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## Central Washington University 2019-2020 Undergraduate Catalog

Central Washington University

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2019-2020 Academic Year  
**UNDERGRADUATE CATALOG**





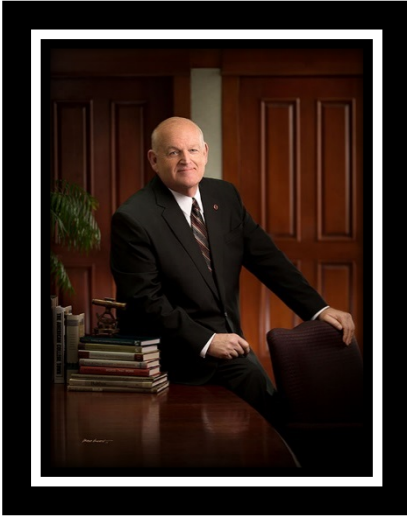
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# Welcome to Central Washington University!



Welcome is a word you'll hear a lot at Central Washington University. It's not only a greeting but a description of the environment we strive to have on our campus. We want you to feel that you belong here and this is a place where you can expand your knowledge and begin the journey of becoming who you want to be.

We try to help you achieve that goal with professors who know your name and want you to excel, experiential learning opportunities, and a wide variety of academic majors-in fact, more than 135. We provide you with an affordable education from top faculty who teach subjects you want to learn.

Research shows that students who become involved and engaged in co-curricular and extra-curricular activities are more likely to succeed. Getting involved in student media, clubs, organizations, club sports, musical productions, art shows, and other out-of-the-classroom experiences enrich students on many levels and can play a significant role in a student's overall holistic development.

One of the best things about Central's residential campus in Ellensburg is its location. The surrounding region offers a wide choice of recreational opportunities. CWU is only minutes away from beautiful mountains, great nature trails, the Yakima River, snow skiing, and more.

Additionally, Ellensburg itself might just be one of Washington state's most hidden jewels with his array of dining, shopping, and special events.

Central Washington University offers a variety of ways for you to learn. Students at one of our eight university centers or instructional sites can earn course credit and degrees that meet their individual needs while allowing them to remain close to home. We also provide a host of online classes and certifications. In fact, when it comes to online learning, few universities can compare to CWU. Several of our programs, including psychology, professional and creative writing, and information technology and administrative management, have been named among the nation's top online programs, and Central has consistently been designated one of the best value online school in the state of Washington.

By enrolling at Central, you have become a member of the Wildcat family. We are diverse and inclusive-CWU is the only Washington state university given the prestigious Higher Education Excellence in Diversity (HEED) award in four of the past five years-along with being friendly and welcoming. At Central, you will find a nurturing environment with a strong foundation in the principles of respect, support, and acceptance.

One of the best parts of my job is getting to meet and know our students. When you see me around campus or in the community, please introduce yourself.

Sincerely,

James L. Gaudino  
President

# History, Mission, Vision and Core Values

## History

Since our founding in 1891, Central Washington University has prepared students to excel in the workplace and as effective members of society. Established as the Washington State Normal School, CWU has consistently redefined and advanced higher education in the state of Washington and focused on making it accessible to all.

Our success is based on creating a diverse, inclusive, and welcoming environment, providing the academic programs our students want, cultivating award-winning faculty, and offering an affordable education. Our focus on these values has helped make CWU one of the fastest growing public universities in the state of Washington.

## Mission

Prepare students for enlightened, responsible, and productive lives; to produce research, scholarship, and creative expression in the public interest; and to serve as a resource to the region and the state through effective stewardship of university resources.

## Vision

Prepare students for enlightened, responsible, and productive lives; to produce research, scholarship, and creative expression in the public interest; and to serve as a resource to the region and the state through effective stewardship of university resources.

## Core Values

Central Washington University exists to advance society through the essential activities of teaching, discovery, and service. While no one of these core elements is meaningful in isolation from the others, CWU finds it necessary to prioritize its efforts in relation to its mission, vision, values, goals, and resources. In order to maximize the value of each of the elements of its mission, CWU emphasizes the integration of scholarship, teaching, and public service.

As a public comprehensive university, CWU strives to create an engaging learning environment and therefore places its highest priority on teaching, learning, and student success. The faculty is comprised of scholar-teachers working in the interests of their students, their disciplines, and the region. CWU encourages individualized programs of student success and promotes undergraduate and graduate student-faculty partnerships that are actively engaged in discovery, creative expression, and engaged learning.

As a community dedicated to the principles of academic freedom, CWU must be an environment that promotes reasoned, civil, and enlightened discourse and creative expression without fear of reprisal, ridicule, or exclusion. CWU's educational environment must empower each person with the freedom to explore, to evaluate, and to learn.

CWU must also strive to serve its region by addressing pressing economic and social issues. As a comprehensive university, CWU must use its intellectual capacity not only to contribute to disciplinary literatures, but also to assist area business, social, and government leaders in strengthening and diversifying the area's economic base, to help create a sustainable natural environment, and to address critical social issues.

CWU is also a place where people gather to live and to work. It must therefore be a place that enables people to grow and to prosper. In keeping with the academic values of shared governance and reasoned dialogue, the university must be open, transparent, and empowering.

It follows, then, that CWU is committed to the following shared values:

- **Student success:** CWU believes that student success is best achieved by providing supportive learning and living environments that encourage intellectual inquiry, exploration, and application. CWU believes that learning is best achieved in small classroom or group settings with ample opportunities for individualized instruction, mentoring, advising, and programming.
- **Access:** CWU believes in providing educational opportunities to as many qualified students as possible. CWU believes that restrictions of place, time, and finances can be overcome through the effective use of partnership with community colleges and by effective and efficient use of learning, communication, and social technologies.
- **Engagement:** CWU believes that learning, research, and creative expression are enhanced by engagement with external partners. CWU believes that as a publicly-funded institution, it has a responsibility to help address the social and economic challenges faced by our communities.
- **Inclusiveness:** CWU believes that diversity of peoples, cultures, and ideas is essential to learning, discovery, and creative expression. CWU believes that all faculty, staff, and students must be and must feel physically, professionally, and emotionally safe in order to fully engage in and benefit from the university experience.
- **Shared governance:** CWU believes that shared governance is most effective when information systems and decision-making processes are both robust and transparent. CWU believes that communication channels should be open and two-way and that faculty, staff, and students should be empowered to participate in the governance systems.
- **Facilities:** CWU believes that state-of-the-art, safe, and attractive facilities enhance the working and learning environments of faculty, staff, and students. CWU also believes that state-of-the-art technologies provide leverage for the efforts of faculty, staff, and students.



• **Safety:** CWU believes it has a responsibility to providing a working and learning environment that is both physically and emotionally safe. CWU believes this responsibility extends to the off-campus environment of its full-time, residential students.

### **Equal Opportunity Policies**

CWU's policies and practices affirm and actively promote the rights of all individuals to equal opportunity in education and employment without regard to their race, ethnicity, color, creed, religion, national origin, sex, sexual orientation, gender identity and gender expression, age, marital status, disability, genetic information, or status as protected veterans. The university administers an affirmative action program for employment purposes and complies with applicable federal, state, and local laws, regulations, and executive orders. Policy statements on affirmative action, gender equity, and sexual harassment, as well as discrimination complaint and resolution policy and procedures available at [www.cwu.edu/resources-reports](http://www.cwu.edu/resources-reports).

The person responsible for institutional compliance with most federal and state laws and institutional policies dealing with discrimination is Staci Sleigh-Layman, Executive Director, HR, and Title IX Coordinator, 509-963-1256 or [hr@cwu.edu](mailto:hr@cwu.edu). She also serves as one of the university's ADA Compliance Officer and can be contacted for any questions or concerns related to disability-related laws and institutional policies, 509-963-1256 or [hr@cwu.edu](mailto:hr@cwu.edu). Human Resources is located in Mitchell Hall, First Floor.

### **Accreditation**

The university is accredited by the Northwest Commission on Colleges and Universities (NWCCU). Some programs have been accredited by specialized accrediting and certification associations, including:

- [Applied and Natural Science Accreditation Commission of ABET](#)
- [Association to Advance Collegiate Schools of Business International \(AACSB\)](#)
- [American Council for Construction Education \(ACCE\)](#)
- [Accreditation Council for Education in Nutrition and Dietetics \(ACEND\)](#)
- [American Chemical Society \(Committee on Professional Training\)](#)
- [Commission on Accreditation of Allied Health Education Programs \(CAAHEP\)](#)
- [Council for Accreditation of Counseling and Related Educational Programs \(CACREP\)](#)
- [Engineering Technology Accreditation Commission of ABET](#)
- [National Association of Schools of Music \(NASM\)](#)

# Quarterly Calendars

## FALL 2019 UNIVERSITY ACADEMIC CALENDAR

All deadlines are due by the close of business on that date. Information in this handbook may be subject to change.

If you have any questions, contact Registrar Services at 509-963-3001.

### REGISTRATION AND CLASSES

April 22	Registration Assignment	Log into MyCWU to view enrollment appointment for web registration
April 22	Schedule Goes Live	View in MyCWU
April 22	Advising Begins	FALL 2019 advising
May 6-June 21	Registration	For continuing students ( <i>During the assigned enrollment appointment</i> )
August 1	OPEN ENROLLMENT	Students may add/drop classes until change of schedule period ends.
September 11	Leave of Absence	Students not attending FALL quarter must submit request
<b>September 19</b>	<b>Faculty Development Day</b>	<b>Before classes start</b>
<b>September 25</b>	<b>CLASSES BEGIN</b>	<b>First day of classes for FALL</b>
Sept 27-Oct 7 until midnight	CWU Payment Plan - Open Enrollment Period	Students may split their quarter charges in three payments instead of one. A \$50 enrollment fee applies.
October 1	Change of Schedule Period Ends and Audit Deadline	<i>Add/Drop Classes-Drops completed prior to this date or by the close of business on this date will not appear on transcripts or have tuition assessed. Deadline to declare audit grading basis.</i>
October 1	TUITION AND FEES DUE	Check with the Cashiers Office or view your statement online for amount due. Student has 100 percent tuition liability if classes are not dropped by this date.
Oct. 2-Oct. 8	\$25 Late Registration Fee	Instructor signature required to enroll
October 8	\$50 Fee - Unpaid Tuition and Fees	A \$50 late fee will be assessed on unpaid tuition-and-course-fee balances. Student has 100 percent tuition liability.
Oct. 9-Nov. 5	\$50 Late Registration Fee	Instructor and Department Chair signatures required to enroll
October 24	\$100 Fee-Unpaid Tuition and Fees	A \$100 late fee will be assessed on unpaid tuition-and-course-fee balances. Student has 100 percent tuition liability.
Nov. 6-Dec. 6	\$75 Late Registration Fee	Instructor and Department Chair signatures required to enroll
November 8	Credit/No Credit	Deadline to declare credit/no credit
Nov. 12-Dec. 6	Registration for WINTER	See WINTER 2020 calendar
November 11	Veterans Day (Observed)	No classes/administrative offices closed
November 27-29	Thanksgiving and Native American Heritage Day Recess	No classes/administrative offices open November 27 No classes/administrative offices closed November 28-29
December 6	Course Challenge Form Deadline	Deadline to submit course challenge forms to Registrar Services
December 6	Classes End	Last day of class instruction
<b>December 9</b>	<b>Study Day</b>	<b>Study Day</b>
<b>December 10-13</b>	<b>FINAL EXAMS</b>	<b>See exam schedule</b>
December 13	End of Quarter	End of Quarter (last day of finals)
December 17	Grades Due	10:00 p.m. deadline for instructors to submit grades via MyCWU
54	Instructional Days per Quarter	Includes final exams and study days

### WITHDRAWAL DEADLINES

### GRADUATION DEADLINES

Oct. 24	Deadline for 50 percent refund with complete withdrawal	June 28	Deadline to apply for baccalaureate degree for FALL 2019
Nov. 8	Uncontested withdrawal period deadline	Sept. 25-Oct. 1	Master's degree final folder check for FALL needs to be requested during first week of classes
Dec. 6	Hardship withdrawal petition deadline	Oct. 4	Deadline to apply for baccalaureate degree for WINTER
Dec. 6	Complete university withdrawal	Dec. 2	Complete the final "Turnitin" check. All forms submitted and fees paid for FALL graduation for Thesis Option Students
		Dec. 13	Complete all master's degree requirements for FALL graduation



# WINTER 2020 UNIVERSITY ACADEMIC CALENDAR

All deadlines are due by the close of business on that date. Information in this handbook may be subject to change.

If you have any questions, contact Registrar Services at 509-963-3001.

## REGISTRATION AND CLASSES

October 28	Registration Assignment	Log into MyCWU to view enrollment appointment for web registration
October 28	Schedule Goes Live	View in MyCWU
October 28	Advising Begins	WINTER advising
Nov. 12- Dec. 6	Registration	For continuing students ( <i>During the assigned enrollment appointment</i> )
December 16	OPEN ENROLLMENT	Students may add/drop classes until change of schedule period ends.
December 24	Leave of Absence	Students not attending WINTER quarter must submit request
<b>January 7</b>	<b>CLASSES BEGIN</b>	<b>First day of classes for WINTER</b>
Jan. 9-Jan. 19 until midnight	CWU Payment Plan - Open Enrollment Period	Students may split their quarter charges in three payments instead of one. A \$50 enrollment fee applies.
January 13	Change of Schedule Period Ends and Audit Deadline	Add/Drop Classes-Drops completed prior to this date or by the close of business on this date will not appear on transcripts or have tuition assessed. Deadline to declare audit grading basis.
January 13	TUITION AND FEES DUE	Check with the Cashiers Office or view your statement online for amount due. Student has 100 percent tuition liability if classes are not dropped by this date.
January 14-21	\$25 Late Registration Fee	Instructor signature required to enroll
January 20	Martin Luther King Jr. Holiday	No classes/administrative offices closed
January 21	\$50 Fee - Unpaid Tuition and Fees	A \$50 late fee will be assessed on unpaid tuition-and-course-fee balances. Student has 100 percent tuition liability.
Jan. 22-Feb. 19	\$50 Late Registration Fee	Instructor and Department Chair signatures required to enroll
February 5	\$100 Fee -Unpaid Tuition and Fees	A \$100 late fee will be assessed on unpaid tuition-and-course-fee balances. Student has 100 percent tuition liability.
February 17	Presidents Day	No classes/administrative offices closed
Feb. 18-Mar. 13	Registration for SPRING	See SPRING 2020 Calendar
Feb. 20-Mar. 13	\$75 Late Registration Fee	Instructor and Department Chair signatures required to enroll
February 21	Credit/No Credit	Deadline to declare credit/no credit
March 13	Course Challenge Form Deadline	Deadline to submit course challenge forms to Registrar Services
March 13	Classes End	Last day of class instruction
<b>March 16</b>	<b>Study Day</b>	<b>Study Day</b>
<b>March 17-20</b>	<b>FINAL EXAMS</b>	<b>See exam schedule</b>
March 20	End of Quarter	End of Quarter (last day of finals)
March 24	Grades Due	10:00 p.m. deadline for instructors to submit grades via MyCWU
52	Instructional Days per Quarter	Includes final exams and study days

## WITHDRAWAL DEADLINES

## GRADUATION DEADLINES

Feb. 5	Deadline for 50 percent refund with complete withdrawal	Oct. 4	Deadline to apply for baccalaureate degree for WINTER
Feb. 21	Uncontested withdrawal period deadline	Jan. 7-14	Master's degree final folder check for WINTER needs to be requested during first week of classes
March 13	Hardship withdrawal petition deadline	Jan. 17	Deadline to apply for baccalaureate degree for SPRING
March 13	Complete university withdrawal	March 13	Complete the final "Turnitin" check. All forms submitted and fees paid for WINTER graduation for Thesis Option Students
		March 20	Complete all master's degree requirements for WINTER graduation

# SPRING 2020 UNIVERSITY ACADEMIC CALENDAR

All deadlines are due by the close of business on that date. Information in this handbook may be subject to change.

If you have any questions, contact Registrar Services at 509-963-3001.

## REGISTRATION AND CLASSES

Feb. 3	Registration Assignment	Log into MyCWU to view enrollment appointment for web registration
Feb. 3	Schedule Goes Live	View in MyCWU
Feb. 3	Advising Begins	SPRING advising
Feb. 18-Mar. 13	Registration	For continuing students ( <i>During the assigned enrollment appointment</i> )
March 17	Leave of Absence	Students not attending SPRING quarter must submit request
March 23	OPEN ENROLLMENT	Students may add/drop classes until change of schedule period ends.
<b>March 31</b>	<b>CLASSES BEGIN</b>	<b>First day of classes for SPRING</b>
Apr. 2-Apr. 12 until midnight	CWU Payment Plan - Open Enrollment Period	Students may split their quarter charges in three payments instead of one. A \$50 enrollment fee applies.
April 6	Change of Schedule Period Ends and Audit Deadline	Add/Drop Classes-Drops completed prior to this date or by the close of business on this date will not appear on transcripts or have tuition assessed. <i>Deadline to declare audit grading basis.</i>
April 6	TUITION AND FEES DUE	Check with the Cashiers Office or view your statement online for amount due. Student has 100 percent tuition liability if classes are not dropped by this date.
April 7-13	\$25 Late Registration Fee	Instructor signature required to enroll
April 13	\$50 Fee - Unpaid Tuition and Fees	A \$50 late fee will be assessed on unpaid tuition and course fee balances. Student has 100 percent tuition liability.
April 14-May 11	\$50 Late Registration Fee	Instructor and Department Chair signatures required to enroll
April 29	\$100 Fee -Unpaid Tuition and Fees	A \$100 late fee will be assessed on unpaid tuition and course fee balances. Student has 100 percent tuition liability.
May 4-June 24	Registration for SUMMER	See SUMMER 2020 Calendar (Schedule goes live April 20 <sup>th</sup> )
May 11- June 19	Registration for FALL	See FALL 2020 Calendar (Schedule goes live April 27 <sup>th</sup> )
May 12-June 5	\$75 Late Registration Fee	Instructor and Department Chair signatures required to enroll
May 15	Credit/No Credit	Deadline to declare credit/no credit
May 13-14	SOURCE Days	Instructional days - Research projects
May 25	Memorial Day	No classes/administrative offices closed
June 5	Course Challenge Form Deadline	Deadline to submit course challenge forms to Registrar Services
June 5	Classes End	Last day of class instruction
<b>June 8</b>	<b>Study Day</b>	<b>Study Day</b>
<b>June 9-12</b>	<b>FINAL EXAMS</b>	<b>See exam schedule</b>
June 12	End of Quarter	End of Quarter (last day of finals)
June 13	COMMENCEMENT	Commencement Ceremonies - Ellensburg
June 14	COMMENCEMENT	Commencement Ceremonies - Kent
June 16	Grades Due	10:00 p.m. deadline for instructors to submit grades via MyCWU
53	Instructional Days per Quarter	Includes final exams and study days

## WITHDRAWAL DEADLINES

## GRADUATION DEADLINES

April 29	Deadline for 50 percent refund with complete withdrawal	Jan. 17	Deadline to apply for baccalaureate degree for SPRING
May 15	Uncontested withdrawal period deadline	Mar. 31- Apr. 7	Master's degree final folder check for SPRING needs to be requested during first week of classes
June 5	Hardship withdrawal petition deadline	April 3	Deadline to apply for baccalaureate degree for SUMMER
June 5	Complete university withdrawal	May 29	Complete the final "Turnitin" check. All forms submitted and fees paid for SPRING graduation for Thesis Option Students
		June 12	Complete all master's degree requirements for SPRING graduation



# SUMMER SESSION 2020 UNIVERSITY ACADEMIC CALENDAR

All deadlines are due by the close of business on that date. Information in this handbook may be subject to change.

If you have any questions, contact Registrar Services at 509-963-3001.

## REGISTRATION AND CLASSES

April 20	Schedule Goes Live	View in MyCWU
April 20	Advising Begins	SUMMER advising
May 4-June 24	Registration	Summer Session
<b>June 22</b>	<b>CLASSES BEGIN</b>	<b>Classes begin for six-week and full session</b>
June 24	Change of Schedule Period Ends	Add/Drop Classes-Drops completed prior to this date or by the close of business on this date will not appear on transcripts or have tuition assessed.
June 24	TUITION AND FEES DUE	Check with the Cashiers Office or view your statement online for amount due. Student has 100 percent tuition liability if classes are not dropped by this date.
June 24- July 2 until midnight	CWU Payment Plan - Open Enrollment Period	Students may split their quarter charges in three payments instead of one. A \$50 enrollment fee applies.
June 25-July 1	\$25 Late Registration Fee Six-week Session	Instructor signature required to enroll
June 25-July 1	\$25 Late Registration Fee Full Session	Instructor signature required to enroll
July 2-17	\$50 Late Registration Fee Six-week Session	Instructor and Department Chair signatures required to enroll
July 2-30	\$50 Late Registration Fee Full Session	Instructor and Department Chair signatures required to enroll
July 3	Independence Day Holiday	No classes/administrative offices closed
July 6	\$50 Fee - Unpaid Tuition and Fees	\$50 fee will be assessed on unpaid tuition and course fee balances. Student has 100 percent tuition liability.
July 20-31	\$75 Late Registration Fee Six-week Session	Instructor and Department Chair signatures required to enroll
July 21	\$100 Fee -Unpaid Tuition and Fees	\$100 fee assessed on unpaid tuition and course fee balances. Student has 100 percent tuition liability.
<b>July 31</b>	<b>Six-week Session Classes End</b>	<b>Last day of class instruction for six-week session</b>
July 31-Aug. 21	\$75 Late Registration Fee Full Session	Instructor and Department Chair signatures required to enroll
August 4	Grades Due Six-week Session	10:00 p.m. deadline for instructors to submit grades via MyCWU
<b>August 21</b>	<b>Full Session Classes End</b>	<b>Last day of class instruction for full session</b>
August 25	Grades Due Full Session	10:00 p.m. deadline for instructors to submit grades via MyCWU

## WITHDRAWAL DEADLINES

## GRADUATION DEADLINES

July 17	Deadline for 50 percent refund with complete withdrawal	April 3	Deadline to apply for baccalaureate degree for SUMMER
July 17	Uncontested withdrawal period deadline	June 22-26	Master's degree final folder check for SUMMER needs to be requested during first week of classes
July 24	Hardship withdrawal petition deadline for six-week session	July 6	Deadline to apply for baccalaureate degree for FALL 2020
July 24	Complete university withdrawal for six-week session	Aug. 7	Complete the final "Turnitin" check. All forms submitted and fees paid for SUMMER graduation for Thesis Option Students
Aug. 14	Hardship withdrawal petition deadline for full session	Aug. 21	Complete all master's degree requirements for SUMMER graduation
Aug. 14	Complete university withdrawal for full session		

# Catalog Guidelines

The university catalog is prepared by Registrar Services and the Public Affairs teams.

This catalog and its contents shall not constitute a contract between Central Washington University and prospective or enrolled students.

The information contained in this catalog reflects the current policies and regulations of the university. However, the university reserves the right to make changes in its policies and regulations at any time. Accordingly, if policies or regulations of the university at any time conflict with information contained in the catalog, the policies and regulations will govern, unless expressly determined otherwise by the CWU Board of Trustees.

A file containing documents describing the university's accreditation and approval by accrediting agencies is maintained in the Office of the Provost and Associate Provost and may be viewed by any current or prospective student upon request.

Central Washington University is an AA/EEO/Title IX Institution.

Central Washington University's policies and practices affirm and actively promote the rights of all individuals to equal opportunity in education and employment without regard to their race, ethnicity, color, religion, creed, national origin, sex, sexual orientation, gender identity and gender expression, age, marital status, disability, genetic information, or status as protected veterans. CWU complies with all applicable federal, state, and local laws, regulations, and executive orders. Address inquiries to the Executive Director, HR, and Title IX Coordinator, Mitchell Hall, First Floor, Ellensburg, WA 98926-7425, 509-963-1256; [hr@cwu.edu](mailto:hr@cwu.edu), [www.cwu.edu/hr/equal-opportunity](http://www.cwu.edu/hr/equal-opportunity). Students with disabilities may request reasonable accommodation by contacting Disability Services: 509-963-2214; Hogue 126; [DS@cwu.edu](mailto:DS@cwu.edu), [www.cwu.edu/disability-support](http://www.cwu.edu/disability-support). Employees and visitors may request reasonable accommodation by contacting Human Resources; 509-963-1202; [hr@cwu.edu](mailto:hr@cwu.edu).

Registrar Services  
Bouillon Hall, room 140  
Central Washington University  
400 East University Way  
Ellensburg, Washington 98926-7465  
509-963-3001

[www.cwu.edu/registrar](http://www.cwu.edu/registrar)



# Information Directory

## OFFICIAL ELECTRONIC CATALOG

[www.cwu.edu/registrar/catalogs](http://www.cwu.edu/registrar/catalogs)

The Official Electronic Catalog (OEC) is the university's official compilation for all curriculum. The OEC serves as the basis for major, minor, and program requirements for the academic year. For current policy and curriculum requirements, refer to the CWU online catalog.

This catalog provides a general guideline of courses offered by the university. The classes and programs described herein are implemented at the sole discretion of the college and are subject to change at any time without notice. Information contained on classes and programs are illustrative only and are not intended to create any contractual obligation or covenant with the university.

## LIMITATION OF LIABILITY

The university's total liability for claims arising from a contractual relationship with the student in any way related to classes or programs shall be limited to the tuition and expenses paid by the student to the university for those classes or programs. In no event shall the university be liable for any special, indirect, incidental, or consequential damages, including but not limited to, loss of earnings or profits.

## INFORMATION DIRECTORY

Academic Advising: Professional Advising (declared majors, University Centers, and Transfer Student Outreach), Bouillon Hall, room 205	(509) 963-3423
Academic Advising: First Year and Exploratory (for undecided students), Bouillon Hall, room 206	963-2722
Associated Students (ASCWU), Student Union and Recreation Center, 2nd Floor, room 236	963-1693
Career Services, Bouillon Hall, room 206	963-1921
Cashiers Office, Barge Hall, room 104	963-2224
Central Switchboard	963-1111
Catering Services, Tunstall Hall	963-1302
Conference Program, Munson Hall, Vantage room	963-1141
Continuing Education Office, 421 Main Street	963-1712
Disability Services, Hogue Hall, room 126	963-2214
Financial Aid, Bouillon Hall, room 106	963-1611
Graduate Studies and Research, Barge Hall, room 214	963-3101
High School Partnerships, Hebel Hall, room 122	963-1351
International Studies and Programs, International Center	963-3612
James E. Brooks Library	963-1021
Office of Admissions, Barge Hall, room 204	963-1211
President's Office, Barge Hall, room 314	963-2111
Provost, Barge Hall, room 302	963-1400
Registrar Services, Bouillon Hall, room 140	963-3001
Student Employment	
• I-9 and W'4, Mitchell Hall, first floor	963-1202
• Regular Student Employment (non-work study) (Human Resources), Mitchell Hall, first floor	963-1202
• Work Study (Student Financial Services/Financial Aid), Barge Hall, room 115	963-1611
Student Financial Services, Bouillon Hall, room 106	963-3546
Student Counseling Clinic, corner of 11th and Poplar, near Meisner Hall	963-1391
Student Medical Clinic, corner of 11th and Poplar, near Meisner Hall	963-1881
Student Success, Bouillon Hall, room 204	963-1515
Transcript Line	963-3047
University Housing and New Student Programs, Button Hall, 2nd Floor	963-1831
University Public Safety, Public Safety Building, 1211 N. Wildcat Way	963-2667
University Police Services, Public Safety Building, 1211 N. Wildcat Way	963-2959
Veterans Center, Bouillon Hall, room 214	963-3028

## AVAILABILITY OF SAFETY AWARENESS INFORMATION

University Police and Public Safety is responsible for reporting crime statistics in compliance with the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act. Central's annual security report is available at [www.cwu.edu/police/sites/cts.cwu.edu/police/files/documents/2016-asr.pdf](http://www.cwu.edu/police/sites/cts.cwu.edu/police/files/documents/2016-asr.pdf). It contains information regarding crime prevention programs, the law enforcement authority of the University police, policies concerning the reporting of crime, crime statistics for the most recent three-year period and other information about security that is required by law. A paper copy of the information is also available upon request by writing to: Central Washington University, University Police and Public Safety, 400 East University Way, Ellensburg, WA 98926-7527.

# Student Success

The Office of the Dean of Student Success oversees the areas of Student Success, Student Development and Achievement, Health and Wellness, and Student Living, as well as serves in an advising capacity to the Associated Students of Central Washington University. The Dean and staff coordinate the work of committees dealing with student personnel policies, student discipline, and student academic and conduct grievances. The Office of the Dean of Student Success provides students educationally-purposeful programs, events, and services and activities that promote academic, personal, and professional growth within and beyond the classroom.

## Office of Student Rights and Responsibilities

The Office of Student Rights & Responsibilities provides a comprehensive array of resources, education, and crisis management services to support student success and development. The office is responsible for educating students about their rights and responsibilities as members of the CWU community, upholding community standards, and implementing the Student Conduct Code. In this role, the Office of Student Rights and Responsibilities responds to reports of student concerns, including Behaviors of Concern reports. The office serves all CWU locations and students. This office is located in Bouillon 203 however, check-in is in the Dean of Student Success, Bouillon 204 (Phone: 509-963-1515).

## Case Management

Case Management coordinates follow-up care for students in crisis or for students with higher needs and provides assessment and referral for students to appropriate resources and services. Case Management focuses on connecting students with appropriate resources and support to minimize the impact of an incident or behaviors on the specific student, other students, and faculty/staff, in order to balance an individual's needs with those of the surrounding community. The office serves all CWU locations and students. This office is located in Bouillon 203; however, check-in is in the Dean of Student Success, Bouillon 204 (Phone: 509-963-1515).

## The Office of Academic Success Initiatives

This office helps CWU students resolve academic problems, conflicts, and concerns. The Director hears complaints, coaches aggrieved students in effective conflict resolution communication, and, when necessary, mediates to help students and faculty arrive at fair and sustainable solutions. The Director also facilitates the academic appeals and grievance processes, the academic early alert system, and other Student Success special projects, particularly those involving students with serious academic challenges.

# Student Development and Achievement

Student Development and Achievement (SDA), through innovation and collaboration, design and implement services to facilitate lifelong academic, career, and personal success. We promote equity to ensure access to postsecondary education and empower students to achieve their unique academic goals. SDA

cultivates partnerships amongst students, faculty, staff, and the surrounding communities to support the University's mission.

## Undergraduate Advising

### Academic Advising - First Year and Exploratory

Students who are undecided on a major and their exploring options work with Academic Advisors in the First Year and Exploratory Office, located in Bouillon 206 (phone: 509.963.2722). This office also administers the Student Transitions and Academic Resources (STAR) program. STAR is an intensive academic support program that assists academically at-risk students in completing transitions into, and through, and out of the university.

### Academic Advising - Professional Advising

Located in Bouillon 205, Professional Advising provides academic advising to students who have decided or declared a major. This office also supports students in online majors, students attending a university center, and incoming transfer students. (Phone: 509.963.3423)

### Freedman-Remak Student-Athlete Academic Success Center

The Freedman-Remak Student Athlete Academic Success Center provides academic advising for first year and undeclared student athletes at Central Washington University. The Center provides academic support for student athletes by offering study hall, tutoring services, and the Commitment to Higher Academic Milestones and Personal Success (CHAMPS) program.

For more information about academic support services for student athletes, call 509-963-3084 or visit [www.wildcatsports.com](http://www.wildcatsports.com).

### Academic Achievement Programs: Student Support Services (SSS)

SSS is a federally funded TRIO program under the auspices of the U.S. Department of Education. SSS provides opportunities for academic development, assists students with basic college requirements, and serves to motivate students toward the successful completion of their post-secondary education. Students who are first generation, low income, or who have a disability are eligible for the program on a space-available basis. The program may also provide grant aid to current, active, SSS participants who are receiving Federal Pell Grants and are of freshman or sophomore status. The goal of SSS is to increase the college retention and graduation rates of its participants and facilitate the process of transition from one level of higher education to the next. SSS is funded 80 percent by a federal grant from the U.S. Department of Education and 20 percent by CWU.

### College Assistance Migrant Program (CAMP)

The College Assistance Migrant Program (CAMP) provides financial and academic support services to freshman students from migrant and seasonal farm-working backgrounds. The CAMP program, funded by a grant from the Department of Education, Office of Migrant Education, is designed to help students succeed as they begin their college careers and through their freshman year. CAMP students receive a variety of services including scholarships, stipends, tutoring, study skills training, mentoring, career planning services, and cultural enrichment opportunities.

To qualify for the CAMP program, the student must meet the following requirements:

- Be a U.S. citizen, permanent resident, or eligible non-citizen
- Have freshman standing (fewer than 44 quarter credits)
- Meet criteria to determine migrant or seasonal farm-worker status:
- Parent (or student, if independent) has worked for at least 75 days in the last 24 months in farm-work such as production of crops, dairy products, poultry, livestock, tree harvesting, or fish farming. Farm-work must be primary form of employment and be performed on a temporary or seasonal basis
- OR student has participated in the Chapter 1 Migrant Education Program
- OR student or parent qualifies for the WIA167 program

### High School Equivalency Program (HEP)

The High School Equivalency Program is a federally funded program that provides service to migrant and seasonal farm working populations. The program conducts educational awareness, community outreach and recruitment throughout central Washington. The program recruits 110 program participants annually. All participants receive comprehensive GED preparation. This preparation consists of providing GED instruction, test preparation and tutoring services. In addition, students are provided with career development services and educational and/or employment placement assistance.

### Career Services

Career Services is a free comprehensive career counseling and resource center designed to engage students as active participants in their career development from freshman year through alumni status. The central purpose of Career Services is to help students prepare for academic and career success. The office strives to serve the needs of individuals through these career-related classes, programs and events.

- **UNIV 103:** For those who are not certain which major or career path is right for them, Career Services offers a two-credit course, called Career Exploration, on the Ellensburg campus. One-on-one counseling can achieve similar results over time if a student cannot take the class.
- **UNIV 301:** This two-credit career management class helps students prepare for the transition from the classroom to the workplace. The focus of the course is on job search skills in pursuit of fulfilling employment.
- **Job Search Preparation:** Career workshops are organized throughout the year to help students prepare for work or graduate school. To prepare for internship and career opportunities in the US and abroad, career counselors provide information on careers, developing strong resumes, CV's and cover letters, practicing effective interviewing skills, learning successful internship and career job search strategies, including how to negotiate salary.
- **Career Counseling:** Career counselors help students make major and career decisions through online assessments and determining skills, strengths, values, and interests. Counselors also assist students to apply

for graduate school and post-bachelor studies. Alumni experiencing career transitions are also welcome to meet with a career counselor. Counselors are available from 8 a.m. to 5 p.m. in Bouillon 206 in Ellensburg, and at CWU-Lynnwood and CWU-Des Moines Centers. Appointments are also available by phone, Skype or e-mail. We also serve online and University Center students.

- **Wildcat Career Network:** The WCN database contains career information, job and internship opportunities, and enables students to sign up for on-campus interviews and career events. Students can access their account through their MyCWU account. Alumni can create an account through our website. There is no fee for this service.
- **Cooperative Education/Internships:** Cooperative Education offers assistance to students wanting to earn credits for professional work experience while they are in school. Many departments require an internship as part of the major; others accept a limited number of hours toward graduation. An internship is an opportunity to combine career, social, and personal growth with the educational process. The student works with their department faculty and the Career Services Co-op coordinator to prepare for the process that leads to a successful, credit-bearing academic/work experience.
- **Career Fairs and Events:** The department organizes career fairs and events throughout the year as an opportunity to network with employers, learn dining etiquette, interview with businesses, and meet with faculty for major selection, review graduate school opportunities, and more. On-campus interviews and information sessions take place on the main campus and the centers, between students and a variety of businesses, government agencies, non-profit organizations, school districts, and the military. For further information: [www.cwu.edu/career](http://www.cwu.edu/career).

### Educational Opportunity Center

Deciding where to go to college, figuring out how to pay for it, and completing all the necessary forms is complicated. The Educational Opportunity Center (EOC) is set up to help students gather the necessary information to make good decisions about their future educational plans and think clearly through the available options. EOC is available, principally, to help low-income adults who are the first in their family to attend college, work through the admission process. For further information, call 509-574-6895 or e-mail [eoc\\_program@cwu.edu](mailto:eoc_program@cwu.edu).

### GEAR UP

GEAR UP prepares ALL students to pursue and succeed in some form of post-secondary education and seeks to: increase parent involvement, professional development for teachers, community involvement, and collaboration with school staff. GEAR UP serves approximately 5,300 students from 11 school districts in central Washington. Participating students engage in university campus visits, college preparatory programs, academic support programs, and STEM related activities.

### Learning Commons

The Learning Commons encourages student success by offering a wide variety of instructional resources and peer tutoring services. In Ellensburg, the Learning Commons can be found in the Academic and Research Commons (ARC) on the first floor of the Brooks Library. Five key program areas are associated

with the Learning Commons: 1) The Math Center provides academic support in quantitative skills for students in courses across the curriculum. Drop-in and scheduled tutoring sessions are available; 2) At the Writing Studio, trained peer tutors work with students of all levels and disciplines, guiding them toward effective written communication. Tutors meet one-on-one with students by appointment or drop-in 3) Peer Assisted Labs (PALs) provide free, out-of-class study sessions for historically difficult courses led by CWU undergraduate facilitators who have already taken and excelled in the course. 4) Online Tutoring offers tutoring in 15 different subjects, available 5am to midnight, 7 days per week during academic sessions; 5) Students enrolled in developmental coursework (Math 100A, 100B, 100C, and English 100T) are taught by Learning Commons faculty and regularly access tutoring services. Students can contact the Learning Commons by phone (509.963.1270) or via e-mail ([tutoring@cwu.edu](mailto:tutoring@cwu.edu)) with any questions.

### **Veteran's Center**

CWU's Veterans Center opened in 2009 to aid service members and their families entering college. The center is committed to the academic success of its students by helping with the transition into student life and laying the groundwork for a satisfying career. Services include assisting with veteran education benefits applications, certifying enrollment, and locating additional resources veterans and their family members may need. Find more information at [www.cwu.edu/veterans](http://www.cwu.edu/veterans), or call 509-963-3028, or email: [va@cwu.edu](mailto:va@cwu.edu).

## **Health and Wellness**

Health and Wellness is a collaborative integrated wellness model, which creates a culture that values health and wellness as a key component of success for students while attending CWU and in their future lives. The Associate Dean of Health and Wellness is located in Bouillon 204.

### **Recreation**

Recreation is committed to offering programs that provide personal and professional development for a diverse university community. Our nationally recognized facilities and services support the university mission by promoting an inclusive campus environment. Our programs contribute to the holistic wellness of our patrons while providing co-curricular and extracurricular activities that complement other avenues of learning. Through excellent customer service and care for the individual, University Recreation seeks to provide a sense of belonging and community that enhances retention for students, faculty, and staff. Programs include intramural sports, collegiate sport clubs, personal training, group fitness, outdoor pursuits and rentals, climbing wall, challenge course, summer kid's camp, drop-in recreation, and a myriad of special events including films, lectures, interactive programs, and instructional courses.

- The Recreation facilities include the Recreation Center and the Recreation Sports Complex. The Recreation Center offers strength training and cardio equipment, a 1/8-mile indoor jogging track overlooking 4 multi-purpose courts, and administrative offices for the department. The Recreation Sports Complex has a 1/4 mile track and a lighted synthetic turf field.

- Intramural Sports, also known as IM Sports, offers a variety of leagues per quarter. Sports range from the traditional, such as basketball, flag football, softball, and soccer to the non-traditional such as dodgeball, archery tag, and e-sports tournaments. Sports are offered in different levels of competition as well as different divisions such as coed, open, or women's. Anyone (students, staff, and faculty), with a Recreation membership are eligible to participate in IM Sports.
- The CWU Collegiate Sport Clubs Program is designed to provide opportunities for CWU Students with mutual interests in a sporting activity, to pursue their interests more in depth. Each club is formed and administered by their student membership. Student leadership, interest, and participation are essential elements of a successful sport club. The Collegiate Sport Club Program at CWU is designed to be a learning experience for members through their involvement in leadership, club administration, financial management, and event planning. The leadership traits developed through these experiences are not only intended to benefit the students during their time on campus, but long after they leave the university. For a current list of clubs please visit [www.cwu.edu/sport-clubs](http://www.cwu.edu/sport-clubs).
- Personal training packages are available to all recreation center members. For a nominal charge, a personal trainer will develop a challenging workout routine specifically designed to meet an individual's fitness goals.
- Group fitness classes are available to all recreation center members as a part of their membership. From spinning to ballet, intense abdominal workouts to yoga, there's something for everyone.
- Outdoor Pursuits and Rentals provides memorable outdoor adventures via guided trips and equipment rentals to support students, their outdoor recreation desires, and their educational needs.
- The 50-foot climbing wall in the Recreation Center offers bouldering and roped climbing, certification courses in top-rope belay and lead climbing, as well as academic classes, climbing competitions, youth programs, private events, and much more. For current programs, please refer to [www.cwu.edu/climbing-wall/](http://www.cwu.edu/climbing-wall/). Challenge Course programming offers the opportunity to participate in team building activities to accomplish individual and group goals on both low-ropes elements and a state-of-the-art high challenge course for low-cost fee. Our staff will provide everything your group needs to successfully participate in the challenge course experience, including equipment and instruction, as well as a pre-event meeting to determine your group's specific needs.
- Camp C-Woo provides a quality day camp atmosphere for Ellensburg-area youth entering grades 1-5. Our primary function is to offer a safe environment where kids can have fun, make new friends, create unforgettable memories, and spend their summer with positive role models. The camp primarily operates during the summer months but has a variety of programs during the school year. For more



information about Camp C-Woo please visit [www.cwu.edu/rec/camp-c-woo](http://www.cwu.edu/rec/camp-c-woo).

- The University Recreation Student Development area provides purposeful recruitment and training to personally and professionally develop each student employee. Hiring is conducted on a quarterly basis for most program areas. Through a thoughtful hiring process, leadership cohorts, campus collaborations, and networking opportunities, University Recreation student employees learn and enhance their skill set and will graduate from CWU as a more responsible, professional, and educated citizen.

### Student Medical Clinic

Services are offered at the Medical and Counseling Clinic building (southeast corner of the campus). The Clinic hours are 8 a.m. to 5 p.m. Monday through Friday. Summer hours are 8 a.m. to noon and 1 p.m. to 3 p.m. when classes are in session. The Clinic is closed on weekends, holidays and during academic breaks. When the Clinic is closed, emergency medical services are available at Kittitas Valley Community Healthcare, and Kittitas Valley Urgent Care. The cost of hospital care is at the student's expense. Medical appointments are available through the patient portal at the Clinic's website or can be made by phone (509-963-1881), Monday through Friday. **It is imperative that you log onto the student portal and complete the required forms prior to your first medical appointment.** The Clinic bills insurance for the initial medical appointment. If you do not have insurance, your student account will be billed \$50. There is no charge for all follow-up office visits. There will be charges for any ancillary services provided (e.g., labs, x-rays, etc.). More information on appointments can be found at: [www.cwu.edu/medical-counseling/your-first-appointment](http://www.cwu.edu/medical-counseling/your-first-appointment).

The medical staff provides routine and urgent-care services, including care for medical problems such as illnesses, injuries, and infections (e.g., colds, flu, and sexually transmitted infections). It offers customary primary care services including care of chronic illness, routine physical examinations, sports physicals, travel medicine, women's health services (e.g., pap smears, pregnancy testing, long term contraceptives and reproductive counseling), and diagnostic laboratory tests/X-rays. In keeping with the educational mission of the university, emphasis is placed on education regarding wellness, prevention and treatment of illnesses.

### Counseling Services

Students registered for 6 or more credits pay the medical and counseling fee (5 or more credits for summer session) and are thereby eligible for services. All counseling services are provided free of additional charge. Counseling Services are available Monday through Friday, 8am to 5pm when classes are in session; during the summer quarter, hours are 8am-12pm and 1pm - 3pm. Afterhours and during weekends, students are directed to the local crisis line (509-925-4168) for professional support and access to local crisis intervention when needed.

Counseling Services (509-963-1391) operates on the basis of a brief treatment model. Counseling Services include urgent mental health care, individual, couple, group counseling, and educational workshops. Common student issues include transitional/adjustment concerns, relationship difficulties, disordered eating and body image concerns, stress, trauma, anxiety, an/or depression, among others. Group counseling opportunities routinely include coping with anxiety, therapeutic

lifestyle change for depression, bipolar support, personal growth, and relationship difficulties. Special programs for campus groups are available upon request (e.g. education and outreach) as are limited psycho diagnostic testing services. Counseling Services are private and confidential within the limits of the law. A copy of the clinic's privacy policy is available at [www.cwu.edu/medical-counseling](http://www.cwu.edu/medical-counseling). Counseling Services is committed to providing services that are culturally affirming and responsive for all students, particularly those from traditionally underserved and underrepresented groups.

### Wellness Center

The CWU Wellness Center is located in SURC 139. The Wellness Center promotes positive health behaviors and encourages social connections that support student success. The Center uses health promotion theory and campaigns, programming, individual assessments, and consultation, along with peer-to-peer outreach to improve the health of individual students and our campus. Using data and feedback from students, the Wellness Center addresses issues that are most prevalent or impactful. The topic areas currently prioritized are:

- Alcohol, marijuana and other drugs
- Sexual health
- Violence prevention and response to sexual assault and other forms of power-based personal violence
- Nutrition and physical activity
- Positive mental health and resiliency
- Recovery support
- Positive body image and eating disorder prevention
- Sleep

The University has a comprehensive alcohol education and prevention program. Parental notification is one part of CWU's comprehensive sanctioning procedure for underage alcohol and marijuana use. CWU supports all local, state and federal laws pertaining to controlled substances and as such, cannabis is not allowed on any CWU premise.

### Violence Prevention and Response Coordinator

Students impacted by sexual violence or other forms of harassment may call 509-963-3214 and leave a message and/or drop by the Wellness Center at SURC 139. Services include confidential consultation, referral, advocacy, information and crisis response for victims, survivors, and significant others. Those experiencing an emergency are still encouraged to contact 9-1-1. For more information about Central's comprehensive response to power-based personal violence, please visit [www.cwu.edu/wecare](http://www.cwu.edu/wecare).

## Student Living

As Student Living:

We promote a safe and equitable campus in which we encourage holistic student development and well-being. We strive to positively impact the success of our students and staff and we do this through purposeful connections. We are located across the campus in various buildings. The Associate Dean for Student Living can be found in Bouillon 204. <http://www.cwu.edu/student-success/student-living>. (509) 963-2736.

### Disability Services

Disability Services is committed to supporting and sustaining an

inclusive campus that recognizes disability as diversity. We are dedicated to ensuring individuals with disabilities have an equal opportunity to fully participate in the educational process and university experience.

Disability Services facilitates full participation, universal access, and reasonable accommodation to meet the unique needs of each person. The office provides this support by individualizing the accommodation process and facilitating creative approaches to eliminating barriers.

Disability Services is located in Hogue 126 and can be reached at DS@cwu.edu or by phone at (509)963-2214. Employees seeking accommodations can contact Human Resources at (509)963-1202.

### Student Involvement

The Department of Student Involvement is dedicated to enriching students' experiences outside the classroom by providing social, cultural, recreational, and educational programs, services, and apprenticeships. Student Involvement is comprised of the functional areas including ASCWU-Student Government, Diversity and Equity Center, Center for Leadership and Community Engagement, KCWU 88.1 the 'Burg Radio Station, and Student Union and Activities. The office of Student Involvement enriches student's university experience through active commitment of four CORE Values:

- **CONNECTION.** Community is the most important part of the CWU experience for our students. We believe that a connection to where you live and learn as well as a sense of belonging is an important aspect of being a Wildcat.
  - At CWU "connection" means that students have an opportunity to find their place of belonging and make meaningful connections with other students, staff and faculty.
- **OPPORTUNITY.** Engagement, by definition, is not something that can be accomplished alone or created by an individual. We believe it is important that students have opportunities with others whose personalities, beliefs, and cultures, are different from their own.
  - At CWU "opportunity" means that students will have intentional conversations with other students, staff, faculty, and leaders in the Wildcat community.
- **REFLECTION.** The CWU community is continually impacted by individual decisions and actions. We believe that inquiry and critical thinking play an important role in shaping congruence between behaviors and beliefs.
  - At CWU "reflection" means that students will have an opportunity to process and make meaning of their student involvement experience.
- **EMPOWERMENT.** A fully developed student involvement process includes all of its members taking ownership and being invested in creating a space that is welcoming and inviting for all. We believe that being in relationship with others leads to communities of empowerment, meaningful dialogue, and a sense of belonging.

- At CWU "empowerment" means that students actively participate in the community and are catalysts for change.

Office location: SURC 263

Phone: 509-963-1691

Website: <http://www.cwu.edu/student-involvement/home>

### ASCWU - Student Government

The Associated Students of Central Washington University (ASCWU) is the student government board elected by the CWU student body to serve as policy-development officers. Executive responsibility is vested in the seven-member ASCWU-Student Government with the Executive Director of Student Involvement serving as the primary advisor. As a vehicle from which students may share different views, the ASCWU is an integral part of the shared governance of CWU. The ASCWU Student Government recognizes and approves student clubs, student organizations, and student appointments to committees in order to serve and represent a variety of student needs and interest areas.

Office location: SURC 236

Phone: 509-963-1693

Website: <http://www.cwu.edu/ascwu/>

### Center for Leadership and Community Engagement

The (CLCE), with endowments by David Wain Coon and Don and Verna Duncan, serves CWU students and our community with leadership development programs and educational service opportunities which promote positive social change and servant leadership. Through inclusive and intentional high-impact practices, students are provided opportunities to enhance and develop individual competencies to better understand self, others, citizenship and service.

Signature programs include:

- **Experience Leadership Project (ELP)** - A three-day retreat in the Cascade Mountains designed for first-year students, where they learn how to get involved at CWU, enhance their leadership skills and build a network of support.
- **Wildcat Leadership Academy (WLA)** - All students are welcome to participate in this two-year leadership certificate program that allows for personal leadership development and service to the greater community.
- **Cross-Cultural Leadership Program (CCLP)** - Each Fall, students come together for a year-long exploration of leadership through culture, discovering how each culture varies and how to make a positive difference in the lives of others.
- **Leadership Conference** - An annual conference where students gain knowledge and insight from national and local leaders.
- **Earth Week Programs including Yakima River Clean Up** - A series of events dedicated to making a difference by bettering the environment and educating all who affect it.
- **Holiday Extravaganza** - Every Fall, CWU student volunteers gather to create a winter wonderland of holiday crafts and activities for K-5 children and their families.
- **Chavez-King Leadership Institute for Social Change** - An Institute that seeks to foster a generation of active and engaged student leaders committed to

civic responsibility, diversity, and social justice in local and global contexts.

- **Martin Luther King, Jr. Celebration and Tribute** - A weeklong celebration that consists of various civil rights activities with K-5 children, documentary and speech screenings, and a presentation addressing past and current social justice efforts.
- **Leadership Transcript** - Use this to supplement employment, graduate school and scholarship applications, and document your college years.

The CLCE recognizes that every student has leadership capacity and will have ample opportunities to demonstrate leadership throughout their lifetime. Through various programs, workshops and resources, CWU students are equipped to make a positive impact within their communities. From short-term volunteering to intense capstone service programs, individuals are encouraged to use their discipline-specific knowledge in order to address community-based social, political and environmental economic justice issues.

Office location: SURC 256

Phone: 509-963-1850

E-mail: [clce@cwu.edu](mailto:clce@cwu.edu)

Website: [www.cwu.edu/leadership-engage](http://www.cwu.edu/leadership-engage).

### **Diversity and Equity Center (DEC)**

Located in the heart the heart of campus in Black Hall 101 the DEC aspires to promote equity, inclusion and social justice through programs, outreach and partnerships. The DEC is home to an all-inclusive space where students can live the CWU Multicultural experience. Within co-curricular and extracurricular initiatives, the DEC advocates and nurtures a campus community who recognize and celebrate diversity, facilitates inclusion and creative expression. Our signature, thematic, and outreach programs include Heritage months, Identity development and Ally workshops, and many more. In all cases students and staff work together to define programming and outreach efforts. DEC provides resources to students, faculty, and staff on a variety of topics related to underrepresented populations and the intersectionality of identities. Students are welcome in the DEC to hang out and to participate in the activities. Come check out the DEC and see how we can support you!

Office location: Black Hall 101

Phone: 509-963-2127

Website: <http://www.cwu.edu/diversity>

### **KCWU-FM (88.1 the 'Burg)**

KCWU-FM is as an out-of-classroom learning laboratory utilizing a real-world broadcast environment to foster lifelong communication, public speaking, workplace accountability, teamwork, and leadership skills important for successful citizenship and success in any chosen career.

KCWU-FM is CWU's student run, nationally award-winning Radio Station. Operating out of a state-of-the-art living media laboratory, the student broadcasters master speaking and presentation skills while performing as music DJs, newscasters, sportscasters, talk show hosts, production and imaging talent and brand, marketing and event specialists. The multi-platform approach of on-air, on-line and in-person serves the CWU student body and community, and fosters a culture of professionalism, diversity and inclusion.

### **Student Union and Activities**

The Student Union serves as a centralized hub of student activity on campus. The state-of-the-art fusion facility is combined with a Recreation Center and houses the university bookstore, multiple dining options, banking, multiple student programming and service areas, and the student government. The welcoming, inclusive environment provides meeting, lounging and studying spaces in addition to a vast array of activities presented daily that contribute to students' sense of belonging. Seamless, quality services through Student Union Operations include centralized scheduling, event coordination, and technical support of university facilities for all university and non-university events. Our **Campus Activities program** offers a variety of events including music, comedy, speakers, concerts, performances, movies, and special events such as Homecoming, Family Weekend, Boo Central, Ware Fair, CWUp Late and Student Appreciation Day. Wildcat Tickets provides university-wide event ticketing and support. The **Publicity Center** offers a full slate of creative services to promote campus events, programs and departments, and is also home to Hype, a multi-platform communication approach to spreading the word about campus events and opportunities for students to get involved outside the classroom. Student employees throughout the Student Union units gain hands-on experience and professional portfolio/resume development, and can take pride in their part in making the Student Union a vibrant hub for student life.

[www.cwu.edu/student-union](http://www.cwu.edu/student-union)

[www.cwu.edu/publicity](http://www.cwu.edu/publicity)

### **Orientation and Transition Programs**

At Central Washington University, we place special emphasis on each student's transition to the CWU campus. Through research and our own experience, we know that the foundations built through these intentional experiences are key to a student's success. Once you are admitted to CWU, New Student Programs will pick up where the Admissions Office leaves off for both first year and transfer students. Making the commitment to spend your college career at CWU is a major decision. With this in mind, it only makes sense that the CWU community welcomes you by providing a comprehensive guide as you make this transition. We have designed a four-phase orientation program to aid you as you acclimate to life at Central. Your participation in orientation is required, please see our website at [cwu.edu/orientation](http://cwu.edu/orientation) for additional details. This is certain to increase your success at CWU. That's why we have created an orientation program with a wide array of options and opportunities to suit your needs.

Phase I of New Student Orientation is Wildcat Day: Rolling Out the Crimson Carpet, the first component of Central's four-tiered new student orientation program. This program is designed to introduce students who are accepted for the fall quarter and your parents/guests; provide you with information about academic departments and majors; and provide an opportunity for you to ask any questions you may have about Central. This event regularly attracts more than 1,000 incoming students and guests each weekend. Attendance is strongly recommended.

As a part of the event we offer Todos Somos Familia for Spanish speaking families. More information, including a schedule of events, will be posted early in the new year at [cwu.edu/orientation](http://cwu.edu/orientation). WELCOME WILDCATS!

Phase II of New Student Orientation is a two-day program for first year students and parents/family held in June and July. The

program allows you to meet with academic advisors who will help you register for classes, participate in social events with other incoming students, and attend valuable programs that feature campus resources and services. Programs include academic requirements and expectations, housing services, dining services, and financial aid. Parent/family-only sessions are offered to assist with the transition to the university. Faculty and administrators are available throughout the program to assist with parent and student needs. Students with fewer than 40 transferable college credits, and/or who are Running Start students, are required to attend Orientation.

Transfer students have an option of a one-day orientation session in June or July. Transfer students are expected to attend.

For further questions, call New Student Programs at 509-963-2735 or check out our website at [www.cwu.edu/orientation/](http://www.cwu.edu/orientation/)

Phase III of New Student Orientation is Wildcat Welcome Weekend (W3). It picks up in the fall where Orientation left off. W3 is a first-year-focused program that begins on move-in day (Sept. 14). Students will participate in a weekend filled with many fun and informative activities and sessions. Attendance is required to receive credit for University 101.

Phase IV of New Student Orientation is the First-Six-Weeks Programming. It is intentionally designed to help students adjust during the critical first six weeks of their first year at CWU. Attendance at first-six-weeks programming is required as part of a student's University 101 class.

Orientation dates and registration information are available online at [www.cwu.edu/orientation/](http://www.cwu.edu/orientation/)

### **Housing and Residence Life**

University Housing provides well-maintained housing facilities, with an emphasis on student development, as part of the university's academic environment, and works to augment classroom instruction with a learning environment that is supportive of students' educational goals, personal and interpersonal growth, and cultural awareness.

CWU is a residential university with most Ellensburg students living on or near campus. The residence halls and apartments can house 4,200 students. CWU's residence halls offer students a variety of quality living experiences and options.

The residences are within a few minutes' walk of any classroom, library, or dining hall, which offers considerable convenience and flexibility to students. Residence hall and apartment staff provides crisis intervention and educational, cultural, social, and community services programs, as well as coordinating behavioral problem-solving interventions in cooperation with the Dean of Student Success.

The residence halls offer a diverse selection of communities and environments. The residence halls, which house between 35 and 476 occupants, offer programs and environments to enhance classroom experiences. Furniture, basic cable service, wireless internet, utilities, and coin-operated laundry facilities are also provided. Many halls have their own pool table, piano, or ping-pong table. All residence halls and apartments are smoke-free.

Living and Learning Communities (LLCs) are available for students interested in the following areas: Education, Science Talent Expansion Program, Aviation, Music, Casa Latina,

Business, International House, Leadership House, ROTC, Social Science, and William O. Douglas Honors College. Students may request a residence hall offering a living-learning enrichment opportunity. Hall staff and faculty from these areas of interest collaborate to provide residents with educational and social activities that integrate their field of study, enhancing their residence hall experience.

Since college is a total learning experience, Central requires all freshmen/first year students who are under 20 years-of-age to live in the residence halls for one academic year. Running Start students under 20 years-of-age, regardless of class standing, must also fulfill the live-in requirement. Students requesting an exception to the policy must apply through Housing and Residence Life.

CWU also maintains 450 apartments (studio, one, two or three bedrooms) designed for single students and those with families. The apartment complexes offer activities for residents that focus on their needs and priorities. Complexes feature programs and facilities that support students emotionally, socially and academically. These programs might include wellness, self-defense, cultural awareness, lifestyle planning, career planning, and recreation. Many activities for children and families are presented, such as holiday events, child safety awareness programs, domestic violence prevention programs, and career planning.

At different times of the year, demands for apartments may exceed availability. For this reason, waiting lists are provided. To be eligible for apartment housing, a student must be currently enrolled in and must maintain at least 7 credit hours of coursework.

Students who are required to live in residence halls are not eligible to live in the apartments. Each apartment resident is required to sign a lease, which provides for renting an apartment on a month-to-month basis. Written notice must be given at least 30 days prior to vacating an apartment. Pets are not allowed in any area of CWU housing. Central Washington University abides by all state and federal laws pertaining to service animals in on campus housing.

## **CWU Life**

### **Dining Services**

All students living in CWU residence halls are required to select a meal plan. There are five to choose from, and all are set up as a prepaid dining debit account, which allows for purchase of meals or snacks at any campus dining location. Students living off-campus may also purchase a meal plan for the convenience of dining and buying beverages and snacks on campus.

Dining Services' staff is dedicated to your dining satisfaction. Its mission is to provide exceptional food service and customer service to the campus community. This is evident in fresh, appetizing, and nutritionally balanced menus along with the hospitality offered at each of its distinctly different dining locations on campus. These include:

- Central Marketplace, located in the SURC, offers à la carte service in six restaurants: Taglianno's Pizza, Taglianno's Pasta, Totally Tossed Salads, Lion's Rock Broiler, El Gato Loco, and Wrap and Roll Deli Bar



- Holmes Dining Room, located in the SURC, offers an all-you-can-eat service for brunch/lunch and dinner
- North Village Cafe, located in Green Hall on the north side of campus, offers à la carte service for meals and snacks throughout the day
- 1891 Bistro, located in Tunstall Hall on the south side of campus, features local fare such as Thomas Hammer Coffee, Winegar's Homemade Ice Cream, ABC Donuts, EZPZ Grab and Go, the CWU Catering Pastry Case, and soups of the day.

You may also use your meal plan at any of CWU Dining Services' espresso bars or convenience stores:

- Cat Trax East Espresso and Smoothie Bar, Cat Trax West Espresso, and Cats Convenience Store in the SURC
- Coach's Coffee House in the Wendel Hill Hall
- NVC Espresso Bar and NVC Store in the North Village Café and Store

Dining services are available on campus for breakfast, lunch, dinner, and late-night meal service on weekdays, and for brunch and dinner on weekends.

If you have questions about the dining options available at CWU Dining Services, call 509-963-1591, or visit [www.cwu.edu/dining](http://www.cwu.edu/dining). Dining Services can also be found on Facebook, Twitter, and Instagram.

#### Nutritious Foundations

Dining Services offers nutritious menu selections, based on the U.S. Department of Agriculture's food pyramid, to support your healthy lifestyle. You're encouraged to adopt a balanced, moderate, and varied diet by exploring the nutritional foundation that Dining Services provides in all dining arenas.

#### Special Events

Several special dining events are offered quarterly to enrich your dining experience. Some of these events include Oktoberfest, a Holiday meal, a seafood buffet extravaganza, themed and cultural dinners, Cinco de Mayo, the Student Appreciation BBQ, and the commencement luncheon.

#### Employment Opportunities

Dining Services is the largest employer on campus, hiring between 250-350 students annually for part-time work. Consider joining the team where you will meet new friends and learn new skills.

Dining Services is a member of the National Association of College and University Food Services, and is an active supporter of the academic mission of the university through participation in many out-of-classroom events and activities held throughout campus.

#### Honor Societies

Central Washington University maintains memberships in several national honor society chapters. Here is a list of those memberships. Please see the appropriate department for more information about these honor societies.

**Alpha Epsilon Rho:** This is the national honor society for broadcasting. Founded in 1943 for the purpose of emphasizing superior scholarship and creative participation in telecommunication production and activity, it prepares its members for roles as responsible telecommunicators.

Membership in Alpha Epsilon Rho is open to undergraduate and graduate students who are making electronic media studies one of their major academic interests and who meet high standards of scholarship. Please see the Department of Communication for more information.

**Alpha Eta Rho:** (AHP) This International Professional Collegiate Aviation fraternity acts as a bridge between aviation colleges and the aviation industry. AHP was established in 1929 by Earl W. Hill, an aviation instructor at the University of Southern California and, with help from students and faculty, was founded on April 10, 1929. It is the oldest professional aviation fraternity in history. AHP members serve the aviation industry in fields such as: Aviation Captains, NASA Engineers, Flight Attendants, Aircraft Mechanics, Aerospace Engineers, Corporate Pilots, and many more. Please see the Department of Aviation for more information.

**Alpha Kappa Delta:** This is an international sociology honor society. Founded in 1920 and an accredited member of the Association of College Honor Societies, Alpha Kappa Delta is a non-secret, democratic, international society of scholars dedicated to the philosophy of Athropon Katamanthanein Diakonesin or "to investigate humanity for the purpose of service." AKD seeks to acknowledge and promote excellence in scholarship in the study of sociology, the research of social problems, and such other social and intellectual activities that will lead to the improvement of the human condition. Please see the Department of Sociology for more information.

**Alpha Phi Sigma:** This is the nationally recognized honor society for students in the criminal justice sciences. The society recognizes academic excellence by undergraduates as well as graduate students of criminal justice. The honor society is open to undergraduate students who have a declared law and justice major or minor, have maintained a minimum GPA of 3.2 on a 4.0 scale in their cumulative and criminal justice class or rank in the top 35 percent of their classes, and have completed a minimum of four courses within the law and justice curriculum. Graduate students must have a minimum GPA of 3.4 on a 4.0 scale or rank in the upper 25 percent of their class, and have completed a minimum of four courses within the law and justice curriculum. Please see the Department of Law and Justice for more information.

**Alpha Sigma Lambda:** This national honor society, established in 1946, provides the opportunity to recognize the special achievements of adult students. Alpha Sigma Lambda acknowledges adult students who accomplish academic excellence while facing competing interests of family, work, and community. Members must have earned a minimum GPA of 3.5 on a 4.0 scale. The CWU chapter of ASL is Psi Delta Omega and is advised by the Center for Student Empowerment. Invitations to join Psi Delta Omega are sent out at the beginning of each academic year, and induction ceremonies are held both at the Ellensburg campus and at one of the Puget Sound- area centers. Please see the Center of Diversity and Social Justice for more information [www.cwu.edu/diversity/alpha-sigma-lambda](http://www.cwu.edu/diversity/alpha-sigma-lambda).

**Beta Alpha Psi:** This is a not-for-profit honor and service organization for accounting, finance and information systems students at AACSB-or EQUIS-accredited universities. Founded in 1919, the CWU chapter was installed in 2013. It provides opportunities for development of communication, leadership and professional skills, participation in community service, encouragement of ethical, social and public responsibility and

interaction among students, faculty and professionals. Beta Alpha Psi requires its members to maintain at least a 3.0 GPA. It is recognized and respected by the business community as a premier collegiate organization. Please see the College of Business for more information.

**Beta Beta Beta:** TriBeta is a society for students, particularly undergraduates, dedicated to improving the understanding and appreciation of biological study and extending boundaries of human knowledge through scientific research. Since its founding in 1922, more than 200,000 persons have been accepted into lifetime membership, and more than 626 chapters have been established throughout the United States and Puerto Rico. Please see the Department of Biological Sciences for more information.

**Eta Sigma Gamma:** Since its inception in 1967, Eta Sigma Gamma, the National Health Education Honorary, has had a rich history of contributions to the profession of health education and health promotion. It was through the commitment of a group of dedicated professors and students at Ball State University that the first chapter of the honorary was established. Today, there are over 80 chapters representing thousands of students in colleges and universities around the United States. Please see the Department of Health Sciences for more information.

**Gamma Theta Upsilon:** Gamma Theta Upsilon is an international honor society in geography. Gamma Theta Upsilon was founded in 1928 and became a national organization in 1931. Members of Gamma Theta Upsilon have met academic requirements and share a background and interest in geography. Gamma Theta Upsilon chapter activities support geography knowledge and awareness. New members are inducted annually. Please see the Department of Geography for more information.

**Kappa Delta Pi:** The honor society in education, Kappa Delta Pi, encourages high professional, intellectual, and personal standards, and recognizes and honors outstanding achievement in the study of education. Membership is open to undergraduate students, graduate students, and faculty by invitation. New members are inducted quarterly. Please see the College of Education and Professional Studies for more information [www.cwu.edu/education-professional-studies/funds-and-endowments](http://www.cwu.edu/education-professional-studies/funds-and-endowments).

**Lambda Alpha:** The Lambda Alpha National Collegiate Honors Society for Anthropology was founded on March 15, 1968 at Wichita State University in Kansas. To date there are over 200 chapters nationwide. Lambda Alpha (derived from the Greek *Logos Anthropou*, meaning "the Study of Humans") was established for the purpose of encouraging and stimulating scholarship and research among students, faculty and others engaged in the study of anthropology. Lambda Alpha provides scholarships, research and publication opportunities to student members (undergraduate and graduate). Please see the Department of Anthropology and Museum Studies for more information.

**Lambda Pi Eta:** This is the national honorary society for undergraduates in communication. As an accredited member of the Association of College Honor Societies (ACHS), Lambda Pi Eta (LPH) has an active chapter at CWU's Department of Communication. LPH represents what Aristotle described in The Rhetoric as three ingredients of persuasion: logos (lambda) meaning logic, pathos (pi) relating to emotion and ethos (eta) defined as character credibility and ethics. Lambda Pi Eta recognizes, fosters, and rewards outstanding scholastic

achievement while stimulating interest in the communication discipline. Please see the Department of Communication for more information.

**Pi Sigma Alpha:** (Mu Lambda chapter) This is CWU's honor society for students of political science. This is a national honorary, first organized in 1920, with more than 740 chapters throughout the country. Membership is based upon scholastic achievement and a genuine interest in the understanding of politics and political issues, as evidenced by performance in several political science courses. Please see the Department of Political Science for more information.

**Phi Alpha Theta:** This is a nationally recognized honor society founded in March 1921 at the University of Arkansas, and today it numbers over 900 chapters, representing 500,000 members. Central's Tau Iota chapter was chartered in 1972. Membership is composed of undergraduate and graduate students and professors who have been elected upon the basis of excellence in the study and writing of history. The society's objective is the promotion of the study of history by the encouragement of research, good teaching, publication, and scholarly interaction among historians. Please see the Department of History for more information.

**Phi Kappa Phi:** The national honor society of *Phi Kappa Phi* recognizes and encourages superior scholarship in all academic disciplines. Membership is open to undergraduate students, graduate students, and faculty members by invitation, with election based on superior scholarship. New members are inducted each spring. Please see the Department of Accounting for more information.

**Phi Sigma Tau:** This is the international honor society in philosophy. Its purpose is to recognize and encourage excellence in philosophic scholarship among students and faculty. It publishes philosophy articles from undergraduate students in its journal *Dialogue*. Central's local chapter (Washington Alpha) meets periodically to discuss philosophic issues. Membership is based on scholastic attainments. Please see the Department of Philosophy and Religious Studies for more information.

**Psi Chi:** This is the international honor society in psychology, founded in 1929 for the purpose of encouraging, stimulating, and maintaining scholarship in, and advancing the science of, psychology. Membership is open to graduates and undergraduates who are making the study of psychology one of their major interests and who meet the minimum qualifications. Psi Chi is an affiliate of the American Psychological Association and a member of the Association of College Honor Societies. Please see the Department of Psychology for more information.

**Salute:** This is a national academic honor society recognizing student veterans and military personnel who have demonstrated outstanding performance in the academic setting. One of the primary goals of SALUTE is to acknowledge and recognize members who have shown courage, strength, leadership, excellence, and perseverance in their military endeavors and now are showing that same commitment to their academic careers. Please see the Veteran's Center for more information.

**Sigma Lambda Chi:** The fundamental purpose of Sigma Lambda Chi is to provide recognition to outstanding students in construction curricula. Sigma Lambda Chi is the society that offers students the opportunity to be recognized locally and internationally for their academic accomplishments as a

construction major. Please see the Department of Engineering Technologies, Safety and Construction for more information.

**Sigma Pi Sigma:** This is the national physics honor society. It was founded in 1921 and now has over 500 chapters nationwide. It is a member of the Association of College Honor Societies and is affiliated with the American Institute of Physics and with the American Association for the Advancement of Science. Membership is open to undergraduate and graduate students and faculty members. Students elected to membership must maintain high standards of general scholarship and outstanding achievement in physics. Besides providing an incentive for all physics students to rise to excellence, the society also encourages physics interest and science literacy in the general public. Please see the Department of Physics for more information.

**Theta Alpha Kappa:** The only honor society devoted to religious studies. Theta Alpha Kappa granted Central Washington University a charter in 2007. Its overall purpose is to provide local and national recognition to students with high scholarship and an academic interest in the field of religious studies. In addition to promoting student interest in research and advanced study in the field, it provides opportunities for the publication of student research papers of merit through the *Journal of Theta Alpha Kappa*, encourages a professional spirit and friendship among those who have demonstrated an aptitude for excellence within the field, and popularizes interest in religious studies among the general collegiate and local community. Please see the Department of Philosophy and Religious Studies for more information.

### Wildcat Shop

The Wildcat Shop has everything you need right here on campus. We have saved students \$2.1 million since 2017 on course materials, and we offer a wide variety of products and services, including:

- Textbooks (new, used, rental, inclusive access, and ebook)
- General reading and reference books
- Computer hardware (special student prices)
- Certified Apple repair staff
- Electronics
- Clothing, gifts, and hydroflasks
- School and art supplies
- Greeting cards
- Dorm supplies
- Health and beauty aids, including Smashbox products
- Stamps
- Snack foods and more

We also provide custom engraving, sublimation, laminating, binding, copying (color or black and white), mat board cutting, mounting, and fax services.

Special order any book, computer, electronic product, or supply, at no additional cost. For your convenience, the Wildcat Shop buys back textbooks at the end of each quarter, during finals week, and the first two days at the beginning of each quarter. Contact the Wildcat Shop at (509) 963-1311, or at [www.wildcatshop.net](http://www.wildcatshop.net). Always open online.

# University Services

### Archival Services

The Archives at Central Washington University was established in 2004 to act as the repository for official and unofficial records that document the history of the university. The Archives also serve as a regional repository to house, preserve, and promote the history of central Washington. It is located on the fourth floor of the James E. Brooks Library on the Ellensburg campus.

The primary objectives of the Archives is to collect, organize, describe, preserve, and make available university records and regional collections of permanent historical value. It also aims to support research, teaching, and public awareness of the rich heritage of central Washington and the university.

The Archives contain records, photographs, and artifacts produced by CWU or its predecessors: Washington State Normal School at Ellensburg (1891-1937); Central Washington College of Education (1937-1961); and Central Washington State College (1961-1977). The collection contains documents published by the university as well as materials produced by university administrators, faculty, staff, students, and alumni. The collection includes administrative reports, department and committee records, student publications, photographs, printed records, and the correspondence of former presidents, deans, and other university officials.

The regional manuscript collection, which is part of the Archives, consists of historically significant 19th- and 20th-century personal papers, business and organizational records, photograph collections, and other materials produced in central Washington by individuals, businesses, and organizations that reside, or have resided, in the region. One-of-kind unpublished works from the counties of Benton, Chelan, Douglas, Grant, Kittitas, Klickitat, Okanogan, and Yakima are represented in the collection. The collection includes materials relevant to the history and cultural development of central Washington.

### Center for Spatial Information and Research

The Center for Spatial Information and Research (CSIR) encourages, supports, and coordinates research projects for students and faculty using hardware and software technologies that gather and analyze "spatial" information to solve problems in the social sciences, natural sciences, and business. Geographic Information Systems (GIS), high-precision Global Positioning System (GPS), ground-penetrating radar, precision conventional laser surveying, and satellite image processing are some of the spatial technologies used by CWU faculty and students. Typical GIS applications include projects in resource geography, archaeology, field biology, geology, and planning. CSIR also relies on the Department of Geography's GIS laboratory, where a variety of undergraduate and graduate GIS courses are taught, and numerous large and small research projects are conducted using state-of-the-art computing systems.

CSIR encourages creative, interdisciplinary uses of spatial technology, and actively works with the private and government sectors to identify problems to which CWU personnel and equipment can provide effective solutions. CSIR's home page is at [www.cwu.edu/spatial-information](http://www.cwu.edu/spatial-information).

### Central Washington Archaeological Survey

The Central Washington Archaeological Survey (CWAS) is a research and public service office that is part of the Department of Anthropology and Museum Studies. CWAS conducts archaeological investigations in the central counties of the state and promotes public involvement in the identification and protection of regional archaeological resources. CWAS involves faculty and students in research projects funded through external grants and contracts. CWAS cooperates with state and federal agencies, Native American tribes and nations, professional archaeologists throughout the state, and state and local archaeological societies in the study and preservation of central Washington's archaeological resources.

### **Disability Services**

Disability Services (DS), and Human Resources (HR), in partnership with the university community, are dedicated to creating an inclusive campus that celebrates diversity and provides individuals with disabilities an equal opportunity to fully participate in and benefit from all aspects of the employment and educational environments. Utilizing documentation of disability and information obtained in consultation with the student or employee, DS staff assesses the effects of a student's disability on his/her ability to access the educational process. HR staff assesses the effects an employee's disability has on his/her ability to perform the essential functions of his/her job. Based on this assessment, DS/HR staff identifies reasonable accommodations designed to ensure these individuals equal access to all facets of the University. Students or employees wishing to request disability accommodations are responsible for contacting DS/HR.

Examples of accommodations available to CWU students and/or employees with disabilities include, but are not limited to, textbooks and academic/employment materials in accessible formats (large print, Braille, electronic text, PC-read audio), alternative examination procedures, sign language interpreters, speech-to-text transcription, permission to audio-record lectures, note-taking assistance, early registration, priority snow removal routes, special classroom or workplace furniture, access technology and temporary disability parking permits. DS also serves as a resource for student, faculty, staff, and the community regarding disability issues.

Students with disabilities may request reasonable accommodation by contacting DS: 509-963-2214; Hogue 126; DS@cwu.edu, www.cwu.edu/disability-support. Employees and visitors may request reasonable accommodation by contacting HR: 509-963-1202; Mitchell Hall, First Floor; hr@cwu.edu; www.cwu.edu/hr/workplace-accommodation.

### **Diversity and Equity Center (DEC)**

Located in Black Hall 101 and 105, the DEC aspires to promote equity, inclusion and social justice through programs, outreach and partnerships. Within co-curricular and extracurricular initiatives, the DEC advocates and nurtures a campus community who recognize and celebrate diversity, facilitates inclusion and creative expression. Our signature, thematic, and outreach programs include heritage months, identity development and ally workshops, as well as much more. In all cases, students and staff work together to define programming and outreach efforts. DEC provides resources to students, faculty, and staff on a variety of topics related to underrepresented populations and the intersectionality of identities. Students are welcome in the DEC to hang out and to

participate in the activities. Come check out the DEC and see how we can support you!

### **Early Childhood Learning Center**

The Early Childhood Learning Center (ECLC) provides early learning to the campus community serving children aged one-month to eight-years of age. There are two sites; 1900 Brooklane Village, Suite 100, serves children aged two years to eight years of age; Michaelsen Hall, room 109, serves children aged one month to 28 months. The program consists of early learning activities especially designed for young children; including music, language, physical activities, stories, science and math experiences, games, puzzles, blocks, and dramatic play. Nutritious meals and snacks are served throughout the day. Operating hours during the academic year are 7:30 a.m. to 5:30 p.m., Monday through Friday. Call 509-963-1744 or e-mail eclc@cwu.edu for more information.

### **Family Resource Center**

The Family Resource Center (FRC) is part of the Family and Child Life program and Department of Family and Consumer Sciences at Central Washington University. The mission of the FRC is to provide programming and resources to support families, coordinate family-related research, and provide civic engagement opportunities for students. Information about current FRC events and resources for families can be found online at [www.cwu.edu/family/](http://www.cwu.edu/family/), and the FRC director can be reached at 509-963-2758.

### **Geographic Information Systems Laboratory**

The GIS laboratory contains up-to-date computer hardware and various software suites employed in the analysis of spatial data such as maps, aerial photos, satellite imagery, and digital terrain models. The laboratory provides a teaching and research facility for faculty and students from a variety of fields, including anthropology, archaeology, biology, geography, geology, land-use planning, resource management, and sociology. In addition, the laboratory offers contract and consultation services to public and private agencies for GIS applications. Additional information can be found at [www.cwu.edu/geography](http://www.cwu.edu/geography).

### **Information Services**

Information Services (IS) provides computer, communications, enterprise application and networking services to the Ellensburg campus and university centers located throughout the state. IS staff members work closely with all segments of the university to ensure that information technology is broadly developed, acquired, used, and available to all students, faculty, and staff. IS information is available on the web at [www.cwu.edu/its](http://www.cwu.edu/its) and can be contacted at 509-963-2333. The CWU Service Desk can be contacted at 509-963-2001.

Students and faculty have easy access to computers and software in 25 general-purpose and discipline-specific computer labs spread throughout academic buildings on campus. Every residence hall room is equipped with a network connection providing Internet services for those students that bring computers to campus and residence halls have Wi-Fi service. Students, faculty, and staff who reside off campus can access CWU technology resources (i.e., Canvas, portal, e-mail, file services, etc.) via the Internet through [my.cwu.edu](http://my.cwu.edu).

Wi-Fi access to the CWU network and the Internet is available across the campus and via laptop checkout in the SURC, the 1891 Bistro, Multimodal Education Center and Brooks Library.



Information on Wi-Fi at CWU is online at [www.cwu.edu/its-helpdesk/connecting-cwu-wireless-network](http://www.cwu.edu/its-helpdesk/connecting-cwu-wireless-network).

### **James E. Brooks Library**

The Brooks Library provides quality resources and innovative services to stimulate creativity, intellectual curiosity, and to facilitate lifelong learning and research within the communities we serve. The library's faculty and staff are engaged in the creation of collections that support the curriculum and the provision of access to those materials. More specifically, these activities include the collection and preservation of materials, user instruction and guidance, information retrieval, analysis and organization, global access to library and information resources, and collaboration with instructional faculty in developing programs, collections, and research.

Students and other library users have 24/7 online access to electronic materials, as well as, 1.3 million books, films, government documents, maps, and audio recordings on site in the Brooks Library. Additionally, the library provides similar access to more than 28 million information items from the academic libraries of the Northwest that belong to the Orbis Cascade Alliance. Full-text electronic and/or paper subscriptions to over 15,000 periodicals and academic journals are available electronically or on site.

Library staff is available to provide personal service to students 100 hours per week. The Academic and Research Commons (ARC) on the first floor provides spaces for students, faculty and staff to work collaboratively to enhance teaching and learning. The ARC combines the services of Learning Support Services tutoring, research librarians, Career Services and Information Services. Group study areas, a Family Study Space, and desktop computers are available to those who visit the main library in Ellensburg. Students at the Centers have access to library services and materials at the main library and libraries at the Des Moines and Lynnwood Centers. Academic support is also available through a toll-free phone number, e-mail, and 24/7 Ask-A-Librarian services. Internet connectivity for personal laptops is available on each floor of the Brooks Library and laptops are available for checkout by students. The libraries' staff, services, and collections support the educational efforts of students, foster intellectual, social and ethical development, and assist students in locating, using, and evaluating information to equip them for independent, lifelong learning.

### **Multimodal Education Center**

The Multimodal Education Center (MEC) embraces the vision that Technology Empowers Learning. We provide instructional and multimedia technologies, support, and training for all CWU students, faculty, and staff. Our goal is to create opportunities for exploration of emerging technologies, digital media, and innovative learning spaces. Through a variety of workshops, we can help you create multimedia projects, develop a 3D model for printing at the Center, learn a new technology skill, explore the uses of Virtual Reality, and more. We have laptops, video cameras, and projectors for checkout, both Apple and PC computer labs for digital production. For more information, visit us in Samuelson, room 126, call 509-963-3293 or visit the website at [www.cwu.edu/multimodal-education/](http://www.cwu.edu/multimodal-education/).

### **Student Employment**

Central Washington University supports the employment of current students, recognizing the reciprocal benefits of their work. Employment of students provides them the opportunity to

gain valuable work experience and assists them with financing their education. Student employees are a valuable source of labor and spirit for the university.

We work to ensure that each student enjoys his or her CWU work experience and that employers have the resources needed to employ, mentor, and support student employees. The role of Human Resources is to facilitate connections between students and employers so students can fund their educational expenses, obtain valuable work experience, and build career portfolios through work experience and training opportunities created specifically for student employees.

Student employment opportunities are available for both on and off campus (including summer opportunities) at [careers.cwu.edu](http://careers.cwu.edu). For additional information about Student Employment visit our website at [www.cwu.edu/student-employment](http://www.cwu.edu/student-employment). Contact HR at 509-963-1202 or [seo@cwu.edu](mailto:seo@cwu.edu) or come see us in Human Resource, Mitchell Hall, First Floor.

### **Testing Services**

CWU Testing Services is an NCTA certified Testing Center. Testing Services provides support to CWU students, faculty, and staff, as well as the central Washington community.

Testing Services also works closely with Disability Services, Faculty, and students in providing student accommodation for testing.

CWU Testing Services partners with the majority of the major nationwide testing companies (including ETS, PearsonVUE, and PSI) and administers a multitude of exams.

For more information, including a list of exams and dates, contact Testing Services in room 125 of Bouillon Hall, call 509-963-1847, or visit [www.cwu.edu/testing](http://www.cwu.edu/testing).

Exams offered include, but are not limited to:

- CWU Placement Tests
- College Level Examination Program (CLEP) tests
- ETS Testing:
  - GRE
  - PRAXIS
  - ASE
  - MCAT
  - TOEFL
  - TOIEC
- Castle Testing:
  - ACE certifications
- Kryterion Testing:
  - Certified Counselor/Adviser Exam
- PearsonVUE Testing:
  - WEST
  - NES
  - Microsoft
  - CISCO
  - CompTIA
  - GED
- PSI Testing:
  - FAA
- Various other testing:
  - Proctored Exams for other institutions
  - Spanish Placement Test

- TEAS V
- MPRE
- LSAT
- CHES/MCHES
- NCE
- GRE Subject

### **University Police and Public Safety**

University Police and Public Safety (UPPS) provides service to the Ellensburg, WA campus of CWU. Commissioned and trained police officers provide service to the campus community 24 hours per day, 7 days a week. In addition, parking enforcement officers, professional support staff and student employees work diligently to meet our mission: "Work in partnership with our communities to create a safe and secure environment through education and enforcement."

UPPS works closely with neighboring law enforcement agencies. "Blue-light" emergency telephones are installed in or adjacent to many parking lots and walking paths throughout the campus. Each phone has an emergency button and a two-way speaker that directly connects to KITTCOM.

UPPS employs students in a program called Courtesy Assistance Team or CAT. CAT provides walking companions from campus buildings to parking lots or residence halls. CAT employees also check doors to buildings and walk through buildings that are open.

Throughout the school year we give 60-75 crime prevention programs and have been invited to present "active shooter response" to numerous classes. We routinely work with the student newspaper and radio station, as well as other media, to provide safety tips and timely warnings of criminal activity.

Central Transit provides transportation from campus to various locations in the city of Ellensburg.

Our motto is "Integrity Service Excellent."

Emergency Phone: 911  
 Non-emergency: 509-925-8534  
 Business Phone: 509-963-2959  
 Fax: 509-963-2750  
 Monday through Friday, 8 a.m.-5 p.m.  
 Courtesy Assistance Team (CAT) 509-963-2950

### **Veteran Center**

CWU's Veterans Center opened in 2009 to aid service members and their families entering college. The center is committed to the academic success of its students by helping with the transition into student life and laying the groundwork for a satisfying career. Services include assisting with veteran education benefits applications, certifying enrollment, and locating additional resources veterans and their family members may need. Find more information at [www.cwu.edu/veterans](http://www.cwu.edu/veterans), 509-963-3028, or e-mail [va@cwu.edu](mailto:va@cwu.edu).

# University Centers

Central Washington University has six campus and two instructional locations in addition to the residential campus in Ellensburg. The University Centers offer upper-division (300- and 400-level) and graduate-level coursework leading to baccalaureate and master's degrees. The University Centers are designed for students who have completed their Direct Transfer Agreement (DTA) associate degree or most of their general education requirements. Day and evening classes are offered to accommodate the needs of time- and place-bound students. Visit us at [www.cwu.edu/welcome/cwu-campus-locations](http://www.cwu.edu/welcome/cwu-campus-locations).

For more information about the University Centers, contact Lauren Hibbs, Interim Executive Director of Extended Learning at (509)-963-1456 or [Lauren.Hibbs@cwu.edu](mailto:Lauren.Hibbs@cwu.edu).

## **UNIVERSITY CENTER POLICIES**

### **Admission**

Students interested in entering a university center program may submit an application at [www.cwu.edu/admissions](http://www.cwu.edu/admissions).

### **Registration**

Continuing students follow the same procedures as noted in the registration part of this catalog. Students may register via MyCWU, phone, or in person during their assigned enrollment appointment. Non-matriculated students may register for classes on a space-available basis during open enrollment.

### **Advising**

General transfer advising and specific program advising is available by contacting your university center for an appointment. Final official transcripts must be received for articulation of all transfer courses.

### **Tuition**

See current tuition rates and fees or refer to the Registrar Services home page at [www.cwu.edu/registrar](http://www.cwu.edu/registrar). Continuing Education courses are offered on a self-support basis. The self-support tuition schedule is separate from full-time tuition and fees. Visit the Continuing Education web site at [www.cwu.edu/ce/](http://www.cwu.edu/ce/). Tuition and fees are subject to change.

### **Student Services**

Information for services that accommodate physical- and learning-disabled students, career placement, or counseling is available by contacting your specific university center.

### **Financial Aid**

Students attending a university center are eligible to apply for financial aid. You can apply online at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). For more information about financial aid, visit [www.cwu.edu/financial-aid](http://www.cwu.edu/financial-aid). All students must submit the Free Application for Federal Student Aid (FAFSA) to begin the process.

### **Veterans**

Information on veterans' benefits is available through the Veterans Center on the Ellensburg campus, by calling 509-963-3028, or by emailing [va@cwu.edu](mailto:va@cwu.edu).

### **Library**

Access to library services is available to students and faculty at

the university centers through the CWU Brooks Library, which is available by logging on to [www.lib.cwu.edu/](http://www.lib.cwu.edu/). Assistance in acquiring reference materials may also be obtained by calling 800-290-3327. On-site library resource centers are also located at CWU-Des Moines and CWU-Lynnwood.

### **Textbooks**

Textbooks may be purchased through the Wildcat Shop at [cwubookstore.collegestoreonline.com](http://cwubookstore.collegestoreonline.com). You may also inquire at your individual center for specific information.

### **Final Exam Schedule**

University Centers' final exam dates are different from the Ellensburg campus schedule. University Center instructors establish their own finals calendar. Therefore, University Center students should check with the instructor to verify the appropriate date and time or refer to the syllabus.

### **Office Hours and Parking**

Contact the University Center office regarding office hours as times may vary for each center. Parking permit questions can also be directed to your University Center office.

### **CWU-Des Moines**

At Highline Community College  
Higher Education Center, Building 29  
2400 South 240th Street  
P. O. Box 13490  
Des Moines, WA 98198  
206-439-3800

### **Degree Programs:**

- BS Accounting
- BS Business Administration
  - Specializations in:
    - Finance
    - Leadership and Management
    - Marketing Management
    - Supply Chain Management
- BAEd Early Childhood Education/Elementary Education
- BAEd Early Childhood Education/Middle-Level Math
- BAEd Early Childhood Education/TESL
- BS Electronics Engineering Technology
- BAS Information Technology and Administrative Management

Specializations in:

- Administrative Management
- Cybersecurity
- BS Interdisciplinary Studies - Social Sciences
- BA Law and Justice
- BA Psychology
- MS Law and Justice

### **Additional Certifications:**

- Principal Certification
- Sports Business
- Supply Chain Management Certificate

### **CWU-Sammamish**

120 228<sup>th</sup> Ave NE  
Sammamish, WA 98074  
509-963-3690

- 100 and 200 level General education classes
- Continuing Education Programs
- Professional Development Programs

### **CWU-Lynnwood**

At Edmonds Community College  
Snoqualmie Hall  
20000 68th Avenue West  
Lynnwood, WA 98036  
425-640-1574

### **Degree Programs:**

- BA Law and Justice
- BAS Information Technology and Administrative Management
- BAS Supply Chain Management
- BS Accounting
- BS Business Administration
  - Specializations in:
    - Finance
    - Leadership and Management
    - Marketing Management
    - Supply Chain Management
- BS Interdisciplinary Studies - Social Sciences

### **Minors:**

- Accounting
- Administrative Management
- Business Administration
- Cybersecurity
- Economics
- Finance
- Individual Studies
- Information Technology
- Law and Justice
- Supply Chain Management

### **Other:**

- Supply Chain Management Certificate

### **CWU-Joint Base Lewis McChord**

Joint Base Lewis McChord  
6242 Colorado Ave,  
Joint Base Lewis-McChord, WA 98433  
509-963-1210

### **Degree Programs:**

- BS Business Administration - Supply Chain Management
- BAS Supply Chain Management

### **Other:**

- Supply Chain Management Certificate

### **CWU-Moses Lake**

At Big Bend Community College  
Advanced Technology and Education Center  
7662 Chanute Street, Room 1843  
Moses Lake, WA 98837  
509-793-2355

### **Degree Programs:**

- BS Interdisciplinary Studies-Social Sciences

### **CWU-Pierce County**

At Pierce College, Ft. Steilacoom  
Olympic 330

9401 Farwest Dr.  
Lakewood, WA 98498  
253-964-6636

**Degree Programs:**

- BS Business Administration - Supply Chain Management
- BS Business Administration - Leadership and Management
- BAS Supply Chain Management
- BAEd Elementary Education - Literacy Minor
- BS Interdisciplinary Studies- Social Sciences
- BAS Information Technology and Administrative Management
  - Specializations in:
    - Administrative Management
    - Cybersecurity
    - Information Technology (Hybrid)
- BS Information Technology and Administrative Management
  - Specializations in:
    - Administrative Management
    - Cybersecurity
    - Information Technology (Hybrid)
    - Retail Management and Technology
- BS Social Services

**Minors:**

- Law and Justice
- Psychology
- Social Services
- Sociology

**CWU-Wenatchee**

At Wenatchee Valley College  
Higher Education Center  
1300 Fifth Street  
Wenatchee, WA 98801  
509-665-2600

**Degree Programs:**

- BAEd Elementary Education
- BS Interdisciplinary Studies-Social Sciences

**CWU-Yakima**

At Yakima Valley College  
Deccio Higher Education Center  
1000 South 12th Avenue, Room 107  
P.O. Box 22520  
Yakima, WA 98907  
509-574-6894

**Degree Programs:**

- BAEd Elementary Education
- BS Interdisciplinary Studies - Social Sciences

# Undergraduate Admissions

**General Information**

Central offers admission to qualified students as they apply. All applicants must submit a completed CWU application along with a non-refundable application processing fee. Application fee waivers may be granted by the Office of Admissions based on financial need.

Applicants that apply for fall quarter will be notified of an admissions decision within two to four weeks after all application materials are received. The priority application date for fall quarter application for first-year and transfer students is February 1. Applications received after February 1 will be processed on a space-available basis. For the most current information and admissions deadlines for other academic quarters, please visit [www.cwu.edu/admissions](http://www.cwu.edu/admissions).

For initial admission, applicants must meet minimum standards as established by the State. The Academic Affairs Committee may recommend more stringent standards as well as standards for automatic admission. Standards for initial admission will be established by the Academic Affairs Committee of the Faculty Senate in consultation with the Dean of Student Success and the Associate Vice President for Admissions and Enrollment. Adherence to established standards of admission will be monitored by the Academic Affairs Committee.

**Freshmen Applicants**

First-year applicants are students currently enrolled in high school or high school graduates who have earned fewer than 40 college credits after high school graduation, including Running Start and other college level credits.

Central Washington University offers criteria-based admissions decisions for students with 3.0 or higher high school GPA and completion of College Academic Distribution Requirements (CADR). For those who do not meet these criteria, CWU offers a comprehensive review process.

Application processes vary depending on cumulative GPA as outlined below:

**Applicants with a 3.00 cumulative GPA** or higher who have satisfied the State of Washington CADR requirements will be automatically admitted regardless of ACT or SAT scores\*. A personal statement is not required. (\*Applicants must still submit an ACT or SAT test scores as they are used for placement in English and Math courses at CWU.)

**Applicants with a 2.50-2.99 cumulative GPA** who have satisfied the CADR and have ACT/SAT  $\geq 500$  in both Math and English will be automatically admitted. A personal statement is not required.

**Applicants with a 2.50-2.99 cumulative GPA** who have satisfied the CADR and have ACT/SAT  $< 500$  in either Math or English will be considered through CWU's Comprehensive Review process. A personal statement is not required.

**Applicants with a cumulative GPA of 2.00-2.49** who have satisfied the CADR will be considered through CWU's

Comprehensive Review process regardless of ACT/SAT scores. Applicants in this category are required to submit a personal statement.

**First year applicants deficient in any of the CADR** areas up to, but not exceeding 3 Distribution Requirements, may be considered through the alternate admissions standards (CWUP 5-90-020(6)). Students considered for admission through the alternate admissions standards will be subject to the comprehensive review process and are required to submit a personal statement.

Official application materials must be received by the office of admission, including all high school and college transcripts, as well as ACT or SAT scores.

At least a 2.00 cumulative GPA is required in all high school and any applicable college work.

**College Academic Distribution Requirements (CADR)**  
CADR refers to college admission criteria established by the Washington Student Achievement Council (WSAC). Each school district determines which of its courses meet CADR guidelines. Students are encouraged to take additional courses above and beyond the minimum CADR requirements.

English: 4 credits (including 3 credits of literature and composition).

Math: 3 credits (including algebra I, algebra II and geometry, senior year math-based quantitative course: 1 credit)  
(Acceptable courses include algebra I, algebra II, geometry, pre-calculus and above, math analysis, statistics, applied math, appropriate career and technical courses, or an algebra-based science course such as chemistry or physics. If you take and pass pre-calculus, math analysis of calculus prior to your senior year, you're exempt from this requirement.

Social Science: 3 credits.

Lab Science: 2 credits (one credit required in an algebra-based lab science).

World Language: 2 credits of the same world language, Native American language or American Sign Language.

1 credit of fine, visual, or performing arts, or electives from any of the other required CADR areas.

### **College Credit Earned While in High School**

Regardless of the number of college credits completed or if an Associate Degree is earned, students earning college credit while in high school, including coursework taken during summer after graduation, will be considered freshmen for admissions purposes. Running Start students and others with college credit are eligible for all freshmen scholarships and must live on campus for their first year. CWU accepts most college credit earned while in high school, including programs such as:

- Advanced Placement (AP)
- College in the High School
- College Level Examination Program (CLEP)
- CWU Cornerstone
- International Baccalaureate (IB)
- Running Start

### **Home-school Applicants**

A home-schooled student is any applicant who will complete their high school coursework at home and will not receive a

diploma from an accredited high school. An applicant is qualified for freshman admission if they:

- Present evidence of their completion of the academic CADR courses by submitting an official home-school transcript. Transcripts must be signed by a parent or guardian in order to be official.
- Submit official ACT or SAT scores.
- Provide the GED as proof of high school completion. A GED is not required but may be submitted for eligibility for Federal Financial Aid and to participate in varsity athletics.
- Submit any official college transcripts (if applicable). Regardless of the number of college credits completed, students earning college credit in high school will be considered freshmen for admissions purposes as long as they do not take coursework after graduation from high school (excluding summer).

All home-schooled students will be reviewed by the Admissions Review Process on an individual basis.

### **Transfer Applicants**

A transfer applicant is one who comes with 40 or more credits (27 semester credits) from an accredited two-or four-year college or university. Credits earned at other institutions will be evaluated to determine if they will count toward a CWU degree. Transfer students must submit official copies of all college transcripts to the Office of Admissions. Applicants who have not earned a high school diploma may be admitted to the university under the alternative admissions process outlined in CWUP 5-90-020(6).

Generally, transfer students who have completed at least 40 college-level transferable credits with at least a 2.5 cumulative GPA will be admissible.

### **Alternative Admissions**

Applicants who do not meet admission criteria may be considered for admission by the Admissions Review Committee through an alternative admissions pathway. Such applicants include, but are not limited to, applicants who have been home-schooled; persons who are 18 or older and have neither completed high school nor 40 credits of college work elsewhere but have earned the GED; applicants deemed deficient in high school course requirements; and applicants who are 25 or older who have poor academic histories and who have not attended school recently. Applicants considered through the alternative admissions pathway will be subject to the comprehensive review process and are required to submit a personal statement. Applicants without an associate degree must satisfy the foreign language admission requirement prior to completing a total of 135 credits.

### **Comprehensive Review**

Under certain situations, a comprehensive review of an applicant's academic performance may be performed to ascertain whether the applicant has a high likelihood of success at CWU. A comprehensive review may include the following aspects, high school grade trends, rigor of coursework in an applicant's senior year of high school, or a personal statement.

### **International Students**

Central welcomes qualified students from other countries. Students demonstrating the greatest potential for success at the university level may be admitted after a thorough review and



evaluation of their entire academic background.

Because educational systems vary widely around the world, there is no single, uniform admission requirement for international students. International students must meet the following minimum requirements for admission purposes:

1. Evidence of completion of the academic course work and national examinations that would qualify them to apply to colleges and universities in their native country.
2. Normally, if English is not the first language, competency in English demonstrated in one of the following ways:
  - a. Test of English as a Foreign Language (TOEFL) minimum score of 525 paper-based, 195 computer-based and 71 internet-based
  - b. International English Language Testing System (IELTS) minimum score of 6.0.
  - c. Completing two English department approved composition courses each with minimum grade of 3.0 or equivalent rating from a regionally accredited U.S. college, university or an approved university partner.
3. If English is the first language, the foreign language requirement for the Bachelor of Arts degree can be fulfilled by completing the basic skills foreign language requirement, passing the CLEP®, passing a foreign language course challenge exam, or obtaining approval from the Chair of World Languages.
4. Applicants transferring from U.S. institutions must have a minimum grade point average in transferable courses as established by the Academic Affairs Committee or DTA associate degree from an accredited Washington State community college (or approved out-of-state associate degree).
5. Adequate financial support for the student's intended studies. Financial support will be judged based on applicant's confidential financial statement and a current bank letter or guaranteed source of funding.
6. If all of the above conditions are met, the student is recommended for admissions by the international admissions counselors, and the Office of International Studies and Programs may issue the INS certificate of eligibility for F-1 status (Form I-20).

(B) Exceptions to the above admissions requirements must be approved by the admissions review committee in consultation with the Assistant Vice President of International Studies and Programs.

Students who originate from one of the following countries are considered to have met English Proficiency Standards: Australia, Ireland, New Zealand, United Kingdom, and English-speaking provinces of Canada. These students are exempt from furnishing proof of English proficiency documents.

International Transfer students who are transferring from U.S. institutions must have a minimum grade point average of 2.5 in transferable college level courses and meet the academic requirements for college entrance in their native country. Though not required for admission purposes, adequate financial

support, verified by the Confidential Financial Statement form and a current bank letter or scholarship award, is required of all international applicants.

All supporting documents should be sent a minimum of 90 days in advance of the quarter for which the applicant seeks admission.

Students who submit international college or university transcripts must have an official course-by-course translation. Evaluation may be done by university personnel or one of the following foreign credential evaluation companies: Foundation for International Services (FIS) Inc. at [www.fis-web.com](http://www.fis-web.com) or World Education Services (WES) at [www.wes.org](http://www.wes.org).

#### **Re-admission of Former Students**

Students who interrupt their CWU studies for more than one quarter (excluding summer) must re-apply for admission to the university and pay the application fee. If the student has attended any institution during his or her absence from CWU, the student must send official transcripts of all post-CWU coursework to the Office of Admissions at the time they re-apply. Eligibility for re-admission will be based on prior academic performance at the university and any courses completed since last attending CWU. If a student left on academic or disciplinary suspension, they should contact the Dean of Student Success for reapplication instructions 30 days prior to the start of the quarter for which the student is applying.

#### **Confirmation of Admission**

Students who are admitted to the university must confirm their intention to enroll by logging on to MyCWU and using the Accept/Decline button in their Admissions Toolbox. This will begin the orientation, registration, and advising process. The university may withdraw an offer of admission for fall quarter if confirmation is not complete by May 1. Students who have not confirmed may be denied admission after that time if enrollment limits have been reached. Students who choose not to accept offers of admission should notify the Office of Admissions by emailing [admissions@cwu.edu](mailto:admissions@cwu.edu) or use the Accept/Decline option in MyCWU. An offer of admission is only valid for the academic quarter indicated in the acceptance letter. A student who chooses not to accept an offer of admission may reapply for a subsequent quarter.

#### **Withdrawal of Offer of Admission**

Offers of admission may be withdrawn by the Office of Admissions if a student's academic work between the time of application and the quarter for which the student has applied results in the student not meeting the admissions criteria or other university standards.

#### **Non-matriculated Student Application**

Students who are not seeking degrees or certificates may be allowed to enroll in courses as non-matriculated students. These students do not need to go through the regular admissions process, but should apply through Registrar Services by completing the Non-Matriculated Application form. Non-matriculated students register during open enrollment on a space-available basis. Credits earned as a non-matriculated student may not be used to satisfy degree or certificate requirements unless the student applies and is accepted as a matriculated student, in which case a maximum of 45 credits may be applied. Exceptions may be made for non-matriculated students in collaborative certificate programs.

Students who have previously attended Central as matriculated students and have not obtained a degree, and students who have applied and been rejected for undergraduate matriculated status will not be allowed to enroll as non-matriculated students. Non-matriculated students are not eligible for most financial aid, veteran's benefits, or other services regularly provided for matriculated students.

**High School Enrichment Program**

Students who have not yet graduated from high school may be allowed to enroll as non-matriculated students for courses that they need to advance academically, provided that such academic opportunities are not readily available to them elsewhere.

To be eligible for the High School Enrichment Program, students must have demonstrated superior academic performance or preparation in the area of study for which they are applying. High School Enrichment Program applicants must submit official copies of their high school transcript. Some courses may require that the student submit ACT, SAT, or COMPASS scores in order to qualify for placement into those courses. In addition, they must complete the High School Enrichment application that is available from Registrar Services, and obtain the approval of their high school principal, the course instructor, and Registrar. Regular tuition and fees apply. For further information, please call 509-963-3001 or e-mail [reg@cwu.edu](mailto:reg@cwu.edu).

# Transfer Credit

## Equivalency Guides and Policies

Central Washington University accepts a maximum of 135 total transfer credits from regionally accredited four-year schools, including a maximum of 105 total credits from regionally accredited community colleges. Credits are evaluated by Registrar Services based on official transcripts. Credits earned in courses numbered 100 and above are generally accepted toward total transfer credits provided the courses require university-level study.

Transfer courses equivalent to CWU courses will apply toward the baccalaureate degree exactly as do the CWU courses for which they are being substituted. Equivalency is established by a course review from the appropriate academic department. Other transfer courses that have not been established as exact equivalents may transfer as general electives and may also be allowed in the degree program with approval from the appropriate academic department chair and, as appropriate, college dean.

Colleges that operate on semester basis give semester credits. Equivalent quarter credits are semester credits multiplied by one and one half.

Credits earned at institutions which are not fully accredited by a regional accrediting association are not accepted. Consideration for exception to this policy may be made by written petition to the dean of the appropriate college after earning a minimum of 45 credits at Central with a cumulative GPA of at least 2.5.

The university recognizes college credit from a number of sources, including Advanced Placement (AP), College Level Examination Program (CLEP), International Baccalaureate (IB), DANTES and military educational experience or correspondence credit. Up to 45 quarter credits from these programs may be counted toward graduation and contributes to the 105 lower division credit limitation.

The university endorses the policy on Inter-College Transfer and Articulation among Washington public colleges and universities published by the Washington Student Achievement Council. The policy deals with the rights and responsibilities of transfer students, and the review and appeal process in transfer credit disputes. Contact Registrar Services for more detailed information.

Academic associate degrees which are part of the Direct Transfer Agreements (DTA) between the university and Washington community and technical colleges will meet the general education and foreign language requirements of a bachelor's degree. Community and technical colleges offer several kinds of associate degrees, therefore, students who plan to transfer to the university should check with their counselors to make sure they are enrolled in the appropriate direct transfer degree program.

A student cannot earn an associate degree and bachelor's degree in the same quarter.

Associate of arts degrees from a college accredited by the Northwest Commission on Colleges and Universities in the state of Washington approved by the Intercollege Relations Commission (ICRC) as a direct transfer agreement (DTA) associate degree will have satisfied the general education and the foreign language requirements of a bachelor's degree.

Students transferring to CWU from another Washington State public baccalaureate institution, whose General University Requirements or General Education Requirements were complete at the sending institution, will also satisfy all of the CWU General Education Requirements, provided official documentation is received from the sending institute and certified by CWU.

Students who would like to petition their transfer equivalency may request a substitution through their academic department for major/minor requirements or file a general education petition through registrar services.

Students who transfer from a regionally-accredited four-year institution after completing the general education at their prior four-year institution, will not be required to complete the CWU general education or foreign language requirements. Students must submit evidence of prior general education completion to registrar services upon admission.

Associate of science transfer degrees (AS-T Track 1 or 2) which are part of direct transfer agreements between CWU and Washington community colleges must meet additional general education requirements for a CWU bachelor's degree, but will not be required to complete the foreign language requirement.

## Advanced Placement Credit

*The University will grant at a minimum elective credit for College Board Advanced Placement (AP) exams completed with a score of three (3) or higher.* Students may receive credit for advanced placement with a grade of S, depending upon the scores achieved on the College Board Advanced Placement Test (AP). Students must request that their AP test scores be sent to the Registrar Services at Central. **Scores of 3 or higher on Advanced Placement Examination will be awarded as free electives for departments without specific policy.** No more than 45 total quarter credits through AP or other sources of nontraditional credit may apply toward graduation requirements.

Department	AP Score	CWU Equivalent (credit amount)
<b>Art and Design</b>		
Art 2D	3, 4, 5	Knowledge Area- K3: Creative Expression; Pathway- P6: Ways of Knowing (5)
Art 3D	3, 4, 5	Knowledge Area- K3: Creative Expression; Pathway- P6: Ways of Knowing (5)
Art History	3, 4, 5	Knowledge Area- K5: Humanities; Pathway- P6: Ways of Knowing (5)
Art Studio	3, 4, 5	Knowledge Area- K3: Creative Expression; Pathway- P6: Ways of Knowing (5)
<b>Biology</b>		
	3	BIOL 101 (5)
	4, 5	BIOL 181 and 182 (10)
Capstone: Research	3, 4, 5	Knowledge Area- K1: Academic Writing II; Pathway- P6: Ways of Knowing (5)
Capstone: Seminar	3, 4, 5	Knowledge Area- K1: Academic Writing II; Pathway- P6: Ways of Knowing (5)
<b>Chemistry</b>		
	3, 4	Knowledge Area- K7: Physical & Natural World; Pathway- P3: Perspectives on Current Issues (5)
	5	CHEM 181, 181LAB, 182, 182LAB (10)
<b>Computer Science</b>		
Computer Science A	3, 4	CS 110 (4)
Computer Science A	5	CS 110 and 111 (8)
Computer Science AB	3, 4	CS 110 and 111 (8)
	5	CS 110, 111, and 301 (12)
Computer Science Principles	3, 4, 5	CS 112 (4)
<b>Economics</b>		
Micro Economics	3, 4, 5	ECON 201 (5)
Macro Economics	3, 4, 5	ECON 202 (5)
<b>English</b>		
Lang and Comp	3, 4, 5	ENG 101 (5)
Lit and Comp	3, 4, 5	ENG 105 (5)
<b>Environmental Science</b>		
	3, 4	ENST 201 (5)
	5	ENST 201 and 202 (10)
<b>Geography</b>		
Human Geography	3, 4, 5	Knowledge Area- K6: Individual & Society; Pathways- P4: Social Justice, P6: Ways of Knowing (5)
<b>History</b>		
U.S. History	3	HIST 144 (5)
U.S. History	4, 5	HIST 143 and 144 (10)
World History	3, 4, 5	HIST 103 (5)
European History	3	HIST 102 (5)
European History	4, 5	HIST 102 and 103 (10)
<b>Mathematics</b>		
Calculus AB	3, 4, 5	MATH 172 (5)
Calculus BC	3, 4, 5	MATH 172 and 173 (10)
Math Statistics	3, 4, 5	MATH 211 (5)
<b>Music</b>		
Music Listening and Literature	3, 4, 5	Knowledge Area- K3: Creative Expression; Pathway- P6: Ways of Knowing (5)

	Music Theory	3, 4, 5	Knowledge Area- K3: Creative Expression; Pathway- P6: Ways of Knowing (5)
Physics			
	Physics 1	3	Physics Elective (5)
	Physics 1	4, 5	PHYS 111 (5)
	Physics 2	3	Physics Elective (5)
	Physics 2	4, 5	PHYS 112 and PHYS 113 (10)
	Physics B	3, 4, 5	Physics Elective (5)
Physics C			
	Mechanics	3	Physics Elective (5)
	Mechanics	4, 5	PHYS 181 and PHYS 182 (10)
	Electricity & Magnetism	3	Physics Elective (5)
	Electricity & Magnetism	4, 5	PHYS 183 (5)
Political Science			
	American Govt	3, 4	Knowledge Area- K2: Community, Culture, & Citizenship; Pathway- P1: Civic & Community Engagement (5)
	American Govt	5	POSC 210 (5)
	Comparative Politics	3, 4	Knowledge Area- K4: Global Dynamics; Pathway- P4: Social Justice (5)
	Comparative Politics	5	POSC 260 (5)
Psychology			
		3	Psychology Elective (5)
		4, 5	PSY 101 (5)
World Languages			
		3	WL 251 (5)
		4	WL 251, 252 (10)
	Maximum 15 total cr.	5	WL 251, 252, 253 (15 max)
	French Literature	3, 4, 5	French Elective (5)
	Spanish Literature	3, 4, 5	Knowledge Area- K3: Creative Expression; Pathway- P6: Ways of Knowing (5)
	Latin Literature	3, 4, 5	Knowledge Area- K3: Creative Expression; Pathway- P6: Ways of Knowing (5)
	Latin Vergil	3, 4, 5	Knowledge Area- K3: Creative Expression; Pathway- P6: Ways of Knowing (5)

## College Level Examination Program

Students will be awarded college-level quarter credits with a grade of S for each score at the 50th percentile on the College Level Examination Program (CLEP) humanities, social science/history and natural sciences examinations. These credits will meet the general education requirements in the appropriate areas. Students may also be awarded credit for subject examinations as determined by appropriate academic departments at the time of application for credit.

No more than 45 total quarter credits through CLEP or other sources of nontraditional credit may apply to graduation requirements. CLEP credit is not awarded for English.

College Level Examination Program		
CLEP Test Scores for Central Washington University at the 50th Percentile or Above.		
	Score	CWU Equivalent (credit amount)
Calculus with Elementary Functions	50+	MATH 172 and 173 (10)
Chemistry	63+	CHEM 181, 181LAB (5)
College Mathematics	50+	Basic Skills Math (5)

Macroeconomics	50+	Economics Elective (5)
Microeconomics	50+	Economics Elective (5)
Human Growth and Development	50+	PSY 314 (4)
Humanities	50+	Literature and the Humanities (5)
Info Systems and Computer Applications	54+	CS 101 (4)
Intro to Psychology	50+	PSY 101 (5)
Intro Ed. Psychology	50+	PSY 315 (4)
Intro to Sociology	50+	SOC 107 (5)
Natural Sciences	50+	Fundamental Disciplines of Physical and Biological Sciences (5)
Social Science and History	50+	Perspectives on the Cultures and Experiences of the US (5)
Western Civilization I	50+	HIST 101 (5)
Western Civilization II	50+	HIST 102 or 103 (5)
US History I	57+	HIST 143 (5)
US History II	54+	HIST 144 (5)
French Language Level I	50-61	French 100-level elective (15)
German Language Level I	50-62	German 100-level elective (15)
Spanish Language Level I	50-62	Spanish 100-level elective (15)
*CLEP cannot meet major or minor requirements in the World Language department.		

## International Baccalaureate

Central recognizes the International Baccalaureate (IB) program as a coherent, challenging course of study and responds individually to each participant's IB transcript for award of college credit. Central will grant at a minimum elective credit for International Baccalaureate (IB) higher level exams completed with a score of five (5) or higher, with exceptions. Standards for acceptance will be established by the appropriate academic departments and listed in the official catalog. CWU recognizes the International Baccalaureate Diploma and awards up to 45 quarter credits (30 semester credits). With the receipt of a Diploma, credit will be awarded for 3 courses (15 quarter credits) and distributed evenly among the three general education breadth or knowledge areas. These credits will not be applied to lab or writing courses. An additional 30 quarter credits (20 semester credits) may be awarded in the areas of the students' higher-level subject exams with a score of 4 or higher. No more than 45 total quarter credits through IB or other sources of nontraditional credit may apply toward graduation requirements.

IB Department	Exam	Score	CWU Equivalent (credit amount)
Art Appreciation	HL	4, 5+	Art Elective (4)
Biology	HL	4	BIOL 101 (5)
	HL	5	BIOL 101 and BIOL 181 (10)
	HL	6+	BIOL 101 and BIOL 181 (10)
	SL	4, 5, 6+	BIOL Elective (5)
Business and Management	HL	4+	BUS Elective (5)
	SL	4+	BUS Elective (5)
Chemistry	HL	4	CHEM 181 (5)
	HL	5	CHEM 181, 182 (10)
	HL	6+	CHEM 181, 182, 183 (15)
	SL	4+	CHEM Elective (5)
Computer Science	HL	4+	CS 110 (4)
	SL	4, 5+	CS Elective (4)
Dance	HL	4+	PED Elective (3)
	SL	4+	PED Elective (3)
Design Technology	HL	4, 5+	ETSC Elective (5)
Economics	HL	4, 5, 6+	ECON 101 (5)
	SL	4+	ECON 101 (5)
English	HL	4+	ENG 101 (5)
Environmental Systems and Societies	HL	4+	ENST Elective (5)
	SL	4+	ENST Elective (5)
Film	HL	4+	FILM Elective (5)



	SL	4+	FILM Elective (5)
Geography	HL	4+	GEOG 208 (5)
	SL	4, 5+	GEOG Elective (5)
Global Politics	HL	4+	POSC Elective (5)
	SL	4+	POSC Elective (5)
History:	HL	4+	HIST 101
	SL	4+	HIST Elective (5)
Americas		4+	HIST 101 and HIST 386 (10)
Africa		4+	History Elective/Social and Behavioral Sciences-Perspectives on World Cultures (5)
W. South Asia		4+	History Elective/Social and Behavioral Sciences-Perspectives on World Cultures (5)
E. Southeast Asia		4+	History Elective/Social and Behavioral Sciences-Perspectives on World Cultures (5)
Europe		4+	History Elective/Social and Behavioral Sciences-Perspectives on World Cultures (5)
Information Technology in a Global Society	HL	4+	IT Elective (3)
	SL	4+	IT 301 (3)
Mathematics	HL	4+	MATH Elective (5)
	SL	4+	MATH Elective (5)
Music	HL	4+	MUS Elective (3)
	SL	4+	MUS Elective (3)
Philosophy	HL	4+	PHIL 201 (5)
	SL	4+	PHIL Elective (5)
Physics	HL	4	PHYS Elective (5)
	HL	5+	PHYS 181, 182, 183 (15)
	SL	4	PHYS Elective (5)
	SL	5+	PHYS 111, 112,113 (15)
Psychology	HL	4+	PSY 101 (5)
Social and Cultural Anthropology	HL	4+	ANTH Elective (5)
	SL	4+	ANTH Elective (5)
Theatre	HL	4+	TH Elective (4)
	SL	4+	TH Elective (4)
Visual Arts	HL	4+	ART 103 (4)
	SL	4+	ART 103 (4)
World Languages	SL	4	WL 151
	SL	5+	WL 151 and 152 (10)
	HL	4	WL Elective (5)
	HL	5	WL 251 (5)
	HL	6	WL 251, 252 (10)
	HL	7	WL 251, 252, 253 (15)
World Religions	SL	4+	RELS Elective (5)
	HL	4+	RELS Elective (5)
SL= Standard Level			
HL= High Level			

### Credit for Military Service

Matriculated students seeking to use Veterans Affairs Educational Benefits must submit official military transcripts (Joint Services Transcript) for evaluation. Students may receive up to 30 lower and/or upper division credits for completion of military educational experiences as recommended by the American Council on Education (ACE). Basic training and Military Occupational Specialty courses are excluded. Military credit recommendations that are direct equivalents to CWU course offerings may be articulated to that specific course with departmental approval. If direct course equivalents do not exist, elective credit will be awarded when possible. No more than 45 total quarter credits through military credit or other sources of nontraditional credit may apply toward graduation requirements.

### Non-U.S. College/University Credit

Credit will be accepted from non-U.S. institutions of higher education when (1) it has been earned at an institution linked to CWU either by a bilateral or consortial (e.g., International Student Exchange Program (ISEP) agreement, or when an institution has been certified by the CWU Office of International Studies and Programs as a legitimate, recognized institution of higher education (tertiary level) within a

particular country; (2) the student has received a passing grade recognized by the institution; and (3) an official record or transcript has been received by the university.

### Non-Transferable Courses

Credit will not be granted for vocational/technical courses; non-credit courses and workshops; remedial or college preparatory courses; or sectarian religious studies.

### Degrees Offered

Central Washington University offers the following undergraduate degrees:

- Bachelor of Applied Science
- Bachelor of Arts
- Bachelor of Arts in Education
- Bachelor of Fine Arts
- Bachelor of Music
- Bachelor of Science

Students wishing to earn a BA, BAS, BAEd, BFA, BM, or BS degree must complete (1) the general education program; (2) a concentration of at least 60 credits which may be satisfied by a specified major, or a specified major and minor, or a specified major and courses in other fields as prescribed by the major department; (3) electives in sufficient quantity to include 60 upper-division credits to bring the total quarter credits to 180; and (4) other degree requirements as specified in the catalog under Graduation Requirements. Department fields of study are listed by major, minor, or specialization by college on the undergraduate programs offered. Minor concentrations are offered in many fields.

Students wishing to earn a BAEd degree must complete (1) the general education program; (2) a major in Early Childhood Education, Elementary Education or Special Education and minors, when appropriate; (3) the professional education foundation courses; (4) 180 total quarter credits (including 60 upper-division credits); and (5) other general degree requirements as listed under the College of Education and Professional Studies and Graduation Requirements sections in this catalog. Students may select any university minor; however, students are strongly encouraged to select an endorsable teaching minor.

### Cambridge International AS/A Level Exams

Once the student has submitted the original exam certificate directly from Cambridge International, students will be awarded up to 15 quarter credits for each A-level exam with a passing grade and up to 7.5 quarter credits will be granted for each AS-level exam with a passing grade. A satisfactory (S) grade will be posted for A-level or AS-level exams.

No more than 45 total quarter credits through Cambridge International or other sources of nontraditional credit may apply to graduation requirements. Cambridge International credit is not awarded for ENGL 101.

Cambridge Department	Exam	Score	CWU Equivalent (credit amount)
<b>Accounting</b>	AS	A-E	ACCT Elective (7.5)
	A	A-E	ACCT Elective (15)
<b>Art</b>			
ART - Art and Design	AS	A-E	ART Elective (7.5)
	A	A-E	ART Elective (15)
ART - Digital and Media Design	AS	A-E	ART Elective (7.5)
	A	A-E	ART Elective (15)
<b>Biology</b>	AS	A-E	BIOL Elective (7.5)
	A	A-E	BIOL Elective (15)
<b>Business</b>	AS	A-E	BUS Elective (7.5)
	A	A-E	BUS Elective (15)
<b>Chemistry</b>	AS	A-E	CHEM Elective (7.5)
	A	A-E	CHEM Elective (15)
<b>Classical Studies</b>	AS	A-E	HUM Elective (7.5)
	A	A-E	HUM Elective (15)
<b>Computer Science</b>	AS	A-E	CS Elective (7.5)
	A	A-E	CS Elective (15)
<b>Design and Technology</b>	AS	A-E	ETSC Elective (7.5)
	A	A-E	ETSC Elective (15)
<b>Economics</b>	AS	A-E	ECON Elective (7.5)
	A	A-E	ECON Elective (15)

<b>Design and Textiles</b>	AS	A-E	ATM Elective (7.5)
	A	A-E	ATM Elective (15)
<b>English</b>			
ENG - English Literature	AS	A-E	ENG Elective (7.5)
	A	A-E	ENG Elective (15)
ENG - Literature in English	AS	A-E	ENG Elective (7.5)
	A	A-E	ENG Elective (15)
ENG - English Language	AS	A-E	ENG Elective (7.5)
	A	A-E	ENG Elective (15)
ENG - Language and Linguistics	AS	A-E	ENG Elective (7.5)
	A	A-E	ENG Elective (15)
ENG - Language and Literature in English	AS	A-E	ENG Elective (7.5)
	A	A-E	ENG Elective (15)
<b>Environmental Management</b>	AS	A-E	ENST 201 (5) and ENST Elective (2.5)
<b>Geography</b>	AS	A-E	GEOG Elective (7.5)
	A	A-E	GEOG Elective (15)
<b>Global Perspectives &amp; Research</b>	AS	A-E	Transfer Elective (7.5)
	A	A-E	Transfer Elective (15)
<b>History</b>			
HIST - Component 1 (World)	AS	A-E	HIST Elective (7.5)
HIST - Component 2 (U.S.)	AS	A-E	HIST Elective (7.5)
HIST - Component 3 (World)	A	A-E	HIST 101, 102, and 103 (15)
HIST - Component 3 (U.S.)	A	A-E	HIST 143 and 144 (10) and HIST Elective (5)
HIST - Component 4 (World)	A	A-E	HIST 101, 102, and 103 (15)
HIST - Component 4 (U.S.)	A	A-E	HIST 143 and 144 (10) and HIST Elective (5)
<b>Information Technology</b>			
IT - Applied Information and Communication Technology	AS	A-E	IT Elective (7.5)
	A	A-E	IT Elective (15)
IT - Information Technology	AS	A-E	IT Elective (7.5)
	A	A-E	IT Elective (15)
<b>Law</b>	AS	A-E	LAJ Elective (7.5)
	A	A-E	LAJ Elective (15)
<b>Marine Science</b>	AS	A-E	Transfer Elective (7.5)
	A	A-E	Transfer Elective (15)
<b>Mathematics</b>			
MATH - Mathematics	AS	A-E	MATH 172 (5) and MATH Elective (2.5)
	A	A-E	MATH 172 and 173 (10) and MATH Elective (5)
MATH - Further Mathematics	A	A-E	MATH 265 and MATH Elective (11)
<b>Media Studies</b>	AS	A-E	COM Elective (7.5)
	A	A-E	COM Elective (15)
<b>Music</b>	AS	A-E	MUSC Elective (7.5)
	A	A-E	MUSC Elective (15)
<b>Nepal Studies</b>	AS	A-E	Transfer Elective (7.5)
<b>Physical Education</b>	AS	A-E	PE Elective (7.5)
<b>Physics</b>	AS	A	PHYS 181 (5) and PHYS Elective (2.5)
	AS	B-C	PHYS 111 (5) and PHYS Elective (2.5)
	AS	D-E	PHYS Elective (7.5)
	A	A	PHYS 181, 182, and 183 (15)
	A	B-C	PHYS 111, 112, and 113 (15)
	A	D-E	PHYS Elective (15)
<b>Psychology</b>	AS	A-C	PSY 101 (5) and PSY Elective (2.5)
	AS	D-E	PSY Elective (7.5)
	A	A-E	PSY 101 (5) and PSY Elective (10)
<b>Religious Studies</b>			
RELS - Divinity	AS	A	RELS 353 or 354 (5) and RELS Elective (2.5)
	AS	B-E	RELS Elective (7.5)

	A	A	RELS 353 or 354 (5) and RELS Elective (10)
	A	B-E	RELS Elective (15)
RELS - Islamic Studies	AS	A	RELS 355 (5) and RELS Elective (2.5)
	AS	B-E	RELS Elective (7.5)
	A	A	RELS 355 (5) and RELS Elective (10)
RELS - Hinduism	AS	A	RELS 352 (5) and RELS Elective (2.5)
	AS	B-E	RELS Elective (7.5)
	A	A	RELS 352 (5) and RELS Elective (10)
<b>Sociology</b>	A	B-E	RELS Elective (15)
	AS	A-E	SOC Elective (7.5)
<b>Thinking Skills</b>	A	A-E	SOC Elective (15)
	AS	A-E	Transfer Elective (7.5)
<b>Travel and Tourism</b>	A	A-E	Transfer Elective (15)
	AS	A-E	RTE Elective (7.5)
<b>Theatre Arts/Drama</b>	A	A-E	RTE Elective (15)
	AS	A-E	TH Elective (7.5)
<b>World Languages</b>	A	A-E	TH Elective (15)
WL - French	AS	A-E	FR Elective (7.5)
	A	A-E	FR Elective (15)
WL - German	AS	A-E	GERM Elective (7.5)
	A	A-E	GERM Elective (15)
WL - Japanese	AS	A-E	JAPN Elective (7.5)
WL - Spanish	AS	A-E	SPAN Elective (7.5)
	A	A-E	SPAN Elective (15)
WL - Arabic, Afrikaans, Hindi, Portuguese, Tamil, Urdu	AS	A-E	FNLA Elective (7.5)
	A	A-E	FNLA Elective (15)

# Tuition and Fees

General tuition and fee rates are established by the State Legislature and miscellaneous fees are set by the CWU Board of Trustees. The tuition rates shown below are an estimate. **All tuition and fees are subject to change without notice.**

**Tuition rates for 2019-2020 are not available at this time.**

## **Undergraduate and post-baccalaureate students registering for 10-18 credits:**

Quarterly tuition fees for residents of the state of Washington \$2,056.50

Quarterly tuition fees for nonresidents of the state of Washington \$7,050.20

## **Undergraduate and post-baccalaureate students registering for nine credits or less:**

Resident: Each credit, \$205.65

Minimum of \$411.30

Nonresident: Each credit, \$705.02

Minimum of \$1,410.04

## **Graduate (Master's Degree) students registering for 10-18 credits:**

Resident graduate: \$3,071.20

Nonresident graduate: \$7,194.20

## **Graduate (Master's Degree) students registering for nine credits or less:**

Resident graduate: Each credit, \$307.12

Minimum of \$614.24

Nonresident graduate: Each credit, \$719.42

Minimum of \$1438.84

## **Students registering for more than 18 credits:**

Undergraduate and post-baccalaureate,

Resident: Each credit over 18, \$205.65

Nonresident: Each credit over 18, \$705.02

Resident graduate: Each credit over 18, \$307.12

Nonresident graduate: Each credit over 18, \$719.42

## **Continuing Education Tuition Fees**

All courses taught through the Office of Continuing Education are self-supporting. The waiver for veterans, university staff and senior citizens does not apply. Full fee-paying students must make additional payments at the rate established for each continuing education course in which they enroll.

## **Resident and Non-Resident Status**

Washington State law concerning resident classification for tuition and fee purposes, RCW 28B.15.012 et seq., requires that a student "(a)(i) have established a bona fide domicile in the state of Washington, primarily for purposes other than educational, for at least one year immediately prior to the beginning of the quarter for which he or she registers at the university, and (ii) be financially independent, or (b) be a dependent student, one or both of whose parents or legal guardians have maintained a bona fide domicile in the state of Washington for at least one year prior to the beginning of the quarter for which the student registers at the university." The term "domicile" denotes a person's true, fixed, and permanent home and place of habitation. It is the place where he or she intends to remain, and to which he or she expects to return when

he or she leaves without intending to establish a new domicile elsewhere.

Any change of residency status for a given quarter must be based on written evidence provided by the student on a residency classification questionnaire on or before the first-class day of the quarter for which a change of residency is sought. Questionnaires are available through Registrar Services. The burden of proof in all cases rests with the student.

In accordance with RCW 28B.15.014, certain nonresidents are exempted from paying nonresident tuition and fees. To be eligible for such an exemption, a nonresident student must provide documented evidence that he or she resides in the state of Washington, and (a) holds a graduate service appointment, designated as such by the university, involving not less than 20 hours per week; (b) is employed for an academic department in support of the instructional or research programs involving not less than 20 hours per week; or (c) is a faculty member, classified staff member, administratively exempt employee holding not less than a half-time appointment, or dependent child of such a person.

## **Resident Tuition for Veterans and Eligible Individuals**

Effective July 24, 2015, ESSB 5355 was signed into law in July 2015, modifying the definition of resident student to comply with federal requirements established by the Veterans Access, Choice, and Accountability Act of 2015 (Choice Act). The Choice Act requires states to charge in-state tuition and fees to "covered individuals" in order for the Department of Veterans Affairs to approve programs of education for everyone training under the Post 9/11 GI Bill and the Montgomery GI Bill.

### **A "covered individual" is defined in the Choice Act as:**

1. A Veteran who lives in the state in which the institution of higher learning is located (regardless of his/her formal state of residence) and enrolls in the school within three (3) years of discharge from a period of active duty service of 90 days or more.
2. A spouse or child using transferred benefits who lives in the state in which the institution of higher learning is located (regardless of his/her formal state of residence) and enrolls in the school within three (3) years of the transferor's discharge from a period of active duty service of 90 days or more.
3. A spouse or child using benefits under the Marine Gunnery Sergeant John David Fry Scholarship who lives in the state in which the institution of higher learning is located (regardless of his/her formal state of residency) and enrolls in the school within three (3) years of the service member's death in the line of duty following a period of active duty service of 90 days or more.

*The Choice Act does not apply to active duty service members or dependents of active duty service members.*

## **Eligibility Requirements**

Covered individuals may qualify to pay in-state tuition and fees, regardless of his/her formal state of residence. To apply for residency for tuition purposes as covered individuals, the following criteria must be met:

1. Separated from the uniformed services with any period of honorable service after at least ninety (90)

days of active duty service. Must provide DD-214 to show separation date.

Uniformed services include: Army, Navy, Marine Corps, Air Force, Coast Guard, US Public Health Service Commissioned Corps, and the National Oceanic and Atmospheric Administration Commissioned Officer Corps.

1. Lives in Washington and enters a Washington higher education institution within three (3) years of discharge from a period of active duty service.

Enters is defined as the first day of the quarter prior to the end of the third year of discharge.

1. Has received a Certificate of Eligibility verifying VA educational benefit.

Procedure:

1. Request for Veterans Center to send supporting documents to Registrar's Office.
2. Contact Registrar's Office to complete additional paperwork [reg@cwu.edu](mailto:reg@cwu.edu) 509-963-3001.

### Out-of-State Applicants

To qualify as a Washington State resident, a student must be a U.S. citizen or have permanent resident (resident alien) status. A student must also be either independent and have established a permanent home in the state of Washington for purposes other than education at least 12 months prior to enrollment. Verification will be requested.

The spouse or dependent of a person who is on active military duty, stationed in Washington, can be classified as a resident, for tuition paying purposes, by submitting proof of military assignment. A student cannot qualify as a Washington resident if s/he (or parent, in the case of a dependent) has attended college as a resident of another state within a year prior to enrollment; has received financial assistance from another state, including reciprocity awards, within a year prior to enrollment; or possesses a current out-of-state driver's license, vehicle registration or other document which gives evidence of being domiciled in another state. For further information, contact Registrar Services at 509-963-3001.

Residency questions should be directed to Registrar Services. Residency requirements are subject to legislative change.

### Senior Citizens

Senior citizens are encouraged to take advantage of the large variety of courses offered at the university. Persons 60 years of age or older may register as an auditor the first day of class on a space-available basis with permission of instructor. The fee is \$5 for a maximum of two courses, not to exceed six credits. Any person utilizing this provision taking more than six credits must pay an additional \$25 tuition charge. Credits may not be applied toward meeting requirements for any degree or for increments on any wage or salary scale. Waivers are not available during summer quarter.

### Veterans Conflict Grant

**Not available summer quarter.**

Central Washington University (CWU) offers a Veteran Conflict Grant (amount of available grant is determined each academic year) with the following limitations and requirements:

1. Admission to CWU.

2. DD-214 Member 4 copy showing Honorable Discharge (all grants are awarded on information that that Department of Defense (DOD) codes on each DD-214).
3. Veteran must be a Washington State Resident.
4. Veteran must complete the FAFSA-Financial Aid Application each year.
5. Minimum enrollment must be halftime (6 credits)
6. **The Veteran of Foreign Conflict Waiver/Central Grant can be received for up to 225 quarter credits.**

This grant replaces all other military conflict waivers awarded in the past by CWU. For further information, contact the Veterans Center at 509-963-3028 or e-mail [va@cwu.edu](mailto:va@cwu.edu) or check the website at: [www.cwu.edu/veterans](http://www.cwu.edu/veterans).

### Children and Spouse of Totally Disabled or POW/MIA or Deceased Eligible Veterans or National Guard Members

**Tuition Waiver:** The Washington State legislature RCW 28B.15.621 established this waiver to honor active and reserve veterans, National Guard members and their dependents. This is a mandatory tuition waiver for the children and spouse of totally disabled or POW/MIA or deceased eligible veterans or National Guard Members. Children, Spouse and Veteran must be Washington State residents. This waiver can only be applied within the current academic year.

- Child and spouse of an eligible veteran or National Guard member who became totally disabled;
- Child and spouse of an eligible veteran or National Guard member determined to be a prisoner of war or missing in action;
- Child and spouse of an eligible veteran or National Guard member who lost his or her life;
- The Washington State Disabled Veteran Dependent Tuition Waiver can be received up to 200 quarter credits or in the case of the child, until they turn 27 years old.
- Child is defined as a biological child, adopted child, or stepchild.
- Subject to amounts appropriated, student shall also receive a stipend for textbooks and course materials in the amount of five hundred dollars per academic year, to be divided equally among academic terms and prorated for part-time enrollment.

For more information, contact the Veterans Center at 509-963-3028 or e-mail [va@cwu.edu](mailto:va@cwu.edu), or check the website at [www.cwu.edu/veterans](http://www.cwu.edu/veterans).

### Washington State Employee Tuition Waiver

Educating the citizens of Washington State is integral to Central Washington University's mission. CWU encourages and supports its employees, as well as non-CWU state employees and others as allowed by law, to continue their education as prescribed through this educational benefits policy. Central Washington University provides educational benefits for Central Washington University faculty, exempt, and classified staff, non-CWU state employees, members of the Washington National Guard, and veterans (as defined by 41.04.005 RCW) who are not eligible for educational benefits from the Veteran's Administration. Eligible employees (CWU and state) must hold appointment to a half-time or more position. In addition, civil service employees must have permanent status (i.e., passed their probationary period). Faculty and exempt employees who are employed half time or more and are expected to be employed for



more than six months are eligible on the first day of employment. Eligible CWU employees may take up to eight (8) credit hours of course work per quarter. Washington National Guard, veterans, and non-CWU state employees may take up to six (6) credit hours of course work per quarter. Faculty who are hired on a quarter-to-quarter basis will become eligible beginning with the second consecutive quarter of half-time or more employment. For the purposes of this section, employment of faculty in spring quarter and the following fall quarter may constitute consecutive employment.

Employees who are not eligible for the tuition and fee waiver are: faculty on courtesy appointments; retired faculty, staff, and exempt personnel; and undergraduate and graduate assistants, associates, or others holding positions with student status. Employees must meet university admission requirements and file proof of eligibility with the Office of the Registrar no less than 15 working days prior to the beginning of each academic term may take up to eight credit hours of coursework for a nominal fee each quarter (summer excluded). Enrollment is subject to space availability only. Enrollment in a closed or wait-listed course under this waiver is prohibited. A waiver processing fee and course fees may apply. Refer to CWU academic policy: [www.cwu.edu/resources-reports/cwup-2-20-090-waiver-tuition-and-fees](http://www.cwu.edu/resources-reports/cwup-2-20-090-waiver-tuition-and-fees) for further information.

#### **Tuition Refund Schedule**

A continuing student will receive a 100 percent refund of tuition and fees if a complete withdrawal from the university occurs prior to the sixth day of the quarter.

A student will receive a 50 percent refund of tuition and fees if a complete withdrawal from the university occurs on or after the sixth day of the quarter and within 30 calendar days of the beginning of the quarter.

There is no refund of tuition and fees if withdrawal from the university occurs after the 30th calendar day of the quarter.

There is no refund for individual class withdrawals after the change of schedule period.

Tuition and fees may be refunded to students unable to complete coursework as a result of medical circumstances or being called to active duty in the Armed Forces of the United States. Students must petition Registrar Services.

#### **Miscellaneous Fee Schedule**

Fees are subject to change for the 2019-2020 academic year.

**Application for Admission Fee:** \$50.

**Athletic Fee:** \$56 mandatory fee per quarter for all students. Students with less than 10 credits will be assessed \$5.60 per credit. This fee supports student athletics and provides free admittance to all events. Ellensburg campus only.

**Audit Fee (without credit):** A student enrolling in a course as an auditor is charged regular fees.

**Background Check Fee:** In order to participate in certain programs/majors a student must arrange for and obtain a criminal background check from the appropriate law enforcement agency. Information regarding the process, requirements, and costs can be obtained through the department offering the program/major.

**Breakage Fee:** Students enrolled in certain courses are required to pay for any equipment they break. Fees are variable according to the item broken.

**Central Transit Fee:** \$3, mandatory fee per quarter for all Ellensburg students. This provides bus transportation throughout town.

**Credit by Examination Fee:** Students applying to challenge a course will be assessed a nonrefundable fee of \$15 per credit, with a minimum of \$30 per course challenge.

**Graduation Application Fees:** The fee for a baccalaureate degree is \$50. The fee for degree reapplication is \$20. An additional \$12 will be assessed for concurrent degrees and an additional fee of \$17 per diploma when requesting more than one diploma for multiple majors. For further information, [www.cwu.edu/registrar/degree-checkout-fees](http://www.cwu.edu/registrar/degree-checkout-fees).

**Health and Accident Insurance:** Group insurance is optional. An additional premium will allow student dependents to be covered by medical facilities other than the student health center, which is reserved for student use only. For further information, inquire at the Cashier's Office.

**International Studies Application Fee:** A fee of \$50 per student per quarter for students participating in study abroad or exchange programs.

**Late Fee:** Students failing to pay their tuition in full by the published deadline are assessed a \$50 and \$100 late fee.

**Late Registration Fee:** Students will be charged a \$25 per course fee for registration from the sixth through the 10th day of instruction; a \$50 fee per course for the 11th day through the 30th day of instruction; and \$75 per course after the 30th day. Permission to add courses will still require signature of the instructor or the department chair and the college dean after the 10th day of classes.

**Library Fee:** \$10, mandatory fee per quarter for all students.

**Master's Thesis Binding Fee:** Students submitting a thesis as part of the requirements for the Master's degree pay a fee of \$75 for binding of three copies of their thesis. Two copies are deposited in the library and one copy is given to the student. Students not wishing a copy for themselves will be assessed \$50. Any students wanting more than one copy for themselves must make their own binding arrangements for the extra copies.

**Math and Writing Tutoring Fee:** \$5.00, mandatory fee per quarter for all students.

**Parking:** Students using the university's parking facilities must purchase a campus parking permit.

**Recreation Center Fee:** \$102, mandatory fee per quarter for all Ellensburg campus-based students enrolled for six credits or more.

**Registration Cancellation Fee:** Students who register and do not drop their classes prior to the change of schedule period and have extenuating circumstances that result in a refund of tuition will be assessed a \$50 cancellation fee.

**Student-in-Training (Liability) Insurance:** In order to register for certain courses, a student must arrange for individual student-in-training (liability) insurance purchased either through the CWU business office or through some other agency. Information regarding types of coverage available may be obtained from the department chair or program director.

**Student Medical and Counseling Clinic Fee:** \$102.96, mandatory fee per quarter for all Ellensburg campus-based students enrolled for six credits or more. Students can see a physician for free regardless of insurance status. Students only pay for testing costs. In order to get this fee waived students must live outside of town or be a CWU employee or staff member.

**Student Lobby Fee (WSL):** \$1, mandatory fee per quarter for all students. This fee supports student lobbying for CWU needs in Olympia.

**Supply and Equipment Fees:** Students enrolling in certain courses are charged for supplies and equipment not furnished as part of the course.

**SURC Building Fee:** \$69, mandatory fee per quarter for all Ellensburg campus-based students enrolled for 10 credits or more. Students with less than 10 credits will be assessed \$6.90 per credit. Students with one credit will be assessed the same as the two-credit fee, \$13.80. This building is OWNED by the STUDENTS. This fee pays for operational costs such as utilities and monthly lease. When the building was built students voted to pay the cost of the building and that cost is continued through every year that the debt is not paid off.

**Technology Fee:** \$30, mandatory fee per quarter for all students. Students with less than 10 credits will be assessed \$ 3.00 per credit. Pays for student's ability to use computers, software, and print on campus.

**Transcript Fee:** \$10 for each copy. \$18 for on demand, express mail or FAX copies. All fees are due in advance. A \$2.25 credit card fee may apply if ordering through the clearinghouse. For more information, [www.cwu.edu/registrar/request-transcripts](http://www.cwu.edu/registrar/request-transcripts).

**Tuition Nonpayment Fee:** Students who have not paid full tuition by the 30th calendar day of the quarter will be assessed a \$100 tuition nonpayment fee. A hold will be placed on their student record and they will be liable for 100 percent of tuition and fees. Students will receive notification to their CWU e-mail account. Students must have their student account cleared prior to registering for future quarters.

**Web-based Course Fee:** \$40 per class will be assessed for all Web (WW) courses.

**Wellness Fee:** \$ 18, mandatory fee per quarter for all Ellensburg students. The wellness center promotes healthy decision making and prevention services, confidential support for issues related to alcohol/drugs/sexual violence. It also provides training for students to handle these sorts of situations. In order to waive this fee, students must live outside of town or be a CWU employee or staff.

### **Financial Obligation**

Central Washington University Student Financial Responsibility Agreement

## **1. PAYMENT OF FEES/PROMISE TO PAY**

I understand that when I register for any class at Central Washington University ("CWU") or receive any service from CWU, I accept full responsibility to pay all tuition, fees and other associated costs assessed as a result of my registration and/or receipt of services.

I further understand and agree that any amounts charged to my CWU Student Account that are not paid by the due date shall constitute a student educational debt under § 523(a)(8) of the U.S. Bankruptcy Code that I am obligated to repay. Any overpayment of financial aid or other educational benefit that I receive for any period when I am not enrolled at CWU shall also constitute a student educational debt that I am obligated to repay. All such student debt shall also include any late fees, finance charges, and collection fees and costs as more fully described below in Section 2, "Delinquent Account/Collection."

I understand and agree that if I drop or withdraw from some or all of the classes for which I register, I will be responsible for paying all or a portion of tuition and fees in accordance with the published tuition refund schedule on the Registrar's Office website <http://www.cwu.edu/registrar/tuition-and-mandatory-fees>. I have read the terms and conditions of the published tuition refund schedule and understand those terms are incorporated herein by reference.

I further understand that it is my responsibility to monitor my student account activity via MyCWU online (<https://my.cwu.edu/>) and pay the charges/fees by the published due dates. My failure to pay or not receive a bill does not absolve me of my financial responsibility as described above.

### **Withdrawal**

If I decide to completely withdraw from CWU, I will follow the instructions at <http://www.cwu.edu/registrar/>, which I understand and agree are incorporated herein by reference.

## **2. DELINQUENT ACCOUNT/COLLECTION**

**Financial Hold:** I understand and agree that if I fail to pay my student account bill or any monies due and owing CWU by the scheduled due date, CWU will place a financial hold on my student account, preventing me from registering for future classes, requesting official transcripts, or receiving my diploma.

### **Late Payment Charge**

I understand and agree that if I fail to pay my student account bill or any monies due and owing CWU by the scheduled due dates, then CWU will assess a finance charge at the rate of 1% per month on the past due portion of my student account until my past due account is paid in full. The 1% finance charge is in addition to tuition and housing late payment fees. See <http://www.cwu.edu/registrar/late-fees> for tuition due dates and <http://www.cwu.edu/housing/> for housing due dates.

### **Collection Agency Fees**

I understand and accept that if I fail to pay my student account bill or any monies due and owing CWU by the scheduled due date, and fail to make acceptable payment arrangements to bring my account current, CWU may refer my delinquent account to a collection agency.

I further understand that I am responsible for paying the collection agency fee, which may be based on a percentage of a

maximum of 35% of the amounts collected for first collection efforts (and up to 40% for subsequent collection efforts), together with all costs and expenses, including reasonable attorney's fees, relating to the collection of my delinquent account. Finally, I understand that my delinquent account may be reported to one or more of the national credit bureaus.

### 3. COMMUNICATION

#### Method of Communication

I understand that CWU uses e-mail as an official method of communication with me, and that therefore I am responsible for reading the e-mails I receive from CWU on a timely basis. If I want to receive paper communications then I need to submit the request to [StudentAccounts@cwu.edu](mailto:StudentAccounts@cwu.edu).

#### Method of Billing

I understand that CWU uses electronic billing (e-bill) as its official billing method, and therefore I am responsible for viewing and paying my student account e-bill by the scheduled due date. I further understand that failure to review my e-bill does not constitute a valid reason for not paying my bill on time. E-bill information is available at <https://my.cwu.edu/>. If I want to receive paper billings then I need to submit the request to [StudentAccounts@cwu.edu](mailto:StudentAccounts@cwu.edu).

I understand that administrative, clerical or technical billing errors do not absolve me of my financial responsibility to pay the correct amount of tuition, fees and other associated financial obligations assessed as a result of my registration at CWU.

#### Contact

I authorize CWU and its agents and contractors to contact me at my current and any future cellular phone number(s), email address(s) or wireless device(s) regarding my delinquent student account(s)/loan(s), any other debt I owe to CWU, or to receive general information from CWU.

I authorize CWU and its agents and contractors to use automated telephone dialing equipment, artificial or pre-recorded voice or text messages, and personal calls and emails, in their efforts to contact me.

Furthermore, I understand that I may withdraw my consent to call my cellular phone by submitting my request in writing to CWU or in writing to the applicable contractor or agent contacting me on behalf of CWU.

#### Updating Contact Information

I understand and agree that I am responsible for keeping CWU records up to date with my current mailing addresses, email addresses, and phone numbers by following the procedure at the Registrar's Office website <http://catalog.acalog.cwu.edu/content.php?catoid=48&navoid=2639>. The linked procedure is incorporated herein by reference. Upon leaving CWU for any reason, it is my responsibility to provide CWU with updated contact information for purposes of continued communication regarding any amounts that remain due and owing to CWU.

### 4. ENTIRE AGREEMENT

This agreement supersedes all prior understandings, representations, negotiations and correspondence between the student and CWU, constitutes the entire agreement between the parties with respect to the matters described, and shall not be

modified or affected by any course of dealing or course of performance. This agreement may be modified by CWU if the modification is signed by me. Any modification is specifically limited to those policies and/or terms addressed in the modification.

## Financial Aid and Scholarships

### Financial Aid

Each year approximately 80 percent of CWU students receive financial aid. To be eligible for federal aid a student must be a U.S. citizen, a permanent resident, or eligible non-citizen. Washington state aid programs are also available to financially eligible DREAMers (undocumented students) who complete the Washington Application for State Financial Aid (WASFA).

Financial aid is available to matriculated students seeking a degree or certification in an eligible program. Most financial aid programs require a minimum of half-time enrollment, which is 6 credits at the undergraduate level and 5 credits at the graduate level. Students who have a first baccalaureate degree and are not admitted to a master's program will be classified as a post-baccalaureate student. Post-baccalaureate students are eligible for federal loans.

Students must apply and be accepted for admission to the university (matriculated) to receive financial aid. Students and their families must complete a Free Application for Federal Student Aid (FAFSA). The application can be completed online at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). Paper copies are available in the Financial Aid Office and at most high schools or libraries. If ineligible to file the FAFSA, Washington resident students and their families should submit a Washington Application for State Financial Aid (WASFA) to be considered for Washington State aid programs. The WASFA is available on the web at [www.readysgrad.org/wasfa](http://www.readysgrad.org/wasfa).

The application should be submitted to the federal processor as soon as possible after October 1 each year. February 1 is the cutoff date for priority consideration for limited gift aid. Accurate preparation of the FAFSA/WASFA and timely response to all requests for additional information or documentation are critical. If you are selected for Verification be sure to get all documents required for verification submitted to the Financial Aid Office by April 1 in order to assure that your Financial Aid, if eligible, will be ready by September.

Students who have been admitted to the university and have listed Central Washington University Title IV code #003771 on the FAFSA will have a student financial aid file delivered to the university electronically. Once that file has been reviewed and verified, the student will receive an award letter. WASFA applications are also received electronically before being reviewed, verified and awarded aid by the financial aid office.

The award letter will indicate the estimated student budget, the federally determined expected family contribution, and an offer of aid including the type and amount. You must accept, reduce or decline aid offers on MyCWU. Aid is disbursed quarterly in equal amounts. If you have chosen to borrow student loans, the

master promissory note and loan entrance counseling are completed electronically at [www.studentloans.gov](http://www.studentloans.gov).

Students are expected to maintain "good academic standing" while receiving financial aid. A minimum CWU cumulative GPA of 2.0 is required for undergraduates after two years of attendance; post-baccalaureates are required to maintain a 2.0 cumulative GPA; and a minimum cumulative GPA of 3.0 is required for graduate students. Financial aid recipients are required to make reasonable progress toward a degree.

Additional financial aid information is available in the Financial Aid Office, Bouillon Hall, room 106; and through the Financial Aid Counselors at certain University Centers, at 509-963-1611, [financialaid@cwu.edu](mailto:financialaid@cwu.edu), or on the CWU Financial Aid home page at [www.cwu.edu/financial-aid](http://www.cwu.edu/financial-aid).

### **Scholarships**

Scholarships are gift aid, which do not have to be repaid. More information on CWU scholarships can be found at [www.cwu.edu/scholarships](http://www.cwu.edu/scholarships). The CWU Scholarship Central Application opens each October 1st and closes February 1st, scholarships awarded through this application are for the following academic year beginning in fall quarter. Make sure to apply online through your MyCWU account using the path *MyCWU>Financial>Scholarship Application*.

Scholarship eligibility is based on a variety of criteria including, but not limited to, academic proficiency, specialized talent, community service, leadership, and financial need. College and

departmental selection committees as well as the Financial Aid Office select scholarship recipients. Some scholarships require students to complete the FAFSA (Free Application for Federal Student Aid), [www.fafsa.ed.gov](http://www.fafsa.ed.gov) or WASFA (Washington State Application for Financial Aid), [www.readyssetgrad.org/wasfa](http://www.readyssetgrad.org/wasfa), and any college or departmental scholarship applications for which the student is eligible that are available in the Financial Aid Office. In addition, students with talent in athletics, art, music, and/or theatre should contact the department(s) directly for specific audition or exhibition opportunities. Institutional merit aid is awarded to incoming students based on GPA and ACT/SAT scores. Need is not always a criterion.

Community-sponsored scholarships include awards for which the recipients are chosen by organizations outside the university. Each organization establishes its own eligibility criteria and application process. More information can be found at the scholarship website [www.cwu.edu/scholarships](http://www.cwu.edu/scholarships) or by contacting the organizations directly. Recipients are to inform the CWU Financial Aid Office if they are receiving an award from a community organization. Checks should be made payable to "Central Washington University." Include student's name and identification number. Send to the CWU Cashiers Office, 400 East University Way, Ellensburg, WA 98926-7495.

Scholarships are considered an educational funding source and may change a student's eligibility in other institutional, state or federal aid programs.

# Academic and General Regulations

## Academic Advising

All students are expected to seek, and the university is expected to provide appropriate advising resources. These resources include academic advisors for first-year and undecided students, professional and faculty major advisors, online and transfer advisors, special program advisors, career counselors, success courses, workshops, and publications. Academic advising for first-year and undecided students is available at the Exploratory Advising office, located in Bouillon 206. Incoming transfer students may contact [transferadvisor@cwu.edu](mailto:transferadvisor@cwu.edu) to receive initial advising. Professional advising for the Colleges of Arts and Humanities, Sciences, and Education, and Professional Studies is available in the Academic Advising office in Bouillon 205. College of Business advising is located in Shaw Smyser 413. Students pursuing an online major need to email [onlineadvisor@cwu.edu](mailto:onlineadvisor@cwu.edu) to contact their professional advisor. Faculty advisors are available in their respective departmental offices and are also responsible for providing major program advising. Students are encouraged to seek additional academic counsel from various faculty concerning specific areas of interest.

All students are required to meet their assigned academic advisor at the following prescribed points throughout their academic career.

- Every quarter until they have earned over 45 credits. Students will meet with advisors who will assist them with class selection toward major declaration and major admission requirements, as well as appropriate completion of General Education Requirements.
- The quarter after they have earned their 90th credit. Students meet with major advisors to review and discuss major and overall graduation requirements and to develop a degree completion plan.

In addition, students who have not declared their major by the time they have earned their 75th credit are required to meet with an advisor before they can register for the next quarter.

## Admission to Major

As a student progresses, identification with a major or pre-major program of study becomes necessary for effective advising. Students are required to apply for admission to the program in which they want to major. Application forms are available in department offices or on their department web sites. After completing the form, students should submit it to the department office which administers the major. A major or pre-major advisor will be assigned by the major department at the time a student is admitted into a major or pre-major program.

Students who have earned 75 or more credits and who have not applied and been admitted to a major or pre-major will not be permitted to register for classes until their advisor has removed their advising hold.

Students are bound by the major requirements which became effective with the fall quarter Online Electronic Catalog (OEC) for the academic year in which they are accepted into their major.

If a student does not enroll for two or more consecutive quarters at Central (excluding summer), he or she will be required to reactivate his or her major status. Unless a student applies for an official leave of absence from the school, reactivation must be done with the concurrence of the department and in accordance with the department and the OEC requirements current at the time of readmission. A leave of absence should be requested, if a student is going to opt-out for more than one quarter (excluding summer) at Central. Leave of absence forms are due to Registrar Services by the end of the quarter prior to the quarter they are requesting their leave. A leave of absence can be granted for up to two consecutive quarters at a time. This will allow the student to be eligible for registration, maintain status in their major, and the student will not have to re-apply for admissions.

## Registration

Currently enrolled students may register for courses by using MyCWU, the web registration system. Registration for new and readmitted students will take place during new student orientation. New students who did not attend orientation may register during the open enrollment period.

Students may change their schedule during the designated change of schedule period as stated in the academic calendar. Students are encouraged to use the MyCWU web registration system to complete all registration transactions.

Registration, in-person, by telephone, or web, obligates students for payment of all tuition and fees. If tuition is not paid by the due date, students will be liable for late fees and for any other reasonable collection costs and charges.

Students are assigned a registration appointment through MyCWU. This designates when the student may start registering for classes for the term. Consult the university calendar at [www.cwu.edu/registrar/course-information](http://www.cwu.edu/registrar/course-information) or contact the university center administration office to determine exact dates for early registration, open enrollment, tuition deadlines, and the change-of-schedule period.

### Fall 2019 Registration

Please note that "credits earned" does not include courses in progress but does include transfer credit that has been posted to your academic record. Please use your MyCWU unofficial transcript, not Academic Requirements report, to determine your total earned credit hours. Non-matriculated students do not qualify for priority registration.

Priority Registration		
Date	Day	Category Eligible
April 29	Monday	Disability Support Students (as required by RCW 28B.10.92)
May 3	Friday	Graduating Students
May 6	Monday	Student Support Services/TRIO, STAR/STAR2 (FR/SO) and CAMP Students
		Veteran Students (as required by RCW 28B.15.625)
		Douglas Honors College Students
		Competing Student Athletes (Men's Basketball, Women's Basketball, Men's Cross-Country, Women's Cross-Country, Football, Women's Rugby, Soccer, Volleyball)
May 6	Monday	Graduate Students
May 6	Monday	Post-Baccalaureate Students
May 6 - May 7	Monday - Tuesday	Seniors with 135 or more credits earned (use your unofficial transcript to find your total credits)
May 8	Wednesday	Sammamish Running Start Students
May 8 - May 10	Wednesday - Friday	Juniors with 90 - 134.99 credits earned (use your unofficial transcript to find your total credits)
May 13 - May 17	Monday - Friday	Sophomores with 45 - 89.99 credits earned (use your unofficial transcript to find your total credits)
May 20 - May 31	Monday - Friday	Freshmen with 0 - 44.99 credits earned (use your unofficial transcript to find your total credits)
August 1	Monday	Open Enrollment

### Winter 2020 Registration

Please note that "credits earned" does not include courses in progress but does include transfer credit that has been posted to your academic record. Please use your MyCWU unofficial transcript, not Academic Requirements report, to determine your total earned credit hours. Non-matriculated students do not qualify for priority registration.

Priority Registration		
Date	Day	Category Eligible
November 4	Monday	Disability Support Students (as required by RCW 28B.10.92)
November 8	Friday	Graduating Students
November 12	Tuesday	Student Support Services/TRIO, STAR/STAR2 (FR/SO) and CAMP Students
		Veteran Students (as required by RCW 28B.15.625)
		Douglas Honors College Students
		Competing Student Athletes (Men's Basketball, Women's Basketball, Men's Cross-Country, Women's Cross-Country, Football, Women's Rugby, Soccer, Volleyball)
November 12	Tuesday	Graduate Students
November 12	Tuesday	Post-Baccalaureate Students
November 12 - November 13	Tuesday - Wednesday	Seniors with 135 or more credits earned (use your unofficial transcript to find your total credits)
November 14	Thursday	Sammamish Running Start Students
November 14 - November 15	Thursday - Friday	Juniors with 90 - 134.99 credits earned (use your unofficial transcript to find your total credits)
November 18 - November 21	Monday - Thursday	Sophomores with 45 - 89.99 credits earned (use your unofficial transcript to find your total credits)
November 22 - December 6	Friday - Friday	Freshmen with 0 - 44.99 credits earned (use your unofficial transcript to find your total credits)
December 16	Monday	Open Enrollment



**Spring 2020 Registration**

Please note that "credits earned" does not include courses in progress but does include transfer credit that has been posted to your academic record. Please use your MyCWU unofficial transcript, not Academic Requirements report, to determine your total earned credit hours. Non-matriculated students do not qualify for priority registration.

<b>Priority Registration</b>		
<b>Date</b>	<b>Day</b>	<b>Category Eligible</b>
February 10	Monday	Disability Support Students (as required by RCW 28B.10.92)
February 14	Friday	Graduating Students
February 18	Tuesday	Student Support Services/TRIO, STAR/STAR2 (FR/SO) and CAMP Students
		Veteran Students (as required by RCW 28B.15.625)
		Douglas Honors College Students
		Competing Student Athletes (Men's Basketball, Women's Basketball, Men's Cross-Country, Women's Cross-Country, Football, Women's Rugby, Soccer, Volleyball)
February 18	Tuesday	Graduate Students
February 18	Tuesday	Post-Baccalaureate Students
February 18 - February 19	Tuesday - Wednesday	Seniors with 135 or more credits earned (use your unofficial transcript to find your total credits)
February 20	Thursday	Sammamish Running Start Students
February 20 - February 21	Thursday - Friday	Juniors with 90 - 134.99 credits earned (use your unofficial transcript to find your total credits)
February 24 - February 28	Monday - Friday	Sophomores with 45 - 89.99 credits earned (use your unofficial transcript to find your total credits)
March 2 - March 13	Monday - Friday	Freshmen with 0 - 44.99 credits earned (use your unofficial transcript to find your total credits)
March 22	Monday	Open Enrollment

**Summer 2020 Registration**

Please note that "credits earned" does not include courses in progress but does include transfer credit that has been posted to your academic record. Please use your MyCWU unofficial transcript, not Academic Requirements report, to determine your total earned credit hours. Non-matriculated students do not qualify for priority registration.

<b>Priority Registration</b>		
<b>Date</b>	<b>Day</b>	<b>Category Eligible</b>
April 23	Thursday	Disability Support Students (as required by RCW 28B.10.92)
April 24	Friday	Graduating Students
April 27	Monday	Open Enrollment

### **Academic Credit Hour**

The rule for determining academic credit is: one credit represents a total time commitment of three hours each week of the quarter. A regular load of 15 credits requires 45 hours of work per week. The total time includes class time, studying, conferring with the instructor, writing, performing laboratory work, exercising, or performing any other activity required of students. A minimum of 180 credits is required for an undergraduate bachelor's degree.

CWU operates on a quarter system and grants quarter credit. Some colleges operate on a semester basis (i.e., divide the academic year into two parts, exclusive of summer) and give semester credits. Quarter credits can be multiplied by two-thirds to determine equivalent semester credits. Semester credits can be multiplied by one-and-one-half to determine equivalent quarter credits.

### **Course Numbering and Class Standing**

Courses are numbered sequentially from 100 through 700. Those numbered 100 are pre-collegiate and credits in such courses are not accepted toward meeting degree requirements or calculated in the student's grade point average. Undergraduate courses are numbered 101 through 499 and graduate courses are numbered 501 and above. Courses numbered 500 are professional development courses and are not accepted toward meeting degree requirements.

### **Lower Division**

Freshman 101 through 199

Sophomore 200 through 299

### **Upper Division**

Junior 300 through 399

Senior 400 through 499

Students may enroll in courses one year ahead of their present status except when otherwise specified in the course description. A student's class standing is determined by the number of credits earned and/or accepted upon transfer. The following table lists the credits required for each class standing:

Freshman 0-44.9

Sophomore 45-89.9

Junior 90-134.9

Senior 135 or more

Students holding bachelor's degree and pursuing a second degree or CWU certification program are considered post-baccalaureate. Students that are admitted to a master's degree program are considered graduate students. Satisfying undergraduate graduation requirements depends not only on the number of credits completed (a minimum of 180), but also on completion of all other degree/major/minor requirements.

### **Student Study Load**

Full-time and part-time students are determined by the number of credits for which they register. Full-time undergraduate is 12 credits or more. Three-quarter time undergraduate is 9-11 credits. One-half time undergraduate is 6-8 credits. Full-time

graduate is 10 or more credits. One-half time graduate is 5-6 credits.

Students are encouraged to enroll in 15 credits or more each term to ensure timely progress toward degree. Please discuss your degree completion timeline with your academic advisor.

### **Undergraduate:**

15 credits - Standard undergraduate load

18 credits or fewer - No permission required

19-20 credits - Major advisor and major department chair approval required, or Advising Center for undeclared majors. Over 21 credits - Major advisor and major department chair approval as well as the appropriate college dean.

A cumulative GPA of 2.8 or higher is required for students seeking an overload.

### **Graduate:**

15 credits - Normal graduate load

16 credits or less - No permission required

17-19 credits - Major department chair or dean approval required

20 or more credits - Dean of Graduate Studies and Research approval required

### **Proficiency Requirements**

Students will be assessed for placement into ENG 101 and MATH 101 and above upon entering CWU. Students with deficiencies in English usage/reading or mathematical computation must correct them prior to enrolling in ENG 101 or MATH 101 and above. Students should review requisites for courses listed in the catalog. Not having the appropriate pre- or co-requisite may result in being disenrolled.

### **Developmental and Foundational Course Requirements**

Students who do not place into Academic Writing I or Quantitative Reasoning or higher, must enroll and complete all necessary developmental course work within the first sixty (60) credits for which they are enrolled at Central.

Students are required to enroll and complete foundational course work (Academic Writing I and Quantitative Reasoning) within the first sixty (60) credits for which they are enrolled at Central.

Exceptions to these requirements may be made pending consultation with the student's advisor and approval by the college dean or the dean of student success for undeclared majors.

### **Seniors in Graduate Courses**

Seniors may enroll in graduate-level courses (501 and above) with the approval of both the instructor of the course and the department chair. Credit earned in these courses may meet undergraduate or graduate program requirements, but not both. Students wishing to designate the course for graduate credit must obtain approval from the dean of Graduate Studies and Research.

### **Auditing a Course**

Students eligible to enroll in a course for credit may enroll as an auditor provided space is available and permission is secured from the instructor prior to registration. To receive credit for an audited class, students must enroll for credit in and repeat the same course in a subsequent quarter. Students are assessed full tuition for audited courses. Instructors may not compel auditors to write papers or take examinations, but may insist upon other

course requirements. Instructors may request that the college dean withdraw the auditor from the course if these requirements are not met. Students receive neither credit nor grades for audited courses. Course participation requirements are set by the faculty member responsible for the course.

### **Concurrent Enrollment**

Credit for work taken while simultaneously enrolled at CWU and other educational institutions may be transferred to Central. Any student who has obtained an F-1 visa from CWU must obtain permission from the executive director of the Office of International Studies and Programs (or designee) prior to enrolling in any other institution.

### **University Catalog**

The Official Electronic Catalog (OEC) is the university's compilation for all curriculum. Undergraduate catalogs are valid for five years, and may be found at [www.cwu.edu](http://www.cwu.edu). A student should expect to complete general education requirements as listed in the OEC current at the time of first enrollment at either Central or a community college in the state of Washington (provided he or she transfers directly to CWU from the community college and has not attended another four-year institution). The student should also expect to meet the specific requirements of the departments for majors and minors in the OEC current at the time he or she is accepted by the department into the major or minor program.

Graduate students admitted to the master's degree program may use the catalog they are admitted under or the current one.

### **Leave of Absence**

Students will automatically be granted one term leave of absence for fall, winter or spring quarter without reapplying for admission as long as they were enrolled in the previous academic term. A student may petition for consecutive terms of leave by submitting a leave of absence form to Registrar Services. The request may be granted if the following conditions are met:

1. The petition must be submitted at least two weeks prior to the start of the term for which the student is seeking leave.
2. The petition demonstrates that attendance would present an exceptional hardship or loss of opportunity for the student.

Students who are on leave are permitted to register for classes as continuing students at the designated time.

**A student who attends another college or university while on a leave of absence must submit an official transcript from the school by the end of the term in which they return to CWU.**

**Graduate students need to contact the Graduate Studies office at 509-963-3103 for leave of absence information.**

### **Withdrawal from a Course**

Peremptory (uncontested) withdrawals will not be permitted after the first six weeks of instruction. Students who withdraw after the change of schedule period from 25 percent or more of the coursework for which they have registered for two or more quarters each academic year are subject to dismissal. Students who have been dismissed under this policy may not enroll for

courses without submitting an approved plan of study signed by an academic advisor to the Office of the Provost/ Vice President for Academic and Student Life. To continue enrollment, the student must satisfactorily complete all credits enrolled during the first quarter of readmission. Students who do not meet this requirement will not be allowed to register for one calendar year.

Peremptory withdrawals will be noted on the student's transcript with "+W," but are not calculated into the student's grade point average. Students who are considering an uncontested withdrawal should consult the Financial Aid Office as it may affect the student's satisfactory academic progress for financial aid. Class rosters will reflect the +W for students who have used their peremptory withdrawal.

Withdrawals after the sixth week of instruction will be granted only for reasons of hardship and then only upon written petition to and written approval by the registrar. The student must contact the course instructor and obtain the faculty member's signature on the hardship withdrawal petition. The signature serves merely to acknowledge the petition and implies neither support nor rejection of the request. The registrar may consult with affected faculty when evaluating a petition and will notify the instructor if the hardship withdrawal has been approved. Hardship withdrawals will be noted on the student's transcript with an "HW" (hardship withdrawal). Hardship withdrawals from individual courses will not be permitted during or after the final examination period.

Conversions of incompletes to withdrawals must be petitioned as if they were hardship withdrawals. They may be changed only upon petition to the registrar. Withdrawals will not be included in calculating grade point averages. There are no tuition refunds in cases of withdrawal from individual courses.

### **Complete Withdrawal from the Academic Term**

A student may withdraw from the academic term for reasons of illness or other extenuating circumstances at any time prior to finals week. An official withdrawal form is available at Registrar Services or university center offices. A student may not withdraw from the university during finals week except with approval of the registrar. A complete withdrawal from the university will be noted on the student's transcript with a "W" and will not affect the student's grade point average. The registrar will notify affected faculty members when a student has withdrawn from the university. Students who plan to leave the university must complete the official withdrawal form and may need to have an exit interview. Failure to do so may result in failing grades. There is no refund of tuition and fees if total withdrawal occurs after the 30th calendar day of the beginning of the quarter. See refund policy for specific details.

### **Military Exigency Withdrawal**

Students who have been called into military service of the United States due to a national emergency will be eligible for withdrawal from the university or the granting of credit. The policy does not apply to regular National Guard or Reserve duty or to annual active-duty requirements.

- Students who must withdraw from the University during the first third of the quarter will be granted a total University withdrawal (W).
- Students who must withdraw from the university during the second third of the quarter may request

either an uncontested withdrawal (+W) or an incomplete (I) in each course with specified deadline for completion to be determined by the dean in consultation with the instructor or a total university withdrawal from all courses (W).

- Students who must withdraw from the university during the last third of the quarter may request an uncontested withdrawal (+W) or an incomplete (I) or credit if the coursework is satisfactory, to be determined by the dean in consultation with the instructor or a total university withdrawal from all courses (W). If credit is awarded, the instructors must report either a letter grade or a satisfactory (S) for each course depending upon the quality of the student's work. If credit is received and the course(s) complete(s) all requirements for the baccalaureate degree, the degree will be awarded.
- Students being called to active duty will be placed on a leave of absence until their return, at which time they will be reactivated, so they will not need to re-apply to the university or pay the application fee. Students should contact Registrar Services when they are ready to return to Central to ensure a smooth transition.
- In all circumstances, students will be expected to attend classes up to fifteen (15) calendar days prior to induction.
- Students need to contact Registrar Services or their university center office as soon as possible to complete the appropriate paperwork, and to submit a copy of the Federal Activation Orders.

### Grading Policies and Regulations

"Grade Points" are assigned to each grade as follows:

Letter Grade	GPA Credit	Transcript Explanation	Definition of Letter Grade/Policy Statement
A A-	4.0 3.7	Excellent	Meets all objectives of the course and fulfills all requirements; performs at a level that reflects excellence
B+ B B-	3.3 3.0 2.7	Good	Meets all objectives of the course and fulfills all requirements; performs at a high level
C+ C C-	2.3 2.0 1.7	Satisfactory	Meets all objectives of the course and fulfills all requirements; performs at a satisfactory level
D+ D D-	1.3 1.0 0.7	Marginal Pass	Makes progress toward meeting the course objectives; fulfills course requirements at a substandard level
F	0	Failure	Fails to meet the course objectives; does not fulfill course requirements

The following symbols are also used. No "grade points" are assigned.

CR      Credit  
NC      No Credit

S      Satisfactory  
U      Unsatisfactory  
AU     Audit  
W      Complete withdrawal from the university  
+W     Uncontested withdrawal from a course  
HW     Hardship withdrawal from a course  
I      Incomplete  
IP     In Progress  
NR     No grade reported  
NS     No show

### All grades are frozen upon award of degree.

Financial aid may be affected by certain grades and/or grading symbols. It is incumbent upon students to be aware of the impact of all grades on their financial aid. Financial aid information policies are available from the Financial Aid office.

### Incomplete Grade

The "I" grade is used when the student was not able to complete the course by the end of the term, but has satisfactorily completed a sufficient portion of it and can be expected to finish without having to re-enroll in it. The instructor will designate what a student must do to complete the course and set a specific date up to one calendar year for the completion of the coursework.

If the work is not completed within one (1) calendar year from the last day of the quarter in which the "I" was received, the registrar will automatically convert the "I" to an "F." However, instructors may require the work to be completed prior to the end of the calendar year. In these cases, the registrar will convert the grade according to the date indicated by the instructor. It is the student's responsibility to contact the professor and make arrangements to complete the course.

To earn a grade, the student must complete the work for the course as prescribed by the instructor by the indicated date on the incomplete. Students may not re-register for a course in which they receive a grade of incomplete.

All incomplete changes exceeding the one calendar year limit, including extensions, must be submitted by the instructor to Registrar Services for approval.

### In-Progress Grade

For undergraduate students, the "IP" grade is used when the student was not able to be evaluated by the end of the term, usually because instruction is not yet completed. "IP" is used for special circumstances within programs such as aviation, international studies, and cooperative education.

For graduate students, "IP" is used for thesis, and project study, that normally extend beyond a single term.

All uses of the "IP" grade must be submitted to and approved by the registrar. A letter grade is issued when the course is completed and recorded by the registrar, upon receipt of the Change of Grade form submitted by the instructor. If a grade is not submitted to the registrar within one calendar year, the "IP" will automatically be changed to "F" by the registrar.

### Grade Point Average

Grade point averages will be calculated by dividing grade points earned by the credit hours attempted. Here is a typical example:

Course	Credit Hours	Grade	Grade Points Earned
MUS 143	3	C+	3 x 2.3 = 6.9
HIST 143	5	B-	5 x 2.7 = 13.5
PSY 300	5	C	5 x 2.0 = 10.0
COM 205	4	B	4 x 3.0 = 12.0
<b>Totals</b>	<b>17</b>		<b>42.4</b>

Dividing 42.4 by 17 gives a grade point average of 2.49. In computing cumulative grade point averages, only work attempted at Central will be included in the computation. Within the major, minor, and professional education option, grades earned in all allowed courses are used. Credits earned at other institutions are accepted in meeting degree requirements according to the limits described under bachelor's degree requirements. Graduation with distinction honors shall be based on the GPA of all credits earned at Central and all transfer credits accepted by CWU.

### Credit/No Credit Option

Students may use the credit/no credit option as a way to explore academic areas of interest without affecting their grade point average.

(A) Students, except for first year students and students on academic probation, may select one course per quarter under the credit/no credit option. The credit/no credit option is distinct from courses graded on satisfactory/unsatisfactory basis.

(B) The credit/no credit option may only be applied to undergraduate free electives. The option does not apply to master's degree requirements.

(C) A maximum of 15-credits earned in credit/no credit courses may be allowed toward the 180 required for the bachelor's degree.

(D) Courses taken beyond the 15-credit maximum as credit/no credit will be converted to a grade.

(E) The grade recorded on the student's transcript will be "CR" if the course grade is C- or above. If below C-, the entry will be "NC."

(F) Instructors will not be informed which students are taking a course for credit/no credit. A grade will be given as in any other course.

(G) Students must designate a course as credit/no credit by the uncontested withdrawal deadline. For students enrolling in 6-9-week summer courses, credit/no credit must be designated by the uncontested withdrawal deadline. Intensive courses whose dates do not correspond to the academic term in which they are scheduled must have specific withdrawal deadlines.

(H) Courses taken on a graded basis may not be repeated on a credit/no credit basis.

(I) Credits earned under the credit/no credit option are not included in computing grade point averages.

### Statute of Limitation on Grade Changes

Grade changes may be filed until the end of the quarter following the one in which they were recorded. Spring quarter grades may be changed until the end of the fall quarter.

### Grade Reports

A report of the final grades assigned in courses will be available on MyCWU at the end of each quarter. Students may request a hard copy be mailed by contacting Registrar Services or their university center office.

### Honor Roll

Undergraduates, post-baccalaureate, and non-matriculated students who achieve a grade point average of 3.5 or higher will be placed on quarterly honor roll. To be eligible, a student must complete a minimum of 12 graded credits in the quarter earned. Central will provide honor roll recipient names to student's hometown based on the student's permanent address listed on MyCWU at the end of the quarter. If a student has placed a FERPA directory restriction on their record through MyCWU, the hometown newspaper will not be notified of his/her honor roll status. Post-baccalaureate and master students are not eligible for the honor roll. The honor roll status is listed on the student's unofficial transcript and is posted two to three weeks after grades are due on the web located at [www.cwu.edu/registrar/honor-roll](http://www.cwu.edu/registrar/honor-roll).

### Grade Appeal Procedure

Students who believe they have been improperly graded should first attempt to resolve the matter with the instructor. If resolution is not achieved, the student may appeal the grievance to the department chair. Failing resolution at that level, the grievance may be submitted to the college dean. Finally, if the grievance is not resolved at the dean level, the student may petition for a hearing with the board of academic appeals. For details, contact the Office of Student Success in Bouillon Hall, room 204 or by calling 509-963-1515.

### Repetition of Courses

Some CWU courses are approved for repetition with credit awarded each time the course is taken and passed. Such approval is indicated in the course description in the university catalog. Full tuition is assessed for all repeated courses. Other courses may be repeated under the following conditions:

- Students are allowed to take a course a second time without restriction. Students attempting to take the same course a third time may do so only with permission of the course instructor and the department chair. Unless otherwise designated as repeatable, courses may not be taken more than three times without permission of the dean of the college and department chair.
- Credit will be awarded only once, including credit for transfer courses that are repeated at Central.
- When a course is repeated, only the last grade earned will be used in the computation of the cumulative and major grade point averages. All grades will remain in the student's official record.

Any CWU course repeated at another institution is subject to the following requirements:

- May be transferred in for CWU credit.
- Will be used in calculating both the CWU and the transfer GPA.

### Scholastic Standards

Academic standards are established by the faculty. The Dean of Student Success has responsibility for implementing these standards. A student's academic standing appears on the

quarterly grade report or unofficial transcript located on MyCWU. Questions about academic standing should be directed to the Office of Student Success (Bouillon Hall, room 204).

**Good Standing:** A student is in good standing when both the quarterly and cumulative grade point averages (GPA) are 2.0 or higher.

**Academic Warning:** A student who has been in good standing will be placed on academic warning when the GPA for the previous quarter is below 2.0.

**Academic Probation:** A student who has been on academic warning will be placed on academic probation if either the quarterly or cumulative GPA is below 2.0.

**Academic Suspension:** A student who has been on academic probation will be placed on academic suspension if the GPA for the previous quarter is below 2.0. If the GPA for the previous quarter is 2.0 or above, but the cumulative GPA remains below 2.0, the student will remain on academic probation.

Immediately after grades are submitted, the dean of student success or designee(s) reviews the academic files of all suspended students and makes one of three decisions:

- The student may be allowed to register for one more quarter with an academic standing of probation.
- The student may be allowed to submit an academic appeal presenting: (a) reasons for poor academic performance, (b) explanation and documentation of circumstances beyond the student's control which adversely affected the student's performance during the preceding quarter(s), and (c) an academic success plan which clearly outlines what the student will do differently to achieve academic good standing, should s/he be reinstated. The committee will hear the student's case and may decide to allow the student to enroll for one more quarter on academic probation.
- The student may be denied enrollment for one year, following which the student will need to re-apply for admission to the university; however, readmission is not guaranteed.

A letter will be sent to the student informing him or her of the committee's decision.

### **Academic Forgiveness**

An undergraduate student may petition the registrar in writing for academic forgiveness if all of the following criteria are met:

- a. The student returned to CWU after an absence of at least five years;
- b. The student's CWU cumulative GPA at the time of leaving CWU was below 2.0; and
- c. The student has earned at least a 3.0 GPA in at least 45 credits since returning to CWU.

If academic forgiveness is granted, the previous credits and grades at CWU will remain on the student's transcript but will not be used in the calculation of the cumulative GPA, and the student will be placed on good standing. Only the grades earned since returning to CWU will be used in computing the CWU cumulative GPA.

The student may request a review of the registrar's decision by the board of academic appeals and academic standing. A petition

for academic forgiveness may be granted only once. Unless academic forgiveness is granted, the GPA at CWU will include all CWU grades for all courses. The forgiveness policy does not extend to calculating GPA of major or to honors.

### **Class Attendance and Participation**

Instructors may require regular class attendance. The first day of the quarter is the first day of instruction listed in the university calendar. An instructor may drop a student from the class by notifying the registrar if the student has failed to attend the class by the end of the third day of the quarter or the first-class meeting if the class does not meet during the first three days of the quarter. Students enrolled in web courses should make a post on the learning management system within the first three days of classes to ensure they are not dropped for non-attendance. Students are responsible for checking their schedules by the fifth day of instruction or the end of the change of schedule period to ensure their class schedule is correct.

A student who does not meet course prerequisites may be required to drop the course. Instructors are not required to offer makeup work for missed classes, including those missed during the change of class schedule period, regardless of student course enrollment status.

Sponsors of university-approved activities requiring absence from campus will prepare and sign an official list of the names of those students who plan to be absent. It is each student's responsibility to present a copy of the official list to the appropriate instructors and make arrangements prior to the absence(s). Instructors are strongly encouraged to make accommodations.

Members of the university community directing or arranging such activities must adhere to the following guidelines:

- a. Scheduling of such activities shall not overlap with official final examination periods.
- b. Scheduling of such activities shall not require an absence of more than three (3) consecutive class days.
- c. Scheduling of such activities shall be announced to the students' far enough in advance for them to plan to fulfill course requirements.
- d. Seeking permission for an exception lies with the sponsor and not with the student(s).

### **Student Bereavement Leave**

In the event that a student experiences a death of an immediate family member or relative as defined below, the student will be excused from class for funeral leave, subsequent bereavement, and/or travel considerations. The student will provide appropriate documentation and arrange to complete missed classroom work as soon as possible according to the process outlined below.

Upon notification of the absence and proper documentation, each faculty member shall excuse the student from class according to this policy and provide an opportunity to complete missed exams, quizzes, and other required work. Ultimately, the student is responsible for all material covered in class and must consult with each individual professor as soon as they return to complete any required work.

#### **(A) Excused Absences**

1. Immediate Family and Relatives. Students shall be eligible for up to five (5) consecutive days (not including weekends or

holidays) or excused absence in the event of a death of a spouse, domestic partner, parent, child, grandparent, grandchild or sibling.

2. Other. In the event that a death occurs to a family member or friend that does not qualify as an immediate family or relative above, students can communicate the circumstances to individual faculty to determine on a case by case basis if it is covered by this policy.

### **Course Challenge Prior Learning Assessment (Credit by Examination)**

Under certain circumstances the university may award credit based on course challenges and other prior learning assessments. Matriculated students, enrolled in one or more course, may challenge any course which appears on the current course challenge list.

The following rules apply:

- A Course Challenge Prior Learning Assessment (Credit by Examination) application form, must be completed. This application form is available in the Registrar Services Office.
- A fee of \$15 per credit, with a minimum of \$30 per course, will be charged to the student's account and must be paid at the Cashiers Office.
- The challenge is conducted according to procedures established by the appropriate department.
- A list of department-approved courses which may be challenged will be maintained by Registrar Services.
- Special courses such as "individual study," "special topics," "cooperative education," and "seminars" may not be challenged for credit.
- The result of the course challenge is recorded as "S" or "U" on the transcript and is not used in computing grade point average.
- The application to challenge a course will be denied if credit for the course has been received previously at this or another college, the course was previously failed, the student previously withdrew from the course, the course was previously unsatisfactorily challenged, the course was previously audited, or if registration was canceled.
- Credits earned by course challenge or prior learning assessment will not be allowed toward meeting the residence study requirements by the university.
- Graduate students who have been admitted to a graduate program must obtain permission from the dean of Graduate Studies and Research, their advisor and the course instructor for course challenge.

### **Course Challenge List**

Special courses such as Individual Study, Special Topics, Cooperative Education, Workshops, and Seminars may not be challenged for credit.

Accounting: no courses are offered for challenge

Administrative Management: no courses are offered for challenge

Aerospace Studies: no courses are offered for challenge

Anthropology and Museum Studies: no courses are offered for challenge

Art and Design: no courses are offered for challenge

Asian Studies: no courses are offered for challenge

Aviation Management and Aviation Professional Pilot: all courses with departmental approval

Biological Sciences: no courses are offered for challenge

Chemistry: CHEM 110

Communication: no courses are offered for challenge

Computer Sciences: all undergraduate courses with chair's approval

Early Childhood Education: no courses are offered for challenge

Economics: no courses are offered for challenge

Education: all undergraduate courses with chair's approval

English: no courses are offered for challenge

Engineering Technologies, Safety, and Construction: all undergraduate courses with chair's approval

Environmental Studies: no courses are offered for challenge

Ethnic Studies: all 100 and 200 level courses with the director's approval

Family and Consumer Sciences: ATM 280

Finance: no courses are offered for challenge

Geography: no courses are offered for challenge

Geology: no courses are offered for challenge

Health Education: HED 101

History: 101, 102, 103, 143, and 144

Humanities: 101, 102, and 103

Information Technology: 101

Law and Justice: no courses are offered for challenge

Management: no courses are offered for challenge

Mathematics: all undergraduate courses numbered above 170

Military Science: all 100 and 200 level courses.

Music: all undergraduate courses except applied lessons, class lessons, and performing groups

Nutrition: NUTR 101, 240, 240LAB, 340, 340LAB, 345, 440, 440LAB, 442, 443, 444, 445, 446, 447, and 448

Paramedics: EMS 245, 250, 440, 441, 443, 444, and 451

Philosophy: no courses are offered for challenge

Physics: no courses are offered for challenge

Political Science: no courses are offered for challenge

Psychology: PSY 101

Recreation and Tourism: no courses are offered for challenge

Religious Studies: no courses are offered for challenge

Safety Education: no courses are offered for challenge

Social Science: no courses are offered for challenge

Sociology: all 100 and 200 level courses with the chair's approval

Theatre Arts: no courses are offered for challenge

World Languages and Cultures: all 100 and 200 level courses with chair's approval

### **Course Substitutions**

Students may petition the degree granting department chair if they wish to substitute courses within degree requirements. The course(s) used for substitution must satisfy the programmatic goals and objectives of the department as determined by the dean and the department chair. The substituted course(s) credits may not reduce the total required credits. Permit to Substitute form can be obtained from Registrar Services or online.

### **Academic Appeal**

Students should be aware that procedures have been established to hear complaints regarding academic matters. The board of academic appeals exists to guarantee due process for academic grievances involving students, faculty, staff, and administrators. The academic appeals policy is established by the faculty senate and is administered by the Dean of Student Success.



**Required Participation in Assessment Activities**

As part of the continual evaluation and pursuit of excellence in ongoing programs, students are required to participate in assessment activities at several points during their academic careers. They will be assessed for placement into Academic Writing I and Quantitative Reasoning upon entering as new students. Through the placement exams, students identified with deficiencies in English usage/reading or computation must correct them prior to enrolling in Academic Writing I or Quantitative Reasoning, respectively. Students will take a placement exam prior to or during orientation. Departments may establish their own requirements as long as they meet or exceed university standards. Departments may also require students with deficiencies to correct them before being accepted into their major.

To promote success, students will be assessed for placement into courses that require a specific skill set or proficiency level (e.g. mathematics or foreign languages). These placement opportunities will be available prior to or during orientation for new first year students.

Students will participate in an assessment of intended student outcomes of the general education program. End-of-major assessments are required prior to graduation.

Students will participate in all required assessments prior to graduation.

Students enrolling in programs that require auditions/evaluations must follow department requirements.

Unless otherwise stated, all courses at CWU are taught in English.

Once accepted, international students may be evaluated by the ESL staff to determine whether additional English-as-a-Second-Language coursework will be required during attendance at CWU.

**Student Service Campus**

For tuition/fees to be properly charged and for assessment purposes, it is imperative that student service campus information be correct within the student information system by the end of the change of schedule period as published in the official academic calendar. Students may take courses at any campus, online, or through a combination of multiple instructional sites. A service campus is the location that a student will be taking the majority of classes or be receiving most of their support services. The service campus is the campus to which the student was admitted unless an authorized campus change request has been processed by registrar services or a university center.

Students who would like to change their service campus must complete a campus change request form. Any change involving the Ellensburg campus must be approved and processed by registrar services. All other changes may be approved and processed by university center or online advising staff as appropriate.

## Qualifying Minimum Placement Test Scores

### 11th GRADE SMARTER BALANCED ASSESSMENT AGREEMENT

#### MATH

In recognition of the achievements of high school students who have demonstrated their readiness for college-level course work, the undersigned universities agree to exempt from remedial coursework in mathematics, without further placement testing, students who:

1. Earn a Level 3 or 4 on the **11th grade Smarter Balanced Assessment** in Mathematics, and
2. Complete the minimum admissions requirement of a quantitative course in the 12th grade, and
3. Enroll in a college-level course that fulfills a quantitative requirement (also known as QSR) as specified by each university, excluding pre-calculus and calculus level college courses, during the first year following high school graduation.

Students who achieve Level 3 or Level 4 may enroll in more advanced mathematics courses through university placement testing.

#### ENGLISH

Similarly, the undersigned universities agree to exempt from remedial coursework in English composition, without further placement testing, students who:

1. Earn a Level 3 or Level 4 on the **11th grade Smarter Balanced Assessment** in English Language Arts,
2. Complete the fourth-year of the minimum admission requirement in English, and
3. Enroll in a college-level English composition course during the first year following high school graduation.

At each university, students achieving at Level 3 or 4 will be eligible to enroll directly in an English 101, or equivalent, course that meets a general education English/writing requirement.

This agreement will apply to students who complete the 11th grade Smarter Balanced Assessment and are members of the high school graduating classes of 2016 through 2019.

#### ENGLISH

	OLD SAT	NEW SAT WT and RT	NEW SAT ERW	ACT	Accuplacer	Next Gen Accuplacer	Smarter Balance
<b>English 100T</b>	<500	Writing Test <26 Or Reading Test <27	Evidence-Based Reading and Writing <560	<19	Reading 85 or below Or WritePlacer 4 or below	Reading 235 or below Or WritePlacer 4 or below	X
<b>English 101</b>	500 or higher	Writing and Language Test: 26 or higher And Reading Test: 27 or higher	Evidence-Based Reading and Writing 560 or higher	English 19 or higher	Reading Comp: 86 or higher And WritePlacer: 5 or higher	Reading 236 or higher And WritePlacer 5 or higher	3+

#### MATH

	Pre-Req	Smtr Bal	MPT		ALEKS	High School
			Gen	Adv	Gen	
<b>Math 100A</b>		X	X	X	<30%	
<b>Math 100B</b>	Math 100A	X	X	X	30%	
<b>Math 100C*</b>	Math 100B	3*	148	145	46%	1yr calculus with B average
<b>Math 101</b>	Math 100B	3	148	145	46%	1yr calculus with B average
<b>Math 102</b>	Math 100B	3	148	145	46%	1yr calculus with B average
<b>Math 130</b>	Math 100B	3	148	145	46%	1yr calculus with B average
<b>Econ 130</b>	Math 100B	3	148	145	46%	1yr calculus with B average
<b>Fin 174</b>	Math 100B	3	148	145	46%	1yr calculus with B average

<b>Math 153</b>	Math 100C	X	148	145	51%	1yr calculus with B average
<b>Math 154</b>	Math 153	X	X	150	61%	X
<b>Math 164</b>	Math 100B	3	148	145	46%	1yr calculus with B average
<b>Math 170</b>	Math 153	X	X	X	61%	X
<b>Math 172</b>	Math 154	X	X	152	76%	X
<b>Math 211</b>	Math 100B	X	148	145	46%	1yr calculus with B average

\*Students must see an advisor for permission to enroll in this course.

	Pre-Req	Accuplacer	Next Gen Accuplacer		
			Arithmetic	QRA Quantitative Reasoning and Algebra QRA	AAF Advanced Algebra and Functions
<b>Math 100A</b>		Arithmetic less than 75	279 or lower		
<b>Math 100B</b>	Math 100A	Arithmetic 75-99	280 or higher	249 or lower	
<b>Math 100C*</b>	Math 100B	*Elementary Algebra 60+ OR Arithmetic 100+		250 or higher	
<b>Math 101</b>	Math 100B	Elementary Algebra 60+ OR Arithmetic 100+		250 or higher	
<b>Math 102</b>	Math 100B	Elementary Algebra 60+ OR Arithmetic 100+		250 or higher	
<b>Math 130</b>	Math 100B	Elementary Algebra 60+ OR Arithmetic 100+		250 or higher	
<b>Econ 130</b>	Math 100B	Elementary Algebra 60+ OR Arithmetic 100+		250 or higher	
<b>Fin 174</b>	Math 100B	Elementary Algebra 60+ OR Arithmetic 100+		250 or higher	
<b>Math 153</b>	Math 100C	Elementary Algebra 85+ OR College Math 35+ or higher		270 or higher	240-263
<b>Math 154</b>	Math 153	College Math 65+ or higher			264-279
<b>Math 164</b>	Math 100B	Elementary Algebra 60+ OR Arithmetic 100+		250 or higher	
<b>Math 170</b>	Math 153	College Math 65+ or higher			264-279
<b>Math 172</b>	Math 154	College Math 100+ or higher			280 or higher
<b>Math 211</b>	Math 100B			250 or higher	

\*Students must see an advisor for permission to enroll in this course.

# Graduation Requirements

Students are eligible for awarding of a bachelor's degree when they fulfill the following requirements.

## Credits

- A minimum of 180 quarter credits is required for a baccalaureate degree; students should note, however, that some bachelor's degrees have requirements in excess of 180 credits. Central allows a maximum of 135 quarter (90 semester) credits to transfer from regionally accredited four-year institutions, including no more than 105 quarter (70 semester) credits of lower division (100-200 level) coursework from a regionally accredited community or technical college. Additional coursework that exceeds this amount may be used to meet specific requirements, but additional credits will not be allowed to count toward the 180-credit requirement for graduation.
- A minimum of 60 credits of upper-division study is required. Upper-division courses are numbered 300 and 400. Credits earned in study at the lower division (courses numbered 100-299) will not be allowed toward meeting this requirement.
- Students must study on the university campus, through CWU online course, or at an established university center at least three quarters and earn a minimum of 45 credits. Credits earned through industrial experience, military experience, or through credit by examination may not be used to meet residency requirements.
- Up to 45 credits may be counted from course challenge or other prior learning assessments.
- Transfer students must earn a minimum of 10 credits in the major and, if a minor is declared, 10 credits in the minor from CWU.
- Cooperative education courses will apply toward graduation requirements, but in no case will a student be allowed to count more than 10 credits at the 290 level nor more than 20 total credits toward graduation requirements. No more than 10 credits are accepted in transfer. No more than eight credits may be applied to a graduate degree. Cooperative education courses may be repeated if field experience learning objectives and activities are distinctly different from previous work or field experience.
- Students who have accumulated 210 or more credits and intend to complete a double major or double degree, and have not yet completed either program, must meet with both department advisors and submit one graduation plan signed by both department chairs and both major advisors to Registrar Services. This also applies to double majors in different colleges. If one major has been completed, only the advisor and the department chair for the uncompleted major need to review and sign the petition.
- Students who have accumulated 210 or more credits and intend to include one or more minors in their academic plan are required to obtain the approvals of their major and minor advisor.

## Degree Components

- The general education program must be completed as defined in the university catalog.
- Students transferring from Washington State community colleges holding the appropriate academic direct transfer associate degree will have met the general education program requirements.
- Completion of all requirements for a major as specified by the appropriate department, as defined in the university catalog, is required.
- Completion of a minor is required when the major is less than 60 credits. In that case the total credits of the major and minor must total a minimum of 60 credits.
- All professional education programs require completion of professional education courses in addition to completion of the major requirements.
- A student may be awarded more than one baccalaureate degree (BA, BAEd, BFA, BMUS, BS) at the same time provided that requirements of both the degree programs have been completed. Double majors within the same baccalaureate program do not constitute separate baccalaureate degrees. In disciplines offering multiple baccalaureate degrees with identical or similar names, e.g., BA or BS in Biology, only one degree will be awarded. Exceptions to this policy require approval by the department chair and the appropriate dean.
- Successful demonstration of writing and computational skills is required for graduation.
- Students who enter Central Washington University with 45 or fewer credits must complete UNIV 101 Student Success Seminar. Students must enroll in UNIV 101 during their first quarter at CWU.
- University General Education Policy requires that students have completed either two years of the same foreign language, Native American language, or American Sign Language in high school, or one year of college-level foreign language. If this requirement was completed prior to enrollment at the University, the student must submit official transcripts to the Office of Admissions. If foreign language has not been satisfied prior to enrollment, then the student must take one year of foreign language before graduating from the university.

**Source URL:** [www.cwu.edu/resources-reports/cwup-5-90-050-graduation-requirements-bachelor%E2%80%99s-degrees](http://www.cwu.edu/resources-reports/cwup-5-90-050-graduation-requirements-bachelor%E2%80%99s-degrees)

## Scholastic Requirements

- Graduation and graduation with honors are based on credits and grade point averages (GPA) earned at the time the degree is awarded. For more information regarding graduation with honors, please review the Graduation with Distinction section of the catalog. When a degree is awarded the academic record is frozen and no grade changes may be performed. Final responsibility for meeting graduation requirements resides with the student.
- In order to graduate, students must have achieved a cumulative grade-point average of at least 2.0 (C) in courses taken at CWU.
- Students must also have achieved a cumulative grade point average of at least 2.25 in the major and 2.0 in the minor field of study. All courses fulfilling the

major and minor requirements, including courses accepted in transfer, are used in computing the major and minor GPA.

- Specific degree and professional certification programs may have more stringent degree requirements than those specified above.
- Transfer students must earn from CWU a minimum of 10 credits in the major and, if a minor is declared, 10 credits in the minor.

#### **Teacher Certification Program**

- Cumulative grade-point average of at least 3.0 for the last 45 graded credits, OR an overall (all colleges attended) cumulative grade point average of 3.0.
- Grade point average of at least 2.5 for major, minor and professional education sequence.
- No grade lower than a C in major or minor, and foundation coursework, will be accepted for certification.

#### **Application for Degree**

Degrees are not automatically awarded when requirements are completed. It is the responsibility of the student to apply for the degree in Registrar Services. Application for the bachelor's degree must be submitted by the second Friday of the quarter preceding the quarter in which the degree is to be completed. Students who apply for graduation after the deadline may incur late fees. Complete instructions and deadlines are available in Registrar Services and through university center offices. Step-by-step instructions may be found at [www.cwu.edu/registrar/degree-checkout](http://www.cwu.edu/registrar/degree-checkout).

#### **Final responsibility for meeting graduation requirements and deadline dates resides with the student.**

Exceptions to university graduation requirements must be petitioned to the registrar. An exception approval may be obtained from the general education committee, department, or program chair and college dean where appropriate. Exceptions to majors or minors and Teacher Certification Programs must be approved by the appropriate department chair and college dean or designee.

#### **Commencement Participation**

Students who have met graduation requirements during the current academic year, summer through winter quarters, and those expecting to meet the requirements during the current spring quarter or upcoming summer session, may participate in the spring commencement ceremony.

Students must complete the online commencement registration form located on the Wildcat Shop's home page at [cwubookstore.collegestoreonline.com](http://cwubookstore.collegestoreonline.com) prior to the published commencement participation deadline. Students should also review the information on the commencement website located at [www.cwu.edu/commencement](http://www.cwu.edu/commencement) for the most current information on the commencement activities and procedures.

Students participating in commencement exercises must wear commencement regalia approved by the commencement committee.

Students anticipating graduation the summer quarter following commencement exercises may participate in the commencement ceremony on a space available basis.

Candidates for summer graduation who wish to participate in the spring commencement ceremony prior to issuance of a degree must submit an application for graduation prior to the spring quarter deadline and complete degree requirements by the end of summer quarter. Published acknowledgment of the degree will not take place until the degree is conferred. Students must apply through MyCWU or by using the form from Registrar Services.

Candidates who are completing student teaching or a full-time internship in the following fall, following commencement, may petition the commencement committee with the approval of the major advisor and dean to participate in spring commencement. Petitions must be submitted to registrar services on or before the graduation application deadline for summer quarter.

Candidates who have applied for their degree the summer following the June commencement ceremony are not eligible for honors distinction nor will their degree be published in the commencement book until the following academic year.

Exceptions to commencement procedures are approved by the commencement committee.

#### **Graduation with Distinction**

The following conditions must be met in order to be considered for graduation with distinction:

- At least 45 of the credits required for the degree must be earned at Central in courses taken on the A-F grading scale.
- Credits earned by course challenge, CLEP, and other national examinations, military experiences or courses, non-college courses, and industrial experience will not be allowed toward the 45-credit eligibility requirement.
- Honors shall be based on the GPA of all credits earned at Central and all transfer credits accepted by CWU.

Baccalaureate honors are awarded to recipients of a first bachelor's degree according to the following standards:

- 3.500 to 3.699 - cum laude
- 3.700 to 3.899 - magna cum laude
- 3.900 to 4.000 - summa cum laude

Cum laude, magna cum laude, and summa cum laude will be noted on the recipient's diploma and university transcript and students participating in commencement exercises may wear their appropriate honors tassel.

For spring quarter degree candidates, the registrar will calculate the top percentage for the declared spring degree candidates based on the end of winter quarter data. Commencement honor tassels will be determined based upon the most recent data available. Final determination of honors will be made after the spring quarter graduation ceremony when all grades are recorded.

Students completing degree requirements during the summer will not be eligible for honors recognition until the following spring commencement ceremony.

President's Scholars: President's Scholars are those students who, in the current academic year, have cumulative GPA's in the top 1% of their respective school or college class. GPA is calculated by existing university policy.

Dean's Scholars: Dean's scholars are those students who, in the current academic year, have a cumulative GPA in the top 5% of their respective school or college class (but not including the top 1%). GPA is calculated by existing university policy. Eligible individual study majors will be determined by the Provost or designee.

The following conditions must be met in order to be considered for President's and Dean's Scholars:

- At least 45 of the credits required for the degree must be earned at Central in courses taken on the A-F grading scale.
- Credits earned by course challenge, CLEP, and other national examinations, military experiences or courses, non-college courses, and industrial experience will not be allowed toward the 45-credit eligibility requirement.
- Honors shall be based on the GPA of all credits earned at Central and all transfer credits accepted by CWU.

NOTE: Individual study majors will be computed with the College of the Sciences majors.

### Concurrent Baccalaureate Degrees

A student may be awarded more than one baccalaureate degree (BA, BAEd, BAS, BFA, BM, BS) at the same time provided that requirements of both degree programs have been completed. Double majors within the same baccalaureate program do not constitute separate baccalaureate degrees except in cases where the second degree requires 60 or more credits that do not satisfy any degree requirements of the first degree.

In disciplines offering multiple baccalaureate degrees with identical or similar names, such as BA and BS in biology, only one degree will be awarded. Exceptions to this policy require approval by the department chair and appropriate dean.

**Source URL:** <http://www.cwu.edu/resources-reports/cwup-5-90-050-graduation-requirements-bachelor%E2%80%99s-degrees>

### Second Baccalaureate Degree

Qualified students seeking second baccalaureate degrees are admitted to post-baccalaureate status; this does not mean, however, that they are enrolled in an "advanced degree program." To receive a second baccalaureate degree, students must complete: (1) all degree requirements not satisfied by the previous degree, and (2) a minimum of 45 quarter credits from Central.

Second baccalaureate students must be accepted into a degree or certificate program by the time they have earned 25 credits beyond their last degree. Once a degree objective has been declared, second baccalaureate students must develop graduation plans with academic advisors. Academic department chairs may grant extensions beyond the 25-credit limit. Second baccalaureate degree students follow regulations applicable to undergraduates.

Second baccalaureate degree students may request from the department that any requirement of a minor be satisfied by the initial bachelor's degree earned provided that the requirements of the minor were completed in prior course work.

CWU reserves the right to review a post-baccalaureate student's transfer work to determine fulfillment of requirements.

## Academic Policies

- Resources and Reports (home of the Policies and Procedures)
- Academic Appeal Procedures CWUP 5-90-010(3)
- Alcohol and Drug Policy CWUP 2-40-030
- Discrimination Complaint and Resolution Policy CWUP 2-35-070
- Equal Opportunity Policies and Programs CWUP 2-35
- Family Educational Rights and Privacy Act (FERPA) CWUP 2-20-070
- Reasonable Accommodation of Persons with Disabilities - Students CWUP 2-35-040
- Students Rights and Responsibilities Policy WAC Title 106
- Student Sexual Assault Response Policy CWUP 8-40-050

**Disclaimer: all policies and procedures are reviewed biannually by the University Policy Advisory Committee (UPAC).**

# 2019-2020 General Education at CWU

## General Education Program Guiding Philosophy

The General Education program prepares you for success at CWU and as a citizen in our dynamic, diverse, and global society. The program fosters integrated learning, enhancing your ability to make connections across courses and disciplines and to apply a breadth of knowledge to real-world problems. It will help you develop skills in critical thinking, clear communication, creative leadership, ethical decision-making, and complex problem solving. Combined with your major, the General Education program will cultivate curiosity, empower personal development, strengthen understanding of and respect for diverse perspectives, and build a foundation for life-long learning.

## General Education Program-Level Goals

**Explore:** You will explore a breadth of knowledge, methods of inquiry and reasoning, and fundamental questions. That process will cultivate curiosity, facilitate the understanding of diverse perspectives, empower personal development and growth, and build a foundation for life-long learning.

**Engage:** As you engage with new knowledge, people, and perspectives, you will assume responsibility for your learning. In the process, you will develop enhanced communication-written and spoken-and critical thinking skills grounded in logic, reason, analysis, and synthesis. Combining these skills will enable you to employ multiple approaches to complex and real-world problems. As an engaged citizen, you will bring intellectual creativity and curiosity into your personal, civic, and professional life.

**Connect:** You will discover how disciplines, societal challenges, and cultures are interconnected. This process links coursework and community, local and global issues, past and present. Your ability to integrate learning will lead to new ways of thinking, analyzing, and interacting with our dynamic and diverse world.

**Create:** Your knowledge and skills will empower you to ask innovative questions and envision unique projects. This process of creative engagement will enable inquisitiveness and original thinking. It will provide you with agility for success in your career and life.

**Empathize:** Your General Education will facilitate open-mindedness and enable you to better understand and imagine others' experiences. As you become more knowledgeable and curious about the world, you will develop respect for diverse points of view, engage in ethical decision-making, and demand and demonstrate compassionate leadership.

I. Engage: First Year Experience Credits: 13-14

Students are required to take one course in each row (First Year Experience, Academic Writing I and Quantitative Reasoning, approximately 13-14 credits) during their first year.

First Year Experience Credits: (4)

The first-year experience will help students transition to college by introducing them to a scholarly approach to problem solving and methods of inquiry. Small classes will emphasize mentorship and focus on special topics developed by faculty. These courses will incorporate writing, critical thinking, oral communication, and information literacy.

Students will register for a section of this course under a specific department prefix ABC 187. Each section will be a different topic.

- CWU 184 - First-Year Experience **Credits:** (4)

Academic Writing, I: Critical Reading and Responding Credits: (5)

Academic Writing, I prepares students with the skills necessary for critical reading and academic writing, including summarizing, reading sources critically and responding to them, synthesizing multiple perspectives, and using academic writing conventions, including grammar and mechanics.

- ENG 101 - Academic Writing I: Critical Reading and Responding **Credits:** (5)
- PHIL 110 - Beyond Belief? Exploring the Fringe and the Paranormal **Credits:** (5)

Quantitative Reasoning Credits: (4-5)

Courses in this category focus on quantitative reasoning and its application. Students will explore various quantitative and statistical processes in order to evaluate and interpret data. Students will develop the ability to identify, analyze, and apply different principles and empirical methods to concrete problems.

- BIOL 213 - Introductory Biostatistics **Credits:** (4)
- BUS 221 - Introductory Business Statistics **Credits:** (5)
- CS 109 - Quantitative Reasoning Using Python **Credits:** (4)
- ECON 130 - Foundations for Business Analytics **Credits:** (5)
- FIN 174 - Personal Finance **Credits:** (5)
- IT 165 - Seeing Through the Data **Credits:** (4)
- MATH 101 - Mathematics in the Modern World **Credits:** (5)
- MATH 102 - Mathematical Decision-Making **Credits:** (5)
- MATH 130 - Finite Mathematics **Credits:** (5)
- MATH 153 - Pre-Calculus Mathematics I **Credits:** (5)
- MATH 154 - Pre-Calculus Mathematics II **Credits:** (5)
- MATH 155 - Applied Precalculus **Credits:** (5)
- MATH 164 - Foundations of Arithmetic **Credits:** (5)
- MATH 172 - Calculus I **Credits:** (5)
- PHYS 181 - General Physics I with Laboratory **Credits:** (5)
- PSY 362 - Introductory Statistics **Credits:** (5)
- SOC 326 - Social Demography **Credits:** (5)

## II. Explore and Connect Credits: 32-40

These courses can be taken any year.

### Knowledge Areas

Students must take one (1) course in each of the eight (8) Knowledge Areas. A student may take courses from the same department in no more than two (2) knowledge areas. The eight (8) knowledge areas are: K1-Academic Writing II; K2-Community, Culture, and Citizenship; K3-Creative Expression; K4-Global Dynamics; K5-Humanities; K6-Individual and Society; K7-Physical and Natural World; and K8-Science and Technology.

### Pathways

From the courses taken in the knowledge areas, students are required to take at least three (3) courses from the same pathway (choose one (1) of the six (6) pathways). Students can choose to take five (5) or more of their courses in the same pathway to earn a certificate. In order to fulfill the Pathway part of the General Education requirement, no more than two (2) courses from a single department may be counted toward this requirement. The six (6) pathways are: P1-Civic and Community Engagement; P2-Health and Well-Being; P3-Perspectives on Current Issues; P4-Social Justice; P5-Sustainability; P6-Ways of Knowing.

### Knowledge Areas (8 courses, 8 knowledge areas)

All students must take one course in each of the areas of knowledge. A student may take courses from the same department in no more than 2 knowledge areas.

### K1 - Academic Writing, II: Critical Reading and Responding

The Academic Writing II courses prepare students with skills in research-based academic argument through assignments involving evaluation, analysis, and synthesis of multiple sources. Individual sections will be linked to specific pathway topics.

### K1P1 - Civic and Community Engagement

- ENG 104 - Academic Writing II: Reasoning and Research on Sustainability and Civic Engagement **Credits:** (5)
- MGT 200 - Essential Skills for Business Professionals **Credits:** (5)
- PHIL 153 - Arguments about Social Issues **Credits:** (5)

### K1P2 - Health and Well-Being

- ENG 103 - Academic Writing II: Reasoning and Research on Health and Current Issues **Credits:** (5)
- MGT 200 - Essential Skills for Business Professionals **Credits:** (5)
- PHIL 152 - Arguments about Healthcare **Credits:** (5)

### K1P3 - Perspectives on Current Issues

- ENG 103 - Academic Writing II: Reasoning and Research on Health and Current Issues **Credits:** (5)
- PHIL 151 - Arguments about Life and Death **Credits:** (5)
- STEP 101 - Scientific Perspectives and Experimentation I **Credits:** (2) (All three courses must be taken and receive passing grade to receive credit)
- STEP 102 - Scientific Perspectives and Experimentation II **Credits:** (2) (All three courses must be taken and receive passing grade to receive credit)
- STEP 103 - Scientific Perspectives and Experimentation III **Credits:** (1) (All three courses must be taken and receive passing grade to receive credit)

### K1P4 - Social Justice

- ENG 102 - Academic Writing II: Reasoning and Research on Social Justice **Credits:** (5)

### K1P5 - Sustainability

- ADMG 285 - Sustainable Decision-Making **Credits:** (4)
- ENG 104 - Academic Writing II: Reasoning and Research on Sustainability and Civic Engagement **Credits:** (5)
- STEP 101 - Scientific Perspectives and Experimentation I **Credits:** (2) (All three courses must be taken and receive passing grade to receive credit)
- STEP 102 - Scientific Perspectives and Experimentation II **Credits:** (2) (All three courses must be taken and receive passing grade to receive credit)
- STEP 103 - Scientific Perspectives and Experimentation III **Credits:** (1) (All three courses must be taken and receive passing grade to receive credit)

### K1P6 - Ways of Knowing

- ENG 102 - Academic Writing II: Reasoning and Research on Social Justice **Credits:** (5)
- HIST 302 - Historical Methods **Credits:** (5)
- STEP 101 - Scientific Perspectives and Experimentation I **Credits:** (2) (All three courses must be taken and receive passing grade to receive credit)
- STEP 102 - Scientific Perspectives and Experimentation II **Credits:** (2) (All three courses must be taken and receive passing grade to receive credit)
- STEP 103 - Scientific Perspectives and Experimentation III **Credits:** (1) (All three courses must be taken and receive passing grade to receive credit)

### K2 - Community, Culture, and Citizenship



The community, culture, and citizenship perspective engages students with historic and contemporary political, ethical, cultural, socioeconomic, and other emerging issues affecting society. By grappling with the intersection of social concerns, students will learn how societies are created and how to contribute to them as effective citizens.

#### K2P1 - Civic and Community Engagement

- ABS 210 - Intro to the African American Odyssey: Socio-Economic and Political Forces Shaping Black Experience **Credits: (5)**
- ANTH 137 - Race, Power and the American Dream **Credits: (5)**
- ART 333 - Art, Design, and Popular Culture **Credits: (4)**
- COM 202 - The First Amendment: Rights and Responsibilities **Credits: (5)**
- ECON 101 - Economic Issues **Credits: (5)**
- EFC 250 - Introduction to Education **Credits: (4)**
- ENG 243 - Talking Back: Power, Diversity, and Social Justice **Credits: (5)**
- FR 200 - Introduction to French Culture **Credits: (5)**
- GEOG 250 - Resource Exploitation and Conservation **Credits: (4)**
- LAJ 102 - Introduction to Law and Justice **Credits: (5)**
- PHIL 107 - Political Philosophy and Social Democracy **Credits: (5)**
- POSC 210 - American Politics **Credits: (5)**
- PUBH 311 - Cross Cultural Practices for Health and Medicine **Credits: (4)**
- PUBH 351 - Community Building Strategies for Public Health **Credits: (4)**
- RUSS 200 - The Art of the Protest: Censorship and Resistance in Russian Culture **Credits: (5)**
- SOC 109 - Social Construction of Race **Credits: (5)**
- SOC 305 - American Society **Credits: (5)**
- WGSS 201 - Introduction to Women's, Gender, and Sexuality Studies **Credits: (5)**

#### K2P2 - Health and Well-Being

- ECON 101 - Economic Issues **Credits: (5)**
- ENST 360 - Environmental Justice **Credits: (5)**
- GEOG 250 - Resource Exploitation and Conservation **Credits: (4)**
- HIST 143 - United States History to 1865 **Credits: (5)**
- LAJ 210 - Latinos, Law and Justice **Credits: (4)**

#### K2P3 - Perspectives on Current Issues

- ABS 210 - Intro to the African American Odyssey: Socio-Economic and Political Forces Shaping Black Experience **Credits: (5)**
- AIS 103 - Contemporary American Indian Experience **Credits: (5)**
- ANTH 137 - Race, Power and the American Dream **Credits: (5)**

- ART 333 - Art, Design, and Popular Culture **Credits: (4)**
- COM 202 - The First Amendment: Rights and Responsibilities **Credits: (5)**
- EDBL 250 - Ethnic and Cultural Minorities in American Education: Past and Present **Credits: (4)**
- ENG 243 - Talking Back: Power, Diversity, and Social Justice **Credits: (5)**
- HIST 144 - United States History Since 1865 **Credits: (5)**
- LAJ 102 - Introduction to Law and Justice **Credits: (5)**
- LIS 245 - Research Methods in the Digital Age **Credits: (4)**
- LLAS 102 - An Introduction to Latino and Latin American Studies **Credits: (5)**
- POSC 210 - American Politics **Credits: (5)**
- RUSS 200 - The Art of the Protest: Censorship and Resistance in Russian Culture **Credits: (5)**
- WGSS 201 - Introduction to Women's, Gender, and Sexuality Studies **Credits: (5)**

#### K2P4 - Social Justice

- ABS 210 - Intro to the African American Odyssey: Socio-Economic and Political Forces Shaping Black Experience **Credits: (5)**
- AIS 103 - Contemporary American Indian Experience **Credits: (5)**
- ANTH 137 - Race, Power and the American Dream **Credits: (5)**
- COM 202 - The First Amendment: Rights and Responsibilities **Credits: (5)**
- ECON 101 - Economic Issues **Credits: (5)**
- EDBL 250 - Ethnic and Cultural Minorities in American Education: Past and Present **Credits: (4)**
- EFC 250 - Introduction to Education **Credits: (4)**
- ENG 243 - Talking Back: Power, Diversity, and Social Justice **Credits: (5)**
- ENST 360 - Environmental Justice **Credits: (5)**
- FR 200 - Introduction to French Culture **Credits: (5)**
- HIST 144 - United States History Since 1865 **Credits: (5)**
- LAJ 210 - Latinos, Law and Justice **Credits: (4)**
- LIS 245 - Research Methods in the Digital Age **Credits: (4)**
- LLAS 102 - An Introduction to Latino and Latin American Studies **Credits: (5)**
- PSY 310 - Multicultural Psychology and Social Justice **Credits: (4)**
- PUBH 311 - Cross Cultural Practices for Health and Medicine **Credits: (4)**
- RUSS 200 - The Art of the Protest: Censorship and Resistance in Russian Culture **Credits: (5)**
- WGSS 201 - Introduction to Women's, Gender, and Sexuality Studies **Credits: (5)**

#### K2P5 - Sustainability

- GEOG 250 - Resource Exploitation and Conservation **Credits: (4)**
- HIST 143 - United States History to 1865 **Credits: (5)**
- MKT 360 - Principles of Marketing **Credits: (5)**

#### K2P6 - Ways of Knowing

- AIS 103 - Contemporary American Indian Experience **Credits: (5)**
- ART 333 - Art, Design, and Popular Culture **Credits: (4)**
- BUS 241 - Legal Environment of Business **Credits: (5)**
- EFC 250 - Introduction to Education **Credits: (4)**
- LAJ 102 - Introduction to Law and Justice **Credits: (5)**
- MKT 360 - Principles of Marketing **Credits: (5)**

#### K3 - Creative Expression

The creative expression perspective allows students to explore aesthetic expression and artistic perspectives on common themes in the literary and fine arts.

##### K3P1 - Civic and Community Engagement

- ART 103 - Art Appreciation **Credits: (4)**
- EDLT 219 - Storytelling Across Disciplines **Credits: (4)**
- ENG 264 - Introduction to Creative Writing and the Environment **Credits: (5)**

##### K3P2 - Health and Well-Being

- DNCE 161 - Cultural History of Dance **Credits: (4)**
- ENG 265 - Introduction to Creative Writing as "Mindfulness, Health and Well-Being" **Credits: (5)**
- FILM 150 - Film Appreciation **Credits: (5)**
- FR 201 - Appreciation of French Cuisine **Credits: (5)**

##### K3P3 - Perspectives on Current Issues

- ART 103 - Art Appreciation **Credits: (4)**
- DNCE 161 - Cultural History of Dance **Credits: (4)**
- MUS 101 - History of Jazz **Credits: (5)**
- MUS 103 - History of Rock and Roll **Credits: (5)**

##### K3P4 - Social Justice

- EDLT 219 - Storytelling Across Disciplines **Credits: (4)**
- FILM 150 - Film Appreciation **Credits: (5)**
- MUS 101 - History of Jazz **Credits: (5)**
- MUS 103 - History of Rock and Roll **Credits: (5)**

##### K3P5 - Sustainability

- ENG 264 - Introduction to Creative Writing and the Environment **Credits: (5)**

#### K3P6 - Ways of Knowing

- ART 103 - Art Appreciation **Credits: (4)**
- DNCE 161 - Cultural History of Dance **Credits: (4)**
- EDLT 219 - Storytelling Across Disciplines **Credits: (4)**
- ENG 264 - Introduction to Creative Writing and the Environment **Credits: (5)**
- FILM 150 - Film Appreciation **Credits: (5)**
- MUS 102 - Introduction to Music **Credits: (5)**
- MUS 103 - History of Rock and Roll **Credits: (5)**
- TH 101 - Appreciation of Theatre and Film **Credits: (4)**
- TH 107 - Introduction to Theatre **Credits: (4)**

#### K4 - Global Dynamics

The global dynamics perspective focuses on how individuals, groups, communities, and nations function in a global society. Students will gain a cultural awareness and sensitivity that prepares them for citizenship in a diverse, global society by developing an understanding of how culture shapes human experience, an appreciation for diverse worldviews, and an awareness of the complexity of the interactions among local, regional, national, and global systems.

##### K4P1 - Civic and Community Engagement

- ECON 102 - World Economic Issues **Credits: (5)**
- IEM 330 - Geopolitics of Fossil Fuels **Credits: (5)**

##### K4P2 - Health and Well-Being

- ECON 102 - World Economic Issues **Credits: (5)**
- ENST 310 - Energy and Society **Credits: (5)**
- GEOG 101 - World Regional Geography **Credits: (5)**
- HIST 101 - World History to 1500 **Credits: (5)**
- IDS 343 - Origins and Results of Food Technology: The Gluttonous Human **Credits: (5)**
- PHIL 106 - Asian Philosophy **Credits: (5)**
- PUBH 317 - Global Health Issues and Solutions **Credits: (4)**

##### K4P3 - Perspectives on Current Issues

- ANTH 130 - Cultural Worlds **Credits: (5)**
- AST 102 - Introduction to Asian Studies **Credits: (5)**
- COM 302 - Intercultural Communication **Credits: (4)**
- ECON 202 - Principles of Economics Macro **Credits: (5)**
- EDLT 217 - Exploring Global Dynamics through Children's and Adolescent Literature **Credits: (4)**
- ENG 347 - Global Perspectives in Literature **Credits: (5)**
- GEOG 101 - World Regional Geography **Credits: (5)**

- HIST 103 - World History Since 1815 **Credits:** (5)
- IDS 343 - Origins and Results of Food Technology: The Gluttonous Human **Credits:** (5)
- IEM 330 - Geopolitics of Fossil Fuels **Credits:** (5)
- MGT 384 - Introduction to International Business **Credits:** (5)
- MUS 105 - Introduction to World Music **Credits:** (4)
- POSC 270 - International Relations **Credits:** (5)
- PUBH 317 - Global Health Issues and Solutions **Credits:** (4)
- WGSS 340 - Gender and Sexuality in a Global Context **Credits:** (5)
- WLC 311 - Popular Cultures of the World **Credits:** (5)

#### K4P4 - Social Justice

- ANTH 130 - Cultural Worlds **Credits:** (5)
- COM 302 - Intercultural Communication **Credits:** (4)
- ECON 102 - World Economic Issues **Credits:** (5)
- EDLT 217 - Exploring Global Dynamics through Children's and Adolescent Literature **Credits:** (4)
- ENG 347 - Global Perspectives in Literature **Credits:** (5)
- GEOG 101 - World Regional Geography **Credits:** (5)
- HIST 103 - World History Since 1815 **Credits:** (5)
- IEM 330 - Geopolitics of Fossil Fuels **Credits:** (5)
- MUS 105 - Introduction to World Music **Credits:** (4)
- POSC 270 - International Relations **Credits:** (5)
- WGSS 340 - Gender and Sexuality in a Global Context **Credits:** (5)
- WLC 311 - Popular Cultures of the World **Credits:** (5)

#### K4P5 - Sustainability

- ECON 202 - Principles of Economics Macro **Credits:** (5)
- ENST 310 - Energy and Society **Credits:** (5)
- MGT 384 - Introduction to International Business **Credits:** (5)
- PHIL 106 - Asian Philosophy **Credits:** (5)

#### K4P6 - Ways of Knowing

- ANTH 130 - Cultural Worlds **Credits:** (5)
- AST 102 - Introduction to Asian Studies **Credits:** (5)
- COM 302 - Intercultural Communication **Credits:** (4)
- ECON 202 - Principles of Economics Macro **Credits:** (5)
- EDLT 217 - Exploring Global Dynamics through Children's and Adolescent Literature **Credits:** (4)
- ENST 310 - Energy and Society **Credits:** (5)
- HIST 101 - World History to 1500 **Credits:** (5)
- MUS 105 - Introduction to World Music **Credits:** (4)
- RELS 103 - World Mythologies **Credits:** (5)
- WLC 311 - Popular Cultures of the World **Credits:** (5)

#### K5 - Humanities

The humanities perspective focuses on helping students interpret their world, culture, and perspectives through the study of philosophical, literary, and historical forms.

#### K5P1 - Civic and Community Engagement

- ABS 110 - Expressive Black Culture: African American Literary Traditions from Folklore to Rap **Credits:** (5)
- ENG 106 - Literature and the Environment **Credits:** (5)
- LAJ 215 - Law in American History **Credits:** (4)
- WLC 250 - Language and Power **Credits:** (5)

#### K5P2 - Health and Well-Being

- ENG 107 - Literature, Health, and Well-Being **Credits:** (5)
- HIST 102 - World History: 1500-1815 **Credits:** (5)
- MGT 395 - Leadership in Business Organizations **Credits:** (5)
- PHIL 105 - The Meaning of Life **Credits:** (5)
- WLC 250 - Language and Power **Credits:** (5)

#### K5P3 - Perspectives on Current Issues

- ABS 110 - Expressive Black Culture: African American Literary Traditions from Folklore to Rap **Credits:** (5)
- AIS 102 - American Indians in the Contact Period **Credits:** (5)
- HIST 301 - Pacific Northwest History **Credits:** (5)
- HUM 101 - Exploring Cultures in the Ancient World **Credits:** (5)
- HUM 102 - Exploring Cultures From 16th through 19th Centuries **Credits:** (5)
- HUM 103 - Exploring Cultures in Modern and Contemporary Societies **Credits:** (5)
- PHIL 104 - Moral Controversies **Credits:** (5)
- RELS 102 - Food, Sex, and the Other: Everyday Religion and Morality **Credits:** (5)
- SPAN 456 - The Spanish and Latin American Short Story **Credits:** (5)
- WLC 341 - Spells of Enchantment: Re-interpreting the Fairy Tale **Credits:** (5)

#### K5P4 - Social Justice

- ABS 110 - Expressive Black Culture: African American Literary Traditions from Folklore to Rap **Credits:** (5)
- AIS 102 - American Indians in the Contact Period **Credits:** (5)
- ENG 108 - Literature and Social Justice **Credits:** (5)
- HUM 101 - Exploring Cultures in the Ancient World **Credits:** (5)

- HUM 102 - Exploring Cultures From 16th through 19th Centuries **Credits:** (5)
- HUM 103 - Exploring Cultures in Modern and Contemporary Societies **Credits:** (5)
- MGT 395 - Leadership in Business Organizations **Credits:** (5)
- PHIL 103 - What Is Enlightenment? **Credits:** (5)
- PHIL 104 - Moral Controversies **Credits:** (5)
- POSC 280 - Introduction to Western Political Thought **Credits:** (5)
- RELS 102 - Food, Sex, and the Other: Everyday Religion and Morality **Credits:** (5)
- SPAN 456 - The Spanish and Latin American Short Story **Credits:** (5)

#### K5P5 - Sustainability

- ENG 106 - Literature and the Environment **Credits:** (5)
- HIST 102 - World History: 1500-1815 **Credits:** (5)
- HIST 301 - Pacific Northwest History **Credits:** (5)
- RELS 102 - Food, Sex, and the Other: Everyday Religion and Morality **Credits:** (5)

#### K5P6 - Ways of Knowing

- AIS 102 - American Indians in the Contact Period **Credits:** (5)
- ENG 105 - The Literary Imagination: An Introduction to Literature **Credits:** (5)
- HIST 102 - World History: 1500-1815 **Credits:** (5)
- HUM 101 - Exploring Cultures in the Ancient World **Credits:** (5)
- HUM 103 - Exploring Cultures in Modern and Contemporary Societies **Credits:** (5)
- LAJ 215 - Law in American History **Credits:** (4)
- PHIL 101 - Philosophical Inquiry **Credits:** (5)
- RELS 101 - World Religions **Credits:** (5)
- SPAN 456 - The Spanish and Latin American Short Story **Credits:** (5)
- WLC 341 - Spells of Enchantment: Re-interpreting the Fairy Tale **Credits:** (5)

#### K6 - Individual and Society

The individual and society perspective focuses on the relationship between people and their socialization. Students will be exposed to connections between behaviors, perspectives, psychology, and influences affecting everyday life.

#### K6P1 - Civic and Community Engagement

- ANTH 180 - Language and Culture **Credits:** (5)
- ENTP 287 - Applied Product Development **Credits:** (5)
- GEOG 273 - Geography of Rivers **Credits:** (5)
- IDS 357 - Race, Drugs and Prohibition in the U.S.: What Makes Drug Use Criminal? **Credits:** (5)

- MGT 380 - Organizational Management **Credits:** (5)
- POSC 260 - Comparative Politics **Credits:** (5)
- YESS 101 - YESS Social Science Perspectives and Research I **Credits:** (2) (All three courses must be taken)
- YESS 102 - YESS Social Science Perspectives and Research II **Credits:** (2) (All three courses must be taken)
- YESS 103 - YESS Social Science Perspectives and Research III **Credits:** (1) (All three courses must be taken)

#### K6P2 - Health and Well-Being

- ANTH 107 - Being Human: Past and Present **Credits:** (5)
- ASP 305 - Accessibility and User Experience **Credits:** (4)
- COM 222 - Media Literacy in the Digital Age **Credits:** (5)
- FCL 101 - Skills for Marriage and Intimate Relationships **Credits:** (4)
- GEOG 273 - Geography of Rivers **Credits:** (5)
- HED 101 - Essentials for Healthy Living **Credits:** (4)
- HRM 381 - Management of Human Resources **Credits:** (5)
- POSC 101 - Introduction to Politics **Credits:** (5)
- PSY 101 - General Psychology **Credits:** (5)
- PSY 205 - Psychology of Adjustment **Credits:** (5)
- SOC 327 - Health and Society **Credits:** (5)

#### K6P3 - Perspectives on Current Issues

- ATM 281 - Socio-cultural Aspects of Apparel **Credits:** (4)
- COM 222 - Media Literacy in the Digital Age **Credits:** (5)
- ECON 201 - Principles of Economics Micro **Credits:** (5)
- FCL 234 - Contemporary Families **Credits:** (4)
- HED 101 - Essentials for Healthy Living **Credits:** (4)
- IDS 357 - Race, Drugs and Prohibition in the U.S.: What Makes Drug Use Criminal? **Credits:** (5)
- LAJ 216 - Race, Gender and Justice **Credits:** (4)
- MGT 380 - Organizational Management **Credits:** (5)
- MGT 389 - Business and Society **Credits:** (5)
- POSC 260 - Comparative Politics **Credits:** (5)
- PSY 242 - Psychology of Video Games **Credits:** (4)
- PUBH 209 - Consumer Health **Credits:** (4)
- SOC 101 - Social Problems **Credits:** (5)
- SOC 107 - Principles of Sociology **Credits:** (5)
- SOC 327 - Health and Society **Credits:** (5)
- WGSS 250 - Introduction to Queer Studies **Credits:** (5)
- YESS 101 - YESS Social Science Perspectives and Research I **Credits:** (2) (All three courses must be taken)

- YESS 102 - YESS Social Science Perspectives and Research II **Credits:** (2) (All three courses must be taken)
- YESS 103 - YESS Social Science Perspectives and Research III **Credits:** (1) (All three courses must be taken)

#### K6P4 - Social Justice

- ASP 305 - Accessibility and User Experience **Credits:** (4)
- ATM 281 - Socio-cultural Aspects of Apparel **Credits:** (4)
- FCL 234 - Contemporary Families **Credits:** (4)
- GEOG 208 - Our Human World **Credits:** (5)
- HRM 381 - Management of Human Resources **Credits:** (5)
- LAJ 216 - Race, Gender and Justice **Credits:** (4)
- MGT 386 - Principles of Organizational Behavior **Credits:** (5)
- POSC 101 - Introduction to Politics **Credits:** (5)
- PSY 333 - Social Justice: The Psychology of Stereotyping, Prejudice, and Discrimination **Credits:** (4)
- PUBH 209 - Consumer Health **Credits:** (4)
- SOC 101 - Social Problems **Credits:** (5)
- SOC 107 - Principles of Sociology **Credits:** (5)
- SOC 327 - Health and Society **Credits:** (5)
- WGSS 250 - Introduction to Queer Studies **Credits:** (5)

#### K6P5 - Sustainability

- AIS 101 - American Indian Culture before European Contact **Credits:** (5)
- ANTH 107 - Being Human: Past and Present **Credits:** (5)
- BUS 389 - Sustainable Business **Credits:** (5)
- ECON 201 - Principles of Economics Micro **Credits:** (5)
- GEOG 273 - Geography of Rivers **Credits:** (5)
- HED 101 - Essentials for Healthy Living **Credits:** (4)
- SCED 305 - The Story of Science **Credits:** (5)
- SOC 322 - Sociology of Food **Credits:** (5)

#### K6P6 - Ways of Knowing

- ATM 281 - Socio-cultural Aspects of Apparel **Credits:** (4)
- COM 222 - Media Literacy in the Digital Age **Credits:** (5)
- ECON 201 - Principles of Economics Micro **Credits:** (5)
- FCL 101 - Skills for Marriage and Intimate Relationships **Credits:** (4)
- GEOG 208 - Our Human World **Credits:** (5)
- MATH 120 - Mathematics as a Mirror: Cultural and Historical Approaches **Credits:** (4)
- MGT 380 - Organizational Management **Credits:** (5)

- POSC 101 - Introduction to Politics **Credits:** (5)
- PSY 101 - General Psychology **Credits:** (5)
- PSY 205 - Psychology of Adjustment **Credits:** (5)
- SCED 305 - The Story of Science **Credits:** (5)
- SOC 107 - Principles of Sociology **Credits:** (5)
- SOC 307 - Individual and Society **Credits:** (5)
- WGSS 250 - Introduction to Queer Studies **Credits:** (5)
- YESS 101 - YESS Social Science Perspectives and Research I **Credits:** (2) (All three courses must be taken)
- YESS 102 - YESS Social Science Perspectives and Research II **Credits:** (2) (All three courses must be taken)
- YESS 103 - YESS Social Science Perspectives and Research III **Credits:** (1) (All three courses must be taken)

#### K7 - Physical and Natural World

This Physical and Natural World perspective introduces the core practice of science: generating testable explanations. Students will be introduced to fundamental scientific concepts and will engage in scientific practices.

#### K7P1 - Civic and Community Engagement

- ANTH 314 - Human Variation **Credits:** (5)
- BIOL 200 - Plants in the Modern World **Credits:** (5)
- PHYS 106 - Physics Inquiry **Credits:** (5)
- SCED 101 - Integrated Life Science **Credits:** (5)

#### K7P2 - Health and Well-Being

- ANTH 314 - Human Variation **Credits:** (5)
- BIOL 101 - Fundamentals of Biology **Credits:** (5)
- CHEM 113 - Introduction to Biochemistry **Credits:** (4)
- **AND** CHEM 113LAB - Introduction to Biochemistry Laboratory **Credits:** (1)
- EXSC 154 - Science of Healthy Living **Credits:** (5)
- GEOL 303 - Water: Science and Society **Credits:** (5)

#### K7P3 - Perspectives on Current Issues

- ANTH 110 - Bones, Apes, and Genes: Exploring Biological Anthropology **Credits:** (5)
- BIOL 101 - Fundamentals of Biology **Credits:** (5)
- ENST 201 - Earth as an Ecosystem **Credits:** (5)
- GEOG 107 - Our Dynamic Earth **Credits:** (5)
- GEOL 107 - Earth's Changing Surface **Credits:** (4)
- IEM 103 - Introduction to Energy and Science Inquiry **Credits:** (5)
- PHYS 101 - Introductory Astronomy I **Credits:** (5)
- SCED 102 - Integrated Earth and Space Science **Credits:** (5)

#### K7P4 - Social Justice

- ANTH 314 - Human Variation **Credits:** (5)
- BIOL 200 - Plants in the Modern World **Credits:** (5)
- GEOL 107 - Earth's Changing Surface **Credits:** (4)
- GEOL 303 - Water: Science and Society **Credits:** (5)

#### K7P5 - Sustainability

- ANTH 110 - Bones, Apes, and Genes: Exploring Biological Anthropology **Credits:** (5)
- BIOL 200 - Plants in the Modern World **Credits:** (5)
- ENST 201 - Earth as an Ecosystem **Credits:** (5)
- GEOG 107 - Our Dynamic Earth **Credits:** (5)
- GEOL 107 - Earth's Changing Surface **Credits:** (4)
- GEOL 303 - Water: Science and Society **Credits:** (5)
- IEM 103 - Introduction to Energy and Science Inquiry **Credits:** (5)
- SCED 101 - Integrated Life Science **Credits:** (5)
- SCED 102 - Integrated Earth and Space Science **Credits:** (5)

#### K7P6 - Ways of Knowing

- ANTH 110 - Bones, Apes, and Genes: Exploring Biological Anthropology **Credits:** (5)
- BIOL 101 - Fundamentals of Biology **Credits:** (5)
- CHEM 111 - Introduction to Chemistry **Credits:** (4)
- **AND** CHEM 111LAB - Introductory Chemistry Laboratory **Credits:** (1)
- CHEM 181 - General Chemistry I **Credits:** (4)
- **AND** CHEM 181LAB - General Chemistry Laboratory I **Credits:** (1)
- ENST 201 - Earth as an Ecosystem **Credits:** (5)
- GEOG 107 - Our Dynamic Earth **Credits:** (5)
- GEOL 101 - Introduction to Geology **Credits:** (4)
- **AND** GEOL 101LAB - Introductory Geology Laboratory **Credits:** (1)
- GEOL 103 - Geology of Washington **Credits:** (4)
- **AND** GEOL 101LAB - Introductory Geology Laboratory **Credits:** (1)
- IEM 103 - Introduction to Energy and Science Inquiry **Credits:** (5)
- PHYS 101 - Introductory Astronomy I **Credits:** (5)
- PHYS 103 - Physics of Musical Sound **Credits:** (5)
- PHYS 106 - Physics Inquiry **Credits:** (5)

#### K8 - Science and Technology

The science and technology perspective focuses on scientific inquiry, intersections with technology, mathematical applications, and connections to the world around us.

#### K8P1 - Civic and Community Engagement

- BIOL 204 - The Science and Practice of Growing Plants **Credits:** (5)
- BIOL 300 - Introduction to Evolution **Credits:** (5)
- STP 201 - Inquiry Approaches to Teaching **Credits:** (2)

- STP 202 - Inquiry Based Lesson Design **Credits:** (2)

#### K8P2 - Health and Well-Being

- ACCT 301 - Accounting Skills for Non-Accounting Majors **Credits:** (5)
- ANTH 120 - Archaeology: Science of the Past **Credits:** (5)
- BIOL 201 - Human Physiology **Credits:** (5)
- BIOL 205 - Microbes and Mankind **Credits:** (5)
- CS 102 - Health and Technology **Credits:** (4)
- FIN 101 - Financial Literacy **Credits:** (5)
- GEOL 302 - Oceans and Atmosphere **Credits:** (4)
- IT 105 - Protecting Your Online Identity **Credits:** (4)
- NUTR 101 - Introduction to Human Nutrition **Credits:** (5)
- SHM 102 - Occupational Health **Credits:** (5)

#### K8P3 - Perspectives on Current Issues

- BIOL 201 - Human Physiology **Credits:** (5)
- BIOL 205 - Microbes and Mankind **Credits:** (5)
- CS 107 - Make a Game with Computer Science **Credits:** (4)
- ENST 202 - Environment and Society **Credits:** (5)
- ETSC 101 - Modern Technology and Energy **Credits:** (5)
- FIN 101 - Financial Literacy **Credits:** (5)
- GEOG 111 - The Power of Maps **Credits:** (4)
- GEOL 108 - Earth and Energy Resources **Credits:** (4)
- GEOL 302 - Oceans and Atmosphere **Credits:** (4)
- IEM 302 - Energy, Environment, and Climate Change **Credits:** (4)
- IT 105 - Protecting Your Online Identity **Credits:** (4)
- IT 111 - Your Digital Footprint and the Web **Credits:** (4)
- MATH 210 - Statistics, Society, and Decisions **Credits:** (5)
- NUTR 101 - Introduction to Human Nutrition **Credits:** (5)
- PHYS 304 - Astrobiology: Origins and Search for Life in the Universe **Credits:** (4)

#### K8P4 - Social Justice

- BIOL 201 - Human Physiology **Credits:** (5)
- BIOL 302 - Sustainability and Environmental Change **Credits:** (5)
- EET 101 - Everyday Electronics **Credits:** (4)
- ENST 202 - Environment and Society **Credits:** (5)
- GEOG 111 - The Power of Maps **Credits:** (4)
- GEOL 108 - Earth and Energy Resources **Credits:** (4)

#### K8P5 - Sustainability

- ANTH 120 - Archaeology: Science of the Past **Credits:** (5)

- BIOL 204 - The Science and Practice of Growing Plants **Credits:** (5)
- BIOL 302 - Sustainability and Environmental Change **Credits:** (5)
- CHEM 101 - Chemistry and Planet Earth **Credits:** (5)
- ENST 202 - Environment and Society **Credits:** (5)
- GEOL 108 - Earth and Energy Resources **Credits:** (4)
- IEM 302 - Energy, Environment, and Climate Change **Credits:** (4)
- PUBH 320 - Environmental Health **Credits:** (4)
- SHM 102 - Occupational Health **Credits:** (5)
- STP 201 - Inquiry Approaches to Teaching **Credits:** (2)
- STP 202 - Inquiry Based Lesson Design **Credits:** (2)

#### K8P6 - Ways of Knowing

- ACCT 301 - Accounting Skills for Non-Accounting Majors **Credits:** (5)
- ANTH 120 - Archaeology: Science of the Past **Credits:** (5)
- BIOL 205 - Microbes and Mankind **Credits:** (5)
- BIOL 300 - Introduction to Evolution **Credits:** (5)
- CS 105 - The Logical Basis of Computing **Credits:** (4)
- EET 101 - Everyday Electronics **Credits:** (4)
- ETSC 101 - Modern Technology and Energy **Credits:** (5)
- FIN 101 - Financial Literacy **Credits:** (5)
- GEOG 111 - The Power of Maps **Credits:** (4)
- GEOL 302 - Oceans and Atmosphere **Credits:** (4)
- IEM 302 - Energy, Environment, and Climate Change **Credits:** (4)
- IT 111 - Your Digital Footprint and the Web **Credits:** (4)
- MATH 210 - Statistics, Society, and Decisions **Credits:** (5)
- NUTR 101 - Introduction to Human Nutrition **Credits:** (5)

#### III. Connect, Create, and Empathize: Culminating Experience Credits: 1-12

Students will be required to complete one (1) of the culminating experience options during their junior or senior year. Culminating experiences may be part of students' major requirements.

#### Culminating Experience

Opportunities may include a department approved capstone course or a General Education capstone course.

- ADMG 471 - Leading Change **Credits:** (4)
- ANTH 458 - Anthropology Senior Comprehensive Survey **Credits:** (4)
- ART 495 - Studio Project **Credits:** (2)
- ASP 485 - Accessibility Studies Capstone **Credits:** (2-3)

- AST 401 - Asia/Pacific Studies Capstone **Credits:** (3)
- BIOL 487 - Biology Capstone **Credits:** (1)
- CHEM 488 - Colloquium **Credits:** (1)
- CMGT 481 - Construction Management Capstone **Credits:** (4) (All courses must be taken and receive passing grade to receive credit.)
- **AND** CMGT 495A - Construction Management Competition Preparation - Fall **Credits:** (2) (All courses must be taken and receive passing grade to receive credit.)
- **AND** CMGT 495B - Construction Management Competition Preparation - Winter **Credits:** (2) (All courses must be taken and receive passing grade to receive credit.)
- COM 489 - Portfolio Assessment **Credits:** (1)
- CWU 400 - General Education Culminating Experience **Credits:** (2) (This is a non-major specific course to allow students who do not have a culminating experience course in their major to be able to fulfill their General Education requirements.)
- ECON 406 - Business Analytics **Credits:** (5)
- EET 487 - Senior Project Management **Credits:** (2) (All courses must be taken and receive passing grade to receive credit.)
- **AND** EET 487LAB - Senior Project Management Laboratory **Credits:** (2) (All courses must be taken and receive passing grade to receive credit.)
- **AND** EET 488 - Senior Project Quality **Credits:** (2) (All courses must be taken and receive passing grade to receive credit.)
- **AND** EET 488LAB - Senior Project Quality Laboratory **Credits:** (2) (All courses must be taken and receive passing grade to receive credit.)
- **AND** EET 489 - Senior Technical Presentations **Credits:** (2) (All courses must be taken and receive passing grade to receive credit.)
- EFC 460 - Pedagogy Capstone **Credits:** (2)
- ENG 489 - Senior Colloquium **Credits:** (2)
- ENST 487 - End-of-Major Capstone **Credits:** (1)
- FILM 489 - Film Career Seminar **Credits:** (1)
- GEOG 489 - Geography Capstone **Credits:** (2)
- GEOL 489 - Geologic Field Methods **Credits:** (6-12)
- GEOL 493 - Field Methods in Environmental Geology **Credits:** (4)
- HIST 481 - Senior Thesis **Credits:** (4)
- IT 470 - Database and the Web Capstone **Credits:** (4)
- IT 482 - Cybersecurity Capstone **Credits:** (4)
- LAJ 489 - Senior Seminar in Law and Justice **Credits:** (4)
- MET 489A - Senior Project I **Credits:** (4) (All courses must be taken and receive passing grade to receive credit.)
- **AND** MET 489B - Senior Project II **Credits:** (4) (All courses must be taken and receive passing grade to receive credit.)
- **AND** MET 489C - Senior Project III **Credits:** (4) (All courses must be taken and receive passing grade to receive credit.)
- MGT 489 - Strategic Management **Credits:** (5)

- MUS 300 - Recital Performance **Credits:** (1) (All courses must be taken and receive passing grade to receive credit.)
- MUS 400 - Recital Performance **Credits:** (1) (All courses must be taken and receive passing grade to receive credit.)
- MUS 420 - Composition 4 **Credits:** (3)
- MUS 495 - Senior Project **Credits:** (2)
- PESH 401 - International Service Learning: Civic Engagement and Youth Development **Credits:** (4)
- PHIL 495 - Undergraduate Thesis **Credits:** (3)
- PHIL 497 - Honors Thesis **Credits:** (3)
- PSY 489 - Senior Assessment **Credits:** (2)
- RELS 495 - Undergraduate Thesis **Credits:** (3)
- RELS 497 - Honors Thesis **Credits:** (3)
- SHM 485 - Safety and Health Management Capstone **Credits:** (3)
- SOC 489 - Senior Seminar **Credits:** (1)

Total Credits: 46-66

# College of Arts and Humanities

## Administration and Organization

### Dean

Jill Hernandez, PhD (Hebeler Hall, room 202)

### Interim Associate Dean

Scott Robinson, MFA (Hebeler Hall, room 202)

Mail Stop 7518

509-963-1858

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## Overview

The College of Arts and Humanities (CAH) is comprised of 12 departments and programs, which represent the disciplines of the arts and humanities. All of the departments and some of the programs of CAH offer undergraduate degrees as well as minors which supplement other degree programs. Five departments offer Master's degrees. In addition to its role in providing degree programs, CAH is responsible for many of the course offerings of the general education programs as well as extensive service coursework for the entire university. The college also plays a major role in Central's teacher education programs, offering bachelors and master's degrees for students preparing to be secondary teachers and providing coursework in educational foundations and discipline-specific methods for teacher education majors. Building on a legacy of teaching excellence, college faculty are engaged in research, creative activities and service, involving students in the scholarship and practical applications of their various academic specializations, while making important contributions to the intellectual tradition and to society at large. There are no special requirements for admission to the college, but some departments have requirements that are described under the respective department and program headings in the catalog.

## Mission

The College of Arts and Humanities advances knowledge, promotes intellectual inquiry, and cultivates creative endeavor among students and faculty through teaching informed by scholarship, creative activity, and public and professional involvement. We are committed to helping students develop intellectual and practical skills for responsible citizenship and the challenges of contemporary life in a global society. The college offers disciplinary and interdisciplinary programs of the highest quality, acts as a steward of the foundational disciplines upon which all inquiry is based, and serves as a cultural center for arts and humanities for the university and the region.

## Vision

The College of Arts and Humanities will be recognized as a distinguished learning community known regionally for scholarly and creative excellence, innovative, and rigorous foundational liberal arts education, and undergraduate and graduate programs that are outstanding and unique in the state.

## Departments and Programs

Africana and Black Studies: Bobby Cummings, PhD (Michaelsen Hall, room 104)

Art and Design: Gregg Schlanger, MFA (Randall Hall, room 100)

Asian Studies: Jeffrey Dippmann, PhD (Language and Literature Bldg., room 337)

Communication: Katharine Whitcomb, MA and Francesco Somaini, PhD (Lind Hall, room 109B)

English: Katharine Whitcomb, MA (Language and Literature Bldg., room 423)

History: Roxanne Easley, PhD (Language and Literature Bldg., room 100)

Center Latino and Latin American Studies Program: Daniel Beck, PhD (Science 1 Bldg., room 338)

Music: Nikolas Caoile, DMA (Jerilyn S. McIntyre Music Building, room 144)

Philosophy and Religious Studies: Jeffrey Dippmann, PhD (Language and Literature Bldg., room 337)

Theatre Arts: Christina Barrigan, MFA (McConnell Hall, room 106)

World Languages and Cultures: Michael Johnson, PhD (Language and Literature Bldg., room 102)



# College of Business

## Administration and Organization

### Dean

Jeffrey Stinson, PhD (Shaw-Smyser Hall, room 129)

### Associate Dean

KeKe (CoCo) Wu, PhD (Shaw-Smyser Hall, room 126)  
Mail Stop 7487  
509-963-1955  
Fax: 509-963-3042  
www.cwu.edu/business

### Vision

CWU's College of Business will be recognized as a premier learning community creating an environment in which students, faculty, and staff reach their full potential.

### Mission

We launch students toward a better future by engaging them in industry-relevant and student-centered programs driven by strong partnerships between students, faculty, and business professionals.

### Our Shared Values

The faculty and staff of the CB share a set of core beliefs and commitments.

### We believe in:

- Student success
- Lifelong learning
- Integrity and ethical behavior
- Excellence

### We commit ourselves to:

- Prepare students for the future
- Impart knowledge on which students can build
- Treat everyone with respect and fairness
- Exemplify our values by serving as teachers and role models
- Maintain currency in our academic disciplines and professional fields
- Engage in scholarly activities that contribute to the body of knowledge in our disciplines

### Statement of Conduct

The College of Business is a learning community committed to a set of core values based on integrity, respect, and responsibility that guide our interactions.

**Integrity:** The quality of possessing and steadfastly adhering to high moral principles or professional standards.

**Respect:** To show consideration or thoughtfulness in relation to others.

**Responsibility:** The state, fact, or position of being accountable and responsible.

### Code of Honor

As College of Business students we pledge to uphold these standards of professionalism and conduct ourselves in accordance with them. We will not lie, cheat, or steal, and will not tolerate those who do. Our behavior defines who we are and

what we will become.

## Programs

The College of Business offers programs leading to the Bachelor of Science degree in the following areas:

- Bachelor of Science, Accounting
- Bachelor of Science, Business Administration with specializations in:
  - Finance
  - General Business
  - Human Resource Management
  - Leadership and Management
  - Marketing Management
  - Personal Financial Planning
  - Supply Chain Management
- Bachelor of Science, Economics with specializations in:
  - Economic and Business Forecasting
  - General Economics
  - Managerial Economics
- Bachelor of Science, Personal Financial Planning
- Bachelor of Applied Science, Supply Chain Management

The College of Business offers minors in:

Accounting  
Business Administration  
Entrepreneurship  
Finance  
Human Resource Management  
Sport Business  
Supply Chain Management

The College of Business offers certificate programs in:

Accounting  
Sport Business  
Supply Chain Management

Students may take their junior and senior years of the accounting and business administration programs at two Puget sound-area centers: Lynnwood and Des Moines.

## Admission Requirements

Admission requirements to major programs within the College of Business are identical regardless of the location of the program. Students must first be accepted by the university and, if applicable, the university center which they plan to attend. Then, students must formally apply to the College of Business and be admitted to a College of Business Program prior to enrolling in 300- and 400-level courses within the college.

Students must attend a College of Business major declaration session to be fully admitted to our majors. Applications are only accepted at new student major declaration sessions. The application form must be completed and returned to the appropriate office along with copies of current transcripts.

Students must have the below requirements to be admitted to a College of Business major. Students seeking entry to the College without these requirements will be granted pre-major standing.

- Completion of 30 credits (If a student is a transfer student, credits must be transferable)
- The applicant must be in good academic standing
- 2.25 Collegiate GPA
- Completion of ENG 101 and ENG 102 with a C- or higher, or equivalent
- Attend a College of Business Major Declaration Session

Students matriculating to the College of Business with a completed BDTA (Business Degree Transfer Agreement from a Washington Community College) will be exempted from BUS 102 and BUS 110. Students without course equivalents from the community college may be advised, though not required, to take these two courses.

All students matriculating to the College of Business without a BDTA will be required to fully meet the College of Business Foundation requirements.

International students whose native language is not English must meet one of the following English proficiency requirements:

- A score of 71 or above on the Internet-based TOEFL or 525 or above on the paper-based TOEFL (195 for computer based, 71 for internet based), OR
- A score of 6.0 or above on the International English Language Testing System (IELTS) exam, OR
- A 3.0 (B grade) or above in each two college-level English composition courses from an accredited United States college or university. Contact the Office of Admissions to find out what courses are acceptable.

Students who have met all of the above requirements will be admitted unless the number of applicants exceeds available space. In that case, acceptance will be competitive, based on a selection index.

### **Previous or Transfer Coursework Policy**

Business courses taken to fulfill the requirements for an undergraduate or graduate degree from the CWU College of Business must have been taken within the last 10 years at the time of graduation. Exceptions may be made, but must be approved prior to acceptance into the College of Business by the department chair and dean or designee.

Students wishing to have credits from non-United States institutions considered for transfer into the College of Business for any major or minor must have their transcripts evaluated through outside credential evaluators who are members of the National Association of Credential Evaluation Services (NACES), such as the Foundation for International Services (FIS), the World Education Service (WES), or Educational Perspectives. Students who intend to pursue the CPA may instead decide to use the NABSA (National Association of State Boards of Accountancy) international evaluation services since it is a requirement of the CPA. Credits for current students participating in a CWU study abroad program will be evaluated by the Office of the Registrar.

Equivalent lower-division (100-200 level) courses may be

transferred toward meeting the foundation course requirements for any BS degree in the college. Upper-division (300-400 level) courses may be transferred toward meeting the major requirements only with the approval of the department chair and the college dean (or designee).

### **Academic Jeopardy Policy**

The College of Business is committed to the success of its students. If a student that has been admitted to the College of Business is deemed to be in academic jeopardy, the College of Business may place restrictions on the student. A student is considered in academic jeopardy for the following reasons:

- On academic warning or probation
- Frequently withdraws from class
- Repeating coursework to be successful
- Has less than a 2.5 (2.499 and below) in any of the required GPAs for graduation.
  - CWU GPA
  - Collegiate GPA (CWU and all transfer coursework combined)
  - Major GPA
  - Upper-division coursework in the major GPA
  - Accounting majors: upper-division Accounting coursework GPA

The College of Business may do the following in response to an Academic Jeopardy situation:

- Limit College of Business coursework in future quarters
- Require academic advising with both faculty and/or professional advisors
- Require academic success plans
- Double majors or double specialization students may be limited to one major plan in the College of Business

If a student is unable to improve academically while receiving intensive advising and support or does not actively participate in required advising, the student may be subjected to the College of Business Separation Policy.

### **Separation Policy**

If a student that has been admitted to the College of Business is placed on academic warning, probation, suspension, has repeat academic course withdrawals, or academic performance below the necessary grade point averages required to graduate, then the student's admission into the College of Business may be rescinded. Students may also be rescinded for violations of the College of Business Statement of Conduct and Code of Honor, or for engaging in Prohibited Student Conduct as defined by Washington Administrative Code (see WAC 106-125-020). Once rescinded, the student will be denied readmission to the College of Business for one year following which a written petition for readmission must be presented at least 30 days prior to the start of the quarter in which readmission is desired. The decision to readmit will be based on meeting current admission standards, analysis of the entire academic record, as well as any other sources of information deemed appropriate. Readmission is not guaranteed.

### **Service to Other Majors**

Students majoring in programs outside CB who are required to

take courses in this college for either their major or minor will be eligible to enroll on a space-available basis. These students will be given priority over other non-college majors wishing to enroll in courses. All students must have taken prerequisites for courses prior to enrollment.

### **Repeat Policy**

Business administration courses may be repeated only once.

### **Departments and Programs**

Accounting: Kenneth Smith (Shaw-Smyser Hall, room 340)  
Economics: Toni Sipic (Shaw-Smyser Hall, room 428)  
Finance and SCM: Carlo Smith (Des Moines Center, room 373)  
Management: William Provaznik (Shaw-Smyser Hall, room 333)

# College of Education and Professional Studies

## **Administration and Organization**

### **Dean**

Paul Ballard, EdD (Black Hall, room 228)

### **Associate Dean**

Gregory Schwab, EdD

### **Executive Director of the School of Education**

Ronald B. Jacobson, PhD (Black Hall 126)

### **Contact Information**

509-963-1411

Mail Stop 7415

[www.cwu.edu/education-professional-studies](http://www.cwu.edu/education-professional-studies)

The mission of the College of Education and Professional Studies (CEPS) is to prepare competent, enlightened citizens who will enhance their respective professions, commit themselves to socially responsible leadership, and help develop the global economy in a spirit of cooperation. Each academic unit of the college has developed specific goals to address this mission.

Graduates of the College of Education and Professional Studies programs are Professionally Prepared and Profession Ready, or P3R. Graduates enter the job force right after graduation and make an immediate positive impact on their profession.

## **School of Education**

The School of Education programs at CWU are all about preparing students to enter the greatest profession in the world....Teaching! Our Education programs approach learning in a supportive and positive environment where students and staff share responsibility for knowledge, and where students and staff value working and learning together. Graduates enter their teaching positions after graduation and make an immediate positive impact on the students they teach.

CEPS facilitates communication between and among the respective disciplines that contribute to the preparation of educators, including teachers, school administrators, and school

psychologists. Supporting the mission, purpose, and governance structure of CEPS is the constructivist philosophy—a belief that knowledge is actively created by learners and made meaningful when learners relate new information to prior knowledge.

The School of Education Teacher Preparation Program is administered through CEPS. Admission to the university does not guarantee admission into the School of Education Teacher Preparation Program. Students must apply to the School of Education Teacher Preparation Program and meet specific application criteria before being admitted. For more information about the **Teacher Certification** process, link to [www.cwu.edu/teacher-certification/](http://www.cwu.edu/teacher-certification/).

## **Professional Studies**

The Professional Studies at Central Washington University strives to deliver innovative applied science and technology programs that develop competent globally responsible citizens who contribute to their respective professions. The vision of Professional Studies at CWU is to be recognized as a premier learning community dedicated to providing relevant and authentic learning experiences.

College of Education and Professional Studies programs value:

- Students
- Excellence in teaching
- A rigorous academic and learning environment
- The preparation of students for successful careers
- Accreditation and industry standards
- Applied research
- Creative, diverse and innovative ideas
- Open, collaborative environments
- Partnerships with external constituents
- The use of current technology
- Professionalism, integrity, and responsible citizenship
- Life balance

For more information about the Departments and Programs, go to the departments listed below.

**The Department of Aerospace Students (AFROTC).** CWU's Air Force ROTC detachment is designed to recruit, educate and commission officer candidates with a mission of developing quality leaders for the Air Force.

**The Department of Aviation** is a regional leader in professional aviation education, attracting individuals with a passion for the combined art and science of flight. Established in 1975, it is the only fully accredited public university aviation program in the Pacific Northwest. The Department offers B.S. degrees in Aviation Management and Professional Pilot and has a stellar reputation for preparing students for the demands of the industry.

**The Department of Curriculum, Supervision, and Educational Leadership** houses the Professional Education Program (PEP), Field Experiences, Instructional Foundations undergraduate degree, and Master Teacher Graduate Program. They also have master level degrees in School Administration, Instructional Leadership and Higher Education.

**The Department of Education, Development, Teaching and Learning (EDTL)** is committed to ensuring graduates are prepared to be outstanding educational leaders and facilitators of learning who demonstrate the knowledge and skill necessary to educate and work within a diverse school population. EDTL offers programs for teacher candidates interested in developing educational pK-12 specialties in Bilingual Education/Teaching English as a Second Language; Literacy (reading, writing, speaking, and listening); and Special Education. Each program leads to an endorsement for the Washington State teaching certificate.

**The Department of Engineering Technologies, Safety, and Construction Management** offers Bachelor of Science degree programs in Construction Management, Safety and Health Management, Mechanical and Electrical Engineering Technologies, and Technology Education. The department also offers a Master's of Science Degree in Engineering Technology.

**The Department of Family and Consumer Sciences** offers degree programs in: Apparel, Textiles and Merchandising; Business and Marketing Education; Family and Consumer Sciences Education; Family Studies; Global Wine Studies; and Recreation, Tourism and Event Management. The department offers a graduate Master of Science with specializations in Family Studies and Career and Technical Education, and is the home of the International Sustainable Development Institute.

**The Department of Information Technology and Administrative Management (ITAM)** offers high demand undergraduate and graduate programs blending technical skills with soft skills in the areas of Administrative Management, Information Technology, Web and Database Management, Retail Management Technology, Network Management, Project Management, and Cybersecurity. Degree programs are offered on campus, hybrid, 100% online, and self-paced competency based. Find out more: [www.cwu.edu/it-management](http://www.cwu.edu/it-management).

**The Department of Military Science (AROTC)** houses the Army ROTC program at CWU. The mission of the Wildcat Battalion is to recruit, educate, coach, mentor and commission outstanding scholars, athletes and leaders inspired for service in our nation's Army.

**The Department of Health Sciences** prepares students in a variety of professions that focus on the physical and functional abilities of humans including clinical physiology, exercise science, nutrition and dietetics, public health and paramedicine.

**The Department of Physical Education, School Health and Movement Studies.** Graduates in this department are prepared to enter careers as physical education and school health teachers. With master level degrees in Health and Physical Education with a specialization in Athletic Administration.

#### **Department Chairs**

**Aerospace Studies (AFROTC):** Mark L. Meier, Lt. Colonel, USAF (Lind Hall 202D)

**Aviation:** TBA (Black Hall, room 225-1)

**Curriculum, Supervision, and Educational Leadership:** Ian Loverro, PhD (Black Hall, room 214-25)

**Education, Development, Teaching and Learning:** M. Katherine Reynolds, EdD (Black Hall, room 205)

**Engineering Technologies, Safety and Construction:** Sathyanarayanan Rajendran, PhD (Hogue Hall, room 101)

**Family and Consumer Sciences:** Duane Dowd, PhD (Michaelsen Hall, room 100)

**Information Technology and Administrative Management:** Robert Lupton, PhD (Samuelson, room 206C)

**Military Science (AROTC):** Bonnie Kovatch, MAJ (Lind Hall 220B)

**Health Sciences:** Ethan Bergman, PhD RDN (Dorothy Purser Hall, room 101)

**Physical Education, School Health and Movement Studies:** Heidi Henschel-Pellett, EdD (Dorothy Purser Hall, room 101)

## College of the Sciences

### Administration and Organization

#### **Dean**

Tim Englund, PhD (Dean Hall, room 130)

#### **Associate Dean**

Mike Harrod, PhD (Dean Hall, room 130)

#### **Associate Dean**

Martha Kurtz, PhD (Dean Hall, room 130)

#### **Staff**

Brad Weekly, development officer

Velma Henry, administrative assistant

Janis Orthmann, administrative assistant

Toni Snowden, program coordinator

Dannica Price, event coordinator

Shelby Taylor-Olson, secretary senior

Mail Stop 7519

509-963-1866

[www.cwu.edu/sciences](http://www.cwu.edu/sciences)

The College of the Sciences (COTS) is comprised of 13 departments and 12 interdisciplinary programs representing disciplines in the behavioral, natural, and social sciences, and mathematics. The departments and programs of the college offer undergraduate baccalaureate degrees, master's degrees, minors that supplement other degree programs, and a comprehensive range of service coursework. As an essential part of its mission, the college offers an extensive general education curriculum. The departments play a major role in Central's Teacher Certification Programs, offering bachelors and master's degrees for students preparing to be secondary teachers and providing coursework in educational foundations and discipline-specific content and methods.

Departments within the college are committed to teaching excellence, active engagement by faculty in research, scholarship and professional service activities, student involvement in research, community service, and employing practical applications of academic specializations.

### Departments

All departments offer baccalaureate degree programs and, in some cases, minors, educational specialist degrees and master's degrees. In addition to consulting department/program headings in this catalog, students are encouraged to contact individual departments and program offices directly.

Anthropology and Museum Studies: Lene Pedersen, PhD, Dean Hall, room 356, 509-963-3201  
 Biological Sciences: James Johnson, PhD, Science Building, room 338, 509-963-2731  
 Chemistry: Anthony Diaz, PhD, Science Building, room 207, 509-963-2811  
 Computer Science: Michael Harrod, PhD, Samuelson, room 219, 509-963-1495  
 Geography: John Bowen, PhD, Dean Hall, room 301, 509-963-1188  
 Geological Sciences: Chris Mattinson, PhD, Discovery Hall, room 129, 509-963-2701  
 Law and Justice: Paul Knepper, PhD, Farrell Hall, room 317, 509-963-3026  
 Mathematics: Janet Shiver, PhD, Samuelson, room 208, 509-963-2103  
 Physics: Andy Piacsek, PhD, Discovery Hall, room 138, 509-963-2727  
 Political Science: Paul Knepper, PhD, Farrell Hall, room 409, 509-963-2408  
 Psychology: Stephanie Stein, PhD, Psychology Building, room 421, 509-963-2381  
 Science Education: Jennifer Dechaine, PhD, Discovery Hall, room 301, 509-963-2929  
 Sociology: Eric Cheney, PhD, Samuelson, room 201, 509-963-1305

### Interdisciplinary Programs

These programs offer specialized coursework, interdisciplinary baccalaureate majors or minors, master's degrees or research, and public service functions.

American Indian Studies: Marna Carroll, Dean Hall 344, 509-963-3201  
 Craft Brewing: Steve Wagner, PhD, Science Building, Room 236K, 509-963-1378  
 Environmental Studies: Pam McMullin-Messier, PhD, Discovery Hall, room 111A, 509-963-2008  
 Integrated Energy Management: Elvin Delgado, PhD, Discovery Hall, room 111A, 509-963-2008  
 Interdisciplinary Studies - Social Sciences: Alena Yastchenko, MA, Deccio 215, 509-963-3607  
 Museum of Culture and Environment: J. Hope Amason, PhD, Dean Hall, room 122, 509-963-2313  
 Primate Behavior and Ecology Program: Lori Sheeran, PhD, Dean Hall, room 356, 509-963-3201  
 Resource Management Program: Patrick McCutcheon, PhD Dean Hall, room 340, 509-963-2075 and Jennifer Lipton, Dean Hall, room 322, 509-963-1164  
 Science Talent Expansion Program (STEP): Marth Kurtz, PhD, Discovery Hall, room 111E, 509-963-3002  
 Women's and Gender Studies: Judith Hennessey, PhD, Samuelson, room 231C, 509-963-1574

### Affiliated Centers and Institutes

Center for Spatial Information and Research: Anthony Gabriel, PhD, Dean Hall, room 320, 509-963-1166  
 Center for the Environment: Pam McMullin-Messier, PhD, Discovery Hall, room 111A, 509-963-2008  
 Central Washington Archaeological Survey, Anthropology: Patrick McCutcheon, PhD, Dean Hall, room 340, 509-963-2075 or Steve Hackenberger, PhD, Dean Hall, room 349, 509-963-3224  
 Community Counseling and Psychological Assessment Center: Heath Marrs, PhD, Psychology Building, room 346, 509-963-2349

Geodesy Laboratory and Pacific Northwest Geodetic Array (PANGA) Data Analysis Facility: Tim Melbourne, PhD, Discovery Hall, room 322C, 509-963-2799

## School of Education

College of Education and Professional Studies  
 School of Education  
 Ellensburg  
 Black Hall, room 101

[www.cwu.edu/programs/school-education](http://www.cwu.edu/programs/school-education)

### Executive Director

Ron Jacobson, PhD

### Associate Director

Caitlin Morrison

### School of Education General Information

The School of Education is administered through CEPS and the School of Education Executive board. The provost/vice president for academic and student life in collaboration with the CEPS dean appoints faculty to serve on the advisory council, which advises the School of Education Executive board on program policies.

### Admission Requirements

Admission to the university does not guarantee a student admission into the School of Education. Students must be fully admitted to the School of Education in order to enroll in Education-related courses.

The processing of applications takes time. To insure the thorough review of an application, it is required that all application materials for admission to the School of Education be submitted by the following dates: For Ellensburg campus programs-winter, October 1; spring, January 1; summer, April 1; fall, April 1. For university center programs-please contact the university center.

(All application forms are available online at [www.cwu.edu/teacher-certification](http://www.cwu.edu/teacher-certification))

1. A 3.0 grade point average (GPA) for at least the last 45 graded quarter credits (the total may exceed 45 if an entire quarter is needed to achieve the minimum 45) or overall CWU/transfer cumulative is required for full admittance into the School of Education. A 2.8 GPA for at least the last 45 graded quarter credits or overall CWU/transfer cumulative will be considered for conditional admittance into the School of Education. A 3.0 GPA for at least the last 45 graded quarter credits or overall CWU/transfer cumulative is required prior to making application to student teaching.
2. Completed APPLICATION FOR ADMISSION TO SCHOOL OF EDUCATION.
3. Completed Character and Fitness supplement. Answering "YES" to any question on the form will require that you meet with the Certification Officer prior to a decision regarding admission. All court documents should be submitted prior to that meeting.

False answers to the questions on the form may result in denial of program admission and/or certification.

4. Official or unofficial transcripts for all college/university coursework must be submitted directly to the School of Education. These transcripts are in addition to transcripts submitted to Registrar Services.
5. Successful completion of ENG 101, ENG 102, and one of either MATH 101, 153, 154, 164,170, or 172 or FIN 174.
6. Submission of the Dispositional Survey. Once you activate your LiveText account, you are automatically sent the Dispositional Survey. It is located in your Forms box in LiveText. Once you complete the survey, click the submit button. Please call 509-963-2660 if you have any questions.
1. Successful completion of the Basic Skills (Reading, Writing, and Math) requirement. Candidates may satisfy this requirement by passing the WEST-B or obtaining certain scores on the SAT and/or ACT. Please see below:

Subject (Basic Skill)	WEST-B	SAT Score	ACT Score
Math	PASS	515 or higher	22 or higher
Reading	PASS	500 or higher	22 or higher
Writing	PASS	490 or higher	8 or higher

#### WEST-B Test

The WEST-B exam is administered statewide several times each year. Registration information and test dates can be found online at [www.west.nesinc.com](http://www.west.nesinc.com).

**Note: Failure to begin the program within one year from date of acceptance may result in cancellation of admission.**

The completed application packet needs to be submitted to the following address by the appropriate deadline date: School of Education, College of Education and Professional Studies, Central Washington University, 400 East University Way, Ellensburg, WA 98926-7414.

**Please be aware that:**

**No grade lower than a C in major or minor, and foundation coursework, will be accepted for certification.**

**To remain in the program, students must maintain a 3.0 GPA for the last 45 graded quarter credits or overall CWU/transfer cumulative.**

**Each applicant for admission to the School of Education will be notified in writing of the status of his or her application.**

**Completion of the School of Education does not guarantee certification by the state of Washington. In order to be certified, the candidate must demonstrate good moral character and personal fitness as defined by WAC 180-79A-155. Current fingerprint clearance from the Washington State Patrol and FBI will be required prior to application for any practicums, all courses that require any type of field experience or working with P-12th grade children, EFC 330 - Field Experience, and/or EFC 480 - Student Teaching. If**

**you have anything from your past that you think may compromise your certification, please seek advisement from the Certification Officer at 509-963-2660 prior to submitting your application.**

**School of Education admission regulations are administered by the College of Education and Professional Studies. Personal folders are maintained in the School of Education for each student enrolled in a teaching program at Central.**

#### Transfer Students

Students entering the university with a transferable associate of arts (AA) degree from an accredited Washington community college will need to meet the admission requirements for the School of Education prior to enrolling in any education courses. These students are frequently surprised to find that, after finishing two years of community college, they have more than two years left to complete an education degree. This is because the AA degree required 90 credits and, when transferred to CWU, satisfies only the Basic and Breadth requirements, which can generally be completed in 60 credits at CWU. Community college students can make good use of the additional 30 credits required by the AA by selecting courses at the community college which may meet major, minor, or, in some cases, courses in the Professional Education Program. Check your community college's equivalency sheet to make certain your courses are equivalent to CWU's courses for these particular requirements.

#### National Evaluation Series (NES) Exam

As of July 1, 2014, all teachers wishing to obtain certification must take the NES exam in each content area for which they seek endorsement prior to student teaching. Documentation (i.e., registration confirmation, test scores) that the student has registered for a test date that occurs prior to student teaching must be submitted to the School of Education prior to applying for student teaching. Final certification will not be awarded until successful completion of the NES exam is earned. Test information and registration is online at [www.nestest.com](http://www.nestest.com).

#### Alternative Admissions Procedures to the School of Education

Students who do not have the required grade point average, or who do not pass portions of the WEST-B test may apply for provisional admission to the School of Education by alternative means.

#### PROCEDURE

1. Applications will be made in writing to the Candidate Admissions, Recruitment, and Retention Committee (CARR) in care of the Certification Officer. The deadline for application will be the first Friday of the quarter preceding the quarter admission is desired (fall quarter applicants' deadline will be the first Friday of spring quarter.) The written application will include the following:

- a. A letter from the applicant's major advisor that supports the following:
  - Applicant's academic ability, service experience, growth, commitment, and motivation
  - Potential for graduate study (following graduation from the undergraduate program)
  - Potential for success in working with diverse groups
  - Other criteria appropriate to the applicant's potential as

a teacher

- Other extenuating circumstances that may have affected the applicant's grades and test scores

b. One supporting letter from a former employer, supervisor, or other individual knowledgeable of the applicant's experiences in working with young people

c. A personal essay by the applicant that describes his or her educational goals and objectives

2. An interview with the Candidate Admissions, Recruitment, and Retention committee (CARR) may be required.

3. Those admitted will be monitored on a quarterly basis by the CARR committee, and will meet all admission requirements prior to student teaching.

4. Students who have been admitted to the School of Education via the CARR committee will receive personal guidance to facilitate completion of their undergraduate degrees and receipt of their certificates.

5. For further information, contact the Certification Officer at 509-963-2660.

### **Graduation/Certification Requirements for the School of Education**

- No grade lower than a C in major, minor, and professional education foundation courses
- Minimum GPA of 2.5 in major, minor, and professional education foundation courses
- Minimum GPA of 3.0 for last 45 graded quarter credits (the total may exceed 45 if an entire quarter is needed to achieve the minimum 45) or overall CWU/transfer cumulative.
- Passing scores on the NES and/or WEST-E exam.
- Passing scores on the edTPA.

### **Major and Minor Concentrations**

The following majors offered at CWU, may lead to Washington state approved endorsements. Students should contact the departments to request information about major requirements.

#### **Endorsable Majors**

Biology: Teaching Major  
Chemistry: Teaching Major  
Early Childhood Education Major  
Earth Science Teaching Major  
Elementary Education Major  
English/Language Arts: Teaching Major  
Family and Consumer Sciences Career and Technical Education Teaching Major  
History: Social Studies Teaching Major  
Mathematics: Teaching Secondary Major  
Middle Level Humanities Major  
Middle Level Mathematics Teaching Major  
Middle Level Science Teaching Major  
Music: Broad Area Specialization  
Music: Choral Music Specialization

Music: Instrumental Music Specialization  
Physical Education and School Health  
Physics Major (BA)  
Special Education P-12 Major  
Technology Education Broad Area Major  
Technology Education Major

The following minors offered at CWU, may lead to Washington state approved endorsements. Students should contact the departments to request information about requirements.

#### **Endorsable Minors**

Bilingual Education/Teaching English as a Second Language Minor  
Biology Teaching Secondary Minor  
Chemistry Teaching Minor  
Dance Teaching Minor  
Early Childhood Education Minor  
Literacy Minor  
Physics Minor  
School Library Media Studies Minor  
Science Education: Broad Area Science Teaching Minor  
Teaching English as a Second Language Minor  
Traffic Safety Education Minor

#### **Certification**

Central is in compliance with the Every Student Succeeds Act (ESSA).

CWU is accredited by the Northwest Commission on Colleges and Universities (NWCCU). NWCCU is recognized by the U.S. Department of Education and the Council for Higher Education Accreditation (CHEA) as the regional authority on educational quality and institutional effectiveness of higher education institutions in the seven-state Northwest region of Alaska, Idaho, Montana, Nevada, Oregon, Utah, and Washington.

CWU's School of Education is approved by the state of Washington's Professional Educators Standards Board and the Office of Superintendent of Public Instruction to offer programs, which lead to teacher certification. To be awarded Washington certificates, candidates must be at least 18 years of age.

Graduates of the School of Education are legally qualified for certification in states, which are party to the interstate certification compact.

#### **Residency Certificate**

The residency-teaching certificate is normally awarded simultaneously with the bachelor's degree. Individuals who hold, or have held a residency-teaching certificate and are enrolled in a professional certificate program, may have the certificate renewed for an additional two years upon verification the individual is enrolled in a professional certificate program.

#### **Professional Certificate (Pro Teach Program)**

The Pro Teach Portfolio is an evidence-based assessment designed for teachers seeking the Washington professional certificate. Teachers who hold a residency certificate must meet the passing score set on the Pro Teach Portfolio (determined by the Professional Educators Standards Board) in order to earn their professional certificate. The Pro Teach Portfolio evaluates teachers on their ability to impact student learning as stated in the 3 standards--effective teaching, professional development and professional contributions-- and 12 criteria for the professional certificate approved by the Professional Educator

Standards Board (PESB). Visit [www.waproteach.org/index.html](http://www.waproteach.org/index.html) for more information.

To maintain the continuing (professional) certificate, each person must complete 150 clock hours of approved in-service education and/or 15 college or university credits every five years.

### Endorsement-only Program

CWU's endorsement-only program is available to certified teachers who hold the Washington State initial, residency, or continuing teaching certificate and who wish to add a teaching endorsement to their certificate. Teachers interested in obtaining an endorsement from CWU should obtain an application online at [www.cwu.edu/teacher-certification/endorsement-programs](http://www.cwu.edu/teacher-certification/endorsement-programs). Once an application and transcripts are submitted, a credit evaluation will be completed.

To qualify for an endorsement to teach in more than one specialization, students must meet the requirements for each specialization.

### Certification Only

Candidates with a bachelor's degree who desire certification must follow the guidelines for admission to the School of Education. Certification-only students may earn the residency-teaching certificate by satisfactorily completing the professional foundation courses and at least one college endorsement program. Final approval of the college endorsement program lies with the individual's content area.

### Alternative Pathway to Teaching Program

#### General Information

Washington has a shortage of teachers in the areas of special education, English language learners, mathematics, and the sciences. While the need for these teachers is widespread across the state, some districts have difficulty recruiting and retaining high-quality teachers. Merely preparing more teachers is not the answer to meet current demands. The solution is to address teacher placement and retention.

The online APT program is inquiry-based. Throughout the year, you will complete and implement pieces of evidence for an online portfolio using case studies, chat rooms, and discussion boards. A co-teaching model is used for your internship. You will begin your internship supporting the classroom teacher, and as your skills build, the roles gradually reverse. You will complete a series of transitions that conclude with the submission of a portfolio and passing the teacher performance assessment (edTPA).

You begin the program with a ten-day intensive "boot camp" held on the main CWU campus in Ellensburg. This "boot camp" occurs the first two full weeks after the Fourth of July every year and is taught by university faculty from across the CWU Education Departments. Featured seminars include orientation to teaching, classroom management, exceptional learners, lesson planning, assessment, culturally relevant teaching practices, and English Language learners, to name a few.

After the boot camp, you complete a mentored internship in a school close to where you live. This mentored internship progresses so that you assume more and more responsibility for lead instruction and culminates in six weeks of student teaching. You proceed through the mentored internship at your own pace, completing a minimum of 720 field experience hours (combined

observation and teaching), in your endorsement area(s). Most teacher candidates spend a full year in their internship, dedicating the first quarter to observation, the second quarter to guided instruction or teaching a short lesson segment, the third quarter to teaching one class or prep, and spending the fourth quarter student teaching full time. This progression is flexible and is developed in concert with a university field supervisor and your mentor teacher.

During the internship, you complete online course work designed to supplement the learning that occurs during your school day. You will be asked to complete focused observations, write reflections, read case studies around various education topics, write your own case study, conduct video conferences with peers in your cohort, and more generally, critically reflect on your process of learning to teach.

A capstone of the program is the successful completion of the edTPA, a statewide requirement for certification. Modeled after the National Board Examination, the edTPA asks you to prepare a learning segment, videotape your teaching of that segment, and then reflect on your teaching practice.

### Credits and Course Work

Completion of the program will confer twenty-four (24) quarter credits.

Summer	ECTL 470: Teaching Seminar (3 cr) ECTL 480: Curriculum Planning (3 cr)
Fall	ECTL 490: Internship (6 cr)
Winter	ECTL 490: Internship (6 cr)
Spring	ECTL 490: Internship (6 cr)

### Choosing your Internship Route

CWU's APT program offers three internship routes in order to accommodate diverse levels of education and experience. Candidates in each of these three internship routes must already hold a bachelor's degree from a regionally-accredited university.

#### Route 2:

- As an applicant, you currently work as an instructional aide or paraprofessional. In this route, you remain employed by your school district in your IA or Parapro role but gradually assume more and more responsibility for lead instruction. You and the lead teacher adopt more co-teaching roles. Route 2 applicants are advised to consult with their school district before applying.

#### Route 3:

- As an applicant, you are a mid-career professional or someone who has decided to change his/her career. You work alongside a mentor teacher in an unpaid internship and are placed into your internship after receipt of your application materials, and prior to the start of the summer "boot camp". It is recommended that Route 3 applicants indicate school district placement preferences upon application to the program. It is also recommended that Route 3 applicants spend some time in the year prior to entering the program observing one or more teachers in a potential placement district.

#### Route 4:



- As an applicant, you have been hired on a contractual basis with a school district to teach as the teacher of record in an area of need. Your district has extended a conditional or emergency license (also termed a limited teaching certificate) to you, and you have a window of time to earn your initial teaching residency license. As an APT candidate, you are assigned a mentor teacher who works with you, but not alongside you, as you have your own classroom of students. More information about the contracted conditional and emergency license types is provided here: <http://www.k12.wa.us/certification/teacher/limited.aspx#contracted>. It is recommended that Route 4 applicants consult with their school district before applying.

### Admission Requirements

- Applicants must complete a bachelor's degree from a regionally accredited institution prior to enrollment in the CWU-Alternative Pathways to Teaching-Online Program. Degrees attained from foreign institutions must be translated and evaluated for U.S. equivalency by an accredited agency.
- Attained a cumulative GPA of 2.50 or higher from all college coursework.
- Complete the application to the Alternative Pathways to Teaching-Online Program.
- Complete a post-baccalaureate application to Central Washington University.
- Submit official transcript(s) from ALL previous colleges or universities attended. All transcripts must be sent directly from the school to CWU Admissions Office.
- Submit a resume.
- Submit two letters of recommendation.
- Submit passing scores from the Washington Educator Skills Test - Basic (WEST-B). Candidates may also satisfy this requirement if they have scored high enough on the SAT or ACT. Please see the chart below:

Subject (Basic Skill)	WEST-B	SAT Score	ACT Score
Math	PASS	515 or higher	22 or higher
Reading	PASS	500 or higher	22 or higher
Writing	PASS	490 or higher	8 or higher

- Complete an interview. You will be contacted by the Alternative Pathways to Teaching-Online Program Manager to schedule an interview time.
- Submit a passing score on the WEST-E and/or NES exam in your content area. (Information on the exam can be found online at [www.nestest.com](http://www.nestest.com)).
- Submit a completed Character and Fitness Form. If you have any yes answers on the form, you must contact the CWU Certification Office at 509-963-2660 to schedule an appointment to discuss the yes answer(s).
- Have current WSP and FBI fingerprint clearance (verified through the OSPI Fingerprint Database by the CWU School of Education).

Please contact the APT Program Manager at 509-963-2433 or [Jesslyn.Hollar@cwu.edu](mailto:Jesslyn.Hollar@cwu.edu) if you have any questions.

### Recency of Coursework

Education courses may not be older than 10 years at the time of graduation/ certification.

### Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission](http://www.cwu.edu/mission).

### Course Offerings

Frequency of course offering information can be found at the department website: [www.cwu.edu/programs/school-education](http://www.cwu.edu/programs/school-education) or by contacting the department directly.

## Office of Continuing Education

The Office of Continuing Education provides lifelong learning opportunities in support of the university mission. The unit offers a variety of credit, non-credit, training, and enrichment courses and programs.

Please NOTE:

- All Continuing Education courses, certificates, degrees, and services are offered on a self-support basis, and may be canceled if adequate enrollment is not reached.

- Waivers for veterans, university staff, senior citizens, and others do not apply. However, student financial aid can be applied to credit courses.

- Full fee-paying students must make additional payments at the rate established for each continuing education course in which they enroll.

- Tuition for some Continuing Education courses is higher than regular CWU tuition. Additional course fees may also apply.

Please visit us on the Web at [www.cwu.edu/ce](http://www.cwu.edu/ce) or call 509-963-1712 for complete information on the following programs:

### ACADEMIC PROGRAMS

#### Craft Brewing Certificate

Are you a homebrewer? Or looking for a career change into the exciting world of the craft brewing industry? The Craft Brewing Certificate is a year-long, 16-credit interdisciplinary program that provides an overview of biochemistry, microbiology, technology, and business aspects of the craft brewing industry. Offered in partnership with the College of the Sciences, this program spans three quarters (30 weeks), meets every other weeknight evening, and is designed to be challenging and interactive. Students learn about all aspects of the brewing industry from production, distribution, marketing and operation of a brewery by using a variety of approaches including lab work, hands on experience, lectures, field trips, and industry speakers. Graduates of the certificate have gone on to work in all aspects of the craft brewing world - from master brewers to marketing professionals to opening their very own breweries. The Certificate program is designed to aid students

who have a passion for brewing to become skilled brewers, entrepreneurs and seasoned professionals while responding to an industry that is growing like never before.

For more information, please visit [www.cwu.edu/craft-brewing](http://www.cwu.edu/craft-brewing) or e-mail [craftbrewing@cwu.edu](mailto:craftbrewing@cwu.edu).

### **UNIV 304 and GIVE International Excursions**

Through cultural immersion and experiential learning in an international setting, students will engage in activities designed to broaden their perspectives on sustainable development while providing opportunities for personal growth. Students will apply critical thinking skills, field observations, and reflective processing to explore and reveal the contextual impacts and opportunities associated with international sustainable development projects.

Content is delivered via a hybrid course that has an online component and an international immersion component through partnership with GIVE Excursions. A pin number for accessing the online course will be provided once the student is registered. The course begins prior to departure and concludes after your return.

For more information, please visit CE Collaborations at [www.cwu.edu/ce](http://www.cwu.edu/ce).

### **CAREER TRAINING AND DEVELOPMENT**

#### **Online Certificates - Non-credit**

Are you looking to start a new career or gain skills to advance in your current one? The Office of Continuing Education, in partnership with ed2go, offers online, open enrollment courses and programs designed to provide the skills necessary to acquire professional level positions for many in-demand occupations.

You can start these career training programs anytime and work at a pace that suits your individual style. You will have access to all the lessons and assignments from day one, and many of these programs can be completed in less than six months. Instructors are actively involved in your online learning experience. They respond to questions and concerns, as well as encourage and motivate you to succeed. Upon completing your program with a passing score, you will get a certificate of completion.

Please NOTE: Many of these programs are approved by the Workforce Training Board and are eligible to receive funding from the Workforce Investment Act (WIA). For a list of approved courses, visit the Washington Career Bridge website at [www.careerbridge.wa.gov](http://www.careerbridge.wa.gov) and search the Eligible Training Provider List for online programs at Central Washington University, Ellensburg.

For a full list of our current offerings, please visit Career and Professional at [www.cwu.edu/ce](http://www.cwu.edu/ce).

#### **Online Courses - Non-credit**

Looking to get ahead in your career? These six-week, online, professional development courses are the perfect way to learn a new skill or enhance your existing ones. You will spend roughly two to four hours each week completing two engaging lessons in an enjoyable, interactive learning environment. Expert instructors develop and lead every course, and you will be able to interact with them and with fellow students in lively online discussion areas. New sessions start every month, so you can

sign up anytime. Upon completing a course with a passing score, you will receive a certificate of completion.

For a full list of our current offerings, please visit Career and Professional at [www.cwu.edu/ce](http://www.cwu.edu/ce).

#### **Seminars and Workshops - Non-credit**

These face to face courses are available each quarter and are designed to enhance and strengthen your business operations or your personal career development. Upon completion of each seminar or workshop, continuing education units (CEU's) will be issued. Course topics are timely, taught by experienced instructors, and offer professionals and businesses convenient, affordable options for training. Course topics include Microsoft Excel, Leading across generational differences, Social media strategy, and more.

For a full list of our current offerings, please visit Career and Professional at [www.cwu.edu/ce](http://www.cwu.edu/ce).

### **PROGRAMS FOR EDUCATORS**

#### **Alternate Pathways to Teaching Program**

Washington has a shortage of teachers in the areas of special education, English language learners, mathematics, and the sciences. While the need for these teachers is widespread across the state, some districts have difficulty recruiting and retaining high-quality teachers. Merely preparing more teachers is not the answer to meet current demands. The solution is to address teacher placement and retention.

The online APT program is inquiry-based. Throughout the year, you will complete and implement pieces of evidence for an online portfolio using case studies, chat rooms, and discussion boards. A co-teaching model is used for your internship. You will begin your internship supporting the classroom teacher, and as your skills build, the roles gradually reserve. You will complete a series of transitions that conclude with the submission of a portfolio and passing the teacher performance assessment (edTPA).

You begin the program with a ten-day intensive "boot camp" held on the main CWU campus in Ellensburg. This "boot camp" occurs the first two full weeks after the Fourth of July every year and is taught by university faculty from across the CWU Education Departments. Featured seminars include orientation to teaching, classroom management, exceptional learners, lesson planning, assessment, culturally relevant teaching practices, and English Language learners, to name a few.

After the boot camp, you complete a mentored internship in a school close to where you live. This mentored internship progresses so that you assume more and more responsibility for lead instruction and culminates in six weeks of student teaching. You proceed through the mentored internship at your own pace, completing a minimum of 720 field experience hours (combined observation and teaching), in your endorsement area(s). Most teacher candidates spend a full year in their internship, dedicating the first quarter to observation, the second quarter to guided instruction or teaching a short lesson segment, the third quarter to teaching one class or prep, and spending the fourth quarter student teaching full time. This progression is flexible and is developed in concert with a university field supervisor and your mentor teacher.

During the internship, you complete online course work designed to supplement the learning that occurs during your school day. You will be asked to complete focused observations, write reflections, read case studies around various education topics, write your own case study, conduct video conferences with peers in your cohort, and more generally, critically reflect on your process of learning to teach.

A capstone of the program is the successful completion of the edTPA, a statewide requirement for certification. Modeled after the National Board Examination, the edTPA asks you to prepare a learning segment, videotape your teaching of that segment, and then reflect on your teaching practice.

For more information, please visit School of Education or Teacher Development at [www.cwu.edu/ce](http://www.cwu.edu/ce).

#### **Online Courses - Non-credit**

Numerous professional development classes are available year-round through online learning in partnership with VESi (Virtual Education Software). Course topics are timely, taught by experienced instructors, and offer PK-12 teachers convenient, affordable options for professional development (500) credit or clock hours. Course topics include classroom management, special education, bilingual education, health and safety management, teaching strategies, technology in schools, and more.

For a full list of our current offerings, please visit Teacher Development at [www.cwu.edu/ce](http://www.cwu.edu/ce).

#### **Seminars and Workshops - Non-credit**

Professional development classes are available each quarter through in-service and distance learning. Course topics are timely, taught by experienced instructors, and offer PK-12 teachers convenient, affordable options for professional development (500) credit or clock hours. Course topics include classroom management, special education, bilingual education, health and safety management, teaching strategies, technology in schools, and more.

For a full list of our current offerings, please visit Teacher Development at [www.cwu.edu/ce](http://www.cwu.edu/ce).

### **LIFE AND LEISURE**

#### **Courses - Non-credit**

These fun offerings are open to the public and range from recreational activities like fly fishing and hiking to beer tastings and bus trips to local wineries and breweries. Categories of classes include Outdoor Recreation and Fitness; Bus Tours and Day Trips; Food, Wine, and Beer; and Art, Culture, and History.

For a full list of our current offerings, please visit Lifelong Learning at [www.cwu.edu/ce](http://www.cwu.edu/ce).

## **Online Learning**

The Office of Multimodal Learning seeks to assure that Central Washington University maintains the highest standards of excellence in online learning and is recognized regionally and nationally for offering outstanding online programs that provide increased access of educational opportunities to diverse, place-bound, traditional, and non-traditional students.

Online offerings at CWU are meant to:

- provide more flexible access to content and instruction for learners who are unable to attend traditional face-to-face offerings
- provide greater educational course and program selection for students
- improve time-to-degree completion by offering students greater course scheduling flexibility

More information about online learning at CWU is available on the web at: [www.cwu.edu/online-learning](http://www.cwu.edu/online-learning).

### **ONLINE LEARNING POLICIES**

#### **Admission**

Students interested in entering an online program may submit an application at [www.cwu.edu/admissions](http://www.cwu.edu/admissions). Once admitted to the university, students must also apply for their online major.

#### **Registration**

Continuing students follow the same procedures as noted in the registration part of this catalog. Students may register via MyCWU, phone, or in person during their assigned enrollment appointment. Non-matriculated students may register for classes on a space-available basis during open enrollment.

#### **Advising**

Online students are encouraged to visit the Online Student Resource Center webpage at [www.cwu.edu/student-achievement/online-student-resource-center](http://www.cwu.edu/student-achievement/online-student-resource-center) to explore all the advising resources and services available. General transfer advising is available by e-mailing [onlineadvisor@cwu.edu](mailto:onlineadvisor@cwu.edu) and specific program advising is available by contacting your faculty advisor. A list of advisors for the online programs is available on the web at: [www.cwu.edu/online-learning/online-programs-list](http://www.cwu.edu/online-learning/online-programs-list). Final official transcripts must be received for articulation of all transfer courses.

#### **Tuition**

See current tuition rates and fees or refer to the Registrar Services home page at [www.cwu.edu/registrar](http://www.cwu.edu/registrar). Continuing Education courses are offered on a self-support basis. The self-support tuition schedule is separate from full-time tuition and fees. Visit the Continuing Education web site at [www.cwu.edu/ce](http://www.cwu.edu/ce). Tuition and fees are subject to change.

#### **Student Services**

Questions regarding services that accommodate physical- and learning-disabled students can be directed towards Disability Services at [DS@cwu.edu](mailto:DS@cwu.edu). CWU also offers career counseling through our Career Services office. They can be contacted by e-mailing [career@cwu.edu](mailto:career@cwu.edu). Tutoring is available for some subjects, including math and writing. Students can e-mail [onlinetutoring@cwu.edu](mailto:onlinetutoring@cwu.edu) for additional information.

#### **Financial Aid**

Students enrolled in an online program are eligible to apply for financial aid. You can apply online at [www.fafsa.ed.gov](http://www.fafsa.ed.gov).

For more information about financial aid, visit [www.cwu.edu/financial-aid](http://www.cwu.edu/financial-aid). All students must submit the Free Application for Federal Student Aid (FAFSA) to begin the process.

## Veterans

Information on veterans benefits is available through the Veterans Center on the Ellensburg campus by calling 509- 963-3028 or by e-mailing [va@cwu.edu](mailto:va@cwu.edu).

## Library

Access to library services is available to students enrolled in the online programs through the CWU Brooks Library, which is available by logging on to [www.lib.cwu.edu](http://www.lib.cwu.edu). Assistance in acquiring reference materials may also be obtained by calling 800-290-3327. On-site library resource centers are also located at CWU- Ellensburg, CWU-Des Moines, and CWU-Lynnwood.

## Textbooks

Textbooks may be purchased through the Wildcat Shop at [wildcatshop.net/](http://wildcatshop.net/).

## Final Exam Schedule

Online Learning final exam dates can be different from the Ellensburg or Center campus schedule. Please review your syllabus and confirm with your instructor for the appropriate date and, if applicable, time.

## Out-of-State Students

Central Washington University has authorization to deliver online courses and degree programs to out-of-state students under the terms and provisions of the State Authorization Reciprocity Agreements (SARA) and individual state authorizations. Please check [www.cwu.edu/online-learning/out-of-state-students](http://www.cwu.edu/online-learning/out-of-state-students) for a list of authorized states and requirements.

## ONLINE LEARNING PROGRAMS

### Online Graduate Degree Programs

EdS School Psychology (Hybrid)  
MA English: Professional and Creative Writing  
MEd Higher Education  
MEd Literacy  
MEd Master Teacher  
MEd School Administration  
MS Athletic Administration  
MS Health and Physical Education (Hybrid)  
MS Information Technology and Administrative Management

### Online Undergraduate Degree Programs

BS Aviation Management  
BS Business Administration  
BA English: Professional and Creative Writing  
BS Information Technology and Administrative Management

- Administrative Management Specialization
- Administrative Management Specialization (FlexIT Competency Based)
- Cybersecurity Specialization
- Project Management Specialization
- Retail Management and Technology Specialization
- Retail Management and Technology Specialization (FlexIT Competency Based)

BAS Information Technology and Administrative Management

- Administrative Management Specialization
- Cybersecurity Specialization

- Information Technology Specialization
- Project Management Specialization

BS Interdisciplinary Studies: Social Sciences  
BA Law and Justice  
BS Paramedicine (Hybrid)  
BA Psychology  
BS Public Health  
BS Social Services  
BA Sociology

### Online Minors

Accessibility Studies Minor  
Administrative Management Minor  
Anthropology Minor  
Cybersecurity Minor  
Data Analytics for IT Managers Minor  
Digital Forensics and Incident Response Minor  
Family Science Minor  
Geography Minor  
Human Resources Management Minor  
Information Technology Minor  
Latino and Latin American Studies Minor  
Law and Justice Minor  
Library and Information Science Minor  
Non-Profit Organization Management Minor  
Project Management Minor  
Psychology Minor  
Public Health Minor  
Retail Management and Technology Minor  
School Library Media Studies Minor  
Sociology Minor  
Sports Business Minor

### Online Certificates/Endorsements

Accessibility Studies Certificate  
Administrative Management Certificate  
Cybersecurity Certificate  
English Language Learner Endorsement  
Global Literacy Development Certificate  
Information Technology Certificate  
Library Media Endorsement  
Non-Profit Organization Management Certificate  
Project Management Certificate  
Retail Management and Technology Certificate  
Rural and Community Health Graduate Certificate  
Teacher Certification (Hybrid)

# High School Partnerships

## College in the High School/Cornerstone

Central Washington University's College in the High School/Cornerstone program is a cooperative partnership between school districts across the state of Washington and CWU. The program allows high school students to take CWU courses from their approved high school instructors without leaving their high school campus. Students benefit from the academic challenges of college course work and find that the experience helps to clarify their educational goals. The College in the High School/Cornerstone program can also help ease with the transition from high school to college, and provide students with a unique opportunity to take on more academic responsibility.

Courses are taught by high school teachers who have been approved as non-tenure track faculty by the appropriate CWU academic departments. High school teachers work closely with CWU faculty liaisons to ensure that the materials taught in the high school are equivalent to a course taught on the university campus. CWU faculty liaisons provide high school teachers with syllabus development, curriculum, and the necessary support to help assure that the College in the High School/Cornerstone students are experiencing the same academic rigor as those who are taking classes on any CWU campus. The College in the High School and Cornerstone programs act the same in obtaining college credit but there are some key differences financially.

College in the High School courses are paid for by the State of Washington. The Office of Superintendent of Public Instruction (OSPI) provides funding for those schools that have applied and qualified. This state funding is only available for 11th and 12th grade students in schools that have been awarded the subsidy.

Cornerstone courses are privately paid, whether that be the student/family, the school district, or an outside organization. Students are able to take Cornerstone courses at the same time as College in the High School courses, although students are only allowed to take 15 credits per grading term through both Cornerstone and College in the High School. Students who are in the 10th, 11th, and 12th grades are eligible under Cornerstone.

Students interested in participating in College in the High School/Cornerstone should speak with their high school counselor or administrator to find out what CWU classes are available at their school.

For more information, visit us at [www.cwu.edu/college-hs](http://www.cwu.edu/college-hs) or call 509-963-1351.

## Running Start

Central Washington University welcomes eligible high school juniors and seniors to participate in the Running Start program at Ellensburg and Sammamish. Students enrolled in the Running Start program are able to take college courses tuition-free during the fall, winter, and spring quarters. Public, home, and private school students are all encouraged to apply.

The credits earned from these courses apply to Central Washington University general education and major requirements and are generally transferable to other colleges and universities, while also satisfying high school requirements. Students may enroll simultaneously in high school and college courses, or exclusively in college courses. Participating in the Running Start program allows Running Start students the opportunity to take a wide range of courses from CWU faculty and gain the experience of a traditional college student while also enjoying the support of their family, high school, and local community.

### Admission Requirements:

- Applicants with a 3.0 cumulative GPA or higher will automatically be admitted.
- Applicants with a 2.5 - 2.99 cumulative GPA will be considered for admission based on grades AND test scores.
- Applicants with a 2.00 - 2.49 cumulative GPA will be considered through CWU's Running Start Admission Review Process. In this process, we consider grade trends, course rigor, and test scores.
- Homeschool students are evaluated on an individual basis and must submit both homeschool transcripts and appropriate test scores.
- To be considered for admission, students must have at least a 2.00 cumulative GPA in high school and any applicable college work.
- CWU does not require an essay at the time of application. If during the review process we feel additional information will be helpful, we will request it.

### Placement Testing

In order to register for a particular class, students must meet the eligibility requirements as stated in the CWU Course Catalog. Requirements usually vary between classes, but two common requirements are either successfully passing previous course work and/or placement testing. Appropriate test scores include Smarter Balance, Accuplacer, ACT, SAT, and ALEKS. Please see the CWU College Catalog for a full listing of appropriate placement tests and scores.

CWU offers students the option to take the ACT Residual and Accuplacer English and Math Placement tests at the Ellensburg campus. Accuplacer testing is available at the Sammamish campus. Students who are unable to schedule testing at a CWU location are welcome to submit test scores from other colleges.

- ACT Residual is an on-campus ACT test available to students who are unable to test during the national test dates. ACT Residual is intended for students who are applying to CWU and the scores are only reported to

CWU for admission, course placement, and advising purposes. Students taking the ACT Residual will not be able to send their results to other colleges. The ACT Residual is offered once a month in Ellensburg.

- Accuplacer is a computer-based test designed to assist accurate placement into appropriate courses for Math and English. Accuplacer offers tests in reading, writing, and math. You will receive your test results immediately upon completion of testing, and your score report will include placement messages informing you what courses you should take.
- Students in the Ellensburg area should check for available dates using the "Schedule a Test" link on the testing website ([www.cwu.edu/testing](http://www.cwu.edu/testing)).
- Students in the Sammamish area should contact CWU Sammamish at 509-963-3690 to schedule the Accuplacer test.
- The Running Start office can pay for testing at CWU if a student meets criteria for the Running Start Book Loan and Testing Fee Waiver program. Please see below for details. If you qualify for this program, you need to submit your application to the Running Start office before scheduling your test.

Please note that CWU does not use ACT, SAT, or Smarter Balance test scores for placement into pre-calculus or calculus math courses. Students wanting to enroll in Math 153 (Pre-Calculus I) will need one of the following: one year of high school calculus with a grade of B or higher, or an Accuplacer College Math score of 35 or higher, or ALEKS score of 51% or higher.

### Advising and Registration

Each quarter (fall, winter, and spring), Running Start students will be able to register online after attending an advising appointment with the Running Start advisor. Students should review the quarterly calendar to determine when their registration assignment and the quarterly schedule will be available. Registration assignments are not advising appointments. They are the earliest day that registration will open for a particular student.

Once a student has determined when they will be able to register, they should view the quarterly schedule and plan which courses they want to take. Because registration is based on seniority, some courses may no longer be available by the time a particular student can register. Therefore, students should plan 2 to 3 different schedules that will work for their high school requirements and college goals.

After choosing possible schedules, students should schedule an appointment to meet with their high school counselor to review high school requirements and fill out the Running Start Enrollment Verification Form (RSEVF). This form is due each quarter. Students will not be permitted to register until a signed and completed RSEVF is turned in to the Running Start office. The high school has the final word on which CWU courses will fulfill high school graduation requirements. (Homeschool students are not required to complete state high school graduation requirements. They are, however, required to complete the RSEVF each quarter prior to enrolling.)

Students are welcome to schedule an appointment for advising any time between the beginning of advising and the last day of registration. Students should, however, meet with their high

school counselor and fill out the RSEVF before attending a Running Start advising appointment. At the advising appointment, the student and advisor will discuss course selections, how these fit into the student's academic goals at CWU or other institutions, and review the student's academic progress.

The Running Start advisor is also available to meet with students to discuss applying to CWU and other institutions, academic degree planning, referrals to other resources on campus, help with selecting a major, scholarship resources, and navigating college life. Once the student meets with the Running Start advisor, they will be released to register and will be able to register for their courses online through their MyCWU account during their assigned enrollment period.

Students will be notified about advising, registration, and other important dates via their CWU email accounts. Students are expected to check their CWU email on a regular basis (daily) so that they do not miss important information from the Running Start office, other services on campus, and their instructors. Students who are unsure of how to access their email or MyCWU account are welcome to stop by the Running Start office in Ellensburg (Hebeler 122) or Sammamish (main office) for assistance.

Please keep in mind that Running Start funding is only available for the fall, winter, and spring quarters. Students wishing to enroll in summer courses at CWU must obtain permission from the Registrar's Office and pay full tuition.

### Benefits and Challenges

There are a number of benefits afforded to students who participate in the Running Start program, but students can also encounter some challenges. As you make the important decision about applying to the Running Start program, please keep the following in mind.

#### *Benefits:*

- Students have the opportunity to take courses that may not be offered at their local high schools.
- Academically prepared students have an opportunity to take college level courses.
- Students have an opportunity to experience university education while in high school. This experience may be helpful in making the transition from home to college, self-assessing college readiness skills, and in informing future education plans.
- Students can earn up to two years of tuition-free college credit during the fall, winter, and spring quarters, saving many dollars in college education.
- It is not uncommon for students who have strong college readiness skills, yet have difficulty fitting-in the traditional high school setting, to flourish in a different educational setting such as college.
- In college, high school students have the opportunity to gain academic and career maturity and knowledge from participating within the challenge of a college setting and with other college students.
- Running Start students are eligible to take part in college activities, with the exception of intercollegiate athletics.

- Students can get a "Running Start" on completing a college degree including general education requirements and prerequisites to a college major.
- Students may still participate in any high school extracurricular activity, if time permits and consistent with Washington Interscholastic Athletic Association (WIAA) rules of eligibility.
- Students who have transferred between high schools and have incurred credit difficulties may find that Running Start can help them meet graduation requirements on time.
- Financially, this is the best scholarship a student can earn. Consider the worth of each college class completed.
- First time freshmen with CWU enrollment prior to high school graduation through CWU Cornerstone, CWU College in the High School, or Running Start at CWU will be given a \$500 tuition award, provided they have earned a 3.00 cumulative GPA or higher in their CWU courses. Note: Students must be admitted by February 1 and submit a FAFSA for their freshman year to receive the tuition waiver.

#### *Challenges:*

- Some students who are academically qualified may not be ready socially or emotionally for the college environment. They may find the independence and speed of college classes overwhelming. Maturity is one of the key ingredients needed for success in Running Start.
- High schools provide a social network and social development experiences for teenagers. This network is not as readily available at the college level as it is in the high schools. However, Running Start students may participate in student activities at the college, such as clubs.
- Students are not guaranteed space in preferred college classes, and college schedules may conflict with high school classes or extracurricular activities (sports, drama, music, etc).
- CWU operates on a quarter system, which may be different from the high school academic calendar. Holidays and vacation periods are frequently different. Students are expected to attend classes at the university even though their high schools may not be in session. Careful planning must occur in order to avoid conflicts in family and school activities.
- College courses move at a much faster pace than high school courses. A class that may take a semester or year at the high school will be completed in ten weeks at the university.
- The high school is the final authority on high school graduation requirements. It is important to work closely with a high school counselor to ensure graduation requirements will be met. Some schools may not allow students to participate in graduation ceremonies if their college classes are not completed by the date of graduation. Check with the high school for their policies.
- Students and their families are responsible for tuition costs above 1.2 combined high school and college FTE. For a student taking a full load at the college (15 credits) he/she might be eligible to be in only one class in their high school. It is the student and family

responsibility to understand these limitations and carefully plan his/her educational program.

- College classes are designed for adult learners. Contemporary issues of our society will be actively discussed in our classrooms. The content of classes will not be censored for younger students.
- The high school determines students' eligibility to be involved in high school activities. Being away from the high school might mean that students are out of the loop for some things, such as activity requirements or scholarship application deadlines.
- The program is not free. Tuition is covered up to 1.2 combined high school and college FTE over fall, winter, and spring quarters. Students must pay for mandatory college fees, books, online course fees, campus parking, gas, supplies, and other related costs. Students wishing to enroll in summer courses must receive permission from the Registrar's Office and pay full tuition.
- Students start a college transcript when they take their first college class. It will stay with them throughout their college careers. If students perform poorly, it may jeopardize future college plans. These grades will transfer back to the high school transcript as well.
- There is much less contact between colleges and parents than the high schools and parents.
- College offers a much less structured environment with more independent study required. The speed at which college classes are taught is much faster than classes in high school. College classes typically demand approximately 2 hours of homework for each hour of class, with no classroom time for homework.
- Communication concerning grades and attendance is more frequent in high schools.

#### **Tuition, Fees, and Other Costs**

- Students may take up to 15 tuition-free credits per quarter (fall, winter, and spring).
- The number of tuition-free credits a student is eligible for depends on how many classes the student takes at the public high school.
- Students may enroll in additional credits, but are required to pay the remaining tuition.
- Students are responsible for technology and course fees. Course fees range depending on what course the student enrolls in. A listing of course fees is available here: [www.cwu.edu/registrar/courses-additional-fees](http://www.cwu.edu/registrar/courses-additional-fees).
- Students are responsible for paying for testing, textbooks, transportation, and other supplies.

#### **Testing Fee Waiver and Book Loan Program**

The Running Start office can waive testing fees and provide loaned books to eligible low-income students on a first-come, first-served basis. Students are required to return loaned textbooks to the Running Start office at the end of each quarter. The Running Start program will do its best to help students with at least one textbook a quarter. However, books are not guaranteed due to limited funding and textbook availability. Books that cannot be reused are not purchased.

Running Start students must meet one of the following criteria to qualify:

- Family receives public assistance (example: SSI, TANF, Basic Food/QUEST, Washington State medical coupons).
- Student is eligible to receive free or reduced lunch at their school district, or has been eligible within the last five years.
- Student is a foster youth.
- Student's primary caregiver is currently receiving unemployment

For more information, visit us at

[www.cwu.edu/runningstart/new-students](http://www.cwu.edu/runningstart/new-students) or call 509-963-1351.

## Degrees Offered (Majors, Minors, Certificates)

2019-2020 General Education at CWU

Accessibility Studies Certificate  
 Accessibility Studies Minor  
 Accounting Certificate  
 Accounting Major, BS  
 Accounting Minor  
 Actuarial Science Major, BS  
 Administrative Management Minor or Certificate  
 Adventure Leadership Minor  
 Advertising Minor  
 Aerospace Studies Minor  
 Africana and Black Studies Minor  
 American Indian Studies Minor  
 American Sign Language Minor  
 Anthropology Major, BA (45 Credits)  
 Anthropology Major, BA (62 Credits)  
 Anthropology Major, BS  
 Anthropology Minor  
 Apparel Design Minor  
 Apparel, Textiles and Merchandising Major, BS  
 Apparel, Textiles and Merchandising Minor  
 Applied Computer Science Minor  
 Applied Mathematics Major, BS  
 Art and Design Minor  
 Art BFA, Graphic Design Specialization  
 Art BFA, Studio Art Specialization  
 Art History Minor  
 Art Major, BA  
 Asia University America Program (AUAP)  
 Asian Business Minor  
 Asian Studies Major, BA  
 Asian Studies Minor  
 Astronomy Minor  
 Aviation Management BS, Aviation Management Specialization  
 Aviation Management BS, Maintenance Management Specialization  
 Aviation Management Minor  
 Aviation Professional Pilot Minor  
 Aviation: Professional Pilot BS, Commercial Pilot Specialization  
 Aviation: Professional Pilot BS, Flight Officer Specialization

Bilingual Education/Teaching English as a Second Language Minor  
 Biochemistry Major, BS  
 Biology BS, Biomedical Science Specialization  
 Biology BS, Ecology and Evolutionary Biology Specialization  
 Biology BS, General Biology Specialization  
 Biology BS, Molecular and Cell Biology Specialization  
 Biology Major, BA  
 Biology Minor  
 Business Minor (FSCM)  
 Business Administration BS (BSBA), Finance Specialization  
 Business Administration BS (BSBA), General Business Specialization  
 Business Administration BS (BSBA), Human Resource Management Specialization  
 Business Administration BS (BSBA), Leadership and Management Specialization  
 Business Administration BS (BSBA), Marketing Management Specialization  
 Business Administration BS (BSBA), Personal Financial Planning Specialization  
 Business Administration BS (BSBA), Supply Chain Management Specialization  
 Business Analytics Minor or Certificate  
 Business and Marketing Education Major, BS  
 Business Minor (MGT)  
 Captive Primate Care Certificate  
 Career and Technical Education Certificate  
 Chemistry Major, BA  
 Chemistry Major, BS  
 Chemistry Minor  
 Child Development Certificate  
 Child Development Minor  
 Chinese Minor  
 Cinema Studies Minor  
 Clinical Physiology Major, BS  
 Communication Minor  
 Communication Studies Major, BA  
 Computer Science Major, BS  
 Computer Science Minor  
 Construction Management Major, BS  
 Construction Minor or Certificate  
 Craft Beer Trade Certificate  
 Craft Brewing, BS  
 Creative Writing Minor  
 Cybersecurity Minor or Certificate  
 Dance Major, BA  
 Dance Performance Minor (PESHMS)  
 Dance Performance Minor (TH)  
 Digital Forensics and Incident Response (DFIR) Minor or Certificate  
 Digital Journalism Major BA, Broadcast Journalism Specialization  
 Digital Journalism Major, BA  
 Douglas Honors College  
 Dual-degree Physics/Engineering Program  
 Early Childhood Education Major, BA  
 Early Childhood Education Minor  
 Economics BS, Economic and Business Forecasting Specialization  
 Economics BS, General Economics Specialization  
 Economics BS, Managerial Economics Specialization  
 Economics Minor I  
 Economics Minor II



Educating Highly Capable Learners Minor  
 Electronics Engineering Technology Major, BS  
 Elementary Education Major, BAEd  
 EMS Paramedicine Major, BS  
 Energy Studies Minor  
 English Language and Literature Major, BA  
 English Language and Literature Minor  
 English Language Arts Teaching Major, BA  
 English Professional and Creative Writing, BA  
 Enterprise Process and Systems Integration Certificate  
 Entrepreneurship Minor  
 Environmental Geological Sciences Major, BS  
 Environmental Sciences BS, Environmental Biology  
 Specialization  
 Environmental Sciences BS, Environmental Chemistry  
 Specialization  
 Environmental Sciences BS, Environmental Geography  
 Specialization  
 Environmental Sciences BS, Environmental Geology  
 Specialization  
 Environmental Sciences BS, Environmental Policy  
 Specialization  
 Environmental Studies Minor  
 Ethics Minor  
 Ethnic Studies Minor  
 Event Management Minor  
 Exercise Science Major, BS  
 Exercise Science Minor  
 Family and Child Life Major BS, Child Development  
 Specialization  
 Family and Child Life Major BS, Child Life Specialization  
 Family and Child Life Major BS, Family Science  
 Specialization  
 Family and Consumer Sciences Career and Technical  
 Education Teaching Major, BS  
 Family and Consumer Sciences Education Minor  
 Family and Consumer Sciences Major, BA  
 Family and Consumer Sciences Minor  
 Family Science Minor  
 Film Major, BA  
 Film Production Minor  
 Finance Minor  
 Food Science and Nutrition BS, Dietetics Specialization  
 Food Science and Nutrition BS, Foods and Nutrition  
 Specialization  
 Food Service Management Minor  
 Forensics Certificate  
 French Major, BA  
 French Minor  
 Geographic Information Systems (GIS) Certificate  
 Geography BS, Environmental and Resource Geography  
 Specialization  
 Geography BS, GIScience Specialization  
 Geography Major, BA  
 Geography Minor  
 Geology Major, BA  
 Geology Major, BS  
 Geology Minor  
 German Minor  
 Global Citizenship Certificate  
 Global Cultural Training Certificate  
 Global Literacy Development Certificate  
 History Major (Large Plan), BA  
 History Major (Small Plan), BA  
 History Minor  
 History Social Studies Teaching, BA  
 Hospitality Management Minor  
 Hospitality, Tourism and Event BS, Event Management  
 Specialization  
 Hospitality, Tourism and Event BS, Tourism Management  
 Specialization  
 Hospitality, Tourism and Event Management BS,  
 Hospitality Management Specialization  
 Human Resource Management Minor  
 Individual Studies  
 Industrial Engineering Technology Major, BS  
 Industrial Technology Minor  
 Innovation through IT Minor or Certificate  
 Instructional Foundations, BA  
 Insurance Management Certificate  
 Integrated Energy Management BS, Integrated Energy  
 Business Specialization  
 Integrated Energy Management BS, Integrated Energy  
 Policy Specialization  
 Integrated Energy Management BS, Integrated Power  
 Systems Specialization  
 Interdisciplinary Honors Minor  
 Interdisciplinary Studies-Social Sciences, BS  
 International Studies Minor  
 International Theatre Experience Certificate  
 ITAM BAS, Administrative Management Specialization  
 ITAM BAS, Cybersecurity Specialization  
 ITAM BAS, Data-driven Innovation for IT Managers  
 Specialization  
 ITAM BAS, Information Technology Specialization  
 ITAM BAS, Project Management Specialization  
 ITAM BS, Administrative Management Specialization  
 ITAM BS, Cybersecurity Specialization  
 ITAM BS, Data-driven Innovation for IT Managers  
 Specialization  
 ITAM BS, Network Administration and Management  
 Specialization  
 ITAM BS, Project Management Specialization  
 ITAM BS, Retail Management and Technology  
 Specialization  
 ITAM BS, Web and Database Administration and  
 Management Specialization  
 Japanese Major, BA - Large Plan  
 Japanese Major, BA - Small Plan  
 Japanese Minor  
 Jazz Studies Certificate  
 Latin American Business Certificate  
 Latino and Latin American Studies Minor  
 Law and Justice Major, BA  
 Law and Justice Minor  
 Lean Six Sigma Greenbelt Certificate  
 Liberal Studies Minor  
 Library and Information Science Certificate  
 Library and Information Science Minor  
 Linguistics Minor  
 Literacy Minor  
 Mathematics Major, BS (Large Plan)  
 Mathematics Major, BS (Small Plan)  
 Mathematics Minor  
 Mathematics: Middle-Level Education, BA  
 Mathematics: Secondary Education, BA  
 McNair Scholars Program  
 Mechanical Engineering Technology Major, BS  
 Middle-level English Minor (Non-Endorsement)  
 Middle-level Humanities Teaching Major, BA  
 Middle-level Social Studies Minor (Non-Endorsement)  
 Military Science Minor

Modern IT Applications Minor or Certificate  
 Museum Studies Minor  
 Music Composition Major, BM  
 Music Education Major BM, Broad Area Specialization  
 Music Education Major BM, Choral Music Specialization  
 Music Education Major BM, Instrumental Music Specialization  
 Music Major, BA  
 Music Minor  
 Music Performance Major BM, Keyboard Specialization  
 Music Performance Major BM, Percussion/Wind/String Specialization  
 Music Performance Major BM, Vocal Specialization  
 Musical Theatre, BFA  
 Natural Resource Management Certificate  
 Non-profit Organization Management Certificate (COM)  
 Non-profit Organization Management Minor (ANTH)  
 Non-profit Organization Management Minor (COM)  
 Non-profit Organization Management Minor (MUS)  
 Non-profit Organization Management Minor (TH)  
 Nutrition Minor  
 Organizational Communication Minor  
 Personal Financial Planning Certificate  
 Personal Financial Planning, BS  
 Philosophy Major, BA (50 or 60 credits)  
 Philosophy Minor  
 Physical Activity and Recreation Programming Minor (FCS)  
 Physical Activity and Recreation Programming Minor (PESHMS)  
 Physical Education - Dance Minor  
 Physical Education - Dance: Teaching Minor  
 Physical Education and School Health Major, BS  
 Physical-Rehabilitation Therapy Minor  
 Physics Major BS, Biophysics Specialization  
 Physics Major, BA  
 Physics Major, BS  
 Physics Minor  
 Political Science Major, BA (47 credits) (62 credits)  
 Political Science Minor  
 Pre-Chiropractic  
 Pre-Dental Hygiene  
 Pre-Dentistry  
 Pre-Dietetics  
 Pre-Engineering  
 Pre-Law  
 Pre-Medical Technology  
 Pre-Medicine  
 Pre-Nursing in Public Health  
 Pre-Occupational Therapy  
 Pre-Pharmacy  
 Pre-Physical Therapy  
 Pre-Physician Assistant  
 Pre-Respiratory Therapy  
 Pre-Veterinary  
 Professional Education Program  
 Professional Sommelier Certificate  
 Professional Tax Minor or Certificate  
 Professional Writing Certificate (COM)  
 Professional Writing Certificate (ENG)  
 Program Development Minor  
 Project Management Minor or Certificate  
 Psychology Major, BA (45 credits)  
 Psychology Major, BA (60 credits)  
 Psychology Minor  
 Public Health BS, Population Health Specialization  
 Public Health BS, Pre-Nursing Specialization  
 Public Health Minor  
 Public Policy, BS  
 Public Relations Major, BA  
 Radio Broadcasting Certificate  
 Religious Studies Major, BA (50 or 60 credits)  
 Religious Studies Minor  
 Retail Management and Technology Minor or Certificate  
 Risk Management Certificate  
 Risk Management Minor  
 Robotics and Automation Minor  
 Russian Studies Major, BA  
 Russian Studies Minor  
 Safety and Health Management Major, BS  
 Safety and Health Management Minor or Certificate  
 Science Education - Broad Area Science Teaching Minor  
 Science Education K-8 Minor  
 Science Talent Expansion Program (STEP)  
 Science: Middle-Level Education, BA  
 Screenwriting Minor  
 Secondary Education Program  
 Social Services Major, BS  
 Social Services Minor  
 Sociology Major, BA (45 credits)  
 Sociology Major, BA (60 credits)  
 Sociology Minor  
 Spanish Major, BA  
 Spanish Minor  
 Spanish Translation and Interpretation Certificate  
 Special Education (P-12) Broad Area Major, BAEd  
 Special Education (P-12) Major, BAEd  
 Special Education High Incidence Inclusion (K-12) Endorsable Minor  
 Special Education Non-Endorsable Minor  
 Sport Business Certificate  
 Sport Business Minor  
 Sport Coaching Minor  
 Sport Management BS, Recreation Management Specialization  
 Sport Management BS, Sport Business Specialization  
 Sport Management BS, Sport Coaching Specialization  
 STEM Teaching Program  
 Structures of Data Analytics for IT Managers Minor or Certificate  
 Study Abroad and Exchange Programs (SAEP)  
 Supply Chain Management Certificate  
 Supply Chain Management Minor  
 Supply Chain Management, BAS  
 Sustainability Certificate  
 Sustainable Tourism Minor  
 Teaching English as a Second Language (TESL) Minor  
 Technical Writing Minor  
 Technology Education Broad Area Major, BS  
 Technology Education Major, BS  
 TESOL Certificate  
 Theatre Arts Minor  
 Theatre Design and Production, BFA  
 Theatre Education, BFA  
 Theatre Performance, BFA  
 Theatre Studies, BA  
 Tourism Management Minor  
 Traffic Safety Education Minor  
 University and Enrichment Program  
 University English as a Second Language Program (UESL)  
 Web Design and Management Minor or Certificate  
 Wine Studies BS, Global Wine Studies Specialization

Wine Studies BS, Wine Industry Management  
Specialization  
Wine Trade and Tourism Minor  
Wine Trade Professional Certificate  
Women's, Gender, and Sexuality Studies Minor  
Women's, Gender, and Sexuality Studies, BA  
Yearlong Exploration of Social Sciences Program (YESS)

# Accounting Department

College of Business  
Ellensburg (E)  
Shaw-Smyser Hall, room 327  
CWU-Des Moines (D)  
CWU-Lynnwood (L)  
Mail Stop 7484  
509-963-3340  
Fax: 509-963-2875  
www.cwu.edu/accounting

See the website for how these programs may be used for educational and career purposes.

## Faculty and Staff

### Chair

Toni Sipic, PhD  
Shaw-Smyser Hall, room 340

### Professors

Robert E. Holtfreter, PhD, CFE, CICA, CBA (E)  
Ke Zhong, PhD (L)

### Associate Professors

Kenneth A. Smith, PhD, CPA (L)  
James H. Thompson, PhD, CPA (D)

### Assistant Professor

Fabio Ambrosio, JD/LLM, CPA/ABV/PFS, CFP, EA, CVA,  
MAFF, CFE, CGMA (D)  
Ryan Cahalan, JD/LLM, MBA (E)  
Clemense E. Ehoff, Jr., PhD, CPA, CGMA (E)  
Steven Hawkins, PhD, CPA (E)

### Senior Lecturers

Jenny Cravens, MAC, CPA (E), O'Shaughnessy Executive  
Professor of Accounting

### Staff

Lisa Woods, secretary

### Department Information

We help our students learn foundation knowledge and skills in accounting and business that will aid them in private, government, or non-profit careers or prepare them for additional education for public accounting careers.

The Department of Accounting will allow non-matriculated students in their classes under the following conditions:

Post-baccalaureate students who have a business degree from an AACSB-accredited program in the United States, or

Current students who are enrolled at another AACSB-accredited program in the United States.

These requests will be addressed on a space-available basis and will need the permission of the Accounting Chair. If you meet either of the above criteria, please e-mail the Accounting classes you desire (including the course location: Ellensburg, Lynnwood, or Des Moines) and an unofficial transcript to the Chair of the Department of Accounting. The Chair will then prepare the necessary paperwork for admission into the course.

### Graduation Requirements

To graduate with an accounting degree, the department requires a cumulative grade-point average of at least 2.0 for in-the-major upper-division accounting courses completed at CWU, in addition to the university grade-point average requirements that apply to all CWU major programs. Accounting majors cannot earn a business minor.

Upper-division (300-400 level) courses may be transferred toward meeting the major requirements only with the approval of the department chair and the college dean (or designee). Transfer students must earn at least 45 credits at CWU. Transfer students and post-baccalaureate students must complete at least 20 CWU in-the-major upper-division accounting credits to be eligible for the accounting degree. In addition to the 20 CWU in-the-major upper-division credits, transfer students and post-baccalaureate students must complete an additional 17 CWU in-the-major accounting major required course or elective credits to be eligible for the accounting degree. Lower-division (100-200 level) accounting or business courses cannot be transferred to meet upper-division (300-400 level) course requirements. No accounting courses are offered for challenge by examination. CWU students who desire to study abroad must have the department chair and dean pre-approve credits transferred back to the College of Business using the Credit Transfer Agreement.

The B.S. in Accounting is designed for students who will begin their career with business, government or not-for-profit organizations. Graduates with the B.S. and appropriate electives are prepared to sit for professional exams such as Certified Management Accounting (CMA), Certified Internal Auditor (CIA), Certified Fraud Examiner (CFE) and Certified Government Financial Manager (CGFM). Students should consult with their major advisor for details.

NOTE: The B.S. degree is NOT sufficient by itself to enable students to pursue the CPA (Certified Public Accountant) license, see below on our Graduate Certificates.

Students wishing to begin their career with a professional accounting firm and pursuing their CPA (Certified Public Accountant) license, need to obtain the equivalent of a "5th year" of coursework. We recommend CPA-seeking students complete one or both of our Graduate Certificates to get the 225 total credits needed to sit for the CPA exam:

- 1) Our 18-credit Professional Accounting Graduate Certificate covers advanced skills and content material that is tested on the CPA exam.
- 2) Our 17-credit Professional Tax Practice Certificate covers advanced skills and content that is tested on the Enrolled Agent (EA) Exam, which allows EA's to legally represent their clients before the IRS (the only others who may do so are licensed CPA's and Lawyers.)

Central accounting students who are up to 180 days prior to obtaining a degree and at least 225 quarter credits are eligible to

sit for the Uniform Certified Public Accountant (CPA) examination. Washington law requires individuals wishing to sit for the CPA examination to have completed a minimum of 36 quarter credits of study in accounting and a minimum of 36 quarter credits in related business courses. (See WAC 4-30-060 for educational requirements). Registration for the examination is made through the State Board of Accountancy, Olympia, Washington [www.cpaboard.wa.gov/](http://www.cpaboard.wa.gov/).

Students seeking the CPA license are encouraged to check annually with the State Board as the rules and procedures may change.

### **College of Business Admission Requirements**

For information on admission requirements, please go to: College of Business.

### **Program Outcomes**

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### **Course Offerings**

Frequency of course offering information can be found at the department website: [www.cwu.edu/accounting](http://www.cwu.edu/accounting) or by contacting the department directly.

## **Accounting Major, BS**

The Department of Accounting will allow non-matriculated students in their classes under the following conditions:

1. Post-baccalaureate students who have a business degree from an AACSB-accredited program in the United States, or
2. Current students who are enrolled at another AACSB-accredited program in the United States.

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Students wishing to begin their career with a professional accounting firm and pursuing their CPA (Certified Public Accountant) license, need to obtain the equivalent of a "5th year" of coursework. We recommend CPA-seeking students complete one or both of our Graduate Certificates to get the 225 total credits needed to sit for the CPA exam:

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Students seeking the CPA license are encouraged to check annually with the State Board as the rules and procedures may change.

### **Program Learner Outcomes**

Upon successful completion of this program, the students will be able to:

- Foundation knowledge and skill in the fundamental business disciplines.
- Effective communication in written and oral business presentations.
- Comprehension and application of ethical principles in business decisions.
- Problems solving ability using integrative and critical assessment of business information and appropriate technical tools.

- Career readiness through participation in Career Center events, self-assessment, club activities, internships and other professional engagement.
- Competency in their specialized field of study.

Foundation Courses Credits: 40

- ACCT 251 - Financial Accounting **Credits: (5)**
- ACCT 252 - Managerial Accounting **Credits: (5)**
- BUS 102 - Business Computer Skills **Credits: (5)**
- BUS 221 - Introductory Business Statistics **Credits: (5)**
- BUS 241 - Legal Environment of Business **Credits: (5)**
- ECON 130 - Foundations for Business Analytics **Credits: (5)**
- **OR** MATH 130 - Finite Mathematics **Credits: (5)**
- ECON 201 - Principles of Economics Micro **Credits: (5)**

Select one from the following: (5 credits)

- MATH 153 - Pre-Calculus Mathematics I **Credits: (5)**
- MATH 154 - Pre-Calculus Mathematics II **Credits: (5)**
- MATH 170 - Intuitive Calculus **Credits: (5)**
- MATH 172 - Calculus I **Credits: (5)**
- MATH 173 - Calculus II **Credits: (5)**

Core Courses Credits: 35

- ACCT 455 - Accounting Information Systems **Credits: (5)**
- COM 301 - Public Speaking for Business and Organizations **Credits: (2)**
- ECON 202 - Principles of Economics Macro **Credits: (5)**
- ENG 311 - Business Writing **Credits: (3)**
- FIN 370 - Introductory Financial Management **Credits: (5)**
- MGT 382 - Principles of Management **Credits: (5)**
- MKT 362 - Essential Marketing Concepts **Credits: (5)**
- SCM 310 - Supply Chain Management **Credits: (5)**

Required Courses Credits: 30

- ACCT 305 - Cost Accounting **Credits: (5)**
- ACCT 340 - Income Tax Accounting I **Credits: (5)**
- ACCT 350 - Intermediate Accounting I **Credits: (5)**
- ACCT 351 - Intermediate Accounting II **Credits: (5)**
- ACCT 352 - Intermediate Accounting III **Credits: (5)**
- ACCT 460 - Auditing **Credits: (5)**

Department-Approved Electives Credits: 5

Select 5 credits from the following:

- ACCT 405 - Advanced Cost Accounting **Credits: (5)**
- ACCT 430 - Governmental and Non-profit Accounting **Credits: (5)**
- ACCT 441 - Advanced Tax 1: Individual **Credits: (5)**
- ACCT 461 - Fraud Examination **Credits: (5)**
- ACCT 475 - International Accounting **Credits: (5)**
- ACCT 484 - Professional Writing and Speaking for the Accountant **Credits: (5)** (ACCT 484, if taken, should be completed no later than fall of senior year.)

College of Business Capstone Credits: 7

- BUS 489 - AACSB Assessment **Credits: (2)**
- MGT 489 - Strategic Management **Credits: (5)**

Total Credits: 122

College and Department Information

Accounting Department  
College of Business

### College of Business Admission Requirements

For information on admission requirements, please go to:  
College of Business.

## Accounting Minor

The accounting minor provides students with an introduction to several key areas of accounting. Declaration forms with instructions are available online, in department and center offices. The accounting minor requires that the student take five accounting courses and earn a cumulative grade point average of 2.00 in them.

Required Courses Credits: 15

- ACCT 251 - Financial Accounting **Credits: (5)**
- ACCT 252 - Managerial Accounting **Credits: (5)**
- ACCT 350 - Intermediate Accounting I **Credits: (5)**

Department-Approved Electives Credits: 10

Choose any two courses from the following:

- ACCT 305 - Cost Accounting **Credits: (5)**
- ACCT 340 - Income Tax Accounting I **Credits: (5)**
- ACCT 351 - Intermediate Accounting II **Credits: (5)**
- ACCT 352 - Intermediate Accounting III **Credits: (5)**

Total Credits: 25

College and Department Information

Accounting Department  
College of Business

### College of Business Admission Requirements

For information on admission requirements, please go to:  
College of Business.

## Accounting Certificate

The accounting certificate provides students with an introduction to several key areas of accounting. Accounting certificates are available to all students. Declaration forms with instructions are available online and, in department and center offices. The accounting certificate requires that the student take five accounting courses and earn a cumulative grade point average of 2.00 in them.

Required Courses Credits: 15

- ACCT 251 - Financial Accounting **Credits: (5)**
- ACCT 252 - Managerial Accounting **Credits: (5)**
- ACCT 350 - Intermediate Accounting I **Credits: (5)**

Department-Approved Electives Credits:10

Choose any two five-credit courses from the ACCT upper-division prefix excluding ACCT 301, ACCT 303, ACCT 490, ACCT 492, and ACCT 493.

Total Credits: 25

College and Department Information

Accounting Department  
College of Business

### College of Business Admission Requirements

For information on admission requirements, please go to:  
College of Business.

## Professional Tax Minor or Certificate

The Professional Tax Certificate/Minor provides students with the skills, knowledge, professional orientation and credit hours required to become an Enrolled Agent. Enrolled Agents (EA) are one of just three types of professionals (along with CPA's and attorneys) who have unlimited practice rights to represent any taxpayer before the IRS (Internal Revenue Service) on any tax matters and at any IRS office/location.

Among the requirements to become an Enrolled Agent, the candidate must pass a three-part professional examination called SEE: Special Enrollment Examination. The three courses in the Professional Tax Certificate/Minor cover the material within the SEE exam as well as other professional training and skills needed to succeed in tax careers.

While this program will not be designed to teach only to the SEE exam, it will help better prepare those who are interested and capable in succeeding on it.

The program has 3 core courses plus a practicum:  
ACCT 441-Advanced Tax 1: Individuals, ACCT 442-Advanced Tax 2: Corporations and other entities, ACCT 443-Advanced Tax 3: Practice and Procedure and the 2-credit Practicum can be satisfied with: (i) ACCT 492-Volunteer Income Tax Assistance or (ii) ACCT 490-Internship or (iii) prior work experience.

Additionally, the program is designed to further develop Tax-oriented students with computer, research, communications, critical thinking, and time (project) management skills. Such skill development will be integrated across the curriculum.

NOTE: CWU also offers a Graduate Professional Tax Certificate. Please meet with your advisor to determine the best program for your career needs.

### Admission Requirements

- Completion of one foundation tax course (equivalent to ACCT 303 or ACCT 340) with a minimum grade of C
- Evidence of English language proficiency for ESL students
  - Computer-based TOEFL minimum score of 213, or
  - Internet-based TOEFL minimum score of 79, or
  - IELTS minimum score of 6.5.
- Statement of Educational and Professional Objectives
- Admissions approval by the Professional Tax Certificate Program Committee

### Graduation Requirements

Students must earn at least a 2.0 GPA in each course and an overall average GPA of 2.5 for all the courses in the Certificate.

Required Courses Credits: 15

- ACCT 441 - Advanced Tax 1: Individual **Credits: (5)**
- ACCT 442 - Advanced Tax 2: Corporations and other entities **Credits: (5)**
- ACCT 443 - Advanced Tax 3: Practice and Procedure **Credits: (5)**

Practicum Credits: 2

- ACCT 490 - Cooperative Education **Credits: (1-12)**
- **OR** ACCT 492 - Volunteer Income Tax Assistance **Credits: (2)**

Total Credits: 17

College and Department Information

Accounting Department  
College of Business

### College of Business Admission Requirements

For information on admission requirements, please go to:  
College of Business.

### **Program Outcomes**

Visit program outcomes to find out what you can expect to know and do after successful completion of this program.

# **Aerospace Studies Department**

College of Education and Professional Studies

Ellensburg

Lind Hall, room 202A

Mail Stop 7568

509-963-2314

800-CWU-ROTC

Fax: 509-963-2235

[www.cwu.edu/airforce](http://www.cwu.edu/airforce)

See website for how this program may be used for educational and career purposes.

### **Faculty and Staff**

#### **Chair**

Lieutenant Colonel Mark L. Meier, USAF, MS

#### **Professor**

Lieutenant Colonel Mark L. Meier, USAF, MS, aeronautical science

#### **Assistant Professors**

Major James B. Barnett, USAF, MS, teaching-elementary

Captain DaJon D. DeMille, USAF, MA, business administration and management

#### **Staff**

Technical Sergeant Marie A. Gordon, USAF, NCOIC, personnel  
Staff Sergeant Kertenisha D. Artison, USAF, NCOIC, administration

Kendra L. Sterkel, program coordinator

### **Department Information**

The United States Air Force Reserve Officer Training Corps (AFROTC), represented at CWU by Detachment 895, develops leaders in preparation to be commissioned as second lieutenants in the U.S. Air Force. Upon completing a baccalaureate/master's degree and all officer qualifications, graduates are commissioned and enter active duty. The program is designed to work with your other academic courses and is taught by active duty officer/professors. The Air Force is seeking qualified candidates from under-represented groups including women, African Americans, Hispanics, Asian/Pacific Islanders, and Native American/Alaskan Natives.

The program is designed to educate students about aerospace studies, with a leadership lab to provide a unique opportunity to practice leadership skills. The Aerospace Studies courses cover an introduction to the Air Force, history, leadership, and regional studies/preparation for active duty. Between sophomore and junior year, students attend a four-week field-training encampment, where they are introduced to an intensive training environment designed to teach critical teamwork, leadership, and fellowship skills. Each year there is also an opportunity to visit an Air Force base to see the environment and meet members of the Air Force. All textbooks, materials, and uniforms are provided.

### **Admission Requirements**

Students from any academic major degree program with a minimum 2.0 cumulative GPA are eligible. Enrollment in the freshman and sophomore classes creates no obligation to the Air Force. A contractual agreement is required after the sophomore year to continue in the ROTC program. Students are eligible to compete for an enrollment allocation into the POC only after successfully passing a medical examination, physical fitness test and having an excellent SAT, ACT or AFOQT (Air Force Officer Qualifying Test) score.

### **Transfer Students**

Students transferring from other institutions who are interested in pursuing a commission in the Air Force should contact the Unit Admissions Officer prior to their fall quarter, if possible.

### **Scholarships**

AFROTC competitive merit scholarships are available and awarded to both non-technical and technical majors. A scholarship will normally cover tuition, fees, and books. Those who have never been a full-time college student may apply for a four-year AFROTC scholarship at [www.afrotc.com](http://www.afrotc.com) by December 1 (the year prior to attending college). College freshmen and sophomores may compete for three-year and two-year scholarships. All contracted cadets in good standing receive a monthly stipend, separate from any scholarships.

### **Special Training Opportunities**

There are a variety of summer programs available to enhance a student's knowledge of the Air Force. Opportunities such as base visits, flying, parachuting, Air Force Office of Special Investigations, engineering, space orientation, as well as trips to other countries to enhance cultural awareness or language immersion. All travel and meals are provided.

### **Program Outcomes**

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### **Course Offerings**

Frequency of course offering information can be found at the department website: [www.cwu.edu/airforce](http://www.cwu.edu/airforce) or by contacting the department directly.

## **Aerospace Studies Minor**

AFROTC courses are accredited and may be taken as an academic minor or as free electives. The aerospace studies minor is awarded upon successful completion of the required courses.

### **Required Courses**

- AFRO 301 - Air Force Leadership Studies **Credits:** (3)
- AFRO 302 - Air Force Leadership Studies **Credits:** (3)
- AFRO 303 - Air Force Leadership Studies **Credits:** (3)
- AFRO 401 - National Security Affairs and Preparation for Active Duty **Credits:** (3)

- AFRO 402 - National Security Affairs and Preparation for Active Duty **Credits:** (3)
- AFRO 403 - National Security Affairs and Preparation for Active Duty **Credits:** (3)

Total Credits: 18

#### College and Department Information

Aerospace Studies Department  
College of Education and Professional Studies

## Africana and Black Studies Program

College of Arts and Humanities  
Ellensburg  
Hebeler Hall, room 202

509-963-1546

[www.cwu.edu/africana](http://www.cwu.edu/africana)

See website for how this program may be used for educational and career purposes.

#### Program Director

Bobby Cummings, PhD

#### Program Advisor

Bobby Cummings, PhD

#### Professors

Delores Cleary, PhD, sociology, ethnic studies, American Indian studies

Bobby Cummings, PhD, curriculum, rhetoric and composition, African American literature

Paulus Pimomo, PhD, English

Charles Reasons, LLB, criminology, criminal justice, law

Todd Schaefer, PhD, political science, African politics

Nelson Pichardo, PhD, sociology, ethnic studies

#### Associate Professors

Teresa Divine, JD, LLM, criminal law, correctional law

#### Assistant Professor

Lacy Ferrell, PhD, African history

Natashia Lindsey, PhD, theatre arts

Michelle O'Brien, PhD, English

Cynthia Pengilly, PhD, English

#### Lecturer

Masonya Bennett, PhD, Africana and Black studies

Pedro Xavier Cavazos, MFA, English, poetry

Andre Dickerson, MA, MBA, director of center for leadership and community engagement

#### Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

#### Course Offerings

Frequency of course offering information can be found at the department website: [www.cwu.edu/africana](http://www.cwu.edu/africana) or by contacting the department directly.

## Africana and Black Studies Minor

The Africana and black studies minor program offers interdisciplinary study of the history, culture, economics, and political institutions that have shaped the experiences of people of African ancestry throughout the world. The program serves as an interdisciplinary intellectual center for study and research in the many dimensions of African and black diasporic experiences, and for application of knowledge and scholarship to advance the common good. It provides access for students and scholars to a broad range of information and research by drawing upon the insights of English, geography, history, political science, music, and other disciplines at Central. The minor is designed for all highly motivated and adventurous students in all majors who have a serious interest in learning about the black diaspora and its impact on the individual countries and on the interdependent world in which we live.

Students in the minor are encouraged to take advantage of study-abroad programs to Africa and to countries of the black diaspora. Africana and Black Studies minors are expected to participate actively in co-curricular multicultural learning experiences offered by the following: student organizations, Students for the Dream Living Learning Community, Diversity Education Center, Campus Life activities, Center for the Dream, University Housing and New Student Programs, Center for Student Empowerment, Latino and Latin American Studies Program, and the David Wain Coon Center for Excellence in Leadership.

#### Required Courses Credits: 15

- ABS 110 - Expressive Black Culture: African American Literary Traditions from Folklore to Rap **Credits:** (5)
- ABS 210 - Intro to the African American Odyssey: Socio-Economic and Political Forces Shaping Black Experience **Credits:** (5)
- HIST 332 - History of the Black Diaspora **Credits:** (5)

#### Department-Approved Electives Credits: 15-20

#### Africana Electives Credits: 12-15

#### Select from the following:

- ABS 300 - Black Diaspora Studies: Afro-Latin America and Afro-Caribbean Cultures **Credits:** (5)
- ABS 302 - Hip Hop as Global Culture **Credits:** (5)
- ABS 308 - African American Folklore **Credits:** (5)
- ABS 309 - Race and Sports: Freedom, Power, and Difference **Credits:** (4)
- ABS 336 - Race and Literature **Credits:** (5)
- **OR** ENG 336 - Race and Literature **Credits:** (5)



- ABS 399 - ABS Seminar **Credits:** (3-5)
- ENG 330 - African American Literature **Credits:** (5)
- HIST 331 - Colonial Africa **Credits:** (5)

Social Sciences Electives Credits: 4-5

Select one from the following:

- ETS 354 - Minority Experiences **Credits:** (5)
- LAJ 402 - African Americans and the Constitution **Credits:** (4)
- POSC 365 - African Politics **Credits:** (5)
- SOC 354 - Minority Experience **Credits:** (5)
- SOC 386 - Seminar on Racism **Credits:** (5)

Total Credits: 30-35

College and Department Information

Africana and Black Studies Program  
College of Arts and Humanities

# American Indian Studies Program

College of the Sciences  
Ellensburg  
Anthropology  
Dean Hall, room 343  
509-963-3201

[www.cwu.edu/native-american](http://www.cwu.edu/native-american)

See website for how this program may be used for educational and career purposes.

## Program Director

Marna Carroll, anthropology

## Professors

Delores Cleary, PhD, sociology  
Steven Hackenberger, PhD, anthropology  
Daniel Herman, PhD, history  
Patrick Lubinski, PhD, anthropology  
Patrick McCutcheon, PhD, anthropology  
Christopher Schedler, PhD, English

## Assistant Professor

Rodrigo Renteria-Valencia, PhD, anthropology

## Lecturers

Marla Carroll, MA, McNair scholars  
Stefanie Wickstrom, PhD, political science

## Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

## Course Offerings

Frequency of course offering information can be found at the department website: [www.cwu.edu/native-american](http://www.cwu.edu/native-american) or by contacting the department directly.

## American Indian Studies Minor

The American Indian studies minor program goals are to provide an interdisciplinary opportunity to learn about American Indian peoples, to facilitate research and creative activities that concern American Indian peoples, and to recognize the diversity represented in the rich heritage of American Indians. Students with a minor in American Indian studies will use academic and experiential knowledge to appreciate the natural and cultural diversity of American Indian people.

Required Courses Credits: 15

- AIS 101 - American Indian Culture before European Contact **Credits:** (5)
- AIS 102 - American Indians in the Contact Period **Credits:** (5)
- AIS 103 - Contemporary American Indian Experience **Credits:** (5)

Department-Approved Electives Credits: 18-19

Humanities Electives Credits: 10

Select two of the following courses:

- AIS 321 - American Indian Spirituality **Credits:** (5)
- ENG 332 - American Indian Literature **Credits:** (5)
- ENG 334 - American Indian Oral and Nonfiction Literature **Credits:** (5)
- ENG 461 - Studies in Film and Culture **Credits:** (5)
- HIST 385 - Aztec, Inca, Maya: Empire and City in the New World **Credits:** (5)
- HIST 434 - American Indian History to 1795 **Credits:** (5)
- HIST 438 - American Indian History since 1795 **Credits:** (5)

Science Electives Credits: 8-9

Select two of the following courses:

- ANTH 324 - North American Archaeology **Credits:** (4)
- ANTH 325 - Prehistory of the Pacific Northwest **Credits:** (4)
- ANTH 341 - Native American Cultures of the Pacific Northwest **Credits:** (4)
- ANTH 347 - Native American Cultures of North America **Credits:** (4)
- POSC 411 - American Indian Politics and Sovereignty **Credits:** (4)
- SOC 366 - Sociology of American Indians **Credits:** (5)

Additional course opportunities in:

The below courses are offered throughout the academic year under different titles.

- AIS 296 - Individual Study **Credits:** (1-6)
- AIS 490 - Cooperative Education **Credits:** (1-12)
- AIS 491 - Workshop **Credits:** (1-6)
- AIS 496 - Individual Study **Credits:** (1-6)
- AIS 498 - Special Topics **Credits:** (1-5)

Total Credits: 33-34

College and Department Information

American Indian Studies Program  
College of the Sciences

# Anthropology and Museum Studies Department

College of the Sciences  
Ellensburg  
Dean Hall, room 357  
Mail Stop 7544  
509-963-3201  
Fax: 509-963-3215

[www.cwu.edu/anthropology](http://www.cwu.edu/anthropology)

See website for how this program may be used for educational and career purposes.

## Faculty and Staff Chair

Lori K. Sheeran, PhD

## Professors

Steven Hackenberger, PhD, archaeology, cultural resource management, North America and Caribbean  
Patrick Lubinski, PhD, archaeology, zooarchaeology, cultural resource management, North America  
Patrick McCutcheon, PhD, archaeology, evolutionary and environmental archaeology, cultural resource management  
Lene Pedersen, PhD, sociocultural anthropology, visual and environmental anthropology, postcolonialism, SE Asia (Indonesia), E. Africa, circumpolar North  
Lori K. Sheeran, PhD, biological anthropology, primate behavior, Asian primates  
Penglin Wang, PhD, linguistic and cultural anthropology, East and Central/Inner Asia, China

## Assistant Professors

J. Hope Amason, PhD, political economy and globalization, politics of representation, race, class, and gender, museums, memorials and heritage sites, tourism studies, Appalachia, US South  
Nicole Jastremski, PhD, biological anthropology, forensic

anthropology, bioarchaeology, mortuary analysis, paleopathology, taphonomy, identity formation, Ecuador  
Jessica Mayhew, PhD, Biological anthropology, primate behavior and socio-cognition, play behavior, Africa, Central America

Rodrigo Rentería-Valencia, PhD, Environmental anthropology, semiotics, linguistic anthropology, ritual and performance theory, visual anthropology; Northern Mexico and the borderlands

## Staff

Penelope Anderson, secretary senior

## Department Information

Anthropology presents an integrated perspective on the cultural and biological nature of humans. Anthropologists study present and past human diversity through classroom, laboratory, and field studies in cultural and biological anthropology, including archaeology, linguistics, ethnology, and applied anthropology.

Students interested in major and minor programs should contact the department office as soon as possible for further information, application forms, and assignment of an advisor. Anthropology majors are expected to meet with their advisors at least once a quarter.

Students need a GPA of 2.5 or higher to be admitted to the department.

## Special Programs

Reflecting the broad nature of anthropological study, the department directly sponsors or is affiliated with a wide range of on- and off-campus options to broaden classroom experiences. Further information about the following programs is available through the anthropology department office:

- **Museum Studies Program**, offering coursework, field experiences, and projects with local and regional museums
- **Central Washington Archaeological Survey (CWAS)**, a service, research, and public information facility with special emphasis in the Northwest
- **Bachelor of science in primate behavior and ecology**, an interdisciplinary program providing undergraduate training in method and theory of primatology as basis for research, laboratory, and field experience
- **Master of science in resource management**, offering an integrated program in natural and cultural resource management including anthropology classes in cultural resource management, and historic preservation
- **Master of science in primate behavior**, an interdisciplinary program in primatology, including courses in the history, field and lab methods, and current topics and issues in the discipline
- **Center for Spatial Information**, providing a range of Geographic Information System (GIS) tools for analysis of social and natural science data
- **Summer workshops and field schools**, including survey archaeology in eastern Washington, primate and biodiversity studies in China, and workshops in forensic anthropology

- **Study abroad opportunities** coordinated through the CWU Office of International Study and programs
- **Departmental honors program** encourages individualized research and study in a sub-area of anthropology. It is open to junior and senior students with an anthropology major GPA of 3.0 or better
- **Anthropology Student Association**, an active student group which sponsors academic and social events related to the discipline.

### Bachelor of Arts

(NOTE: Students seeking a BA degree must complete one-year college/university study or two years high school study of a single world language.)

### Subfield identification key:

**A=Archaeology**

**B=Biological Anthropology**

**C=Cultural Anthropology**

**L=Linguistics**

**S=Seminars**

### Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### Course Offerings

Frequency of course offering information can be found at the department website: [www.cwu.edu/anthropology](http://www.cwu.edu/anthropology) or by contacting the department directly.

## Anthropology Major, BA (45 Credits)

This 45-credit major must be accompanied by a major in a discipline related to anthropology. The program will consist of coursework focused on areas related to the dual major and must be designed in close consultation with an anthropology advisor. A program proposal must be approved prior to admission to this BA program.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate understanding of concepts basic to the anthropological study of humans, such as culture, cultural variability, evolutionary change, ethnocentrism, cultural relativism, and holism.
- Identify the goals, main subject areas and distinctive characteristics of each sub-field
- Demonstrate knowledge and understanding of the range and variety of human bio-cultural and environmental adaptations past and present
- Demonstrate knowledge and understanding of the symbolic and communicative capacities of humans expressed through culture.
- Identify and describe appropriate research methods and techniques for the 4 sub-fields of anthropology.
- Access anthropological literature and appropriate information technology

- Engage in the practice of anthropology under faculty mentorship-study abroad, field schools, research with faculty, internships, service learning, teaching opportunities
- Explain the value of anthropology as part of one's preparation for life in the early 21st century.
- Understand the ethics of the discipline as they apply to dissemination of information, field research, conservation and preservation, and representation of self and others.
- Understand changing role of museums in society, and their primary functions.
  - Education
  - Collections
  - Exhibition
- Know ethics of museums and resources for consulting about ethical issues

### Required Courses

- Introductory (100-level) **Credits:** (15)
- Intermediate (300-level) must include three subfields- **Credits:** (12-16)
- Advanced Courses (400-level) must include two subfields- **Credits:** (8-12)
- ANTH 301 - Anthropology: Principles and Assessment **Credits:** (2)
- ANTH 458 - Anthropology Senior Comprehensive Survey **Credits:** (4)

Total Credits: 45

### College and Department Information

Anthropology and Museum Studies Department  
College of the Sciences

## Anthropology Major, BA (62 Credits)

This liberal arts and sciences major provides background to prepare students for any vocation, in that a measure of achievement in all careers is success in human relationships. The major is also consistent with employment in a variety of business, government and social service areas.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate understanding of concepts basic to the anthropological study of humans, such as culture, cultural variability, evolutionary change, ethnocentrism, cultural relativism, and holism.
- Identify the goals, main subject areas and distinctive characteristics of each sub-field
- Demonstrate knowledge and understanding of the range and variety of human bio-cultural and environmental adaptations past and present

- Demonstrate knowledge and understanding of the symbolic and communicative capacities of humans expressed through culture.
- Identify and describe appropriate research methods and techniques for the 4 sub-fields of anthropology.
- Access anthropological literature and appropriate information technology
- Engage in the practice of anthropology under faculty mentorship-study abroad, field schools, research with faculty, internships, service learning, teaching opportunities
- Explain the value of anthropology as part of one's preparation for life in the early 21st century.
- Understand the ethics of the discipline as they apply to dissemination of information, field research, conservation and preservation, and representation of self and others.
- Understand changing role of museums in society, and their primary functions.
  - Education
  - Collections
  - Exhibition
- Know ethics of museums and resources for consulting about ethical issues

#### Required Courses

##### Anthropology Core Requirements

- ANTH 110 - Bones, Apes, and Genes: Exploring Biological Anthropology **Credits: (5)**
- ANTH 120 - Archaeology: Science of the Past **Credits: (5)**
- ANTH 130 - Cultural Worlds **Credits: (5)**
- ANTH 180 - Language and Culture **Credits: (5)**
- ANTH 301 - Anthropology: Principles and Assessment **Credits: (2)**

Anthropology Core Total Credits: 22

##### Additional Required Courses

- ANTH 458 - Anthropology Senior Comprehensive Survey **Credits: (4)**
- Select 300-level courses from at least three subfields: Archaeology, Biological Anthropology, Cultural Anthropology, Linguistics- **Credits: (16)**
- Advanced (400-level) courses (must include a department-approved, 400-level seminar course) **Credits: (16)**
- Department-approved electives **Credits: (4)**

Total Credits: 62

##### College and Department Information

Anthropology and Museum Studies Department  
College of the Sciences

## Anthropology Major, BS

This major prepares students for graduate work in anthropology or for careers in anthropology and closely related fields. Electives are chosen in consultation with an advisor to lead into specialization in areas such as: ethnology, linguistics, archaeology, environmental studies, or biological anthropology. Students in this major must have course schedules approved quarterly by their departmental advisors.

#### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate understanding of concepts basic to the anthropological study of humans, such as culture, cultural variability, evolutionary change, ethnocentrism, cultural relativism, and holism.
- Identify the goals, main subject areas and distinctive characteristics of each sub-field.
- Demonstrate knowledge and understanding of the range and variety of human bio-cultural and environmental adaptations past and present.
- Demonstrate knowledge and understanding of the symbolic and communicative capacities of humans expressed through culture.
- Identify and describe appropriate research methods and techniques for the 4 sub-fields of anthropology.
- Access anthropological literature and appropriate information technology.
- Engage in the practice of anthropology under faculty mentorship-study abroad, field schools, research with faculty, internships, service learning, teaching opportunities.
- Explain the value of anthropology as part of one's preparation for life in the early 21st century.
- Understand the ethics of the discipline as they apply to dissemination of information, field research, conservation and preservation, and representation of self and others.
- Understand changing role of museums in society, and their primary functions.
  - Education
  - Collections
  - Exhibition
- Know ethics of museums and resources for consulting about ethical issues.

##### Anthropology Core Requirements

- ANTH 110 - Bones, Apes, and Genes: Exploring Biological Anthropology **Credits: (5)**
- ANTH 120 - Archaeology: Science of the Past **Credits: (5)**
- ANTH 130 - Cultural Worlds **Credits: (5)**
- ANTH 180 - Language and Culture **Credits: (5)**
- ANTH 301 - Anthropology: Principles and Assessment **Credits: (2)**

Anthropology Core Total Credits: 22

## Required Courses

Intermediate: (300-level courses) Credits: 24

- Select one 300-level course from each subfield: Archaeology, Biological Anthropology, Cultural, Linguistics- **Credits: (16)**
- Select additional 8 credits from 300-level courses. **Credits: (8)**

Advanced (400-level courses) Credits: 20

- ANTH 458 - Anthropology Senior Comprehensive Survey **Credits: (4)**
- Theory Course: ANTH 410 or ANTH 421 or ANTH 451 **Credits: (4)**
- Department-approved 400-level seminar **Credits: (4)**
- Select additional 8 credits of advanced (400-level) courses **Credits: (8)**

Electives in Anthropology and related fields (must include a course in statistics) Credits: 8

Total Credits: 74

(NOTE: Students planning on graduate school in linguistics are strongly advised to select ANTH 382.)

## College and Department Information

Anthropology and Museum Studies Department  
College of the Sciences

# Forensics Certificate

The Forensics certificate provides recognition for students completing the required core curriculum and electives of forensics-related classes from at least two academic departments. Certification will provide students with an introduction to the topic and may assist them in their future job searches. By itself the certificate is not sufficiently comprehensive to indicate a student is highly trained in forensic science.

Required Courses Credits: 15

Courses may be taken in any order, although the Introduction to Forensics course is recommended to be taken early. It is acceptable to count any of these courses in a major as well as in the certificate.

- ANTH 310 - Research/Laboratory in Biological Anthropology **Credits: (1-2)**
- ANTH 315 - Forensic Skeletal Analysis **Credits: (4)**
- ANTH 318 - Introduction to Forensics **Credits: (4)**
- **OR** LAJ 318 - Introduction to Forensics **Credits: (4)**
- LAJ 300 - Administration of Criminal Justice **Credits: (4)**

- ANTH 409 - Forensics Capstone **Credits: (1)**
- **OR** LAJ 409 - Forensics Capstone **Credits: (1)**

Electives Credits: 15

A total of 15 or more credits must be taken from the following list. Courses must include at least two different academic departments. It is recommended that students enroll in at least one laboratory or field course (indicated with \*), but this is not required.

## Anthropology:

- ANTH 316 - History and Theory of Molecular Anthropology **Credits: (4)**
- ANTH 323 - Field Archaeology **Credits: (3-6) \***
- ANTH 357 - Medical Anthropology: Cross-cultural Perspectives on Health and Healing **Credits: (4)**
- ANTH 414 - Forensic Anthropology: Cold Case Analysis **Credits: (6) \***
- ANTH 415 - Forensic Anthropology: Theoretical and Applied Issues **Credits: (4)**
- ANTH 425 - Zooarchaeology **Credits: (4) \***
- ANTH 444 - Ethnographic Field Methods **Credits: (4)**
- ANTH 486 - Advanced Methods in Archaeology **Credits: (1-8) \***
- ANTH 490 - Cooperative Education **Credits: (1-12)**

## Biological Sciences:

- BIOL 321 - Genetics **Credits: (5) \***
- BIOL 351 - General Entomology **Credits: (5) \***
- BIOL 353 - Integrative Anatomy **Credits: (6) \***
- BIOL 355 - Human Anatomy and Physiology I **Credits: (5) \***
- BIOL 356 - Human Anatomy and Physiology II **Credits: (5) \***
- BIOL 425 - Molecular Biotechnology **Credits: (5) \***
- BIOL 490 - Cooperative Education **Credits: (1-12)**

## Chemistry:

(Note that typically 30 quarter hours in chemistry are required for work in state forensics laboratories, such as for Forensic Scientist I at the Washington State Patrol.)

- CHEM 112 - Introduction to Organic Chemistry **Credits: (4)**
- CHEM 112LAB - Introduction to Organic Chemistry Laboratory **Credits: (1) \***
- CHEM 113 - Introduction to Biochemistry **Credits: (4)**
- CHEM 113LAB - Introduction to Biochemistry Laboratory **Credits: (1) \***
- CHEM 181 - General Chemistry I **Credits: (4)**
- CHEM 181LAB - General Chemistry Laboratory I **Credits: (1) \***
- CHEM 182 - General Chemistry II **Credits: (4)**

- CHEM 182LAB - General Chemistry Laboratory II **Credits:** (1) \*
- CHEM 183 - General Chemistry III **Credits:** (4)
- CHEM 183LAB - General Chemistry Laboratory III **Credits:** (1) \*
- CHEM 332 - Quantitative Analysis **Credits:** (3)
- CHEM 332LAB - Quantitative Analysis Laboratory **Credits:** (2) \*

Law and Justice:

- LAJ 302 - Criminal Procedure **Credits:** (4)
- LAJ 313 - Introduction to Criminal Law **Credits:** (4)
- LAJ 331 - Investigation **Credits:** (4)
- LAJ 490 - Cooperative Education **Credits:** (1-12)

Physics:

(Note that typically 8 quarter hours in physics are required for work in state forensics laboratories, such as for Forensic Scientist I at the Washington State Patrol.)

- PHYS 111 - Introductory Physics I with Laboratory **Credits:** (5)
- PHYS 112 - Introductory Physics II with Laboratory **Credits:** (5)
- PHYS 490 - Cooperative Education **Credits:** (1-12)

Psychology:

- PSY 449 - Abnormal Psychology **Credits:** (4)
- PSY 484 - Violence and Aggression **Credits:** (4)

Sociology:

- SOC 346 - Criminology **Credits:** (5)
- SOC 348 - Women and Crime **Credits:** (5)
- SOC 490 - Cooperative Education **Credits:** (1-12)

Total Credits: 30

College and Department Information

Anthropology and Museum Studies Department  
College of the Sciences

## Anthropology Minor

Required Courses Credits: 15

Select three from the following:

- ANTH 107 - Being Human: Past and Present **Credits:** (5)
- ANTH 110 - Bones, Apes, and Genes: Exploring Biological Anthropology **Credits:** (5)

- ANTH 120 - Archaeology: Science of the Past **Credits:** (5)
- ANTH 130 - Cultural Worlds **Credits:** (5)
- ANTH 180 - Language and Culture **Credits:** (5)

Department-Approved Electives Credits: 12

Elective credits must be at the 300 or 400 course level.

(ANTH 381 suggested for those enrolled in Teaching English as a Second Language.)

Total Credits: 27

College and Department Information

Anthropology and Museum Studies Department  
College of the Sciences

## Museum Studies Minor

The museum studies minor prepares students for entry-level, museum-related employment and/or for graduate work in museum studies. To be eligible for admission to this program, students should be enrolled in a related major (e.g., anthropology, art, biology, geology, geography, history, recreation and tourism, science education, etc.).

Approval by the anthropology department chair is also required.

Required Courses Credits: 18

- ANTH 360 - Introduction to Museum Studies **Credits:** (4)
- ANTH 361 - Museum Exhibit Design **Credits:** (4)
- ANTH 362 - Museum Curation and Management **Credits:** (4)
- ANTH 490 - Cooperative Education **Credits:** (1-12) (must be taken for 6 credits)

Select one from the following: Credits: 5

- ANTH 107 - Being Human: Past and Present **Credits:** (5)
- ANTH 110 - Bones, Apes, and Genes: Exploring Biological Anthropology **Credits:** (5)
- ANTH 120 - Archaeology: Science of the Past **Credits:** (5)
- ANTH 130 - Cultural Worlds **Credits:** (5)

Department-Approved Electives Credits: 7

Total Credits: 30

College and Department Information

Anthropology and Museum Studies Department  
College of the Sciences

# Art and Design Department

College of Arts and Humanities  
Ellensburg  
Randall Hall, room 100  
Mail Stop 7564  
509-963-2665

[www.cwu.edu/art](http://www.cwu.edu/art)

See website for how this program may be used for educational and career purposes.

## Faculty and Staff

### Chair

Gregg Schlanger, MFA

### Professors

Keith Lewis, MFA, jewelry and metalsmithing  
Gregg Schlanger, MFA, sculpture

### Associate Professors

Ellen Avitts, PhD, art history  
David Bieloh, MFA, graphic design  
Maya Chachava, MFA, painting  
Rachel Kirk, MFA, foundations and drawing  
Stephen Robison, MFA, ceramics

### Assistant Professors

Marcus DeSieno, MFA, photography  
Justin Beckman, MFA, graphic design

### Senior Lecturers

Joan CawleyCrane, MA  
Chris Hinrichs, MA  
Howard Barlow, MFA

### Lecturers

Joshua Humphry, MM  
Jacqueline Trujillo, MFA  
Monica Bowen, MA

### Staff

Jeff Cleveland, department maintenance  
Heather Horn Johnson, gallery manager  
Gwendolyn Bruce, secretary senior

### Departmental Information

The Department of Art and Design promotes the study and practice of visual culture. Our faculty facilitates liberal learning and academic excellence to enable our students to assume their respective roles as practitioners, educators, and informed patrons of the visual arts. Degrees are offered in studio art and graphic design with allied course offerings in art history. We also offer minors in studio art and design and in art history.

### Admission Requirements

All new Art and Design majors begin as a BA in Art major. The department offers advising for a Studio Art track and a Graphic Design track.

Students enrolled in the BA in Art may choose to submit an application for entrance into the BFA program during their Junior year.

Admittance to the BFA Studio Art program is based on your Junior year grade-point average in applicable courses. Students must have a 3.0 GPA in all Art and Design classes. Prerequisite courses can be taken before entrance into the program, and Freshman and Sophomores are recommended to enroll in the BA Studio Art Track program so they can be assigned an advisor and discuss program options.

Admittance to the BFA Graphic Design program occurs at the beginning of your Junior year, and is contingent upon grade-point average, and the completion of prerequisite graphic design courses. Students must have a 3.0 GPA in all Art and Design classes. Prerequisite courses can be taken before entrance into the program, and Freshman and Sophomores are recommended to enroll in the BA Graphic Design Track program so they can be assigned an advisor and discuss program options.

For admissions into the BFA degrees:

- 1) Junior class standing (90 or more credits)
- 2) an Art GPA of 3.0 or higher
- 3) have taken at least 5 art classes

Graphic Design students must have completed or be currently enrolled in ART 172 and ART 274.

See all advising forms at: [www.cwu.edu/art/advising-forms](http://www.cwu.edu/art/advising-forms)

### Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### Course Offerings

Frequency of course offering information can be found at the department website: [www.cwu.edu/art](http://www.cwu.edu/art) or by contacting the department directly.

## Art Major, BA

An art degree for students desiring to pursue studio art or graphic design-related careers and/or seeking artistic enrichment. The degree can be directed toward a discipline-specific studio art practice, graphic design or a cross-disciplinary and/or cross-media studio art practice.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge of both Western and non-Western historical and contemporary visual arts.
- Effective use of a wide range of technical skills in the production of artwork.
- Participation in collaborative and team lead projects and activities.

- Creation of assignment led artwork.
- Production of a packet that includes a resume, artist statement and professional documentation of their work.

Required Courses Credits: 30

- ART 150 - Introduction to Drawing **Credits:** (3)
- ART 170 - Two-Dimensional Design **Credits:** (3)
- ART 171 - Three-Dimensional Design **Credits:** (3)
- ART 172 - Computer Fundamentals in Art and Design **Credits:** (3)
- ART 235 - Prehistoric through Medieval Art **Credits:** (3)
- ART 236 - Renaissance through Mid-19th-century Art **Credits:** (3)
- ART 237 - Impressionism through Postmodernism **Credits:** (3)
- ART 250 - Figure Drawing **Credits:** (3)
- ART 414 - Recent Art **Credits:** (4)
- ART 495 - Studio Project **Credits:** (2)

Art History Credits: 4

Select one course from the following:

- ART 324 - History of Photography **Credits:** (4)
- ART 333 - Art, Design, and Popular Culture **Credits:** (4)
- ART 374 - History of Graphic Design **Credits:** (4)
- ART 416 - International Experience in Art, Architecture, and Design **Credits:** (1-4)
- ART 420 - American Art and Architecture **Credits:** (4)

Lower-division Studio Art and Design Required Courses Credits: 16

Select four lower-division studio courses from the following eight courses:

- ART 225 - Beginning Photography **Credits:** (4)
- ART 241 - Beginning Wood Design **Credits:** (4)
- ART 246 - Beginning Jewelry/ Metals **Credits:** (4)
- ART 251 - Beginning Illustration **Credits:** (4)
- ART 260 - Beginning Painting **Credits:** (4)
- ART 265 - Beginning Ceramics **Credits:** (4)
- ART 274 - Beginning Typography **Credits:** (4)
- ART 280 - Beginning Sculpture **Credits:** (4)
- ART 283 - Beginning Graphic Interface Design **Credits:** (4)

Department-approved Upper-division Studio Art and Design Courses Credits: 23-25

- ART 325A - Intermediate Photography: Color **Credits:** (4)

- ART 325B - Intermediate Photography: Analog Processes **Credits:** (4)
- ART 325C - Intermediate Photography: Visual Narratives **Credits:** (4)
- ART 341 - Intermediate Wood Design **Credits:** (4)
- ART 346A - Intermediate Jewelry/Metals: Casting and Link Structures **Credits:** (4)
- ART 346B - Intermediate Jewelry/Metals: Enameling **Credits:** (4)
- ART 346C - Intermediate Jewelry/Metals: Form and Surface **Credits:** (4)
- ART 350 - Mixed-media Drawing **Credits:** (4)
- ART 351 - Intermediate Illustration **Credits:** (4)
- ART 360A - Intermediate Painting: Narrative and Representation **Credits:** (4)
- ART 360B - Intermediate Painting: Color **Credits:** (4)
- ART 360C - Intermediate Painting: Abstraction **Credits:** (4)
- ART 362 - Intermediate Watercolor **Credits:** (4)
- ART 365A - Intermediate Ceramics: Hand-Building **Credits:** (4)
- ART 365B - Intermediate Ceramics: Wheel-Throwing **Credits:** (4)
- ART 365C - Intermediate Ceramics: Mold-Making **Credits:** (4)
- ART 380A - Intermediate Sculpture: Object and Form **Credits:** (4)
- ART 380B - Intermediate Sculpture: Installation Art **Credits:** (4)
- ART 383 - Intermediate Graphic Interface Design **Credits:** (4)
- ART 425 - Advanced Photography **Credits:** (4)
- ART 441 - Advanced Wood Design **Credits:** (4)
- ART 446 - Advanced Jewelry/Metals **Credits:** (4)
- ART 450 - Advanced Drawing **Credits:** (4)
- ART 460 - Advanced Painting **Credits:** (4)
- ART 465 - Advanced Ceramics **Credits:** (4)
- ART 474 - Intermediate Typography **Credits:** (4)
- ART 480 - Advanced Sculpture **Credits:** (4)

Total Credits: 73-75

College and Department Information

Art and Design Department  
College of Arts and Humanities

## Art BFA, Graphic Design Specialization

A comprehensive studio art degree for students desiring careers in graphic design/visual communications. Critical thinking through the exploration of digital and print media is emphasized. After completion of the art core and pre-graphic design prerequisites, students are required to complete the graphic design concentration requirements, including a contracted field experience. Transfer students are encouraged to complete as



many of the transferable art requirements prior to enrolling at CWU.

An Apple laptop is required.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Show knowledge of the historical antecedents of visual communications.
- Apply and demonstrate the use of the basic design elements of space, line, color shape, texture form and value.
- Demonstrate and apply the basic design principles, such as unity, harmony, contrast, repetition, variety, emphasis, balance, proportion, functionality, proximity, etc.
- Identify the typographic fonts that are considered classic and put these fonts to use in visual communication projects.
- Use industry tools and software to create visual communications projects.
- Demonstrate understanding of how to use LeCorbusier's modular grid system of layout design and be able to deconstruct said system.
- Assemble a professional portfolio to show prospective employers.

### Bachelor of Fine Arts Requirements

- ART 150 - Introduction to Drawing **Credits:** (3)
- ART 170 - Two-Dimensional Design **Credits:** (3)
- ART 171 - Three-Dimensional Design **Credits:** (3)
- ART 172 - Computer Fundamentals in Art and Design **Credits:** (3)
- ART 235 - Prehistoric through Medieval Art **Credits:** (3)
- ART 236 - Renaissance through Mid-19th-century Art **Credits:** (3)
- ART 237 - Impressionism through Postmodernism **Credits:** (3)
- ART 250 - Figure Drawing **Credits:** (3)
- ART 414 - Recent Art **Credits:** (4)
- ART 495 - Studio Project **Credits:** (2)

BFA Requirements Total Credits: 30

### Graphic Design Specialization

Prerequisite Lower-division Required Courses Credits: 12

- ART 225 - Beginning Photography **Credits:** (4)
- ART 274 - Beginning Typography **Credits:** (4)
- ART 283 - Beginning Graphic Interface Design **Credits:** (4)

Art History Credits: 4

- ART 374 - History of Graphic Design **Credits:** (4)

Lower-division Required Courses Credits: 12

- ART 251 - Beginning Illustration **Credits:** (4)

Select an additional two department-approved lower-division studio courses from the following:

- ART 241 - Beginning Wood Design **Credits:** (4)
- ART 246 - Beginning Jewelry/ Metals **Credits:** (4)
- ART 260 - Beginning Painting **Credits:** (4)
- ART 265 - Beginning Ceramics **Credits:** (4)
- ART 280 - Beginning Sculpture **Credits:** (4)

Upper-division Required Courses Credits: 50-52

- ART 351 - Intermediate Illustration **Credits:** (4)
- ART 370 - Beginning Layout and Design **Credits:** (4)
- ART 371 - Intermediate Layout and Design **Credits:** (4)
- ART 372 - Beginning Design and Production **Credits:** (4)
- ART 383 - Intermediate Graphic Interface Design **Credits:** (4)
- ART 470 - Advertising Graphic Design **Credits:** (4)
- ART 471 - Corporate Graphic Design **Credits:** (4)
- ART 472 - Intermediate Design and Production **Credits:** (4)
- ART 474 - Intermediate Typography **Credits:** (4)
- ART 483 - Advanced Graphic Interface Design **Credits:** (4)
- ART 490 - Cooperative Education **Credits:** (1-12)  
(Must be taken for 10-12 credits)

Total Credits: 108-110

### College and Department Information

Art and Design Department  
College of Arts and Humanities

## Art BFA, Studio Art Specialization

The Bachelor of Fine Arts, Studio Art Specialization is a comprehensive studio art degree for students desiring to pursue studio art-related careers or seeking artistic enrichment. The degree can be directed toward either a discipline-specific studio art practice or a cross-disciplinary and/or cross-media studio art practice.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge of both Western and non-Western historical and contemporary visual arts.

- Effective use of a wide range of technical skills in the production of work contextualized within historical and contemporary visual arts.
- Participation in collaborative and team-led projects and activities.
- Creation of artwork at an advanced level of expertise.
- Student-led exhibitions of work both on campus and in the community.
- Production of a professional packet that includes a resume, artist statement and professional documentation of artistic work.
- Establishment of professional networks and contacts at the local level or above.

#### Bachelor of Fine Arts Requirements

- ART 150 - Introduction to Drawing **Credits:** (3)
- ART 170 - Two-Dimensional Design **Credits:** (3)
- ART 171 - Three-Dimensional Design **Credits:** (3)
- ART 172 - Computer Fundamentals in Art and Design **Credits:** (3)
- ART 235 - Prehistoric through Medieval Art **Credits:** (3)
- ART 236 - Renaissance through Mid-19th-century Art **Credits:** (3)
- ART 237 - Impressionism through Postmodernism **Credits:** (3)
- ART 250 - Figure Drawing **Credits:** (3)
- ART 414 - Recent Art **Credits:** (4)
- ART 495 - Studio Project **Credits:** (2)

BFA Requirements Total Credits: 30

#### Studio Art Specialization

Art History Credits: 4

Select one specialized art history course.

- ART 324 - History of Photography **Credits:** (4)
- ART 333 - Art, Design, and Popular Culture **Credits:** (4)
- ART 374 - History of Graphic Design **Credits:** (4)
- ART 416 - International Experience in Art, Architecture, and Design **Credits:** (1-4)
- ART 420 - American Art and Architecture **Credits:** (4)

Lower-division Required Studio Art Courses Credits: 24

- ART 225 - Beginning Photography **Credits:** (4)
- ART 241 - Beginning Wood Design **Credits:** (4)
- ART 246 - Beginning Jewelry/ Metals **Credits:** (4)
- ART 260 - Beginning Painting **Credits:** (4)
- ART 265 - Beginning Ceramics **Credits:** (4)
- ART 280 - Beginning Sculpture **Credits:** (4)

Upper-division Department-approved Studio Art Courses  
Credits: 50-52

Select a total of 50 to 52 credits from the following upper-division courses. Please note that a maximum of 20 credits may be taken from a single media area (Photography, Wood Design, Jewelry/Metals, Drawing, Painting, Ceramics and Sculpture).

- ART 325A - Intermediate Photography: Color **Credits:** (4)
- ART 325B - Intermediate Photography: Analog Processes **Credits:** (4)
- ART 325C - Intermediate Photography: Visual Narratives **Credits:** (4)
- ART 341 - Intermediate Wood Design **Credits:** (4)
- ART 346A - Intermediate Jewelry/Metals: Casting and Link Structures **Credits:** (4)
- ART 346B - Intermediate Jewelry/Metals: Enameling **Credits:** (4)
- ART 346C - Intermediate Jewelry/Metals: Form and Surface **Credits:** (4)
- ART 350 - Mixed-media Drawing **Credits:** (4)
- ART 360A - Intermediate Painting: Narrative and Representation **Credits:** (4)
- ART 360B - Intermediate Painting: Color **Credits:** (4)
- ART 360C - Intermediate Painting: Abstraction **Credits:** (4)
- ART 362 - Intermediate Watercolor **Credits:** (4)
- ART 365A - Intermediate Ceramics: Hand-Building **Credits:** (4)
- ART 365B - Intermediate Ceramics: Wheel-Throwing **Credits:** (4)
- ART 365C - Intermediate Ceramics: Mold-Making **Credits:** (4)
- ART 380A - Intermediate Sculpture: Object and Form **Credits:** (4)
- ART 380B - Intermediate Sculpture: Installation Art **Credits:** (4)
- ART 425 - Advanced Photography **Credits:** (4)
- ART 441 - Advanced Wood Design **Credits:** (4)
- ART 446 - Advanced Jewelry/Metals **Credits:** (4)
- ART 450 - Advanced Drawing **Credits:** (4)
- ART 460 - Advanced Painting **Credits:** (4)
- ART 465 - Advanced Ceramics **Credits:** (4)
- ART 480 - Advanced Sculpture **Credits:** (4)

Total Credits: 108-110

#### College and Department Information

Art and Design Department  
College of Arts and Humanities

## Art and Design Minor

The Art and Design Minor gives students an introduction to fundamental principles of Design and of Art History and permits them to explore one or more disciplinary categories in Studio or Design practice.

Required Courses Credits: 6

Select two of the following courses:

- ART 150 - Introduction to Drawing **Credits:** (3)
- ART 170 - Two-Dimensional Design **Credits:** (3)
- ART 171 - Three-Dimensional Design **Credits:** (3)
- ART 172 - Computer Fundamentals in Art and Design **Credits:** (3)

Art History Credits: 3-4

Select one of the following courses:

- ART 235 - Prehistoric through Medieval Art **Credits:** (3)
- ART 103 - Art Appreciation **Credits:** (4)
- ART 324 - History of Photography **Credits:** (4)
- ART 333 - Art, Design, and Popular Culture **Credits:** (4)
- ART 374 - History of Graphic Design **Credits:** (4)
- ART 416 - International Experience in Art, Architecture, and Design **Credits:** (1-4)
- ART 420 - American Art and Architecture **Credits:** (4)

Department-approved Studio Courses Credits: 16

- ART 225 - Beginning Photography **Credits:** (4)
- ART 241 - Beginning Wood Design **Credits:** (4)
- ART 246 - Beginning Jewelry/ Metals **Credits:** (4)
- ART 250 - Figure Drawing **Credits:** (3)
- ART 251 - Beginning Illustration **Credits:** (4)
- ART 260 - Beginning Painting **Credits:** (4)
- ART 262 - Beginning Watercolor **Credits:** (4)
- ART 265 - Beginning Ceramics **Credits:** (4)
- ART 274 - Beginning Typography **Credits:** (4)
- ART 280 - Beginning Sculpture **Credits:** (4)
- ART 285 - Printmaking I **Credits:** (4)
- ART 325A - Intermediate Photography: Color **Credits:** (4)
- ART 325B - Intermediate Photography: Analog Processes **Credits:** (4)
- ART 325C - Intermediate Photography: Visual Narratives **Credits:** (4)
- ART 341 - Intermediate Wood Design **Credits:** (4)
- ART 346A - Intermediate Jewelry/Metals: Casting and Link Structures **Credits:** (4)
- ART 346B - Intermediate Jewelry/Metals: Enameling **Credits:** (4)
- ART 346C - Intermediate Jewelry/Metals: Form and Surface **Credits:** (4)
- ART 350 - Mixed-media Drawing **Credits:** (4)
- ART 351 - Intermediate Illustration **Credits:** (4)
- ART 360A - Intermediate Painting: Narrative and Representation **Credits:** (4)
- ART 360B - Intermediate Painting: Color **Credits:** (4)

- ART 360C - Intermediate Painting: Abstraction **Credits:** (4)
- ART 362 - Intermediate Watercolor **Credits:** (4)
- ART 365A - Intermediate Ceramics: Hand-Building **Credits:** (4)
- ART 365B - Intermediate Ceramics: Wheel-Throwing **Credits:** (4)
- ART 365C - Intermediate Ceramics: Mold-Making **Credits:** (4)
- ART 425 - Advanced Photography **Credits:** (4)
- ART 441 - Advanced Wood Design **Credits:** (4)
- ART 446 - Advanced Jewelry/Metals **Credits:** (4)
- ART 450 - Advanced Drawing **Credits:** (4)
- ART 460 - Advanced Painting **Credits:** (4)
- ART 465 - Advanced Ceramics **Credits:** (4)
- ART 480 - Advanced Sculpture **Credits:** (4)

Total Credits: 25-26

College and Department Information

Art and Design Department  
College of Arts and Humanities

## Art History Minor

This minor permits a more in-depth exploration of Western Art History from prehistory to contemporary artistic practice.

Required Courses Credits: 9

- ART 235 - Prehistoric through Medieval Art **Credits:** (3)
- ART 236 - Renaissance through Mid-19th-century Art **Credits:** (3)
- ART 237 - Impressionism through Postmodernism **Credits:** (3)

Select four courses from the following: Credits:16

- ART 324 - History of Photography **Credits:** (4)
- ART 333 - Art, Design, and Popular Culture **Credits:** (4)
- ART 374 - History of Graphic Design **Credits:** (4)
- ART 414 - Recent Art **Credits:** (4)
- ART 416 - International Experience in Art, Architecture, and Design **Credits:** (1-4)
- ART 420 - American Art and Architecture **Credits:** (4)

Total Credits: 25

College and Department Information

Art and Design Department  
College of Arts and Humanities

# Asian Studies Program

College of Arts and Humanities  
Ellensburg  
Language and Literature Bldg., room 100-0

509-963-1190  
Fax 509-963-1822  
[www.cwu.edu/asian-studies](http://www.cwu.edu/asian-studies)

See website for how this program may be used for educational and career purposes.

## Faculty and Staff

### Director

Michael Launius, PhD

### Program Faculty

Chong Eun Ahn, PhD, history  
Yukari Amos, PhD, education  
Liahna Armstrong, PhD, English  
George Bellah, PhD, theatre  
John Bowen, PhD, geography  
Jeffrey Dippmann, PhD, philosophy and religious studies  
Michael Launius, PhD, political science  
Marilyn Levine, PhD, history  
Joshua Nelson, PhD, Japanese language  
Penglin Wang, PhD, anthropology  
Bang-Soon Yoon, PhD, political science and women and gender studies

### Associate Faculty

Koushik Ghosh, PhD, economics  
Yong Joo Lee, PhD, finance and OSCM  
Charles Li, PhD, English  
Kun Liao, PhD, finance and OSCM  
Yuanxia Liu, MA, Chinese language  
Kenneth Munsell, MA, history  
Joshua Nelson, MA, communication  
Mariko Okada-Collins, MA, Japanese language  
Hideki Takei, DBA, ITAM  
Fen Wang, PhD, ITAM  
Annie Yen Yang, PhD, communication

### Program Information

The Asian Studies Program is an interdisciplinary program focusing on a region currently undergoing a dramatic economic, political, and social transformation. The program provides students with a grasp of the region's diversity while emphasizing the interactive nature of an overarching community of nations. Careers in international business, government service, and education can be augmented by preparation in Asian Studies. The program also serves as an excellent preparation for graduate study in various academic and professional fields.

### Bachelor of Arts

(NOTE: Students seeking a BA degree must complete one-year college/university study or two years high school study of a single world language)

### Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### Course Offerings

Frequency of course offering information can be found at the department website: [www.cwu.edu/asian-studies](http://www.cwu.edu/asian-studies) or by contacting the department directly.

## Asian Studies Major, BA

The Asian Studies Program is an interdisciplinary program focusing on a region currently undergoing a dramatic economic, political, and social transformation. The program provides students with a grasp of the region's diversity while emphasizing the interactive nature of an overarching community of nations. Careers in international business, government service, and education can be augmented by preparation in Asian Studies. The program also serves as an excellent preparation for graduate study in various academic and professional fields.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate an understanding of the Asia/Pacific region's diversity.
- Demonstrate the ability to engage the study of the Asia/Pacific region from an interdisciplinary perspective.
- Recognize and engage the interactive nature of the Asia/Pacific region and its overarching community of nations.
- Analyze and assess issues from multiple perspectives other than their own.
- Demonstrate a working familiarity with one Asian language and recognize the importance of language in shaping culture and understanding the views of others.

### Asia/Pacific Studies Core

- AST 102 - Introduction to Asian Studies **Credits:** (5)
- AST 401 - Asia/Pacific Studies Capstone **Credits:** (3)

### First- and Second-year Chinese - Credits: 30

- CHIN 151 - First-year Chinese **Credits:** (5)
  - CHIN 152 - First-year Chinese **Credits:** (5)
  - CHIN 153 - First-year Chinese **Credits:** (5)
  - CHIN 251 - Second-year Chinese **Credits:** (5)
  - CHIN 252 - Second-year Chinese **Credits:** (5)
  - CHIN 253 - Second-year Chinese **Credits:** (5)
- OR

### First- and Second-year Japanese

- JAPN 151 - First-year Japanese **Credits:** (5)
- JAPN 152 - First-year Japanese **Credits:** (5)
- JAPN 153 - First-year Japanese **Credits:** (5)
- JAPN 251 - Second-year Japanese **Credits:** (5)
- JAPN 252 - Second-year Japanese **Credits:** (5)
- JAPN 253 - Second-year Japanese **Credits:** (5)

Total Core Credits: 36

Choose six classes from the following list: Credits (25-29)

You are required to choose a minimum of one class from each of the three groups. Elective courses may not be chosen from the student's major area.

(Note: Other courses may be included with advisor's approval)

#### Group 1 (Social Sciences)

- ANTH 344 - Cultures of Asia **Credits: (4)**
- ANTH 345 - Cultures of Southeast Asia and Oceania **Credits: (4)**
- AST 310 - Japan Today **Credits: (3)**
- GEOG 375 - Geography of Asia **Credits: (4)**
- POSC 366 - Government and Politics of East Asia **Credits: (5)**
- POSC 367 - Politics of Japan **Credits: (5)**
- POSC 369 - Korean Politics **Credits: (5)**
- POSC 373 - International Politics of the Pacific Rim **Credits: (5)**

#### Group 2 (Aesthetic Experience)

- AST 301 - Chinese Literature in Translation **Credits: (4)**
- CHIN 461 - Chinese Cinema **Credits: (4)**
- JAPN 462 - Japanese Cinema **Credits: (5)**
- TH 375 - Asian Drama **Credits: (4)**

#### Group 3 (Humanities)

- HIST 380 - Modern East Asia **Credits: (5)**
- HIST 383 - East Asian Civilization **Credits: (5)**
- HIST 483 - Modern China **Credits: (5)**
- PHIL 345 - Chinese Philosophy **Credits: (5)**
- RELS 351 - Religions of China and Japan **Credits: (5)**
- RELS 352 - Religions of India **Credits: (5)**
- RELS 401 - The Daoist Tradition **Credits: (5)**
- RELS 403 - Buddhist Thought and Practice **Credits: (5)**

Total Credits: 61-65

#### College and Department Information

Asian Studies Program  
College of Arts and Humanities

## Asian Business Minor

The minor in Asian Business is designed to prepare students for working within the state's emerging Asia-oriented economy. It combines an overview of the nuances of the regional economy with an introduction to Asia's cultural and historical

development. Topics include an introduction to Asian culture and philosophy, corporate-government relations, twentieth-century history, regional development, and export strategies. It can be supplemented with study abroad opportunities and language study. There are two tracks: one for College of Business majors and one for non-business majors.

Required Courses Credits: 12

- AST 102 - Introduction to Asian Studies **Credits: (5)**
- COM 302 - Intercultural Communication **Credits: (4)**
- ECON 101 - Economic Issues **Credits: (5)**
- **OR** ECON 102 - World Economic Issues **Credits: (5)**
- **OR** ECON 201 - Principles of Economics Micro **Credits: (5)**

Track for Business Majors Credits: 9-10

- ANTH 344 - Cultures of Asia **Credits: (4)**
- **OR** ANTH 345 - Cultures of Southeast Asia and Oceania **Credits: (4)**
- **OR** HIST 380 - Modern East Asia **Credits: (5)**
- POSC 366 - Government and Politics of East Asia **Credits: (5)**
- **OR** POSC 373 - International Politics of the Pacific Rim **Credits: (5)**

Track for Non-Business Majors Credits: 10

Choose two of the following courses:

- HRM 381 - Management of Human Resources **Credits: (5)**
- MGT 380 - Organizational Management **Credits: (5)**
- MKT 360 - Principles of Marketing **Credits: (5)**

Total Credits: 21-22

#### College and Department Information

Asian Studies Program  
College of Arts and Humanities

## Asian Studies Minor

The Asian Studies Program is an interdisciplinary program focusing on a region currently undergoing a dramatic economic, political, and social transformation. The program provides students with a grasp of the region's diversity while emphasizing the interactive nature of an overarching community of nations. Careers in international business, government service, and education can be augmented by preparation in Asian Studies. The program also serves as an excellent preparation for graduate study in various academic and professional fields.

Required Courses

- AST 102 - Introduction to Asian Studies **Credits:** (5)

First-year Chinese or First-year Japanese: Credits (15)

- CHIN 151 - First-year Chinese **Credits:** (5)
- CHIN 152 - First-year Chinese **Credits:** (5)
- CHIN 153 - First-year Chinese **Credits:** (5)  
OR
- JAPN 151 - First-year Japanese **Credits:** (5)
- JAPN 152 - First-year Japanese **Credits:** (5)
- JAPN 153 - First-year Japanese **Credits:** (5)

Choose three classes from the following list: Credits 12-14

You are required to choose a minimum of one class from each of the three groups. Elective courses may not be chosen from the student's major area.

(Note: Other courses may be included with advisor's approval. At least two departments must be represented among selected courses.)

Group 1 (Social Sciences)

- ANTH 344 - Cultures of Asia **Credits:** (4)
- ANTH 345 - Cultures of Southeast Asia and Oceania **Credits:** (4)
- AST 310 - Japan Today **Credits:** (3)
- GEOG 375 - Geography of Asia **Credits:** (4)
- POSC 366 - Government and Politics of East Asia **Credits:** (5)
- POSC 367 - Politics of Japan **Credits:** (5)
- POSC 369 - Korean Politics **Credits:** (5)
- POSC 373 - International Politics of the Pacific Rim **Credits:** (5)

Group 2 (Aesthetic Experience)

- AST 301 - Chinese Literature in Translation **Credits:** (4)
- CHIN 461 - Chinese Cinema **Credits:** (4)
- JAPN 462 - Japanese Cinema **Credits:** (5)
- TH 375 - Asian Drama **Credits:** (4)

Group 3 (Humanities)

- HIST 380 - Modern East Asia **Credits:** (5)
- HIST 383 - East Asian Civilization **Credits:** (5)
- HIST 483 - Modern China **Credits:** (5)
- PHIL 345 - Chinese Philosophy **Credits:** (5)
- RELS 351 - Religions of China and Japan **Credits:** (5)
- RELS 352 - Religions of India **Credits:** (5)
- RELS 401 - The Daoist Tradition **Credits:** (5)
- RELS 403 - Buddhist Thought and Practice **Credits:** (5)

Total Credits: 30-32

College and Department Information

Asian Studies Program  
College of Arts and Humanities

## Aviation Department

College of Education and Professional Studies  
Ellensburg  
Black Hall Suite 225-1  
400 East University Way 98926-7515  
509-963-2364  
Fax: 509-963-2377  
Mail Stop 7515  
aviation@cwu.edu

www.cwu.edu/aviation

See website for how this program may be used for educational and career purposes.

### Faculty and Staff Chair

Gregory Schwab, EdD

### Professors

Amy L. Hoover, PhD, CFII, mountain flying, meteorology, human factors  
Sundaram Nataraja, MS, EdD, CILT, aviation management, airport finance, airport/airlines marketing  
Teresa Sloan, MIT, ATP, FAA ground schools, air transportation  
Jason Underhill, MBA, ATP, CFII, aircraft systems and simulation, airline operations  
Dale Wilson, MS, ATP, MGI, CFI, aviation safety, human factors, aviation weather

### Assistant Professor

Peter Dittmer, EdD, MCFI, ATP, ground schools, air transportation

### Lecturers

Rich Bates, CFII, MEI, assistant chief flight instructor  
Cathy Busha, JD, aviation law  
Nathaniel Freedman, Senior Flight Instructor, CFI, CFII  
Jeff Cole, Senior Flight Instructor, ATP, CFI, CFII  
Anthony Davis, Senior Flight Instructor, CFI, CFII, MEI  
Andrew McIrvin, BS, ATP, DPE, chief flight instructor

### Staff

Lisa Broweleit, program support supervisor  
Alex Cater, dispatcher  
Shae Parker, dispatcher  
Robyn Webb, secretary senior

### Department Information

The Department of Aviation offers two Bachelor of Science degrees.

Professional Pilot degree: Specializations in flight officer and commercial pilot

Aviation Management degree: Specializations in aviation management and aviation maintenance management.

### Accrediting Information

The aviation department holds an FAA Air Agency certificate. Ground schools and flight labs are conducted under 14CFR Part 141 of the Federal Aviation Administration regulations. CWU aviation department is a member of the University Aviation Association.

### Department Standards

#### Admissions

Students must apply for acceptance into a degree or specialization. Application will be reviewed upon acceptance to CWU. Admission decisions are based on a number of factors, including grade point average, SAT/ACT scores, letters of recommendation, financial capability, and a written statement of purpose, as outlined in the aviation department application form. Transportation Security Administration (TSA) regulations require proof of citizenship for pilots.

#### Financial Obligations

Flight training fees are paid by the student and will be in addition to normal university tuition and fees (see aviation department website for current fees). Additional fees are required for AVP 444, AVP 445, and AVP 489 (see online student registration handbook). Additional costs for students enrolled in flight labs include current FAA charts, pilot supplies, and optional personal aviation headphones.

#### Aviation Department Fees

The Department of Aviation flight training is a CWU self-support system. The aviation program utilizes a course fee system to provide a package of services to our students for their flight training, FAA examinations, and ground simulation systems. Fees apply to all students equally. All fees are billed directly to student's accounts. Refund of tuition and fees follow CWU policies as provided in this publication. No refunds of tuition and fees occur after the first 30 days of a course. Self-pay purchases at the airport are not permitted. FAA check ride fees will be charged beyond the first attempt. All courses will be conducted under Part 141 and Part 61. **Flight lab fees do not include CWU standard course tuition and fees.**

Course Number:	Fees:
AVP 101- Private Pilot Flight Laboratory I (training)	\$6000
AVP 102- Private Pilot Flight Laboratory II (training)	\$6000
AVP 103- Private Pilot Flight Laboratory III (training)	\$6700
AVP 201 - Instrument Pilot Flight Laboratory I (training)	\$5400
AVP 202 - Instrument Pilot Flight Laboratory II (training)	\$5400
AVP 203 - Instrument Pilot Flight Laboratory III (training)	\$6000
AVP 304 - Commercial Pilot Flight Laboratory I (training)	\$5800
AVP 305 - Commercial Pilot Flight Laboratory II (training)	\$5800
AVP 306 - Commercial Pilot Flight Laboratory III (training)	\$5800
AVP 401 - Multi-Engine Flight Laboratory	\$8500
AVP 402 - Certified Flight Instructor Laboratory	\$7500

AVP 142 - Principles of Flight II (for testing services)	\$165
AVP 242 - Instrument Flight II (for testing services)	\$165
AVP 354 - Commercial Pilot (for testing services)	\$165
AVP 448 - Fundamentals of Flight Instruction (for testing services)	\$330
AVP 444 - Multi-Engine FTD, Baron G58 (simulator use)	\$1415
AVP 445 - Turboprop FTD, King Air 200 (simulator use)	\$1290
AVP 489 - Turbo FTD, CRJ-200 (simulator use)	\$2345

**Central Washington University (CWU) does not contract with any outside entity for any instruction; the Instructors are faculty, adjunct faculty, instructors, temporary instructors, OPS, etc. (not hired through arrangements with a third party such as a pilot school); CWU leases or owns the aircraft; CWU leases or owns the facilities where flight and ground training is conducted; administrative staff are permanent full-time administrators of CWU.**

#### Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

#### Course Offerings

Frequency of course offering information can be found at the department website: [www.cwu.edu/aviation](http://www.cwu.edu/aviation) or by contacting the department directly.

## Aviation Management BS, Aviation Management Specialization

#### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate a working knowledge of the major components of the domestic and international aviation industry to include general aviation, airline operations, aviation support facilities, airspace system management, airports and aircraft manufacturers as applicable to their degree specialization.
- Demonstrate knowledge of essential business management concepts of accounting, economics, finance, management, human resource management and business law.
- Apply general management concepts to specific aviation-related environments such as Fixed Base Operators (FBOs), airports, airlines and the aerospace industry.
- Describe the fundamental principles of an aviation safety management program and identify the major operational hazards applicable to general aviation and airline operations.
- Exhibit the verbal and written communication skills needed to interact with aviation professionals, business, and management.

## Aviation Management Core Requirements

The Department of Aviation at CWU offers two undergraduate degree programs. One of them is Bachelor Science in Aviation Management (major). Currently, this major has two specializations i.e., (i) Aviation Management Specialization; and (ii) Aviation Maintenance Management Specialization. This program prepares graduates for a variety of administrative and management positions in the aviation industry.

### Graduation Requirements

1. Student should have completed a total of 180 credits.
2. Student should have satisfied the Program Core requirements to a total of 44 core credits.
3. Student should satisfy the 45 credits of Specialization requirements.

### Program Requirements

Bachelor of Science in Aviation Management requires a total of 78 - 91 credits, of which 44 credits are core courses requirement.

### Core Courses

- ADMG 271 - Business Math Applications **Credits:** (4)
- AVM 330 - Aviation Law **Credits:** (3)
- AVM 333 - Air Transportation **Credits:** (4)
- AVM 334 - Airport Management **Credits:** (3)
- AVM 335 - Aviation Management **Credits:** (3)
- AVM 338 - Airport Administration and Finance **Credits:** (4)
- AVM 350 - Aviation Career Planning and Professionalism **Credits:** (3)
- AVM 417 - Aviation Safety Management **Credits:** (4)
- AVM 422 - Legal Ethics in Aviation **Credits:** (4)
- AVM 424 - Aviation Security **Credits:** (4)
- AVM 426 - International Aviation Management **Credits:** (4)
- AVM 430 - Airport/Airline Marketing **Credits:** (4)

Total Core Credits: 44

### Aviation Management Specialization Courses

Select 5 of the following courses Credits: (15-28)

- ADMG 371 - Administrative Management **Credits:** (4)
- ADMG 372 - Leadership and Supervision **Credits:** (4)
- AVM 332 - Aviation Legislation **Credits:** (4)
- AVM 418 - Threat and Error Management in Aviation **Credits:** (3)
- AVM 420 - Aviation Labor Relations **Credits:** (4)
- AVM 434 - Airport Operations **Credits:** (3)
- AVM 438 - Airport Planning and Design **Credits:** (4)
- AVM 490 - Cooperative Education **Credits:** (1-12)

Select 4 of the following courses Credits: (19-20)

- ACCT 251 - Financial Accounting **Credits:** (5)
- ACCT 301 - Accounting Skills for Non-Accounting Majors **Credits:** (5)
- COM 345 - Business and Professional Speaking **Credits:** (4)
- ECON 201 - Principles of Economics Micro **Credits:** (5)
- ECON 202 - Principles of Economics Macro **Credits:** (5)
- HRM 381 - Management of Human Resources **Credits:** (5)
- MGT 380 - Organizational Management **Credits:** (5)
- MATH 130 - Finite Mathematics **Credits:** (5)
- MATH 211 - Statistical Concepts and Methods **Credits:** (5)
- MKT 360 - Principles of Marketing **Credits:** (5)

Total Specialization Credits: 34-48

Total Credits: 78-92

### College and Department Information

Aviation Department  
College of Education and Professional Studies

## Aviation Management BS, Maintenance Management Specialization

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate a working knowledge of the major components of the domestic and international aviation industry to include general aviation, airline operations, aviation support facilities, airspace system management, airports and aircraft manufacturers as applicable to their degree specialization.
- Demonstrate knowledge of essential business management concepts of accounting, economics, finance, management, human resource management and business law.
- Apply general management concepts to specific aviation-related environments such as Fixed Base Operators (FBOs), airports, airlines and the aerospace industry.
- Describe the fundamental principles of an aviation safety management program and identify the major operational hazards applicable to general aviation and airline operations.
- Exhibit the verbal and written communication skills needed to interact with aviation professionals, business, and management.

Aviation Management Core Requirements



The Department of Aviation at CWU offers two undergraduate degree programs. One of them is Bachelor Science in Aviation Management (major). Currently, this major has two specializations i.e., (i) Aviation Management Specialization; and (ii) Aviation Maintenance Management Specialization. This program prepares graduates for a variety of administrative and management positions in the aviation industry.

### Graduation Requirements

1. Student should have completed a total of 180 credits.
2. Student should have satisfied the Program Core requirements to a total of 44 core credits.
3. Student should satisfy the 45 credits of Specialization requirements.

### Program Requirements

Bachelor of Science in Aviation Management requires a total of 78 - 91 credits, of which 44 credits are core courses requirement.

### Core Courses

- ADMG 271 - Business Math Applications **Credits:** (4)
- AVM 330 - Aviation Law **Credits:** (3)
- AVM 333 - Air Transportation **Credits:** (4)
- AVM 334 - Airport Management **Credits:** (3)
- AVM 335 - Aviation Management **Credits:** (3)
- AVM 338 - Airport Administration and Finance **Credits:** (4)
- AVM 350 - Aviation Career Planning and Professionalism **Credits:** (3)
- AVM 417 - Aviation Safety Management **Credits:** (4)
- AVM 422 - Legal Ethics in Aviation **Credits:** (4)
- AVM 424 - Aviation Security **Credits:** (4)
- AVM 426 - International Aviation Management **Credits:** (4)
- AVM 430 - Airport/Airline Marketing **Credits:** (4)

Total Core Credits: 44

### Maintenance Management Specialization

This specialization prepares graduates for entry into aviation maintenance and management in the aviation industry or FAA.

Students enrolling in this specialization must already possess an FAA Airframe and Powerplant certificate and/or graduation certificate from a Federal Aviation Administration-approved 14CFR Part 147 school. (Certificate not offered at Central Washington University.) Forty-five credits of the Airframe and Powerplant certificates will be accepted upon completion of all other degree requirements.

### Maintenance Management Specialization Courses

- **Airframe and Powerplant Certificates Credits: (45)** (Certificate not offered at Central Washington University. Forty-five credits of the Airframe and Powerplant Certificate will be accepted upon completion of all other degree requirements. See program advisor.)

Total Specialization Credits: 45

Total Credits: 89

### College and Department Information

Aviation Department  
College of Education and Professional Studies

## Aviation: Professional Pilot BS, Commercial Pilot Specialization

This specialization prepares graduates for commercial aviation employment opportunities. Students must earn a minimum grade of B- in CWU's FAA approved ground school courses AVP 141, AVP 142, AVP 241, AVP 242, AVP 354 to receive an FAA course graduation certificate as required by FAR141.

To be eligible for the FAA Restricted ATP certificate, students must complete the instrument/commercial pilot course with CWU in-house flight training and in the manner approved by the FAA under FAR Part 141 and the R-ATP LOA.

### Aviation Department Fees

The Department of Aviation flight training is a CWU self-support system. The aviation program utilizes a course fee system to provide a package of services to our students for their flight training, FAA examinations, and ground simulation systems. Fees apply to all students equally. All fees are billed directly to student's accounts. Refund of tuition and fees follow CWU policies as provided in this publication. No refunds of tuition and fees occur after the first 30 days of a course. Self-pay purchases at the airport are not permitted. FAA check ride fees will be charged beyond the first attempt. All courses will be conducted under Part 141 and Part 61. **Flight lab fees do not include CWU standard course tuition and fees.**

Course Number:	Fees:
AVP 101- Private Pilot Flight Laboratory I (training)	\$6000
AVP 102- Private Pilot Flight Laboratory II (training)	\$6000
AVP 103- Private Pilot Flight Laboratory III (training)	\$6700
AVP 201 - Instrument Pilot Flight Laboratory I (training)	\$5400
AVP 202 - Instrument Pilot Flight Laboratory II (training)	\$5400
AVP 203 - Instrument Pilot Flight Laboratory III (training)	\$6000
AVP 304 - Commercial Pilot Flight Laboratory I (training)	\$5800
AVP 305 - Commercial Pilot Flight Laboratory II (training)	\$5800
AVP 306 - Commercial Pilot Flight Laboratory III (training)	\$5800
AVP 401 - Multi-Engine Flight Laboratory	\$8500
AVP 402 - Certified Flight Instructor Laboratory	\$7500
AVP 142 - Principles of Flight II (for testing services)	\$165

AVP 242 - Instrument Flight II (for testing services)	\$165
AVP 354 - Commercial Pilot (for testing services)	\$165
AVP 448 - Fundamentals of Flight Instruction (for testing services)	\$330
AVP 444 - Multi-Engine FTD, Baron G58 (simulator use)	\$1415
AVP 445 - Turboprop FTD, King Air 200 (simulator use)	\$1290
AVP 489 - Turbo FTD, CRJ-200 (simulator use)	\$2345

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#### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Apply the foundational knowledge and skills necessary to fly commercial transport aircraft in a safe and efficient manner.
- Interpret, calculate, and analyze meteorological, aerodynamic, performance, and loading factors to conduct safe and efficient commercial flights.
- Demonstrate knowledge and skills to effectively operate aircraft airframe, power plant, navigation, and communication systems in a multi-crew environment, including Crew Resource Management (CRM\*).
- Describe the physiological and psychological limitations to flight crew performance and effectively cope with these limitations in the flight environment.
- Demonstrate a working knowledge of various aviation industries to include airspace system management, airline operations, and aviation support facilities.
- Exhibit the verbal and written communication skills needed to interact with aviation professionals, business, and management.

#### Professional Pilot Core Requirements

The Professional Pilot major prepares graduates for entry level careers and leadership roles in the aviation community. Students select one of two technical specializations leading to a Bachelor of Science degree in Professional Pilot. The Aviation curriculum is designed to provide a solid foundation in the liberal arts as well as a thorough education and training in a technical discipline.

- AVM 330 - Aviation Law **Credits: (3)**
- AVM 350 - Aviation Career Planning and Professionalism **Credits: (3)**
- AVM 418 - Threat and Error Management in Aviation **Credits: (3)**
- AVP 101 - Private Pilot Flight Laboratory I **Credits: (2)**

- AVP 102 - Private Pilot Flight Laboratory II **Credits: (2)**
- AVP 103 - Private Pilot Flight Laboratory III **Credits: (2)**
- AVP 131 - Introduction to Aviation **Credits: (1)**
- AVP 141 - Principles of Flight I **Credits: (4)**
- AVP 142 - Principles of Flight II **Credits: (4)**
- AVP 201 - Instrument Pilot Flight Laboratory I **Credits: (2)**
- AVP 202 - Instrument Pilot Flight Laboratory II **Credits: (2)**
- AVP 203 - Instrument Pilot Flight Laboratory III **Credits: (2)**
- AVP 211 - Meteorology for Pilots **Credits: (4)**
- AVP 221 - Aircraft Systems I - Reciprocating **Credits: (4)**
- AVP 237 - Outdoor Survival for Pilots **Credits: (1)**
- AVP 241 - Instrument Flight I **Credits: (4)**
- AVP 242 - Instrument Flight II **Credits: (3)**
- AVP 304 - Commercial Pilot Flight Laboratory I **Credits: (2)**
- AVP 305 - Commercial Pilot Flight Laboratory II **Credits: (2)**
- AVP 306 - Commercial Pilot Flight Laboratory III **Credits: (2)**
- AVP 312 - Aviation Weather Services **Credits: (3)**
- AVP 319 - Applied Aerodynamics **Credits: (3)**
- AVP 340 - Human Factors in Flight **Credits: (5)**
- AVP 352 - Multiengine Principles **Credits: (2)**
- AVP 354 - Commercial Pilot **Credits: (4)**
- AVP 470 - Professional Pilot Capstone **Credits: (1)**

Total Core Credits: 70

Commercial Pilot Specialization Courses Credits: 20

Any AVM or AVP course(s) that is/are not used in required core course.

Total Credits: 90

#### College and Department Information

Aviation Department  
College of Education and Professional Studies

## Aviation: Professional Pilot BS, Flight Officer Specialization

This specialization prepares graduates for professional pilot positions within the airline industry. Students must earn a minimum grade of B- in CWU's FAA approved ground school courses AVP 141, AVP 142, AVP 241, AVP 242, AVP 354 to receive an FAA course graduation certificate as required by FAR141.

To be eligible for the FAA Restricted ATP certificate, students must complete the instrument/commercial pilot training with

CWU in-house flight training and in the manner approved by the FAA under FAR Part 141 and the R-ATP LOA.

### Aviation Department Fees

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AVP 203 - Instrument Pilot Flight Laboratory III (training)	\$6000
AVP 304 - Commercial Pilot Flight Laboratory I (training)	\$5800
AVP 305 - Commercial Pilot Flight Laboratory II (training)	\$5800
AVP 306 - Commercial Pilot Flight Laboratory III (training)	\$5800
AVP 401 - Multi-Engine Flight Laboratory	\$8500
AVP 402 - Certified Flight Instructor Laboratory	\$7500
AVP 142 - Principles of Flight II (for testing services)	\$165
AVP 242 - Instrument Flight II (for testing services)	\$165
AVP 354 - Commercial Pilot (for testing services)	\$165
AVP 448 - Fundamentals of Flight Instruction (for testing services)	\$330
AVP 444 - Multi-Engine FTD, Baron G58 (simulator use)	\$1415
AVP 445 - Turboprop FTD, King Air 200 (simulator use)	\$1290
AVP 489 - Turbo FTD, CRJ-200 (simulator use)	\$2345

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### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Apply the foundational knowledge and skills necessary to fly commercial transport aircraft in a safe and efficient manner.
- Interpret, calculate, and analyze meteorological, aerodynamic, performance, and loading factors to conduct safe and efficient commercial flights.
- Demonstrate knowledge and skills to effectively operate aircraft airframe, power plant, navigation, and communication systems in a multi-crew environment, including Crew Resource Management (CRM\*).
- Describe the physiological and psychological limitations to flight crew performance and effectively cope with these limitations in the flight environment.
- Demonstrate a working knowledge of various aviation industries to include airspace system management, airline operations, and aviation support facilities.
- Exhibit the verbal and written communication skills needed to interact with aviation professionals, business, and management.

### Professional Pilot Core Requirements

The Professional Pilot major prepares graduates for entry level careers and leadership roles in the aviation community. Students select one of two technical specializations leading to a Bachelor of Science degree in Professional Pilot. The Aviation curriculum is designed to provide a solid foundation in the liberal arts as well as a thorough education and training in a technical discipline.

- AVM 330 - Aviation Law **Credits: (3)**
- AVM 350 - Aviation Career Planning and Professionalism **Credits: (3)**
- AVM 418 - Threat and Error Management in Aviation **Credits: (3)**
- AVP 101 - Private Pilot Flight Laboratory I **Credits: (2)**
- AVP 102 - Private Pilot Flight Laboratory II **Credits: (2)**
- AVP 103 - Private Pilot Flight Laboratory III **Credits: (2)**
- AVP 131 - Introduction to Aviation **Credits: (1)**
- AVP 141 - Principles of Flight I **Credits: (4)**
- AVP 142 - Principles of Flight II **Credits: (4)**
- AVP 201 - Instrument Pilot Flight Laboratory I **Credits: (2)**
- AVP 202 - Instrument Pilot Flight Laboratory II **Credits: (2)**
- AVP 203 - Instrument Pilot Flight Laboratory III **Credits: (2)**
- AVP 211 - Meteorology for Pilots **Credits: (4)**
- AVP 221 - Aircraft Systems I - Reciprocating **Credits: (4)**
- AVP 237 - Outdoor Survival for Pilots **Credits: (1)**
- AVP 241 - Instrument Flight I **Credits: (4)**
- AVP 242 - Instrument Flight II **Credits: (3)**
- AVP 304 - Commercial Pilot Flight Laboratory I **Credits: (2)**
- AVP 305 - Commercial Pilot Flight Laboratory II **Credits: (2)**

- AVP 306 - Commercial Pilot Flight Laboratory III **Credits:** (2)
- AVP 312 - Aviation Weather Services **Credits:** (3)
- AVP 319 - Applied Aerodynamics **Credits:** (3)
- AVP 340 - Human Factors in Flight **Credits:** (5)
- AVP 352 - Multiengine Principles **Credits:** (2)
- AVP 354 - Commercial Pilot **Credits:** (4)
- AVP 470 - Professional Pilot Capstone **Credits:** (1)

Total Core Credits: 70

Flight Officer Specialization Courses Credits: 40

- AVM 333 - Air Transportation **Credits:** (4)
- AVP 321 - Aircraft Systems -Turboprop **Credits:** (3)
- AVP 348 - Air Carrier Operations **Credits:** (4)
- AVP 401 - Multiengine Flight Laboratory **Credits:** (1-2) (Must be taken for 2 credits)
- AVP 402 - Certified Flight Instructor Laboratory **Credits:** (1-2) (Must be taken for 2 credits)
- AVP 410 - Crew Resource Management **Credits:** (3)
- AVP 421 - Aircraft Systems III-Turbojet **Credits:** (4)
- AVP 444 - Multiengine FTD, Baron G58 **Credits:** (2)
- AVP 448 - Fundamentals of Flight Instruction **Credits:** (5)
- AVP 469 - Turbojet Operations **Credits:** (4)
- AVP 489 - Turbo FTD, CRJ-200 **Credits:** (3)
- Approved electives: any AVM or AVP course not used in required course: Credits (4)

Total Credits: 110

College and Department Information

Aviation Department  
College of Education and Professional Studies

## Aviation Management Minor

An aviation management minor provides students with an introduction to several key areas of aviation management.

Required Courses

- AVM 330 - Aviation Law **Credits:** (3)
- AVM 334 - Airport Management **Credits:** (3)
- AVM 335 - Aviation Management **Credits:** (3)
- AVM 417 - Aviation Safety Management **Credits:** (4)
- MGT 380 - Organizational Management **Credits:** (5)

Choose two courses from the following:

- AVM 333 - Air Transportation **Credits:** (4)
- AVM 434 - Airport Operations **Credits:** (3)
- AVM 438 - Airport Planning and Design **Credits:** (4)

Total Credits: 25-26

College and Department Information

Aviation Department  
College of Education and Professional Studies

## Aviation Professional Pilot Minor

A program designed for students who wish to earn a pilot's license (private pilot certificate). Flight training is taken through CWU's approved flight training operator at Bowers Field in Ellensburg, Washington, and may be taken under FAR Part 61 or Part 141.

Required Courses

- AVP 101 - Private Pilot Flight Laboratory I **Credits:** (2)
- AVP 102 - Private Pilot Flight Laboratory II **Credits:** (2)
- AVP 103 - Private Pilot Flight Laboratory III **Credits:** (2)
- AVP 141 - Principles of Flight I **Credits:** (4)
- AVP 142 - Principles of Flight II **Credits:** (4)
- AVP 211 - Meteorology for Pilots **Credits:** (4)
- AVP 221 - Aircraft Systems I - Reciprocating **Credits:** (4)
- Department-approved AVM or AVP electives **Credits:** (6)

Total Credits: 24

College and Department Information

Aviation Department  
College of Education and Professional Studies

## Biological Sciences Department

College of the Sciences  
Ellensburg  
Science Bldg., room 338  
Mail Stop 7537  
509-963-2731

Fax: 509-963-2730

[www.cwu.edu/biology](http://www.cwu.edu/biology)

See website for how this program may be used for educational and career purposes.

**Faculty and Staff  
Chair**

James E. Johnson, PhD

**Professors**

Daniel D. Beck, PhD, physiological ecology and herpetology

Lucinda Carnell, PhD, molecular behavioral genetics  
 Tom R. Cottrell, PhD, plant ecology (emeritus)  
 David M. Darda, PhD, evolutionary vertebrate morphology, herpetology  
 Kristina A. Ernest, PhD, ecology and mammalogy  
 Jason T. Irwin, PhD, animal physiology  
 Paul W. James, PhD, ecology and fisheries biology  
 James E. Johnson, PhD, mycology, systematics  
 Sheldon R. Johnson, PhD, zoophysiology, mammalogy (emeritus)  
 Holly C. Pinkart, PhD, microbiology, microbial ecology, virology  
 Mary E. Poulson, PhD, plant physiology  
 Wayne S. Quirk, PhD, sensation and perception, neuroscience  
 Ian J. Quitadamo, PhD, STEM education, cell and molecular biology  
 Linda A. Raubeson, PhD, evolutionary biology and genetics  
 Stamford D. Smith, PhD, entomology (emeritus)  
 Lixing Sun, PhD, behavioral ecology, evolutionary biology, and primatology  
 R. Steven Wagner, PhD, conservation genetics and herpetology

#### Associate Professors

Clay Arango, PhD, stream ecology and nitrogen biogeochemistry  
 Jennifer Dechaine, PhD, plant biology  
 Blaise Dondji, PhD, human physiology, microbiology, parasitology, immunology  
 Alison Scoville, PhD, ecological and evolutionary genomics  
 Gabrielle Stryker, PhD, microbiology, immunology and parasitology

#### Assistant Professors

April Binder, PhD, cell biology, developmental and reproductive biology

#### Lecturers

Lucy Bottcher, PhD, ecologist, herpetologist  
 Eric Graham, PhD, plant ecology  
 Fabiola Serra-Fuertes, DVM, animal biology, physiology

#### Staff

Emil Babik, engineering technician  
 Jonathan Betz, instructional classroom support technician  
 Stacey Ferris, secretary  
 Eric Foss, instructional classroom support technician  
 Mari Knirck, fiscal specialist I  
 Kariann Linnell, fiscal specialist supervisor  
 Ormacinda White, engineering technician  
 Mark Young, instructional classroom support technician

#### Department Information

The Department of Biological Sciences provides the biological component of the liberal arts education at the university. We promote student understanding of biological concepts relevant to the individual and society and foster an appreciation of scientific inquiry. Evolution is the unifying theme of our curriculum. Our students obtain a broad education, covering a wide variety of biological disciplines. We focus on the student. Classes are small, facilitating hands-on experience, interactions with faculty, and opportunities for both undergraduate and graduate research. Biological Sciences offers major specializations in Ecology and Evolution, Molecular and Cell Biology, and Biomedical Sciences, or a General Biology option for those seeking a broader perspective of the discipline. With a biology major, students often pursue careers in fields such as teaching, natural

resource management, and biotechnology. Many students pursue further study in graduate programs. Several of the Biological Sciences degree options are ideal for students wanting to enter professional programs including medicine, dentistry, physical therapy, pharmacy and veterinary medicine.

#### Admission Requirements

To be admitted to a biology major or minor, all students must:

1. Complete a Biology Major or Minor Application. We recommend declaring a major as early as freshman year and no later than sophomore year.
  - Application forms can be obtained from the advisor, the department office, or online at [www.cwu.edu/biology/forms-and-information](http://www.cwu.edu/biology/forms-and-information).
2. Choose a Biology faculty advisor
  - We recommend choosing an advisor from the Biology Advising Team based on area of interest (Evolution and Ecology, Molecular and Cell, Biomedical Sciences or General Biology)
3. Complete and file a program of study by the end of the junior year.
  - To graduate, each student must have on file in the biology department and in the registrar's office, an official Course of Study. The Course of Study documents a student's individual degree program and lists the required and elective courses necessary for successful program completion. It is submitted by the student to his or her advisor and must be approved by the Biology faculty advisor and Biology Department Chair at least two quarters prior to graduation. Students should meet with their Biology faculty advisor regularly to discuss their progress. Course of Study forms can be obtained from the advisor or online at: [www.cwu.edu/biology/forms-and-information](http://www.cwu.edu/biology/forms-and-information).

#### Student Scholarly Activities

The department is student oriented and provides a diversity of laboratory and field experiences. Students are encouraged to participate in a variety of activities.

- Research activities: Students are encouraged to seek out a faculty member who is engaged in active research that complements the student's career goals. Students who begin research early and continue it through their career in the department gain a better understanding of their profession and are more competitive in the job market or in graduate school admissions.
- Field programs: The department believes in the importance of exposing students to biological field experiences. In addition to those provided by regular courses, the department offers summer field courses and trips to biologically interesting areas during breaks between quarters.

#### Student Organizations

All biology students are encouraged to join a student organization. These student-run groups meet regularly to discuss academic planning and career opportunities in biology. Student clubs perform service activities and plan recreational outings.

See the Biology department website for a list of currently active organizations at [www.cwu.edu/biology](http://www.cwu.edu/biology)

### Fees

Course fees are assessed for many of the department's courses. These fees are used as partial support for purchasing lab materials or providing transportation costs.

### General Consideration for Biology Majors and Minors

- Completing the equivalent of MATH 153 or higher is required for most biology major courses.
- Students are urged to complete the introductory chemistry sequence (CHEM 181, 182, 183) and the introductory biology series (BIOL 181, 182, 183) in their freshman or sophomore year.
- Most courses in the biology majors also require specific pre-requisite courses. Please consult your biology faculty advisor to plan your course of study.
- All Bachelor of Science degrees in Biology must include a minimum 100 credits of coursework. This includes all courses in the core curriculum, the specific coursework required for the chosen specialization, and elective courses. A maximum of 15 credits of elective coursework can include the following:
  - BIOL 490 - Cooperative education (1-12 credits)
  - BIOL 492 - 2-4 credits
  - BIOL 495 - 1-6 credits
  - BIOL 496 - 1-6 credits

All students must meet University requirements of a total of 180 credits, 60 of which must be upper division, to earn a Bachelor's degree (Graduation Requirements).

### Graduation Requirements

- Students must have a cumulative GPA of at least 2.25 in their major to graduate.
- Application for the bachelor's degree must be filed by the second Friday of the quarter preceding the quarter in which the degree is to be received. Complete instructions and deadlines are available in Registrar Services.

### Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### Course Offerings

Frequency of course offering information can be found at the department website: [www.cwu.edu/biology](http://www.cwu.edu/biology) or by contacting the department directly.

## Biology Major, BA

The BA degree program is designed for students preparing to incorporate biology into broader careers such as teaching, certain health sciences (e.g., physician assistant, nursing, physical therapist), business, or law. It is also the appropriate major for students seeking endorsement in teaching high school biology.

A BS is recommended for students who anticipate pursuing a graduate degree in biology, health programs (MD, DO, DVM, DDS, Pharm D.) or biology careers that might require training in a greater depth of biological sub-disciplines. See a faculty advisor in the Biology Department as soon as possible to develop a course of study and to determine which degree program to pursue.

### Teaching Endorsement:

This major partially satisfies the criteria for a teaching endorsement in Biology (5-12), qualifying students to teach biology at the high school, middle, or junior high levels. Students who successfully complete the Biology BA and STEM Teaching Program (an alternative to the Professional Education Program) are eligible to apply for Washington State teacher certification. Teacher certification candidates must receive a C grade or higher in all major and STEM Teaching Program courses, have a GPA of at least 3.0 for either the last 45 graded quarter credits or overall CWU/transfer cumulative, and meet all Washington State teacher certification requirements. See the biology teaching advisor as soon as possible to develop a course of study.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Exhibit basic mastery of biological content.
- Reason analytically.
- Critically analyze the primary literature.
- Employ appropriate experimental design and methodology.
- Effectively communicate underlying principles of biology.
- Demonstrate basic scientific skills.

Required Courses Credits: 45

- BIOL 181 - General Biology I **Credits: (5)**
- BIOL 182 - General Biology II **Credits: (5)**
- BIOL 183 - General Biology III **Credits: (5)**
- BIOL 213 - Introductory Biostatistics **Credits: (4)**
- BIOL 321 - Genetics **Credits: (5)**
- BIOL 487 - Biology Capstone **Credits: (1)**
- CHEM 181 - General Chemistry I **Credits: (4)**
- CHEM 181LAB - General Chemistry Laboratory I **Credits: (1)**
- CHEM 182 - General Chemistry II **Credits: (4)**
- CHEM 182LAB - General Chemistry Laboratory II **Credits: (1)**
- CHEM 183 - General Chemistry III **Credits: (4)**
- CHEM 183LAB - General Chemistry Laboratory III **Credits: (1)**
- CHEM 361 - Organic Chemistry I **Credits: (3)**
- CHEM 361LAB - Organic Chemistry Laboratory I **Credits: (2)**

Select from the following for 17-26 credits:

- 1 course from the Biological Diversity Group Credits: (4-5)
- 1 course from the Ecology Group Credits: (3-5)\*
- 1 course from the Evolution Group Credits: (4-6)\*
- 1 course from the Molecular/Cell Group Credits: (3-5)\*
- 1 course from the Structure/Function Group Credits: (3-6)

(\*NOTE: Courses can only be counted once.)

Total Credits: 62-71

#### Biological Diversity Group

- BIOL 323 - Microbiology **Credits: (5)**
  - BIOL 341 - Plant Taxonomy **Credits: (5)**
  - BIOL 344 - Dendrology **Credits: (4)**
  - BIOL 351 - General Entomology **Credits: (5)**
  - BIOL 352 - Parasitology **Credits: (5)**
  - BIOL 421 - General Virology **Credits: (5)**
  - BIOL 443 - Mycology **Credits: (5)**
  - BIOL 444 - Algae and Bryophytes **Credits: (5)**
  - BIOL 445 - Field Mycology **Credits: (5)**
  - BIOL 450 - Ichthyology **Credits: (4)**
  - BIOL 451 - Herpetology **Credits: (4)**
  - BIOL 452 - Ornithology **Credits: (4)**
  - BIOL 453 - Mammalogy **Credits: (5)**
- (NOTE: Courses are listed in multiple groups; a course may only count in one area.)

#### Ecology Group

- BIOL 360 - General Ecology **Credits: (5)**
  - BIOL 362 - Biomes of the Pacific Northwest **Credits: (4)**
  - BIOL 377 - Regional Natural History **Credits: (2)**
  - **AND** BIOL 377LAB - Regional Natural History **Credits: (3)**
  - BIOL 420 - Environmental Microbiology **Credits: (5)**
  - BIOL 459 - Winter Biology **Credits: (4)**
  - BIOL 461 - Community Ecology **Credits: (3)**
  - BIOL 462 - Wildlife and Fisheries Ecology **Credits: (5)**
  - BIOL 463 - Limnology **Credits: (5)**
  - BIOL 464 - Terrestrial Plant Ecology **Credits: (5)**
  - BIOL 466 - Conservation Biology **Credits: (5)**
  - BIOL 467 - Biological Field Techniques **Credits: (5)**
- (NOTE: Courses are listed in multiple groups; a course may only count in one area.)

#### Evolution Group

- BIOL 353 - Integrative Anatomy **Credits: (6)**
- BIOL 371 - Paleobiology **Credits: (4)**
- BIOL 421 - General Virology **Credits: (5)**
- BIOL 465 - Biology of Animal Behavior **Credits: (4)**
- BIOL 470 - Mechanisms of Evolution **Credits: (5)**

(NOTE: Courses are listed in multiple groups; a course may only count in one area.)

#### Molecular and Cell Group

- BIOL 323 - Microbiology **Credits: (5)**
  - BIOL 354 - Developmental Biology **Credits: (5)**
  - BIOL 421 - General Virology **Credits: (5)**
  - BIOL 422 - Immunology **Credits: (5)**
  - BIOL 423 - Techniques in Immunology and Virology **Credits: (5)**
  - BIOL 425 - Molecular Biotechnology **Credits: (5)**
  - BIOL 428 - Nutrigenomics **Credits: (5)**
  - BIOL 430 - Cell Biology **Credits: (5)**
  - BIOL 431 - The Cell Biology of Cancer **Credits: (3)**
  - BIOL 441 - Plant Physiology **Credits: (5)**
  - BIOL 457 - Fundamentals of Neuroscience **Credits: (5)**
- (NOTE: Courses are listed in multiple groups; a course may only count in one area.)

#### Structure/Function Group

- BIOL 343 - Plant Anatomy **Credits: (5)**
  - BIOL 353 - Integrative Anatomy **Credits: (6)**
  - BIOL 354 - Developmental Biology **Credits: (5)**
  - BIOL 355 - Human Anatomy and Physiology I **Credits: (5)**
  - **AND** BIOL 356 - Human Anatomy and Physiology II **Credits: (5)**
  - BIOL 422 - Immunology **Credits: (5)**
  - BIOL 423 - Techniques in Immunology and Virology **Credits: (5)**
  - BIOL 426 - Medical Microbiology **Credits: (3)**
  - BIOL 441 - Plant Physiology **Credits: (5)**
  - BIOL 454 - Histology **Credits: (3)**
  - BIOL 455 - Integrative Animal Physiology **Credits: (5)**
  - BIOL 457 - Fundamentals of Neuroscience **Credits: (5)**
- (NOTE: Courses are listed in multiple groups; a course may only count in one area.)
- BIOL 459 - Winter Biology **Credits: (4)**

#### College and Department Information

Biological Sciences Department  
College of the Sciences

## Biology BS, Biomedical Science Specialization

The biomedical science specialization will serve students that are interested in pursuing careers in human health (medicine, dentistry, optometry, physical therapy, pharmacy) and veterinary medicine. This specialization allows for the study of human biology, together with a core of fundamental physical science

principles (chemistry and physics). This specialization will allow students to apply these physical principals to the study of biological systems, which is an essential requirement of professional health programs in medicine, dentistry, optometry, physical therapy, pharmacy and physician assistant programs. The biomedical science specialization offers individualized academic plans to help each student achieve his or her goals in the biomedical field.

Students consult with the appropriate biology advisor for approval of their BS program and electives, which must be submitted for approval to the biological sciences department at least two quarters preceding graduation. All students in the BS biology major must complete all BS core requirements, plus additional specific requirements. Additionally, students will need to choose a specified number of courses from different groupings of upper-division courses. A maximum of 15 credits in BIOL 295, BIOL 490, BIOL 495, and BIOL 496 may be included in the major.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Exhibit basic mastery of biological content.
- Reason analytically.
- Critically analyze the primary literature.
- Employ appropriate experimental design and methodology.
- Effectively communicate underlying principles of biology.
- Demonstrate basic scientific skills.

### Biology Core Requirements

- BIOL 181 - General Biology I **Credits: (5)**
- BIOL 182 - General Biology II **Credits: (5)**
- BIOL 183 - General Biology III **Credits: (5)**
- BIOL 213 - Introductory Biostatistics **Credits: (4)**
- BIOL 321 - Genetics **Credits: (5)**
- BIOL 487 - Biology Capstone **Credits: (1)**

### General Chemistry and Laboratory Credits: (15)

- CHEM 181 - General Chemistry I **Credits: (4)**
- CHEM 181LAB - General Chemistry Laboratory I **Credits: (1)**
- CHEM 182 - General Chemistry II **Credits: (4)**
- CHEM 182LAB - General Chemistry Laboratory II **Credits: (1)**
- CHEM 183 - General Chemistry III **Credits: (4)**
- CHEM 183LAB - General Chemistry Laboratory III **Credits: (1)**

Total Core Credits: 40

### Select from the following sequences Credits: 15

- PHYS 111 - Introductory Physics I with Laboratory **Credits: (5)**

- PHYS 112 - Introductory Physics II with Laboratory **Credits: (5)**
- PHYS 113 - Introductory Physics III with Laboratory **Credits: (5)**  
OR
- PHYS 121 - Introductory Physics for Life Sciences I **Credits: (5)**
- PHYS 122 - Introductory Physics for Life Sciences II **Credits: (5)**
- PHYS 123 - Introductory Physics for Life Sciences III **Credits: (5)**  
OR
- PHYS 181 - General Physics I with Laboratory **Credits: (5)**
- PHYS 182 - General Physics II with Laboratory **Credits: (5)**
- PHYS 183 - General Physics III with Laboratory **Credits: (5)**

### Additional Required Courses Credits: 17-29

- CHEM 361 - Organic Chemistry I **Credits: (3)**
- CHEM 361LAB - Organic Chemistry Laboratory I **Credits: (2)**
- CHEM 362 - Organic Chemistry II **Credits: (3)**
- 3 courses\* from the Ecology, Evolution, Molecular/Cell and/or Structure/Function Groups **Credits: (9-21)**  
(\*NOTE: Courses must come from three different groups.)

### Department-Approved Electives Credits: 16-28

Total Credits: 100

### Ecology Group

- BIOL 360 - General Ecology **Credits: (5)**
- BIOL 362 - Biomes of the Pacific Northwest **Credits: (4)**
- BIOL 377 - Regional Natural History **Credits: (2)**
- **AND** BIOL 377LAB - Regional Natural History **Credits: (3)**
- BIOL 420 - Environmental Microbiology **Credits: (5)**
- BIOL 459 - Winter Biology **Credits: (4)**
- BIOL 461 - Community Ecology **Credits: (3)**
- BIOL 462 - Wildlife and Fisheries Ecology **Credits: (5)**
- BIOL 463 - Limnology **Credits: (5)**
- BIOL 464 - Terrestrial Plant Ecology **Credits: (5)**
- BIOL 466 - Conservation Biology **Credits: (5)**
- BIOL 467 - Biological Field Techniques **Credits: (5)**  
(NOTE: Courses are listed in multiple groups; a course may only count in one area.)

### Evolution Group

- BIOL 353 - Integrative Anatomy **Credits: (6)**
- BIOL 371 - Paleobiology **Credits: (4)**



- BIOL 421 - General Virology **Credits:** (5)
- BIOL 465 - Biology of Animal Behavior **Credits:** (4)
- BIOL 470 - Mechanisms of Evolution **Credits:** (5)  
(NOTE: Courses are listed in multiple groups; a course may only count in one area.)

#### Molecular and Cell Group

- BIOL 323 - Microbiology **Credits:** (5)
- BIOL 354 - Developmental Biology **Credits:** (5)
- BIOL 421 - General Virology **Credits:** (5)
- BIOL 422 - Immunology **Credits:** (5)
- BIOL 423 - Techniques in Immunology and Virology **Credits:** (5)
- BIOL 425 - Molecular Biotechnology **Credits:** (5)
- BIOL 428 - Nutrigenomics **Credits:** (5)
- BIOL 430 - Cell Biology **Credits:** (5)
- BIOL 431 - The Cell Biology of Cancer **Credits:** (3)
- BIOL 441 - Plant Physiology **Credits:** (5)
- BIOL 457 - Fundamentals of Neuroscience **Credits:** (5)  
(NOTE: Courses are listed in multiple groups; a course may only count in one area.)

#### Structure/Function Group

- BIOL 343 - Plant Anatomy **Credits:** (5)
- BIOL 353 - Integrative Anatomy **Credits:** (6)
- BIOL 354 - Developmental Biology **Credits:** (5)
- BIOL 355 - Human Anatomy and Physiology I **Credits:** (5)
- **AND** BIOL 356 - Human Anatomy and Physiology II **Credits:** (5)
- BIOL 422 - Immunology **Credits:** (5)
- BIOL 423 - Techniques in Immunology and Virology **Credits:** (5)
- BIOL 426 - Medical Microbiology **Credits:** (3)
- BIOL 441 - Plant Physiology **Credits:** (5)
- BIOL 454 - Histology **Credits:** (3)
- BIOL 455 - Integrative Animal Physiology **Credits:** (5)
- BIOL 457 - Fundamentals of Neuroscience **Credits:** (5)  
(NOTE: Courses are listed in multiple groups; a course may only count in one area.)
- BIOL 459 - Winter Biology **Credits:** (4)

#### Electives

Courses from the following group may also be used as electives:

#### Biological Diversity Group

- BIOL 323 - Microbiology **Credits:** (5)
- BIOL 341 - Plant Taxonomy **Credits:** (5)
- BIOL 344 - Dendrology **Credits:** (4)
- BIOL 351 - General Entomology **Credits:** (5)
- BIOL 352 - Parasitology **Credits:** (5)

- BIOL 421 - General Virology **Credits:** (5)
- BIOL 443 - Mycology **Credits:** (5)
- BIOL 444 - Algae and Bryophytes **Credits:** (5)
- BIOL 445 - Field Mycology **Credits:** (5)
- BIOL 450 - Ichthyology **Credits:** (4)
- BIOL 451 - Herpetology **Credits:** (4)
- BIOL 452 - Ornithology **Credits:** (4)
- BIOL 453 - Mammalogy **Credits:** (5)  
(NOTE: Courses are listed in multiple groups; a course may only count in one area.)

#### College and Department Information

Biological Sciences Department  
College of the Sciences

## Biology BS, Ecology and Evolutionary Biology Specialization

Ecology is the study of how organisms interact with their physical and biological environment. Evolution considers how populations change over time to generate the rich diversity of life on earth and is the unifying theory of biology. The ecology and evolutionary specialization is designed for students broadly interested in basic and applied biology, natural resource management, agriculture, ecological restoration, conservation biology, disease dynamics, animal behavior, and biological research. Students following this specialization will gain experience in natural history, field research, and experimental design. Potential careers may be found in federal, state, and tribal agencies, or private environmental consulting firms, research laboratories, and natural history museums. Students interested in graduate study should work closely with their advisor to tailor this specialization to their particular field of interest.

Students consult with the appropriate biology advisor for approval of their BS program and electives, which must be submitted for approval to the Biological Sciences Department at least two quarters preceding graduation. All students in the BS Biology major must complete all BS core requirements, plus additional specific requirements. Additionally, students will need to choose a specified number of courses from different groupings of upper division courses. A maximum of 15 credits in BIOL 295, BIOL 490, BIOL 495, and BIOL 496 may be included in the major.

#### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Exhibit basic mastery of biological content.
- Reason analytically.
- Critically analyze the primary literature.
- Employ appropriate experimental design and methodology.
- Effectively communicate underlying principles of biology.
- Demonstrate basic scientific skills.

## Biology Core Requirements

- BIOL 181 - General Biology I **Credits: (5)**
- BIOL 182 - General Biology II **Credits: (5)**
- BIOL 183 - General Biology III **Credits: (5)**
- BIOL 213 - Introductory Biostatistics **Credits: (4)**
- BIOL 321 - Genetics **Credits: (5)**
- BIOL 487 - Biology Capstone **Credits: (1)**

## General Chemistry and Laboratory Credits: (15)

- CHEM 181 - General Chemistry I **Credits: (4)**
- CHEM 181LAB - General Chemistry Laboratory I **Credits: (1)**
- CHEM 182 - General Chemistry II **Credits: (4)**
- CHEM 182LAB - General Chemistry Laboratory II **Credits: (1)**
- CHEM 183 - General Chemistry III **Credits: (4)**
- CHEM 183LAB - General Chemistry Laboratory III **Credits: (1)**

Total Core Credits: 40

## Additional Required Courses Credits: 25

- BIOL 360 - General Ecology **Credits: (5)**
- BIOL 470 - Mechanisms of Evolution **Credits: (5)**
- CHEM 361 - Organic Chemistry I **Credits: (3)**
- CHEM 361LAB - Organic Chemistry Laboratory I **Credits: (2)**
- MATH 170 - Intuitive Calculus **Credits: (5)**
- **OR** MATH 172 - Calculus I **Credits: (5)**
- PHYS 111 - Introductory Physics I with Laboratory **Credits: (5)**
- **OR** PHYS 121 - Introductory Physics for Life Sciences I **Credits: (5)**
- **OR** PHYS 181 - General Physics I with Laboratory **Credits: (5)**

Select from the following for 10-21 credits.

- 1 course from the Biological Diversity Group **Credits: (4-5)**
- 1 additional course from the Ecology OR Evolution Group **Credits: (3-6)\***
- 1 additional course from the Molecular/Cell OR Structure/Function Group **Credits: (3-10)**  
(\*NOTE: Courses can only be counted once.)

Department-Approved Electives Credits: 14-25

Total Credits: 100

## Biological Diversity Group

- BIOL 323 - Microbiology **Credits: (5)**
- BIOL 341 - Plant Taxonomy **Credits: (5)**

- BIOL 344 - Dendrology **Credits: (4)**
  - BIOL 351 - General Entomology **Credits: (5)**
  - BIOL 352 - Parasitology **Credits: (5)**
  - BIOL 421 - General Virology **Credits: (5)**
  - BIOL 443 - Mycology **Credits: (5)**
  - BIOL 444 - Algae and Bryophytes **Credits: (5)**
  - BIOL 445 - Field Mycology **Credits: (5)**
  - BIOL 450 - Ichthyology **Credits: (4)**
  - BIOL 451 - Herpetology **Credits: (4)**
  - BIOL 452 - Ornithology **Credits: (4)**
  - BIOL 453 - Mammalogy **Credits: (5)**
- (NOTE: Courses are listed in multiple groups; a course may only count in one area.)

## Ecology Group

- BIOL 360 - General Ecology **Credits: (5)**
  - BIOL 362 - Biomes of the Pacific Northwest **Credits: (4)**
  - BIOL 377 - Regional Natural History **Credits: (2)**
  - **AND** BIOL 377LAB - Regional Natural History **Credits: (3)**
  - BIOL 420 - Environmental Microbiology **Credits: (5)**
  - BIOL 459 - Winter Biology **Credits: (4)**
  - BIOL 461 - Community Ecology **Credits: (3)**
  - BIOL 462 - Wildlife and Fisheries Ecology **Credits: (5)**
  - BIOL 463 - Limnology **Credits: (5)**
  - BIOL 464 - Terrestrial Plant Ecology **Credits: (5)**
  - BIOL 466 - Conservation Biology **Credits: (5)**
  - BIOL 467 - Biological Field Techniques **Credits: (5)**
- (NOTE: Courses are listed in multiple groups; a course may only count in one area.)

## Evolution Group

- BIOL 353 - Integrative Anatomy **Credits: (6)**
  - BIOL 371 - Paleobiology **Credits: (4)**
  - BIOL 421 - General Virology **Credits: (5)**
  - BIOL 465 - Biology of Animal Behavior **Credits: (4)**
  - BIOL 470 - Mechanisms of Evolution **Credits: (5)**
- (NOTE: Courses are listed in multiple groups; a course may only count in one area.)

## Molecular and Cell Group

- BIOL 323 - Microbiology **Credits: (5)**
- BIOL 354 - Developmental Biology **Credits: (5)**
- BIOL 421 - General Virology **Credits: (5)**
- BIOL 422 - Immunology **Credits: (5)**
- BIOL 423 - Techniques in Immunology and Virology **Credits: (5)**
- BIOL 425 - Molecular Biotechnology **Credits: (5)**
- BIOL 428 - Nutrigenomics **Credits: (5)**
- BIOL 430 - Cell Biology **Credits: (5)**
- BIOL 431 - The Cell Biology of Cancer **Credits: (3)**
- BIOL 441 - Plant Physiology **Credits: (5)**

- BIOL 457 - Fundamentals of Neuroscience **Credits:** (5)  
(NOTE: Courses are listed in multiple groups; a course may only count in one area.)

#### Structure/Function Group

- BIOL 343 - Plant Anatomy **Credits:** (5)
- BIOL 353 - Integrative Anatomy **Credits:** (6)
- BIOL 354 - Developmental Biology **Credits:** (5)
- BIOL 355 - Human Anatomy and Physiology I **Credits:** (5)
- **AND** BIOL 356 - Human Anatomy and Physiology II **Credits:** (5)
- BIOL 422 - Immunology **Credits:** (5)
- BIOL 423 - Techniques in Immunology and Virology **Credits:** (5)
- BIOL 426 - Medical Microbiology **Credits:** (3)
- BIOL 441 - Plant Physiology **Credits:** (5)
- BIOL 454 - Histology **Credits:** (3)
- BIOL 455 - Integrative Animal Physiology **Credits:** (5)
- BIOL 457 - Fundamentals of Neuroscience **Credits:** (5)  
(NOTE: Courses are listed in multiple groups; a course may only count in one area.)
- BIOL 459 - Winter Biology **Credits:** (4)

#### College and Department Information

Biological Sciences Department  
College of the Sciences

## Biology BS, General Biology Specialization

For those students who do not desire a specialization, the BS Biology major offers undergraduate students a broad degree program with depth of training in a variety of areas in biological sciences and supporting fields. This program offers considerable flexibility in program coursework and prepares students for immediate entrance into careers in biological sciences or for graduate work.

Students consult with the appropriate biology faculty advisor for approval of their BS program and electives, which must be submitted for approval to the biological sciences department at least two quarters preceding graduation. All students in the BS Biology major must complete all BS core requirements, plus additional specific requirements. Additionally, students will need to choose a specified number of courses from different groupings of upper division courses. A maximum of 15 credits in BIOL 295, BIOL 490, BIOL 495, and BIOL 496 may be included in the major.

#### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Exhibit basic mastery of biological content.

- Reason analytically.
- Critically analyze the primary literature.
- Employ appropriate experimental design and methodology.
- Effectively communicate underlying principles of biology.
- Demonstrate basic scientific skills.

#### Biology Core Requirements

- BIOL 181 - General Biology I **Credits:** (5)
- BIOL 182 - General Biology II **Credits:** (5)
- BIOL 183 - General Biology III **Credits:** (5)
- BIOL 213 - Introductory Biostatistics **Credits:** (4)
- BIOL 321 - Genetics **Credits:** (5)
- BIOL 487 - Biology Capstone **Credits:** (1)

#### General Chemistry and Laboratory Credits: (15)

- CHEM 181 - General Chemistry I **Credits:** (4)
- CHEM 181LAB - General Chemistry Laboratory I **Credits:** (1)
- CHEM 182 - General Chemistry II **Credits:** (4)
- CHEM 182LAB - General Chemistry Laboratory II **Credits:** (1)
- CHEM 183 - General Chemistry III **Credits:** (4)
- CHEM 183LAB - General Chemistry Laboratory III **Credits:** (1)

Total Core Credits: 40

Additional Required Courses Credits: 10

- CHEM 361 - Organic Chemistry I **Credits:** (3)
- CHEM 361LAB - Organic Chemistry Laboratory I **Credits:** (2)
- PHYS 111 - Introductory Physics I with Laboratory **Credits:** (5)
- **OR** PHYS 121 - Introductory Physics for Life Sciences I **Credits:** (5)
- **OR** PHYS 181 - General Physics I with Laboratory **Credits:** (5)

Select from the following for 17-31 credits.

- 1 course from the Biological Diversity Group **Credits:** (4-5)
- 1 course from the Ecology Group **Credits:** (3-5)\*
- 1 course from the Evolution Group **Credits:** (4-6)\*
- 1 course from the Molecular/Cell Group **Credits:** (3-5)\*
- 1 course from the Structure/Function Group **Credits:** (3-10)  
(\*NOTE: Courses can only be counted once.)

Department-Approved Electives Credits: 19-33

Total Credits: 100

#### Biological Diversity Group

- BIOL 323 - Microbiology **Credits:** (5)
  - BIOL 341 - Plant Taxonomy **Credits:** (5)
  - BIOL 344 - Dendrology **Credits:** (4)
  - BIOL 351 - General Entomology **Credits:** (5)
  - BIOL 352 - Parasitology **Credits:** (5)
  - BIOL 421 - General Virology **Credits:** (5)
  - BIOL 443 - Mycology **Credits:** (5)
  - BIOL 444 - Algae and Bryophytes **Credits:** (5)
  - BIOL 445 - Field Mycology **Credits:** (5)
  - BIOL 450 - Ichthyology **Credits:** (4)
  - BIOL 451 - Herpetology **Credits:** (4)
  - BIOL 452 - Ornithology **Credits:** (4)
  - BIOL 453 - Mammalogy **Credits:** (5)
- (NOTE: Courses are listed in multiple groups; a course may only count in one area.)

#### Ecology Group

- BIOL 360 - General Ecology **Credits:** (5)
  - BIOL 362 - Biomes of the Pacific Northwest **Credits:** (4)
  - BIOL 377 - Regional Natural History **Credits:** (2)
  - **AND** BIOL 377LAB - Regional Natural History **Credits:** (3)
  - BIOL 420 - Environmental Microbiology **Credits:** (5)
  - BIOL 459 - Winter Biology **Credits:** (4)
  - BIOL 461 - Community Ecology **Credits:** (3)
  - BIOL 462 - Wildlife and Fisheries Ecology **Credits:** (5)
  - BIOL 463 - Limnology **Credits:** (5)
  - BIOL 464 - Terrestrial Plant Ecology **Credits:** (5)
  - BIOL 466 - Conservation Biology **Credits:** (5)
  - BIOL 467 - Biological Field Techniques **Credits:** (5)
- (NOTE: Courses are listed in multiple groups; a course may only count in one area.)

#### Evolution Group

- BIOL 353 - Integrative Anatomy **Credits:** (6)
  - BIOL 371 - Paleobiology **Credits:** (4)
  - BIOL 421 - General Virology **Credits:** (5)
  - BIOL 465 - Biology of Animal Behavior **Credits:** (4)
  - BIOL 470 - Mechanisms of Evolution **Credits:** (5)
- (NOTE: Courses are listed in multiple groups; a course may only count in one area.)

#### Molecular and Cell Group

- BIOL 323 - Microbiology **Credits:** (5)
- BIOL 354 - Developmental Biology **Credits:** (5)
- BIOL 421 - General Virology **Credits:** (5)
- BIOL 422 - Immunology **Credits:** (5)

- BIOL 423 - Techniques in Immunology and Virology **Credits:** (5)
  - BIOL 425 - Molecular Biotechnology **Credits:** (5)
  - BIOL 428 - Nutrigenomics **Credits:** (5)
  - BIOL 430 - Cell Biology **Credits:** (5)
  - BIOL 431 - The Cell Biology of Cancer **Credits:** (3)
  - BIOL 441 - Plant Physiology **Credits:** (5)
  - BIOL 457 - Fundamentals of Neuroscience **Credits:** (5)
- (NOTE: Courses are listed in multiple groups; a course may only count in one area.)

#### Structure/Function Group

- BIOL 343 - Plant Anatomy **Credits:** (5)
  - BIOL 353 - Integrative Anatomy **Credits:** (6)
  - BIOL 354 - Developmental Biology **Credits:** (5)
  - BIOL 355 - Human Anatomy and Physiology I **Credits:** (5)
  - **AND** BIOL 356 - Human Anatomy and Physiology II **Credits:** (5)
  - BIOL 422 - Immunology **Credits:** (5)
  - BIOL 423 - Techniques in Immunology and Virology **Credits:** (5)
  - BIOL 426 - Medical Microbiology **Credits:** (3)
  - BIOL 441 - Plant Physiology **Credits:** (5)
  - BIOL 454 - Histology **Credits:** (3)
  - BIOL 455 - Integrative Animal Physiology **Credits:** (5)
  - BIOL 457 - Fundamentals of Neuroscience **Credits:** (5)
- (NOTE: Courses are listed in multiple groups; a course may only count in one area.)
- BIOL 459 - Winter Biology **Credits:** (4)

#### College and Department Information

Biological Sciences Department  
College of the Sciences

## Biology BS, Molecular and Cell Biology Specialization

Molecular and Cell Biology is the study of fundamental processes that form the basis of biological life and the techniques used to study these processes. The study of molecular and cell biology facilitates understanding of a wide variety of disciplines, including genetics, developmental biology, physiology, microbiology, and evolutionary biology. The goal of the MCB emphasis is to prepare graduates to be competitive in applications for entry into graduate degree programs, professional programs in the biomedical fields, clinical laboratory sciences, or jobs in biomedical and agricultural research labs in government and industry.

Students need to consult with the appropriate biology faculty advisor for approval of their BS program and electives, which must be submitted for approval to the biological sciences department at two quarters prior to graduation. All students in

the BS Biology major must complete all BS core requirements, plus additional specific requirements. Additionally, students will need to choose a specified number of courses from different groupings of upper division courses. A maximum of 15 credits in BIOL 295, BIOL 490, BIOL 495, and BIOL 496 may be included in the major.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Exhibit basic mastery of biological content.
- Reason analytically.
- Critically analyze the primary literature.
- Employ appropriate experimental design and methodology.
- Effectively communicate underlying principles of biology.
- Demonstrate basic scientific skills.

### Biology Core Requirements

- BIOL 181 - General Biology I **Credits:** (5)
- BIOL 182 - General Biology II **Credits:** (5)
- BIOL 183 - General Biology III **Credits:** (5)
- BIOL 213 - Introductory Biostatistics **Credits:** (4)
- BIOL 321 - Genetics **Credits:** (5)
- BIOL 487 - Biology Capstone **Credits:** (1)

### General Chemistry and Laboratory Credits: (15)

- CHEM 181 - General Chemistry I **Credits:** (4)
- CHEM 181LAB - General Chemistry Laboratory I **Credits:** (1)
- CHEM 182 - General Chemistry II **Credits:** (4)
- CHEM 182LAB - General Chemistry Laboratory II **Credits:** (1)
- CHEM 183 - General Chemistry III **Credits:** (4)
- CHEM 183LAB - General Chemistry Laboratory III **Credits:** (1)

Total Core Credits: 40

### Additional Required Courses Credits: 21

- BIOL 425 - Molecular Biotechnology **Credits:** (5)
- BIOL 430 - Cell Biology **Credits:** (5)
- CHEM 361 - Organic Chemistry I **Credits:** (3)
- CHEM 361LAB - Organic Chemistry Laboratory I **Credits:** (2)
- CHEM 362 - Organic Chemistry II **Credits:** (3)
- CHEM 431 - Biochemistry I **Credits:** (3)

Select from the following for 9-21 credits.

- 1 course from the Molecular/Cell Group **Credits:** (3-5)

- 2 courses\* from the Ecology, Evolution, and/or Structure/Function Groups **Credits:** (6-16)  
(\*NOTE: Courses must come from two different groups.)

Department-Approved Electives Credits: 18-30

Total Credits: 100

### Ecology Group

- BIOL 360 - General Ecology **Credits:** (5)
- BIOL 362 - Biomes of the Pacific Northwest **Credits:** (4)
- BIOL 377 - Regional Natural History **Credits:** (2)
- **AND** BIOL 377LAB - Regional Natural History **Credits:** (3)
- BIOL 420 - Environmental Microbiology **Credits:** (5)
- BIOL 459 - Winter Biology **Credits:** (4)
- BIOL 461 - Community Ecology **Credits:** (3)
- BIOL 462 - Wildlife and Fisheries Ecology **Credits:** (5)
- BIOL 463 - Limnology **Credits:** (5)
- BIOL 464 - Terrestrial Plant Ecology **Credits:** (5)
- BIOL 466 - Conservation Biology **Credits:** (5)
- BIOL 467 - Biological Field Techniques **Credits:** (5)  
(NOTE: Courses are listed in multiple groups; a course may only count in one area.)

### Evolution Group

- BIOL 353 - Integrative Anatomy **Credits:** (6)
- BIOL 371 - Paleobiology **Credits:** (4)
- BIOL 421 - General Virology **Credits:** (5)
- BIOL 465 - Biology of Animal Behavior **Credits:** (4)
- BIOL 470 - Mechanisms of Evolution **Credits:** (5)  
(NOTE: Courses are listed in multiple groups; a course may only count in one area.)

### Molecular and Cell Group

- BIOL 323 - Microbiology **Credits:** (5)
- BIOL 354 - Developmental Biology **Credits:** (5)
- BIOL 421 - General Virology **Credits:** (5)
- BIOL 422 - Immunology **Credits:** (5)
- BIOL 423 - Techniques in Immunology and Virology **Credits:** (5)
- BIOL 425 - Molecular Biotechnology **Credits:** (5)
- BIOL 428 - Nutrigenomics **Credits:** (5)
- BIOL 430 - Cell Biology **Credits:** (5)
- BIOL 431 - The Cell Biology of Cancer **Credits:** (3)
- BIOL 441 - Plant Physiology **Credits:** (5)
- BIOL 457 - Fundamentals of Neuroscience **Credits:** (5)  
(NOTE: Courses are listed in multiple groups; a course may only count in one area.)

### Structure/Function Group

- BIOL 343 - Plant Anatomy **Credits:** (5)
- BIOL 353 - Integrative Anatomy **Credits:** (6)
- BIOL 354 - Developmental Biology **Credits:** (5)
- BIOL 355 - Human Anatomy and Physiology I **Credits:** (5)
- **AND** BIOL 356 - Human Anatomy and Physiology II **Credits:** (5)
- BIOL 422 - Immunology **Credits:** (5)
- BIOL 423 - Techniques in Immunology and Virology **Credits:** (5)
- BIOL 426 - Medical Microbiology **Credits:** (3)
- BIOL 441 - Plant Physiology **Credits:** (5)
- BIOL 454 - Histology **Credits:** (3)
- BIOL 455 - Integrative Animal Physiology **Credits:** (5)
- BIOL 457 - Fundamentals of Neuroscience **Credits:** (5)  
(NOTE: Courses are listed in multiple groups; a course may only count in one area.)
- BIOL 459 - Winter Biology **Credits:** (4)

#### Electives

Additionally, courses from the following group may also be used as electives:

#### Biological Diversity Group

- BIOL 323 - Microbiology **Credits:** (5)
- BIOL 341 - Plant Taxonomy **Credits:** (5)
- BIOL 344 - Dendrology **Credits:** (4)
- BIOL 351 - General Entomology **Credits:** (5)
- BIOL 352 - Parasitology **Credits:** (5)
- BIOL 421 - General Virology **Credits:** (5)
- BIOL 443 - Mycology **Credits:** (5)
- BIOL 444 - Algae and Bryophytes **Credits:** (5)
- BIOL 445 - Field Mycology **Credits:** (5)
- BIOL 450 - Ichthyology **Credits:** (4)
- BIOL 451 - Herpetology **Credits:** (4)
- BIOL 452 - Ornithology **Credits:** (4)
- BIOL 453 - Mammalogy **Credits:** (5)  
(NOTE: Courses are listed in multiple groups; a course may only count in one area.)

#### College and Department Information

Biological Sciences Department  
College of the Sciences

## Biology Minor

Not available to biology majors.

#### Required Courses

- BIOL 181 - General Biology I **Credits:** (5)
- BIOL 182 - General Biology II **Credits:** (5)

- BIOL 183 - General Biology III **Credits:** (5)
- BIOL 213 - Introductory Biostatistics **Credits:** (4)

#### General Chemistry and Laboratory: Credits 15

- CHEM 181 - General Chemistry I **Credits:** (4)
- CHEM 181LAB - General Chemistry Laboratory I **Credits:** (1)
- CHEM 182 - General Chemistry II **Credits:** (4)
- CHEM 182LAB - General Chemistry Laboratory II **Credits:** (1)
- CHEM 183 - General Chemistry III **Credits:** (4)
- CHEM 183LAB - General Chemistry Laboratory III **Credits:** (1)

#### Electives in Biological Sciences: Credits 10

Total Credits: 44

#### College and Department Information

Biological Sciences Department  
College of the Sciences

# Career and Technical Education Program

Family and Consumer Science Department  
Ellensburg  
Michaelsen Hall, room 135

509-963-1970

[www.cwu.edu/family-consumer/career-technical-education-teacher-preparation-program](http://www.cwu.edu/family-consumer/career-technical-education-teacher-preparation-program)

See website for how this certificate may be used for educational and career purposes.

#### Faculty and Staff Chair

Duane Dowd, PhD

#### Program Director, Business and Industry Route Certification

Jodi Musser, MEd

#### Faculty

Kim Bartel, PhD, business and marketing education  
Scott Calahan, MEd, industrial education  
Jodi Musser, MEd, business and marketing education

#### Regional Coordinators

Paul Randall  
Ross Short

# Career and Technical Education Certificate

## Career and Technical Education Teacher Preparation Certificate

This two-year competency block certificate program is intended for business or industry professionals who are interested in obtaining a career and technical teaching certificate. The program will provide the tools necessary for success in the classroom.

During the program participants will complete a mentored teaching experience or practicum each year. The program is offered through the office of Continuing Education in collaboration with Occupational Education.

### Prerequisites:

1. Current Career and Technical Education Probationary Teaching Certificate, OR
2. 6,000 hours paid occupational experience in the area you wish to teach, and fingerprint clearance from both the Washington State Patrol and the FBI must be on file at the office of Superintendent of Public Instruction (OSPI).
3. Successful completion of all three sections in the Washington Educator Skills Test - Basic (WEST-B). Test scores must be submitted prior to completing the program in order to receive CWU's recommendation for career and technical education teacher certification, OR
4. Washington State Residency Permit or professional teacher certification.

Included in each year of the program is a 70-hour practicum. Passing grades in all courses grants the individual the competencies in general and specific safety requirement.

### Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### Course Offerings

Frequency of course offering information can be found at the department website: [www.cwu.edu/family-consumer/career-technical-education-teacher-preparation-program](http://www.cwu.edu/family-consumer/career-technical-education-teacher-preparation-program) or by contacting the department directly.

### Required Courses

#### Block 1:

- CTE 310A - Career and Technical Education Teaching Methods **Credits:** (3-5)  
Must be taken for 4 credits.
- CTE 310B - Career and Technical Education Occupational Analysis **Credits:** (3-5)  
Must be taken for 3 credits.
- CTE 310C - Career and Technical Education Course Organization and Curriculum Design **Credits:** (3-5)  
Must be taken for 5 credits.

#### Block 2:

- CTE 311A - Career and Technical Education Coordination Techniques of Cooperative Education **Credits:** (3-5)  
Must be taken for 3 credits.
- CTE 311B - History and Philosophy of Career and Technical Education **Credits:** (3-5)  
Must be taken for 3 credits.
- CTE 311C - Career and Technical Education Student and Professional Leadership Development **Credits:** (3-5)  
Must be taken for 4 credits.
- CTE 311D - Career and Technical Education School Law and Issues Related to Abuse **Credits:** (2-5)  
Must be taken for 2 credits.

Total Credits: 24

### College and Department Information

Career and Technical Education Program  
Office of Continuing Education

# Chemistry Department

College of the Sciences  
Ellensburg  
Science Bldg., room 302  
Mail Stop 7539  
509-963-2811  
[www.cwu.edu/chemistry](http://www.cwu.edu/chemistry)

See website for how this program may be used for educational and career purposes.

### Faculty and Staff Chair

Anthony Diaz, PhD

### Associate Chair

Dion Rivera, PhD

### Professor

Anthony Diaz, PhD, inorganic, solid state  
Levente Fabry-Asztalos, PhD, organic  
Anne Johansen, PhD, environmental, analytical  
JoAnn Peters, PhD, organic, mechanistic  
Dion Rivera, PhD, physical, analytical  
Carin Thomas, PhD, biochemistry, toxicology

### Associate Professors

Gil Belofsky, PhD, organic  
Yingbin Ge, PhD, physical  
Todd Kroll, PhD, biochemistry  
Tim Sorey, PhD, chemistry education

### Assistant Professor

Timothy Beng, PhD, organic

### Senior Lecturer

P. Whitney Swain, PhD, general

### Lecturers

Christopher Borman, PhD, general  
Derek Ricketson, PhD, general  
Angleine Wairegi, PhD, general

### Staff

Emil Babik, instrument technician  
Tony Brown, stockroom manager  
Brian Finn, computer technician  
Daniel Hall, stockroom assistant  
Ian Seiler, safety officer  
Lisa Stowe, secretary  
Ormacinda White, instrument technician

### Department Information

The department offers three majors. In each major, courses in the first two years emphasize fundamental topics in chemistry, mathematics, and physics. Students then choose advanced courses in chemistry and related areas to complete the requirements in their major.

These majors provide opportunities for practical experience in chemistry. Students are encouraged to do research on campus with a faculty member, and to participate in the department's seminar program. Two minors are offered to supplement career related fields.

### Department Standards

Students must have earned a grade of C- or higher in all prerequisites to be admitted to a course. To graduate, all chemistry majors are required to achieve at least a 2.0 cumulative GPA and a 2.25 GPA in courses required for the major. To receive a minor in chemistry, students are required to achieve a 2.25 gpa in courses required for the minor.

### Lab Fees

All chemistry labs have fees associated with them that must be paid when registering for the course.

### Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### Course Offerings

Frequency of course offering information can be found at the department website: [www.cwu.edu/chemistry](http://www.cwu.edu/chemistry) or by contacting the department directly.

## Chemistry Major, BA

This BA degree program is designed for students preparing to incorporate chemistry into broader careers such as teaching, health sciences (PA, nursing, pre-PT), industry, business, and/or law. It is also the appropriate major for students seeking endorsement in teaching high school chemistry.

A BS is recommended for students who anticipate pursuing a graduate degree in chemistry, health programs (MD, DO, DVM, DDS, Pharm D, etc.) or chemistry careers that might require training in a greater depth of chemistry subdisciplines. See a faculty advisor in the Chemistry Department as soon as possible

to develop a course of study and to determine which degree program to pursue.

### Teaching Endorsement Requirements:

This major partially satisfies the criteria for a teaching endorsement in Chemistry (5-12), qualifying students to teach Chemistry at the high school, middle, or junior high levels. Students who successfully complete the Chemistry BA and STEM Teaching Program (an alternative to the Professional Education Program) are eligible to apply for Washington State teacher certification. Teacher certification candidates must receive a C grade or higher in all major and STEM Teaching Program courses, have a GPA of at least 3.0 for either the last 45 graded quarter credits or overall CWU/transfer cumulative, and meet all Washington State teacher certification requirements. See the chemistry teaching advisor as soon as possible to develop a course of study.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Master the concepts and skills, including experimental techniques, designated in curriculum learning outcomes for courses in General, Analytical, Biochemistry, Inorganic, Organic, and Physical chemistry, which are needed to graduate and successfully pursue career pathways.
- Write and speak clearly in the language and style of the discipline.
- Demonstrate critical thinking skills needed to develop explanations, support qualitative and quantitative problem solving, and design experiments to test hypotheses.
- Use computers and the modern software of the discipline to fulfill designated curricular outcomes in lab and lecture courses that require data acquisition and analysis, instrument control, computation and display of molecular structure, or preparation of written reports or oral presentations.
- Retrieve and critically analyze chemical literature.
- While working in chemical laboratories, students will be able to recognize chemical and laboratory hazards, and minimize risks using recognized best practices of laboratory safety.
- Work effectively in group situations.

### Chemistry BA Core Requirements

#### General Chemistry and Laboratory Credits: 15

- CHEM 181 - General Chemistry I **Credits:** (4)
- CHEM 181LAB - General Chemistry Laboratory I **Credits:** (1)
- CHEM 182 - General Chemistry II **Credits:** (4)
- CHEM 182LAB - General Chemistry Laboratory II **Credits:** (1)
- CHEM 183 - General Chemistry III **Credits:** (4)
- **AND** CHEM 183LAB - General Chemistry Laboratory III **Credits:** (1)
- **OR** CHEM 193LAB - General Chemistry III Honors Laboratory **Credits:** (1)



Mathematics Credits: 15

- MATH 172 - Calculus I **Credits:** (5)
- MATH 173 - Calculus II **Credits:** (5)
- MATH 272 - Multivariable Calculus I **Credits:** (5)

Introductory, General or Life Sciences Physics Credits: 15

- PHYS 111 - Introductory Physics I with Laboratory **Credits:** (5)
- PHYS 112 - Introductory Physics II with Laboratory **Credits:** (5)
- PHYS 113 - Introductory Physics III with Laboratory **Credits:** (5)  
**OR**
- PHYS 121 - Introductory Physics for Life Sciences I **Credits:** (5)
- PHYS 122 - Introductory Physics for Life Sciences II **Credits:** (5)
- PHYS 123 - Introductory Physics for Life Sciences III **Credits:** (5)  
**OR**
- PHYS 181 - General Physics I with Laboratory **Credits:** (5)
- PHYS 182 - General Physics II with Laboratory **Credits:** (5)
- PHYS 183 - General Physics III with Laboratory **Credits:** (5)

Total Core Credits: 45

Required Courses Credits: 29

- CHEM 332 - Quantitative Analysis **Credits:** (3)
- CHEM 332LAB - Quantitative Analysis Laboratory **Credits:** (2)
- CHEM 350 - Inorganic Chemistry **Credits:** (3)
- CHEM 361 - Organic Chemistry I **Credits:** (3)
- CHEM 361LAB - Organic Chemistry Laboratory I **Credits:** (2)
- CHEM 362 - Organic Chemistry II **Credits:** (3)
- CHEM 381 - Physical Chemistry (Thermodynamics) **Credits:** (5)
- CHEM 431 - Biochemistry I **Credits:** (3)
- CHEM 431LAB - Biochemistry Laboratory **Credits:** (2)
- CHEM 488 - Colloquium **Credits:** (1)
- CHEM 492 - Laboratory Experience in Teaching Chemistry **Credits:** (2)

Department-Approved Electives Credits: 5-6

- CHEM 295 - Research **Credits:** (1-6)
- CHEM 345 - Environmental Chemistry **Credits:** (5)
- CHEM 363 - Organic Chemistry III **Credits:** (3)
- CHEM 363LAB - Organic Chemistry Laboratory II **Credits:** (2)

- CHEM 382 - Physical Chemistry (Quantum Chemistry) **Credits:** (3)
- CHEM 382LAB - Integrated Physical/Inorganic Laboratory I **Credits:** (2)
- CHEM 383 - Physical Chemistry (Quantum, Statistical Mechanics) III **Credits:** (4)
- CHEM 383LAB - Integrated Physical/Inorganic Laboratory II **Credits:** (1)
- CHEM 395 - Research **Credits:** (1-6)
- CHEM 432 - Biochemistry II **Credits:** (3)
- CHEM 433 - Biochemistry III **Credits:** (3)
- CHEM 433LAB - Biochemistry Lab II **Credits:** (2)
- CHEM 452 - Instrumental Analysis Lecture **Credits:** (3)
- CHEM 452LAB - Instrumental Analysis Laboratory **Credits:** (2)
- CHEM 473 - Transition Metal Chemistry **Credits:** (3)
- CHEM 495 - Senior Research **Credits:** (1-6)

Total Credits: 79-80

College and Department Information

Chemistry Department  
College of the Sciences

**Program Outcomes**

Visit program outcomes to find out what you can expect to know and do after successful completion of this program.

## Biochemistry Major, BS

This major is designed for students who plan a career in biochemistry or a related health science area such as medicine or dentistry. Majors may pursue further graduate studies, a career in biotechnology or a related industry.

Students are recommended to take MATH 273 before taking CHEM 381.

**Program Learner Outcomes**

Upon successful completion of this program, students will be able to:

- Master the concepts and skills, including experimental techniques, designated in curriculum learning outcomes for courses in General, Analytical, Biochemistry, Inorganic, Organic, and Physical chemistry, which are needed to graduate and successfully pursue career pathways.
- Write and speak clearly in the language and style of the discipline.
- Demonstrate critical thinking skills needed to develop explanations, support qualitative and quantitative problem solving, and design experiments to test hypotheses.
- Use computers and the modern software of the discipline to fulfill designated curricular outcomes in lab and lecture courses that require data acquisition and analysis, instrument control, computation and

display of molecular structure, or preparation of written reports or oral presentations.

- Retrieve and critically analyze chemical literature.
- Practice health and safety protocols that are integral to the discipline.
- Work effectively in group situations.

#### Chemistry BS Core Requirements

##### General Chemistry and Laboratory: Credits 15

- CHEM 181 - General Chemistry I **Credits:** (4)
- CHEM 181LAB - General Chemistry Laboratory I **Credits:** (1)
- CHEM 182 - General Chemistry II **Credits:** (4)
- CHEM 182LAB - General Chemistry Laboratory II **Credits:** (1)
- CHEM 183 - General Chemistry III **Credits:** (4)
- **AND** CHEM 183LAB - General Chemistry Laboratory III **Credits:** (1)
- **OR** CHEM 193LAB - General Chemistry III Honors Laboratory **Credits:** (1)

##### Organic Chemistry: Credits 13

- CHEM 361 - Organic Chemistry I **Credits:** (3)
- CHEM 361LAB - Organic Chemistry Laboratory I **Credits:** (2)
- CHEM 362 - Organic Chemistry II **Credits:** (3)
- CHEM 363 - Organic Chemistry III **Credits:** (3)
- CHEM 363LAB - Organic Chemistry Laboratory II **Credits:** (2)

##### Total Core Credits: 28

##### Required Courses Credits: 82

- BIOL 321 - Genetics **Credits:** (5)
- CHEM 350 - Inorganic Chemistry **Credits:** (3)
- CHEM 488 - Colloquium **Credits:** (1)

##### Calculus Credits: 15

- MATH 172 - Calculus I **Credits:** (5)
- MATH 173 - Calculus II **Credits:** (5)
- MATH 272 - Multivariable Calculus I **Credits:** (5)

##### General Biology Credits: 15

- BIOL 181 - General Biology I **Credits:** (5)
- BIOL 182 - General Biology II **Credits:** (5)
- BIOL 183 - General Biology III **Credits:** (5)

##### Quantitative Analysis Credits: 5

- CHEM 332 - Quantitative Analysis **Credits:** (3)

- CHEM 332LAB - Quantitative Analysis Laboratory **Credits:** (2)

##### Physical Chemistry Credits: 10

- CHEM 381 - Physical Chemistry (Thermodynamics) **Credits:** (5)
- CHEM 382 - Physical Chemistry (Quantum Chemistry) **Credits:** (3)
- CHEM 382LAB - Integrated Physical/Inorganic Laboratory I **Credits:** (2)

##### Biochemistry Credits: 13

- CHEM 431 - Biochemistry I **Credits:** (3)
- CHEM 431LAB - Biochemistry Laboratory **Credits:** (2)
- CHEM 432 - Biochemistry II **Credits:** (3)
- CHEM 433 - Biochemistry III **Credits:** (3)
- CHEM 433LAB - Biochemistry Lab II **Credits:** (2)

##### Introductory, General or Life Sciences Physics Credits: 15

- PHYS 111 - Introductory Physics I with Laboratory **Credits:** (5)
- PHYS 112 - Introductory Physics II with Laboratory **Credits:** (5)
- PHYS 113 - Introductory Physics III with Laboratory **Credits:** (5)
- **OR**
- PHYS 181 - General Physics I with Laboratory **Credits:** (5)
- PHYS 182 - General Physics II with Laboratory **Credits:** (5)
- PHYS 183 - General Physics III with Laboratory **Credits:** (5)
- **OR**
- PHYS 121 - Introductory Physics for Life Sciences I **Credits:** (5)
- PHYS 122 - Introductory Physics for Life Sciences II **Credits:** (5)
- PHYS 123 - Introductory Physics for Life Sciences III **Credits:** (5)

##### Department-Approved Electives Credits: 2-5

- BIOL 323 - Microbiology **Credits:** (5)
- BIOL 425 - Molecular Biotechnology **Credits:** (5)
- BIOL 430 - Cell Biology **Credits:** (5)
- CHEM 383 - Physical Chemistry (Quantum, Statistical Mechanics) III **Credits:** (4)
- **AND** CHEM 383LAB - Integrated Physical/Inorganic Laboratory II **Credits:** (1)
- CHEM 452 - Instrumental Analysis Lecture **Credits:** (3)
- **AND** CHEM 452LAB - Instrumental Analysis Laboratory **Credits:** (2)
- CHEM 495 - Senior Research **Credits:** (1-6)

Total Credits: 112-115

College and Department Information

Chemistry Department  
College of the Sciences

## Chemistry Major, BS

The bachelor of science major is designed for students who plan a career in chemistry or related fields. The program prepares students for further study in graduate programs, or to enter the workplace directly. The BS degree is certified by the American Chemical Society if the nine department-approved electives come from a designated set of upper-division courses within chemistry. Consult your major advisor about department-approved electives.

Students are recommended to take MATH 273 before taking CHEM 381.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Master the concepts and skills, including experimental techniques, designated in curriculum learning outcomes for courses in General, Analytical, Biochemistry, Inorganic, Organic, and Physical chemistry, which are needed to graduate and successfully pursue career pathways.
- Write and speak clearly in the language and style of the discipline.
- Demonstrate critical thinking skills needed to develop explanations, support qualitative and quantitative problem solving, and design experiments to test hypotheses.
- Use computers and the modern software of the discipline to fulfill designated curricular outcomes in lab and lecture courses that require data acquisition and analysis, instrument control, computation and display of molecular structure, or preparation of written reports or oral presentations.
- Retrieve and critically analyze chemical literature.
- Practice health and safety protocols that are integral to the discipline.
- Work effectively in group situations.

Chemistry BS Core Requirements

General Chemistry and Laboratory: Credits 15

- CHEM 181 - General Chemistry I **Credits:** (4)
- CHEM 181LAB - General Chemistry Laboratory I **Credits:** (1)
- CHEM 182 - General Chemistry II **Credits:** (4)
- CHEM 182LAB - General Chemistry Laboratory II **Credits:** (1)
- CHEM 183 - General Chemistry III **Credits:** (4)

- **AND** CHEM 183LAB - General Chemistry Laboratory III **Credits:** (1)
- **OR** CHEM 193LAB - General Chemistry III Honors Laboratory **Credits:** (1)

Organic Chemistry: Credits 13

- CHEM 361 - Organic Chemistry I **Credits:** (3)
- CHEM 361LAB - Organic Chemistry Laboratory I **Credits:** (2)
- CHEM 362 - Organic Chemistry II **Credits:** (3)
- CHEM 363 - Organic Chemistry III **Credits:** (3)
- CHEM 363LAB - Organic Chemistry Laboratory II **Credits:** (2)

Total Core Credits: 28

Required Courses

Quantitative Analysis Credits: 5

- CHEM 332 - Quantitative Analysis **Credits:** (3)
- CHEM 332LAB - Quantitative Analysis Laboratory **Credits:** (2)

Upper-Division Chemistry Credits: 14

- CHEM 350 - Inorganic Chemistry **Credits:** (3)
- CHEM 431 - Biochemistry I **Credits:** (3)
- CHEM 431LAB - Biochemistry Laboratory **Credits:** (2)
- CHEM 452 - Instrumental Analysis Lecture **Credits:** (3)
- CHEM 452LAB - Instrumental Analysis Laboratory **Credits:** (2)
- CHEM 488 - Colloquium **Credits:** (1)

Physical Chemistry Credits: 15

- CHEM 381 - Physical Chemistry (Thermodynamics) **Credits:** (5)
- CHEM 382 - Physical Chemistry (Quantum Chemistry) **Credits:** (3)
- CHEM 382LAB - Integrated Physical/Inorganic Laboratory I **Credits:** (2)
- CHEM 383 - Physical Chemistry (Quantum, Statistical Mechanics) III **Credits:** (4)
- CHEM 383LAB - Integrated Physical/Inorganic Laboratory II **Credits:** (1)

Introductory, General or Life Sciences Physics Credits: 15

- PHYS 111 - Introductory Physics I with Laboratory **Credits:** (5)
- PHYS 112 - Introductory Physics II with Laboratory **Credits:** (5)
- PHYS 113 - Introductory Physics III with Laboratory **Credits:** (5)

- OR**
- PHYS 121 - Introductory Physics for Life Sciences I **Credits: (5)**
  - PHYS 122 - Introductory Physics for Life Sciences II **Credits: (5)**
  - PHYS 123 - Introductory Physics for Life Sciences III **Credits: (5)**
- OR**
- PHYS 181 - General Physics I with Laboratory **Credits: (5)**
  - PHYS 182 - General Physics II with Laboratory **Credits: (5)**
  - PHYS 183 - General Physics III with Laboratory **Credits: (5)**

Calculus Credits: 15

- MATH 172 - Calculus I **Credits: (5)**
- MATH 173 - Calculus II **Credits: (5)**
- MATH 272 - Multivariable Calculus I **Credits: (5)**

Department-Approved Electives Credits: 9

Total Credits: 101

College and Department Information

Chemistry Department  
College of the Sciences

## Chemistry Minor

Required Courses

General Chemistry and Laboratory: Credits 15

- CHEM 181 - General Chemistry I **Credits: (4)**
- CHEM 181LAB - General Chemistry Laboratory I **Credits: (1)**
- CHEM 182 - General Chemistry II **Credits: (4)**
- CHEM 182LAB - General Chemistry Laboratory II **Credits: (1)**
- CHEM 183 - General Chemistry III **Credits: (4)**
- CHEM 183LAB - General Chemistry Laboratory III **Credits: (1)**
- **OR** CHEM 193LAB - General Chemistry III Honors Laboratory **Credits: (1)**

Department-approved Upper-division Electives in Chemistry Credits: 16

Total Credits: 31

College and Department Information

Chemistry Department  
College of the Sciences

# College of Arts and Humanities

## Global Citizenship Certificate

The program is the natural home of the multi-discipline resources that are most relevant to internationalization and to foster the crucial goal of global citizenship. The program reflects in the mission of the university; embarks on a focused effort to identify existing resources, activities and curriculum relevant to that goal; and will further prepare CWU students for success in a global society.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate and describe skills and attitudes of being a global citizen
- Demonstrate and identify effective use of global competencies.
- Self-identify skills and attitudes of global competency and describe how they intend to further develop and enhance their own global competencies.

### Program Requirements

The student must complete at least one (1) course selection form at least four (4) of the following categories with a minimum of 16 credits. No more than two (2) courses can be from the same course prefix.

#### 1. Study Abroad

Any university-approved international study abroad course up to 5 credits.

#### 2. World Language

Complete at least one course in one of the following languages:

- ASL 151 - American Sign Language **Credits: (5)**
- ASL 152 - American Sign Language **Credits: (5)**
- ASL 153 - American Sign Language **Credits: (5)**
- ASL 251 - Second-year American Sign Language **Credits: (5)**
- ASL 252 - Second-year American Sign Language **Credits: (5)**
- ASL 253 - Second-year American Sign Language **Credits: (5)**
- CHIN 151 - First-year Chinese **Credits: (5)**
- CHIN 152 - First-year Chinese **Credits: (5)**
- CHIN 153 - First-year Chinese **Credits: (5)**
- CHIN 251 - Second-year Chinese **Credits: (5)**
- CHIN 252 - Second-year Chinese **Credits: (5)**
- CHIN 253 - Second-year Chinese **Credits: (5)**
- FR 151 - First-year French **Credits: (5)**

- FR 152 - First-year French **Credits: (5)**
- FR 153 - First-year French **Credits: (5)**
- FR 251 - Second-year French **Credits: (5)**
- FR 252 - Second-year French **Credits: (5)**
- FR 253 - Second-year French **Credits: (5)**
- GERM 151 - First-year German **Credits: (5)**
- GERM 152 - First-year German **Credits: (5)**
- GERM 153 - First-year German **Credits: (5)**
- JAPN 151 - First-year Japanese **Credits: (5)**
- JAPN 152 - First-year Japanese **Credits: (5)**
- JAPN 153 - First-year Japanese **Credits: (5)**
- JAPN 251 - Second-year Japanese **Credits: (5)**
- JAPN 252 - Second-year Japanese **Credits: (5)**
- JAPN 253 - Second-year Japanese **Credits: (5)**
- LAT 151 - Latin **Credits: (5)**
- RUSS 151 - First-year Russian **Credits: (5)**
- RUSS 152 - First-year Russian **Credits: (5)**
- RUSS 153 - First-year Russian **Credits: (5)**
- RUSS 251 - Second-year Russian **Credits: (5)**
- RUSS 252 - Second-year Russian **Credits: (5)**
- RUSS 253 - Second-year Russian **Credits: (5)**
- SPAN 151 - First-year Spanish **Credits: (5)**
- SPAN 152 - First-year Spanish **Credits: (5)**
- SPAN 153 - First-year Spanish **Credits: (5)**
- SPAN 251 - Second-year Spanish **Credits: (5)**
- SPAN 252 - Second-year Spanish **Credits: (5)**
- SPAN 253 - Second-year Spanish **Credits: (5)**

### 3. World Art/Literature

Complete at least one of the following courses:

- AST 301 - Chinese Literature in Translation **Credits: (4)**
- **OR** CHIN 301 - Chinese Literature in Translation **Credits: (4)**
- ENG 347 - Global Perspectives in Literature **Credits: (5)**
- HIST 321 - Latin America Through Film, Art, and Music **Credits: (5)**
- MUS 359 - Survey of Music in Cross-cultural Perspectives **Credits: (2)**
- TH 375 - Asian Drama **Credits: (4)**

### 4. Cultural Studies

Complete at least one of the following courses:

- AST 102 - Introduction to Asian Studies **Credits: (5)**
- AST 310 - Japan Today **Credits: (3)**
- ENG 360 - Cinema Studies IV: Survey of World Cinema **Credits: (5)**
- FR 200 - Introduction to French Culture **Credits: (5)**
- FR 201 - Appreciation of French Cuisine **Credits: (5)**
- FR 363 - Cultures of Francophone Africa **Credits: (4)**
- HIST 323 - Food and Drink in Global History **Credits: (5)**
- HIST 460 - Religion in Latin America **Credits: (5)**

- JAPN 462 - Japanese Cinema **Credits: (5)**
- LLAS 102 - An Introduction to Latino and Latin American Studies **Credits: (5)**
- LLAS 301 - Urban Society in Latin America **Credits: (5)**
- LLAS 388 - Mexican Cultural Studies **Credits: (5)**
- RELS 101 - World Religions **Credits: (5)**
- RELS 351 - Religions of China and Japan **Credits: (5)**
- RELS 352 - Religions of India **Credits: (5)**
- RUSS 200 - The Art of the Protest: Censorship and Resistance in Russian Culture **Credits: (5)**
- RUSS 462 - Russian Cinema **Credits: (4)**
- SPAN 446 - Hispanic Cinema **Credits: (5)**
- WLC 311 - Popular Cultures of the World **Credits: (5)**

### 5. World History/Philosophy

Complete at least one of the following courses:

- HIST 320 - Narcotics in World History **Credits: (5)**
- HIST 328 - Modern Latin America **Credits: (5)**
- HIST 329 - The Tropics and the Modern World **Credits: (5)**
- HIST 332 - History of the Black Diaspora **Credits: (5)**
- HIST 344 - American Manhood in Historical Perspective **Credits: (5)**
- HIST 380 - Modern East Asia **Credits: (5)**
- HIST 385 - Aztec, Inca, Maya: Empire and City in the New World **Credits: (5)**
- HIST 424 - Modern Ireland: 1798-present **Credits: (5)**
- HIST 429 - Ireland and Empire **Credits: (5)**
- HIST 474 - Russia Since 1881 **Credits: (5)**
- HIST 483 - Modern China **Credits: (5)**
- HIST 488 - Mexico in the Modern Era **Credits: (5)**
- PHIL 106 - Asian Philosophy **Credits: (5)**
- PHIL 345 - Chinese Philosophy **Credits: (5)**

Total Credits: 16-20

College and Department Information

College of Arts and Humanities

#### Program Learner Outcomes

Visit program outcomes to find out what you can expect to know and do after successful completion of this program.

## Liberal Studies Minor

Students in the interdisciplinary Liberal Studies minor must take courses in at least three disciplines within the minor and no more than 10 credits of lower division coursework may be included. 20-21 credits must be taken from the list of courses approved for the Liberal Studies minor. No more than 5 credits may be numbered 490.

## Liberal Arts PLUS

Students seeking the minor are encouraged to include the Liberal Arts PLUS Certificates or Opportunities along with the minor.

Core Courses Credits: 9-10

- CAH 289 - Introduction to Liberal Studies **Credits:** (1)
- CAH 389 - Academic and Career Exploration **Credits:** (3)
- CAH 489 - Senior Portfolio Capstone **Credits:** (1)

Research Methods in Liberal Studies

Choose 4-5 credits from the following approved courses:

- COM 300 - Media Research **Credits:** (5)
- COM 351 - Visual Anthropology **Credits:** (4)
- ENG 303 - Principles of English Studies **Credits:** (5)
- HIST 302 - Historical Methods **Credits:** (5)
- HIST 395 - Research in Local History **Credits:** (1-6)
- UNIV 205 - Introduction to Interdisciplinary Research **Credits:** (2)
- **AND** UNIV 295 - Introduction to Undergraduate Research **Credits:** (2) (UNIV 205 and UNIV 295 must be taken together)
- WLC 427 - Cross-Cultural Competence in a Globalized World **Credits:** (5)

Department-Approved Electives Credits: 20-21

As approved by the liberal studies program director. An elective course of study will be submitted as a part of CAH 289.

Total Credits: 33-36

College and Department Information

College of Arts and Humanities

# Communication Department

College of Arts and Humanities

Ellensburg

Lind Hall, room 109

Mail Stop 7438

509-963-1055

Fax: 509-963-1060

[www.cwu.edu/communication](http://www.cwu.edu/communication)

See website for how the communication programs may be used for educational and career purposes.

## Faculty and Staff

### Chair

Katharine Whitcomb, MFA

### Associate Chair

Francesco Somaini, PhD, media studies

### Professors

César García, PhD, information sciences

James L. Gaudino, PhD, communication studies

### Associate Professors

Cynthia Mitchell, MBA, operations management and finance

Maria Sanders, MFA, film editing

### Assistant Professors

Emily DuPlessis, MA, communication

Francesco Somaini, PhD, media studies

### Lecturers

Michael Caldwell, MFA, film and video studies

Yong Cao, ABD, communication

Luther Clement, MFA

Jamie Gilbert, MEd, non-profit organization management

Jennifer Green, MA, cultural anthropology

Jillene Krause, ABD, communication studies

Joshua Nelson-Ichido, ABD, communication studies

Melissa Johnson, MA, English, film studies

Terri Reddout, MS, communication

Patrick Smith, MFA, film and media production

Toby Staab, MEd, education

Arrington Stoll, PhD, communication

Nicholas Temple, PhD, communication studies

Jon Ward, MA, film and video studies

### Staff

Bianca Scott, secretary senior

## Department Information

The Department of Communication prepares students to become active participants in communicating with and the shaping of modern culture in a global society. The department emphasizes student-centered instruction in gathering and disseminating written, spoken, and visual information, as well as course work in the processes, effects, and theories of human communication. The department is committed to a liberal education in written, oral, visual, and convergent media communication, as well as to training in diverse professional fields.

## Department Standards

### Admission Requirements

Admission to the Department of Communication majors in Digital Journalism, Communication Studies and Public Relations is selective. Students need to complete the application form, attach a copy of their AR Report, and submit these documents to the Department of Communication office in Bouillon Hall 232A. Only students with a minimal overall grade point average of 2.4 (Digital Journalism) or 2.7 (Communication Studies and Public Relations) will be accepted. Should students wish to change majors within the department, they must reapply to the new major.

### Completion Requirements

Once admitted to the major, students must take COM 201 and COM 207 as soon as possible. An overall average of B in these two foundational courses is required. In all other courses counted toward fulfilling major requirements, a minimum grade of C- is required. Students must also maintain an overall 2.4 (Digital Journalism) or 2.7 (Communication Studies and Public Relations) grade point average. No more than 8 credits may be counted twice in fulfilling an internal or external minor.

### Financial Obligations

Production courses required for broadcast journalism and/or film and video studies have associated lab fees.

### Communication Foundation Core Requirements

COM 201 - Introduction to Mass Communication Credits: 5  
COM 207 - Introduction to Human Communication Credits: 5  
Total Core Credits: 10

### Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### Course Offerings

Frequency of course offerings can be found at the department website: [www.cwu.edu/communication](http://www.cwu.edu/communication) or by contacting the department directly.

## Communication Studies Major, BA

The communication studies major begins with a traditional liberal arts perspective, infuses an international/intercultural perspective, and then focuses on practical application of communication knowledge and skill. The major is intended for students who wish to be at home in a wide range of situations and cultures and who value the role of communication in creating effective relationships locally and globally. The major is also an effective foundation for advanced study (academic or professional). Students must complete the two communication foundation courses (COM 201 and COM 207) with an overall average of B, in order to graduate from the major.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Understand multiple theoretical perspectives and diverse (including Western, Eastern, and others) intellectual underpinnings of communication.
- Understand the principles of human dialogue together with competency in creating and sustaining that dialogue.
- Demonstrate competency in presentation, preferably in more than one form.
- Demonstrate competency in construction and analysis of persuasive discourse intended to influence beliefs, attitudes, values, and practices.
- Demonstrate competency in systematic inquiry in the analysis of communication systems and processes (the process of asking questions and systematically attempting to answer them, and understanding the limitations of the conclusion reached).

### Communication Foundation Core Requirements

- COM 201 - Introduction to Mass Communication  
**Credits: (5)**
- COM 207 - Introduction to Human Communication  
**Credits: (5)**

Total Communication Foundation Core Credits: 10

### Required Courses

- COM 251 - Small Group Dynamics **Credits: (4)**
- COM 253 - Interpersonal Communication **Credits: (4)**
- COM 302 - Intercultural Communication **Credits: (4)**
- COM 345 - Business and Professional Speaking  
**Credits: (4)**
- COM 350 - Persuasion and Culture **Credits: (4)**
- COM 365 - Organizational Communication **Credits: (4)**
- COM 380 - Non-Verbal Communication **Credits: (4)**
- COM 401 - Communication Theory **Credits: (4)**
- COM 450 - Advanced Public Speaking **Credits: (4)**
- COM 451 - Communication Analysis and Research  
**Credits: (4)**
- COM 485 - Senior Seminar **Credits: (4)**
- COM 489 - Portfolio Assessment **Credits: (1)**

Total Required Course Credits: 45

Collaboration Requirement - minimum of 4 credits

Students are required to take at least one upper division course (300 level or above) in a department outside the Communication Department. Collaboration course must be approved by major advisor.

Specialization or Study Abroad

Study Abroad Option

Twelve (12) pre-approved credits from CWU or participating international institution.

OR

#### Non-Study Abroad Specialization Option

Twelve (12) pre-approved credits: You must take at least eight (8) credits from Intercultural/International Communication or at least eight (8) credits from Organizational Communication.

#### Intercultural and International Communication

- COM 362 - Conflict and Communication **Credits:** (4)
- COM 402 - Gender Communication **Credits:** (4)
- COM 407 - Advanced Intercultural Communication **Credits:** (4)
- COM 490 - Cooperative Education **Credits:** (1-12)  
(May be repeated up to 4 times)

#### Organizational Communication

- COM 375 - Interviewing Principles and Techniques **Credits:** (4)
- COM 403 - Family Communication **Credits:** (4)
- COM 465 - Communication and Organizational Leadership **Credits:** (4)
- COM 490 - Cooperative Education **Credits:** (1-12)  
(Must be taken for 4 credits)

Specialization or Study Abroad Total Credits: 12

Department-approved upper-division electives in COM Credits: 4

May include COM 315.

Total Credits: 75

#### College and Department Information

Communication Department  
College of Arts and Humanities

## Digital Journalism Major, BA

In today's environment of converging media, successful journalists need the necessary skills and concepts to tell meaningful stories for a variety of outlets. In this major, students learn how to conceive ideas and collect and present information using words, pictures, and sounds to craft news stories that are accurate, fair, clear, and compelling. Whether destined for print, online or broadcast presentation, the focus is on preparing students to research, report and communicate news and non-fiction stories that engage audiences and make a difference in people's lives. Students will learn how to build an online platform for their journalism and how to engage with their audience. Students will also understand the ethical, legal, historical and societal environment of journalism and the fundamental role media plays in our social, political and economic systems. Students must complete the communication

foundation courses prior to acceptance into the journalism major.

#### Program Requirements

Students must complete the two communication foundation courses (COM 201 and COM 207) with an overall average of B, in order to graduate from the major.

#### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- **Technical skills:** Students will be able to create news and feature stories by discovering, evaluating and interviewing diverse sources, observing, working a beat, doing computer- assisted research and requesting and accessing documents. Students will be able to write thorough and compelling articles in a variety of styles, produce quality audio and video, and build effective Web sites.
- **Ethical behavior:** Students will understand the historical, socio-political, legal and cultural context for the ethical decisions they must make. Students will be able to uphold the legal and ethical principles and responsibilities of a free press, and will be committed to the First Amendment and to the press's role as a "watchdog" in society.
- **Specialization:** To know in-depth at least one journalism specialization: print, online, or broadcast. To be able to demonstrate professional-quality work in one field.
- **Leadership skills / Working in a team:** Students will be able to work as a team to produce media products for general distribution - NewsWatch, Observer, Online.
- **Students are satisfied with their program.**

#### Communication Foundation Core Requirements

- COM 201 - Introduction to Mass Communication **Credits:** (5)
- COM 207 - Introduction to Human Communication **Credits:** (5)

Total Communication Foundation Core Credits: 10

#### Digital Journalism Core Requirements Credits: 38

All digital journalism majors are required to take all the courses in the digital journalism core requirements.

- COM 226 - Introduction to Writing and Reporting for Digital Journalism **Credits:** (5)
- COM 303 - Online and Social Media Strategies **Credits:** (5)
- COM 308 - Public Affairs Reporting and Writing **Credits:** (5)
- COM 321 - Visual Storytelling **Credits:** (5)
- COM 460 - Communication Law **Credits:** (5)
- COM 489 - Portfolio Assessment **Credits:** (1)
- COM 490 - Cooperative Education **Credits:** (1-12)  
(Must be taken for 5 credits)



- ENG 220 - Grammar for Writers **Credits:** (2)
- FILM 340 - Production I **Credits:** (5)

Student Choice Courses Credits: 13

Select one course from each pair of options below.

- COM 310 - Writing and Reporting for Broadcast Journalism **Credits:** (5)
- **OR** COM 408 - Feature Writing and Freelancing **Credits:** (5)
- COM 342 - Broadcast News Producing **Credits:** (4)
- **OR** COM 347 - Copy Editing **Credits:** (4)
- COM 348 - Publication Design **Credits:** (4)
- **OR** COM 375 - Interviewing Principles and Techniques **Credits:** (4)

Media Requirements Credits: 14

Select at least one course in each section. Courses may be repeated to reach the 14-credit total.

CentralNewsWatch

- COM 442 - CentralNewsWatch Reporting **Credits:** (3)
- COM 462 - CentralNewsWatch Management **Credits:** (3)

Pulse

- COM 446 - Pulse **Credits:** (2)
- COM 478 - Advanced Newspaper Editing **Credits:** (3-6)

Observer

- COM 468 - Observer **Credits:** (1-3)
- COM 478 - Advanced Newspaper Editing **Credits:** (3-6)

Total Credits: 75

College and Department Information

Communication Department  
College of Arts and Humanities

## Public Relations Major, BA

Public relations has become an indispensable part of any organization, company, institution, or government trying to create a body of public opinion to support its mission, vision, or values. Understood as a management function in modern organizations in the corporate world, this same professional level has been adopted by NGOs, non-profit organizations, and even governments and countries as a whole. This new scenario

offers plenty of opportunities for multifaceted public relations practitioners with skills in written and interpersonal communication, research, negotiation, leadership, creativity, logistics, and problem solving.

Students must complete the two communication foundation courses (COM 201 and COM 207) with an overall average of B, in order to graduate from the major.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Know technical skills such as but not limited to data gathering, information processing and practice writing.
- Combine strategies, tactics and planning in order to achieve goals.
- Know in-depth at least one of the Public Relations specialties that has reshaped the PR landscape in recent years (industry, business or organization; PR practice areas).
- Know how to lead a project, be critical with others' work and understand the ultimate objectives of organizations.
- Learn how to influence and/or persuade audiences with solid and well-chosen arguments.
- Students are satisfied with their learning in the program.

Communication Foundation Core Requirements

- COM 201 - Introduction to Mass Communication **Credits:** (5)
- COM 207 - Introduction to Human Communication **Credits:** (5)

Total Communication Foundation Core Credits: 10

Required Courses

- COM 208 - Introduction to Public Relations Writing **Credits:** (4)
- COM 270 - Introduction to Public Relations **Credits:** (4)
- COM 345 - Business and Professional Speaking **Credits:** (4)
- COM 370 - Advanced Public Relations Writing **Credits:** (4)
- COM 470 - Public Relations Strategies **Credits:** (4)
- COM 475 - Public Relations Management **Credits:** (4)
- COM 489 - Portfolio Assessment **Credits:** (1)
- COM 490 - Cooperative Education **Credits:** (1-12) (must be taken for 5 credits)
- MKT 360 - Principles of Marketing **Credits:** (5)

Select eight (8) credits in media from the following:

- COM 303 - Online and Social Media Strategies **Credits: (5)**
- COM 442 - CentralNewsWatch Reporting **Credits: (3)**
- COM 446 - Pulse **Credits: (2)**
- COM 468 - Observer **Credits: (1-3)**
- COM 478 - Advanced Newspaper Editing **Credits: (3-6)**
- COM 481 - Central Communication Agency **Credits: (2)**
- COM 483 - Advanced Central Communication Agency **Credits: (3)**

Select eight (8) credits in public relations specializations from the following:

- COM 371 - Event Planning and Management **Credits: (4)**
- COM 472 - Global Public Relations **Credits: (4)**
- COM 473 - Crisis Communication Management **Credits: (4)**
- COM 487 - Advanced Public Relations Seminar **Credits: (4)**

Select fourteen (14) pre-approved upper-division elective credits from the following:

Student may choose additional COM course with advisor pre-approval. Credits cannot be counted twice in the major and electives.

- COM 300 - Media Research **Credits: (5)**
- COM 302 - Intercultural Communication **Credits: (4)**
- COM 305 - Advertising Copywriting **Credits: (4)**
- COM 312 - Introduction to Non-Profit Leadership **Credits: (4)**
- COM 315 - Studies in Communication **Credits: (1)**
- COM 321 - Visual Storytelling **Credits: (5)**
- COM 333 - Communication Ethics **Credits: (4)**
- COM 347 - Copy Editing **Credits: (4)**
- COM 348 - Publication Design **Credits: (4)**
- COM 350 - Persuasion and Culture **Credits: (4)**
- COM 362 - Conflict and Communication **Credits: (4)**
- COM 365 - Organizational Communication **Credits: (4)**
- COM 369 - Mass Media and Society **Credits: (4)**
- COM 371 - Event Planning and Management **Credits: (4)**
- COM 375 - Interviewing Principles and Techniques **Credits: (4)**
- COM 380 - Non-Verbal Communication **Credits: (4)**
- COM 388 - Advertising Planning **Credits: (4)**
- COM 401 - Communication Theory **Credits: (4)**
- COM 402 - Gender Communication **Credits: (4)**
- COM 403 - Family Communication **Credits: (4)**
- COM 427 - Grant Writing **Credits: (4)**
- COM 460 - Communication Law **Credits: (5)**
- COM 465 - Communication and Organizational Leadership **Credits: (4)**

- COM 472 - Global Public Relations **Credits: (4)**
- COM 473 - Crisis Communication Management **Credits: (4)**
- COM 481 - Central Communication Agency **Credits: (2)**
- COM 483 - Advanced Central Communication Agency **Credits: (3)**
- COM 487 - Advanced Public Relations Seminar **Credits: (4)**

Total Credits: 75

College and Department Information

Communication Department  
College of Arts and Humanities

## Advertising Minor

The minor in advertising is open to students majoring in all fields. The program prepares students with effective written and visual communication, critical thinking, planning, production, distribution, and research skills related to advertising.

Required Courses

- COM 201 - Introduction to Mass Communication **Credits: (5)**
- COM 280 - Advertising Fundamentals **Credits: (4)**
- COM 300 - Media Research **Credits: (5)**
- COM 388 - Advertising Planning **Credits: (4)**

Select 4 credits from the following:

- COM 305 - Advertising Copywriting **Credits: (4)**
- COM 309 - Writing Broadcast Advertising **Credits: (4)**

Select 4 credits from the following:

- COM 481 - Central Communication Agency **Credits: (2)** (Repeatable for credit)
- COM 490 - Cooperative Education **Credits: (1-12)** (Must be taken for 4 credits)
- COM 492 - Communication Practicum **Credits: (2)** (Repeatable for credit)

Total Credits: 26

College and Department Information

Communication Department  
College of Arts and Humanities

## Communication Minor

The communication minor introduces students to the study of communication within a modern social and cultural context.

Students in teacher education must meet with the department chair and the certification director to determine the course of study necessary for endorsement.

### Required Courses

- COM 201 - Introduction to Mass Communication **Credits: (5)**
- COM 207 - Introduction to Human Communication **Credits: (5)**

Department-approved Electives Credits: (18)

Total Credits: 28

### College and Department Information

Communication Department  
College of Arts and Humanities

## Non-profit Organization Management Minor (COM)

The minor in non-profit organization management is an interdisciplinary minor designed to provide an understanding of the organization, financing and management issues in non-profit organizations. It is designed to complement majors in artistic, advocacy and educational endeavors. The minor provides practical, hands-on skills as well as discussion of the issues facing non-profit organizations.

Required Courses: Credits (13)

- ACCT 301 - Accounting Skills for Non-Accounting Majors **Credits: (5)**
- COM 312 - Introduction to Non-Profit Leadership **Credits: (4)**
- COM 427 - Grant Writing **Credits: (4)**

Select 12 credits from at least two prefixes from the following electives:

- ANTH 360 - Introduction to Museum Studies **Credits: (4)**
- ANTH 361 - Museum Exhibit Design **Credits: (4)**
- COM 208 - Introduction to Public Relations Writing **Credits: (4)**
- COM 270 - Introduction to Public Relations **Credits: (4)**
- COM 315 - Studies in Communication **Credits: (1)**
- COM 348 - Publication Design **Credits: (4)**
- COM 362 - Conflict and Communication **Credits: (4)**

- COM 365 - Organizational Communication **Credits: (4)**
- COM 370 - Advanced Public Relations Writing **Credits: (4)**
- COM 371 - Event Planning and Management **Credits: (4)**
- COM 375 - Interviewing Principles and Techniques **Credits: (4)**
- COM 487 - Advanced Public Relations Seminar **Credits: (4)**
- SOC 365 - Minority Groups **Credits: (5)**
- SOC 442 - Social Welfare Policy **Credits: (5)**
- SOC 445 - Social Inequality **Credits: (5)**
- SOC 459 - Organizations **Credits: (5)**
- SOC 460 - Community Structure and Organization **Credits: (5)**
- TH 350 - Theatre and Arts Management I **Credits: (4)**
- TH 351 - Theatre and Arts Management II **Credits: (4)**
- TH 360 - Stage Management **Credits: (3)**

Choose one from the following: Credits (5)

- ANTH 490 - Cooperative Education **Credits: (1-12)**
- ART 490 - Cooperative Education **Credits: (1-12)**
- COM 490 - Cooperative Education **Credits: (1-12)**
- MUS 490 - Cooperative Education **Credits: (1-12)**
- TH 490 - Cooperative Education **Credits: (1-12)**

Total Credits: 30

### College and Department Information

Communication Department  
College of Arts and Humanities

## Organizational Communication Minor

The minor in organizational communication is designed to complement a broad spectrum of majors leading to careers in government, education, social and community services. Emphasis is placed on an understanding of the basic nature of communication in organizations, and on the fundamental knowledge and skills necessary for effective communication in organizations at the interpersonal small group, and public (large group) levels.

### Required Courses

- COM 251 - Small Group Dynamics **Credits: (4)**
- **OR** COM 302 - Intercultural Communication **Credits: (4)**
- COM 345 - Business and Professional Speaking **Credits: (4)**
- COM 365 - Organizational Communication **Credits: (4)**

- COM 375 - Interviewing Principles and Techniques **Credits:** (4)
- COM 490 - Cooperative Education **Credits:** (1-12)  
(Must be taken for 5 credits)

Department-Approved Electives Credits: (4)

Total Credits: 25

College and Department Information

Communication Department  
College of Arts and Humanities

## Non-profit Organization Management Certificate (COM)

The certificate in non-profit organization management is an interdisciplinary approach to provide an understanding of the organization, financing, and management issues in non-profit organizations. It is designed to complement majors in artistic, advocacy, and educational endeavors. The courses provide practical, hands-on skills as well as discussion of the issues facing non-profit organizations.

Required Courses: Credits (13)

- ACCT 301 - Accounting Skills for Non-Accounting Majors **Credits:** (5)
- COM 312 - Introduction to Non-Profit Leadership **Credits:** (4)
- COM 427 - Grant Writing **Credits:** (4)

Select 8 credits at least two prefixes from the following electives:

- ANTH 360 - Introduction to Museum Studies **Credits:** (4)
- ANTH 361 - Museum Exhibit Design **Credits:** (4)
- COM 208 - Introduction to Public Relations Writing **Credits:** (4)
- COM 270 - Introduction to Public Relations **Credits:** (4)
- COM 315 - Studies in Communication **Credits:** (1)
- COM 348 - Publication Design **Credits:** (4)
- COM 362 - Conflict and Communication **Credits:** (4)
- COM 370 - Advanced Public Relations Writing **Credits:** (4)
- COM 371 - Event Planning and Management **Credits:** (4)
- COM 487 - Advanced Public Relations Seminar **Credits:** (4)
- SOC 365 - Minority Groups **Credits:** (5)
- SOC 442 - Social Welfare Policy **Credits:** (5)
- SOC 445 - Social Inequality **Credits:** (5)
- SOC 459 - Organizations **Credits:** (5)

- SOC 460 - Community Structure and Organization **Credits:** (5)
- TH 350 - Theatre and Arts Management I **Credits:** (4)
- TH 351 - Theatre and Arts Management II **Credits:** (4)
- TH 360 - Stage Management **Credits:** (3)

Total Credits: 21

College and Department Information

Communication Department  
College of Arts and Humanities

## Professional Writing Certificate (COM)

Professional Writing Certificate

The professional writing certificate allows students to develop their writing skills for professional and business environments. It is delivered entirely online to serve professionals already working in careers as well as students planning to begin professional or business careers. Students will learn the rhetorical requirements for specific forms of written communication, including letters, memos, reports, proposals, promotional materials, and press releases. They will also learn to edit their own writing for clarity, correctness, and style.

Required Courses

- ENG 301 - Rhetoric for Professional Writers **Credits:** (5)
- ENG 310 - Technical Writing **Credits:** (4)
- COM 347 - Copy Editing **Credits:** (4)
- COM 370 - Advanced Public Relations Writing **Credits:** (4)

Total Credits: 17

College and Department Information

Communication Department  
College of Arts and Humanities

## Radio Broadcasting Certificate

A specialized certificate program designed to be completed within 1-academic school year. The program provides an overview of the practice, technology, production and promotion/sales of Radio Broadcasting. Topics include On-air presentation skills, radio board operation, audio production, radio news, radio production, call screening, radio promotions, programming, voice over, and interviewing.

Students trained via the nationwide music scheduling software certification Music Master, Inc. Students learn the trade while

being trained on broadcast industry standard equipment, approaching tasks in a laboratory environment, going through industry standard certification, and having industry guest lecturers and/or speakers.

### Admission Requirements

#### Eligibility

The total number of applicants admitted may be limited. The following requirements must be met:

A minimum overall college GPA of 2.5

Completed the following; COM 201 (Mass Media), COM 202 Law and Ethics of the First Amendment and FILM 215, Production Technology Skills, Audio Tech, or equivalent

Work experience may substitute for the above academic prerequisites and is subject to evaluation by the advisor

### Graduation Requirements

Obtain a passing grade of C- or higher in each course within the Certificate Program.

### Program Requirements

Students are required to apply for admission into the program. Students are also required to understand, speak and write conversational English. Students must have a basic understanding of computers.

#### Prerequisites

Work experience may substitute for academic prerequisites and is subject to evaluation by the advisor.

- COM 201 - Introduction to Mass Communication **Credits:** (5)
- COM 202 - The First Amendment: Rights and Responsibilities **Credits:** (5)
- FILM 215 - Production Technology Skills **Credits:** (1) (Must take subtitle Audio Tech for 1 credit)

#### Required Courses

- COM 204 - Radio Studies **Credits:** (2)
- COM 205 - Radio Production Skills **Credits:** (4)
- COM 304 - Radio Programming Application **Credits:** (5) (Must take for 15 credits)
- COM 404 - Radio Ratings and Revenue **Credits:** (2)

Total Credits: 34

#### College and Department Information

Communication Department  
College of Arts and Humanities

# Computer Science Department

College of the Sciences

Ellensburg

Samuelson, room 207

Mail Stop 7520

509-963-1495

[www.cwu.edu/computer-science](http://www.cwu.edu/computer-science)

See website for how this program may be used for educational and career purposes.

### Faculty and Staff

#### Chair

Mike Harrod, PhD

#### Professors

Razvan Andonic, PhD, computational intelligence, machine learning, parallel/distributed computing, big data analytics, data mining

Boris Kovalerchuk, PhD, artificial intelligence, visual big data analytics, machine learning, data mining, computer vision, simulation, computer architecture, soft computing

#### Associate Professor

Donald Davendra, PhD, optimization, evolutionary algorithms, manufacturing systems, chaos control, data analytics

#### Assistant Professors

Adriano Cavalcanti, PhD, biomedical computing, mobile technology, robotics/nanorobotics, computer graphics

Arne Leitert, PhD, algorithmic graph theory, data structures and algorithms, large scale network analysis

Szilárd VAJDA, PhD, machine learning, medical image processing, document analysis, data analytics

#### Staff

Chris Stone, secretary senior

Megan McConnell, advisor, recruiter

### Department Information

The Department of Computer Science (CS) offers a degree program leading to the Bachelor of science in computer science. The department also jointly offers a program with the industrial engineering technology (IET) department in the College of Education and Professional Studies in computer engineering technology. Information related to the computer engineering technology program can be found in the IET section of the catalog.

The field of computer science can trace its beginnings and much of its foundation to both mathematics and engineering. Because of this, studies in computer science range from theory through experimental techniques to engineering methodology. The purpose of the computer science curriculum is to expose students to aspects of each of these disciplines and foster an appreciation and understanding of them. To accomplish this, students are exposed to the broad theoretical basis of computer science as well as a strong laboratory component. The laboratory experience is more than simple programming. Rather, it is through the laboratories that students are introduced to both the experimental and the design aspects of computer science.

Using this philosophy as a base, the CS department has designed a curricular model that seeks to increase relevance to the real world. In particular, the senior project, a capstone course series- CS 480 and 481- adopts a theme that expands upon the experimental and design approach of typical computer science curricula. This capstone series addresses the creativity and productivity elements required for business and industry applications today. Students become engaged in projects that investigate each stage of transforming a creative idea into a productivity-enhancing system in a realistic context.

### Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### Course Offerings

Frequency of course offering information can be found at the department website: [www.cwu.edu/computer-science](http://www.cwu.edu/computer-science) or by contacting the department directly.

## Computer Science Major, BS

The Department of Computer Science (CS) offers a degree program leading to the Bachelor of science in computer science. The department also jointly offers a program with the industrial engineering technology (IET) department in the College of Education and Professional Studies in computer engineering technology. Information related to the computer engineering technology program can be found in the IET section of the catalog.

The field of computer science can trace its beginnings and much of its foundation to both mathematics and engineering. Because of this, studies in computer science range from theory through experimental techniques to engineering methodology. The purpose of the computer science curriculum is to expose students to aspects of each of these disciplines and foster an appreciation and understanding of them. To accomplish this, students are exposed to the broad theoretical basis of computer science as well as a strong laboratory component. The laboratory experience is more than simple programming. Rather, it is through the laboratories that students are introduced to both the experimental and the design aspects of computer science.

Using this philosophy as a base, the CS department has designed a curricular model that seeks to increase relevance to the real world. In particular, the senior project, a capstone course series- CS 480 and 481- adopts a theme that expands upon the experimental and design approach of typical computer science curricula. This capstone series addresses the creativity and productivity elements required for business and industry applications today. Students become engaged in projects that investigate each stage of transforming a creative idea into a productivity-enhancing system in a realistic context.

### Admission Requirements

Admission to the computer science major or minor is not selective; however, progress in the major/minor is dependent upon earning certain grades in prerequisite courses. In order to continue in any CS course a student must receive a C grade or higher in each of the CS courses and a C grade or higher in each of the General Education Academic Writing courses and

required Math courses. Applications will be accepted through the last day of classes (i.e., the week before finals) of the fall, winter, and spring quarters for admission the following quarter.

The computer science department believes that advising is one of the keys to success in an undergraduate program. To that end, majors and minors are required to meet with a computer science advisor every term in order to register. Pre-admission students are also encouraged to meet with their designated computer science advisor each term. Advisors and advising times are listed with the CS office.

### Program Requirements

In addition to the courses listed in the required courses listed in the Program Curriculum, students must complete at least 20 credits of electives. Of these 20, at least 12 must be from CS (excluding CS 490, CS 495, and CS 496).

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate an understanding of each of the subject areas that define the discipline as well as the interrelationships that exist among them.
- Demonstrate the ability to utilize appropriate theoretical constructs for problem solving: definitions, and axioms, theorems, proofs, and interpretation of results.
- Have the ability to apply basic research methods in computer science.
- Have the ability to apply appropriate design constructs: requirements analysis and specification, design, implementation, and testing.
- Demonstrate knowledge of ethical codes and societal issues associated with the computing field.
- Demonstrate knowledge of recent technological and theoretical developments, general professional standards, and have an awareness of their own strengths and limitations as well as those of the discipline itself.
- Be aware of the history of computing, including those major developments and trends - economic, scientific, legal, political, and cultural - that have combined to shape the discipline.
- Have the necessary background for entry into graduate study.
- Have the ability to communicate effectively.

CS Pre-admission Requirements Credits: 17

The minimum grade a student must receive is a C grade or higher in each of the CS courses and a C grade or higher in each of the General Education Academic Writing courses and a C grade or higher in each required Math courses.

- CS 110 - Programming Fundamentals I **Credits:** (4)
- CS 111 - Programming Fundamentals II **Credits:** (4)
- CS 301 - Data Structures **Credits:** (4)
- MATH 172 - Calculus I **Credits:** (5)

Required Courses Credits: 69

The minimum grade a student must receive is a C grade or higher in each of the CS courses and a C grade or higher in each of the General Education Academic Writing courses and a C grade or higher in each required Math courses.

- CS 112 - Foundations of Computer Science **Credits:** (4)
- CS 302 - Advanced Data Structures and File Processing **Credits:** (4)
- CS 311 - Computer Architecture I **Credits:** (4)
- CS 312 - Computer Architecture II **Credits:** (4)
- CS 325 - Technical Writing in Computer Science **Credits:** (3)
- CS 361 - Principles of Language Design I **Credits:** (4)
- CS 362 - Principles of Language Design II **Credits:** (4)
- CS 380 - Introduction to Software Engineering **Credits:** (4)
- CS 392 - Lab Experience in Teaching Computer Science **Credits:** (1)
- CS 420 - Database Management Systems **Credits:** (4)
- CS 427 - Algorithm Analysis **Credits:** (4)
- CS 446 - User Interface Design and Development **Credits:** (4)
- CS 470 - Operating Systems **Credits:** (4)
- CS 480 - Advanced Software Engineering **Credits:** (4)
- CS 481 - Software Engineering Project **Credits:** (4)
- CS 489 - Senior Colloquium **Credits:** (1)
- CS 492 - Laboratory Experience in Teaching Computer Science **Credits:** (1-2)
- MATH 260 - Sets and Logic **Credits:** (5)
- MATH 330 - Discrete Mathematics **Credits:** (5)

Department-Approved Electives Credits: 20

Electives must be chosen with the guidance of a computer science advisor and must form a coherent focus area. The minimum grade a student must receive is a C grade or higher in each of the CS courses and a C grade or higher in each of the General Education Academic Writing courses and a C grade or higher in each required Math courses.

- Additional CS courses (excluding CS 490, CS 495, and CS 496) **Credits:** (12)
- Additional department-approved electives **Credits:** (8)

Total Credits: 106

College and Department Information

Computer Science Department  
College of the Sciences

## Applied Computer Science Minor

This minor is designed for students who wish to integrate a computer science component into their curriculum. This minor is appropriate for any student who wishes to include an

enhanced technical computer science background as part of their overall curriculum.

Required Courses Credits: 22

- BUS 221 - Introductory Business Statistics **Credits:** (5)
- **OR** MATH 154 - Pre-Calculus Mathematics II **Credits:** (5)
- CS 110 - Programming Fundamentals I **Credits:** (4)
- CS 111 - Programming Fundamentals II **Credits:** (4)
- CS 301 - Data Structures **Credits:** (4)
- MATH 130 - Finite Mathematics **Credits:** (5)

Department-Approved Electives - Credits: 12-14

At least one course will be in computer science. The other electives will be computer related and may be selected from the student's major with the approval of an advisor.

Total Credits: 34-36

College and Department Information

Computer Science Department  
College of the Sciences

## Computer Science Minor

This minor is designed for students who wish to investigate and basic core of the computer science discipline. This minor is appropriate for any student, including those in teacher education, seeking to enhance their technical computer science background.

Required Courses

- CS 110 - Programming Fundamentals I **Credits:** (4)
- CS 111 - Programming Fundamentals II **Credits:** (4)
- CS 301 - Data Structures **Credits:** (4)
- CS 311 - Computer Architecture I **Credits:** (4)
- MATH 130 - Finite Mathematics **Credits:** (5)
- MATH 154 - Pre-Calculus Mathematics II **Credits:** (5)
- MATH 260 - Sets and Logic **Credits:** (5)

Total Credits: 31

College and Department Information

Computer Science Department  
College of the Sciences

# Craft Brewing Program

**Program Director**  
Jim Johnson, PhD

**Program Coordinator**  
Stacey Ferris

**Professors**  
Roger Beardsley, PE  
Jim Johnson, PhD  
Wayne Quirk, PhD

**Associate Professor**  
Warren Plugge, PhD

**Lecturers**  
Eric Foss, MS  
Cole Provence, MS

The Craft Brewing Program provides students with an in-depth understanding of the brewing industry. The BS in Craft Brewing is built upon a strong foundation in science and is focused on providing students with content, experience, and skills in brewing science, analytical laboratory techniques, quality assurance, and management. Additionally, courses incorporate hands-on and inquiry-based learning opportunities through case studies, pilot brewing, field trips, industry speakers, and research activities. The program prepares graduates for a career in the brewing production, quality assurance, brewery management, beer merchandising, distribution, brewing technology, packaging, safety, sanitation, sensory evaluation, and entrepreneurship. This is an interdisciplinary program involving departments and faculty across the university that is administered in the College of the Sciences.

## Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

## Course Offerings

Frequency of course offering information can be found at the department website: [www.cwu.edu/craft-brewing/](http://www.cwu.edu/craft-brewing/) or by contacting the department directly.

## Craft Brewing, BS

The Craft Brewing Program provides students with an in-depth understanding of the brewing industry. The BS in Craft Brewing is built upon a strong foundation in science and is focused on providing students with content, experience, and skills in brewing science, analytical laboratory techniques, quality assurance, and management. Additionally, courses incorporate hands-on and inquiry-based learning opportunities through case studies, pilot brewing, field trips, industry speakers, and research activities. The program prepares graduates for a career in the brewing production, quality assurance, brewery management, beer merchandising, distribution, brewing technology, packaging, safety, sanitation, sensory evaluation, and entrepreneurship. This is an interdisciplinary program involving

departments and faculty across the university that is administered in the College of the Sciences.

## Pre-Admission Requirements

Students wishing to attain full admission to the BS in Craft Brewing must meet the following requirements:

- Successful completion of CHEM 111 Introduction to Chemistry, CHEM 111LAB Chemistry Laboratory, CHEM 112 Introduction to Organic Chemistry, CHEM 112LAB Introduction to Organic Chemistry Laboratory, CHEM 113 Introduction to Biochemistry, CHEM 113LAB Introduction to Biochemistry Laboratory, MATH 153 or its equivalent, ECON 201 Principles of Economics Micro, PHYS 111 Introductory Physics, PHYS 112 General Physics, with a C (2.0) or higher in each course before being admitted to the major.
- Overall minimum 2.5 GPA will be required for admission.
- Students must fill out an application that includes an essay of motivation and goals.
- Upon admittance to the program students must agree to sign a written statement regarding professional conduct and responsibility.
- Student must be at least 21 years old before enrolling in courses that may involve tasting beer (CRBW 317 Brewing Processes and Biochemistry (5), CRBW 350 Sensory Analysis for Brewing (5), CRBW 495 Brewing Research Methods (5), CRBW 496 Brewing Special Topics (3), CRBW 498 Brewing Research (5), CRBW 499 Brewing Seminar (2)).

Students are highly encouraged to also obtain a minor or degree in Biology, Chemistry, Administrative Management, Industrial Technology, Safety and Health Management and complete at least five credits of CRBW 490, Cooperative Education.

## Special Requirements

Students will be expected to spend significant time outside the classroom working on assignments and projects. Some sessions may meet on Saturdays.

## Additional Information

The requirement for CHEM 111, 111LAB, Introduction to Chemistry and Laboratory, may be met by satisfactorily completing CHEM 181, 181LAB, 182, 182LAB, and 183, 183LAB General Chemistry and Laboratory. The requirement for CHEM 112, 112LAB, Introduction to Organic Chemistry and Laboratory, may be met by satisfactorily completing CHEM 361, 361LAB, 362, Organic Chemistry and Laboratory. The requirement for CHEM 113, 113LAB, Introduction to Biochemistry, may be met by satisfactorily completing CHEM 431, 431LAB and 432, Biochemistry and Laboratory.

## Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Explain the compositional features and biochemistry of the four essential brewing raw materials: malt, hops, water and yeast and how they transformed through the brewing process and contribute to beer styles.



- Demonstrate the brewing process and use of equipment and calculate parameters for brewhouse efficiency.
- Develop a branding, marketing and PR plan for a business in the brewing industry. Students will be able to demonstrate an understanding of financial issues, investments, management, global markets and distribution systems
- Explain beer's quality attributes, such as foam, stability, color, aroma, attenuation and be able to interpret the reasons why a product deviates from expected performance.
- Explain health and safety issues related to all aspects of brewing from machinery to the final product.

#### Required Courses

##### Basic and Breadth Requirement Courses Credits: 10

- ECON 201 - Principles of Economics Micro **Credits:** (5)
- **Choose one of the following mathematics courses:**
- MATH 153 - Pre-Calculus Mathematics I **Credits:** (5)
- MATH 154 - Pre-Calculus Mathematics II **Credits:** (5)
- MATH 170 - Intuitive Calculus **Credits:** (5)
- MATH 172 - Calculus I **Credits:** (5)

##### Professional Core Requirement Credits: 31

- ADMG 201 - Introduction to Business **Credits:** (3)
- CHEM 111 - Introduction to Chemistry **Credits:** (4)
- CHEM 111LAB - Introductory Chemistry Laboratory **Credits:** (1)
- CHEM 112 - Introduction to Organic Chemistry **Credits:** (4)
- CHEM 112LAB - Introduction to Organic Chemistry Laboratory **Credits:** (1)
- CHEM 113 - Introduction to Biochemistry **Credits:** (4)
- CHEM 113LAB - Introduction to Biochemistry Laboratory **Credits:** (1)
- SHM 325 - General Industry Safety and Health **Credits:** (3)
- **Select 10 credits from the following sequences:**
- PHYS 111 - Introductory Physics I with Laboratory **Credits:** (5)
- PHYS 112 - Introductory Physics II with Laboratory **Credits:** (5)
- **OR**
- PHYS 181 - General Physics I with Laboratory **Credits:** (5)
- PHYS 182 - General Physics II with Laboratory **Credits:** (5)

##### Required Advanced Craft Brewing Core Courses Credits: 31

- CRBW 312 - Brewing Microbiology **Credits:** (4)

- CRBW 317 - Principles and Biochemistry of Brewing **Credits:** (4)
- CRBW 450 - Sensory Analysis for Brewing **Credits:** (5)
- CRBW 470 - Current Topics in Brewing **Credits:** (1-6)
- CRBW 490 - Cooperative Education **Credits:** (1-12) (Must be taken for 5 credits)
- **OR** CRBW 495 - Brewing Research Methods **Credits:** (5) (Must be taken for 5 credits)
- CRBW 499 - Seminar **Credits:** (1-5) (Must be taken for 2 credits)
- CRBW 360 - Brewing Process Technology **Credits:** (3)
- RMT 320 - Topics in Strategy for the Craft Brewing Industry **Credits:** (5)

Total Credits: 72

#### College and Department Information

Craft Brewing Program  
College of the Sciences

#### Program Outcomes

Visit program outcomes to find out what you can expect to know and do after successful completion of this program.

## Craft Beer Trade Certificate

The Craft Brewing Certificate is an interdisciplinary certificate program designed to be completed in one academic year sequence. The certificate program provides an overview of the science, technology, and sales/merchandising aspects of the craft beer brewing industry. Topics include principles of malting and brewing, brewing process technology, brewing microbiology, and topics strategy for the craft brewing industry. Students learn about the trade using a variety of approaches including lab work, hands on experiences, lectures, field trips, and industry speakers.

#### Pre-admission Requirements Credits: 10

- MATH 153 - Pre-Calculus Mathematics I **Credits:** (5)
- And one of the following:
- CHEM 101 - Chemistry and Planet Earth **Credits:** (5)
- **OR**
- CHEM 111 - Introduction to Chemistry **Credits:** (4)
- **AND** CHEM 111LAB - Introductory Chemistry Laboratory **Credits:** (1)
- **OR**
- CHEM 181 - General Chemistry I **Credits:** (4)
- **AND** CHEM 181LAB - General Chemistry Laboratory I **Credits:** (1)

#### Admission Requirements

Students must be 21 years of age or older to enroll in the program and must apply for acceptance into the program

through an application that is separate from the university. The application for the program can be found at [www.cwu.edu/sciences/craft-brewing](http://www.cwu.edu/sciences/craft-brewing).

### Special Requirements

Students will be expected to spend significant time outside the classroom working on assignments and projects. Some sessions may meet on Saturdays. In order to receive the certificate, students must earn a grade of C or above in each of the four courses. If students are conditionally admitted without meeting the pre-requisites, they must fulfill the pre-requisites before being awarded the certificate.

Required Courses Credits: 16

- CRBW 312 - Brewing Microbiology **Credits:** (4)
- CRBW 317 - Principles and Biochemistry of Brewing **Credits:** (4)
- RMT 320 - Topics in Strategy for the Craft Brewing Industry **Credits:** (5)
- CRBW 360 - Brewing Process Technology **Credits:** (3)

Total Credits: 26

### College and Department Information

Craft Brewing Program  
College of the Sciences

# Curriculum, Supervision, and Educational Leadership Department

College of Education and Professional Studies  
School of Education  
Ellensburg  
Black Hall, room 214-12  
Mail Stop 7410  
509-963-1448  
[www.cwu.edu/csel/](http://www.cwu.edu/csel/)  
See the website for how these programs may be used for educational and career purposes.

### Faculty and Staff Chair

Ian Loverro, PhD

### Graduate Programs Coordinator

Denise Shaw, PhD, master teacher  
Don Wattam, EdD, school administration, higher education

### Professors

Kelly Benson, EdD, curriculum and instruction, leadership, law

Kim M. Jones, PhD, curriculum and instruction  
Naomi Jeffery Petersen, EdD, philosophy, assessment, STEM, informal settings, accessibility studies  
Henry Williams, EdD, school administration

### Associate Professors

Jan Byers-Kirsch, EdD, curriculum and instruction, literacy and supervision  
Ian Loverro, PhD, educational technology and communication  
Lee Plourde, PhD curriculum and instruction, supervision, administration  
Molly Ross, EdD, field supervisor  
Denise Shaw, PhD, curriculum and instruction, alternative pathways to teaching  
Don Wattam, EdD, school administration, higher education

### Assistant Professors

Susana Y. Flores, PhD, multicultural education  
Eric Hougan, PhD, educational leadership, policy studies  
Keith Reyes, EdD, multicultural education

### Senior Lecturers

Leona Lindvig, MEd, library media  
Brita Williams, MiT, field supervisor

### Staff

Joann Schaan, secretary senior  
Debbie Strand, administrative assistant

### Department Information

In order to be certified in the state of Washington, a student must complete the courses required in an endorsement area as well as the Professional Education Program. The Curriculum, Supervision, and Educational Leadership Department provides the courses and experiences necessary to complete the Professional Education Program. For information directly regarding the Alternative Pathways to Teaching Program please visit [www.cwu.edu/teacher-certification/about](http://www.cwu.edu/teacher-certification/about).

### Department Standards

All students completing an educational endorsement must maintain a 3.0 GPA or higher for the last 45 graded credits. Failure to maintain this level of achievement may result in suspension or expulsion from the Teacher Certification Program. Students must also earn a minimum grade of C in all required Professional Education Program courses.

### Admission Requirements

Students may not enroll in Professional Education Program courses other than EFC 210, EFC 310, and PSY 314 until they have been fully admitted into the School of Education Teacher Certification Program. Please see the admission requirements for the School of Education Teacher Certification Program at the Teacher Certification website, [www.cwu.edu/~cert](http://www.cwu.edu/~cert).

### Exit Requirements

Students admitted into the School of Education are required to present a complete electronic portfolio demonstrating their content, pedagogical, and professional knowledge, skills, and dispositions as a partial fulfillment of their graduation requirements. Please see the exit requirements for the Teacher Certification Program.

### Pre-admission Observation Experience

In special circumstances, this experience may be completed concurrent with the first three weeks of EFC 210. However,

because it will generally not be possible for students to find placements and complete their observation within this time, students are strongly encouraged to complete their Pre-admission Observation Experience prior to enrolling in EFC 210.

### **Student Teaching**

Students must complete a minimum of 16 quarter credits of student teaching on an all-day basis for one quarter. To qualify for certification to teach in more than one specialization, students must meet all requirements listed in the catalog for each specialization. All prerequisites in the course description for student teaching must be completed.

1. One quarter in residence at CWU is required before a student may be assigned to student teaching, unless an exception is approved by the chair of the Department of Educational Foundations and Curriculum.
2. Students must be endorsed for student teaching by their major and minor departments. The endorsement requires completion of 75 percent of the major and minor areas prior to student teaching. See major and minor departments for advising.
3. Most student teaching assignments will be made at centers outside Kittitas County.
4. While student requests for choice of student teaching centers and grade levels will be considered, final responsibility for student teaching placement rests with the director of field experiences.
5. Student teachers wishing to enroll in additional coursework during their student teaching experience must obtain the approval of the director of field experiences.
6. A minimum GPA of 3.0 for the last 45 quarter credits is required prior to applying for student teaching.
7. Fingerprint clearance from both the Washington State Patrol and the FBI must be on file in the office of the dean of the College of Education and Professional Studies (CEPS) prior to applying for student teaching. Clearance must be valid for the entire period in which students will be in the classroom.
8. Applications for certification must be on file in the office of the dean of CEPS one quarter prior to student teaching.
9. At the time of application submission, students must provide proof of purchase of \$1M of liability insurance for student teaching, valid for the quarter in which student teaching will occur.
10. At the time of application submission, students must provide West-E results or proof of having registered for a West-E test date that will occur prior to the first day of student teaching.

### **Professional Education Program**

The purpose of the Professional Education Program is to prepare prospective teachers to become facilitators of learning within the school and community. The Professional Education Program curriculum provides opportunities to acquire the pedagogical knowledge and skills that allow students to demonstrate a positive impact on P-12 student learning. To this end, the program offers information about and experience in integrating research and pedagogy constructs for a spectrum of diverse learning situations.

See important information above under Pre-admission

Observation Experience and Student Teaching.

Students should enroll for EFC 330 prior to their junior year.

Students should check the university catalog for course descriptions and pre-requisite information. Some courses must be taken in sequence. Students should consult their advisor for assistance in developing an academic plan.

### **Required Courses**

EDBL 401 - Principles and Practices for Educating Linguistically Diverse Students 3

OR

EDBL 430 - Sheltering Instruction for Linguistically Diverse Students (3)

EDSE 302 - Introduction to Students with Exceptionalities 3

EFC 210 - Seminar 1

EFC 310 - Orientation to Teaching 3

EFC 315 - Educational Assessment 3

EFC 320 - Multicultural Education 3

EFC 330 - Field Experience 2

EFC 340 - Methods of Instruction 3

EFC 350 - Classroom Management 3

EFC 416 - Educational Technology 3

EFC 440 - Education Law 3

EFC 480 - Student Teaching 16

PSY 314 - Human Development and the Learner 4

**Total Credits: 50**

### **Program Outcomes**

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### **Course Offerings**

Frequency of course offering information can be found at the department website: [www.cwu.edu/csel/](http://www.cwu.edu/csel/) or by contacting the department directly.

## **Instructional Foundations, BA**

This degree program is designed to meet the needs of students who wish to have a background in instructional pedagogy, but who do not wish to complete the requirements for teaching certification. Students who complete the program will be prepared to work in settings that require expertise in the foundations of education, such as training programs in business and industry, service programs at educational institutions, private child care facilities, etc.

The student will select a focus area, which must be approved by the department. The focus area will be a cohesive set of courses, which will be designed to provide the student with the knowledge and skills required to take a leadership role in an education-related organization. The practicum will be done in the focus area after all other course work is completed.

Students must achieve a grade of C or higher in all courses in the major and must have a cumulative grade point average of 3.0 or higher in the major in order to graduate.

Admission to the program requires the following:

1. A passing score on each section of the Washington Educator Skills Test - Basic (WEST-B). See [www.west.nesinc.com](http://www.west.nesinc.com) to register and for additional information.
2. A cumulative GPA of 3.0 or higher.
3. Completion of each of the following with a grade of C or higher.
  - a. ENG 101
  - b. ENG 102
  - c. MATH 101, 153, 154, 164, 170, 172, or FIN 174.
4. Proof of purchase of the College LiveText Edu Solutions software program.

#### Required Courses

- EDCS 492 - Practicum **Credits: (1-15)** (Must be taken for 15 credits)
- EFC 210 - Seminar **Credits: (1)**
- EFC 310 - Orientation to Teaching **Credits: (3)**
- EFC 315 - Educational Assessment **Credits: (3)**
- EFC 320 - Multicultural Education **Credits: (3)**
- EFC 330 - Field Experience **Credits: (2)**
- EFC 340 - Methods of Instruction **Credits: (3)**
- EFC 416 - Educational Technology **Credits: (3)**
- ENG 310 - Technical Writing **Credits: (4)**
- PSY 314 - Human Development and the Learner **Credits: (4)**

Department-Approved Focus Area Electives Credits: 19

Total Credits: 60

#### College and Department Information

Curriculum, Supervision, and Educational Leadership  
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#### Program Outcomes

Visit program outcomes to find out what you can expect to know and do after successful completion of this program.

## Professional Education Program

The purpose of the Professional Education Program is to prepare prospective teachers to become facilitators of learning within the school and community. The Professional Education Program curriculum provides opportunities to acquire the pedagogical knowledge and skills that allow students to demonstrate a positive impact on P-12 student learning. To this end, the program offers information about and experience in integrating research and "best practice" based pedagogical constructs, for a spectrum of diverse learning situations.

Students should enroll for EFC 330 prior to their junior year. Student teaching is completed at one of the approved off-campus locations.

Check the University catalog for course descriptions and pre-requisites information. Some courses must be taken in sequence.

Consult your education advisor for assistance in developing an academic plan.

#### Required Courses

- EDBL 401 - Principles and Practices for Educating Linguistically Diverse Students **Credits: (3)**
- **OR** EDBL 430 - Sheltering Instruction for Linguistically Diverse Students **Credits: (3)**
- EDSE 302 - Introduction to Students with Exceptionalities **Credits: (3)**
- EFC 210 - Seminar **Credits: (1)**
- EFC 310 - Orientation to Teaching **Credits: (3)**
- EFC 315 - Educational Assessment **Credits: (3)**
- EFC 320 - Multicultural Education **Credits: (3)**
- EFC 330 - Field Experience **Credits: (2)**
- EFC 340 - Methods of Instruction **Credits: (3)**
- EFC 350 - Classroom Management **Credits: (3)**
- EFC 416 - Educational Technology **Credits: (3)**
- EFC 440 - Education Law **Credits: (3)**
- EFC 480 - Student Teaching **Credits: (16)**
- PSY 314 - Human Development and the Learner **Credits: (4)**

Total Credits: 50

#### College and Department Information

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## Secondary Education Program

The purpose of the Secondary Education major is to prepare prospective teachers to become facilitators of learning within the school and community. The Secondary Education major curriculum provides opportunities to acquire the pedagogical knowledge and skills that allow candidates to demonstrate a positive impact on K-12 student learning. To this end, the program offers information about and experience in integrating research and pedagogy constructs for a spectrum of diverse learning situations.

Candidates should check the university catalog for course descriptions and pre-requisite information. Some courses must be taken in sequence. Students should consult their advisor for assistance in developing an academic plan.

#### Department Information

To be certified in the state of Washington, a teacher candidate must complete the courses required for a major in a secondary teaching endorsement area and the courses in the Secondary Education major (50 quarter credits) or CSEL Department approved alternative. The Curriculum, Supervision, and Educational Leadership Department provides the courses and experiences necessary to complete the Secondary Education major. For information regarding Teacher Certification or the

Alternative Pathways to Teaching Program please visit [www.cwu.edu/teacher-certification/](http://www.cwu.edu/teacher-certification/).

### Department Standards

All candidates completing an educational teaching endorsement must maintain a 3.0 GPA or higher for the last 45 graded credits. Failure to maintain this level of achievement may result in suspension or expulsion from the Teacher Certification Program. Candidates must also earn a minimum grade of C in all required Secondary Education major courses.

### Admission Requirements

Candidates may apply to the major at any time, but must be fully admitted to the School of Education Teacher Certification Program to continue enrolling in Secondary Education major courses after successful completion of EFC 250, EFC 320, EDBL 401, EDSE 302, and PSY 314. Please see the admission requirements for the School of Education Teacher Certification Program at [www.cwu.edu/teacher-certification/](http://www.cwu.edu/teacher-certification/).

### Exit Requirements

Candidates admitted into the School of Education Teacher Certification Program are required to pass all courses with a C or higher, maintain a GPA of 3.0, and successfully pass Student Teaching Secondary, EFC 470. Please see the exit requirements for the School of Education Teacher Certification Program at [www.cwu.edu/teacher-certification/](http://www.cwu.edu/teacher-certification/).

### Student Teaching

Candidates pursuing the Secondary Education major must complete the 2-credit Pedagogy Capstone course, EFC 460, in which they will begin developing their final Teacher Performance Assessment (edTPA) in the K-12 class they will be assigned for Student Teaching Secondary. Candidates must complete a minimum of 14-quarter credits of Student Teaching Secondary, EFC 470, on an all-day basis for one quarter. To qualify for certification to teach in more than one specialization, candidates must meet all requirements listed in the catalog for each specialization. All prerequisites in the course description for Student Teaching must be completed.

1. One quarter in residence at CWU is required before a candidate may be assigned to Student Teaching Secondary, unless an exception is approved by the chair of the Curriculum, Supervision, and Educational Leadership Dept.
2. Candidates must be approved for Student Teaching Secondary by their endorsement area departments. The endorsement requires completion of 75 percent of the major and minor areas prior to Student Teaching Secondary. Please see major and minor departments for advising.
3. Most Student Teaching Secondary assignments will be made at schools outside Kittitas County.
4. While candidate requests for choice of Student Teaching Secondary districts, schools, and grade levels will be considered, final responsibility for Student Teaching Secondary placement rests with the Associate Director of the School of Education.
5. Student Teachers wishing to enroll in additional coursework during their Student Teaching Secondary experience must obtain the approval of the

Associate Director of the School of Education and/or the chair of the Curriculum, Supervision, and Educational Leadership Dept.

6. A minimum GPA of 3.0 for the last 45 quarter credits is required prior to applying for Student Teaching Secondary.
7. Candidates must apply for Student Teaching Secondary and meet all the requirements by the posted deadline for each quarter. Please see DEADLINES at [www.cwu.edu/field-experience/student-teaching-information](http://www.cwu.edu/field-experience/student-teaching-information)
8. Fingerprint clearance from both the Washington State Patrol and the FBI must be on file in the office of the School of Education prior to applying for Student Teaching Secondary. Clearance must be valid for the entire period in which candidates will be in the classroom.
9. At the time of Student Teaching Secondary application submission, candidates must have an application for state certification on file in the office of the School of Education.
10. At the time of Student Teaching Secondary application submission, candidates must provide proof of purchase of \$1M of liability insurance for Student Teaching Secondary, valid for the quarter in which Student Teaching Secondary will occur.
11. At the time of Student Teaching Secondary application submission, students must provide West-E or NES results or proof of having registered for a West-E or NES test date that will occur prior to the first day of Student Teaching Secondary.
12. Candidates are strongly encouraged, but not required, to complete the edTPA during Student Teaching Secondary, which is required for initial teaching certification in Washington state.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Make appropriate instructional choices based on learner characteristics and the context of the school and community.
- Implement, and assess a curriculum that is coherent and aligned with state standards.
- Exhibit the dispositions of a professional educator, including their understanding of professional and ethical responsibilities, relevant law and policy, and educational foundations.

### Required Courses

- EDBL 401 - Principles and Practices for Educating Linguistically Diverse Students **Credits:** (3)
- **OR** EDBL 430 - Sheltering Instruction for Linguistically Diverse Students **Credits:** (3)
- EDSE 302 - Introduction to Students with Exceptionalities **Credits:** (3)
- EFC 210 - Seminar **Credits:** (1)
- **AND** EFC 310 - Orientation to Teaching **Credits:** (3)
- **OR**
- EFC 250 - Introduction to Education **Credits:** (4)

(Either take EFC 210 and EFC 310 or only take EFC 250)

- EFC 315 - Educational Assessment **Credits:** (3)
- EFC 320 - Multicultural Education **Credits:** (3)
- EFC 330 - Field Experience **Credits:** (2)
- EFC 340 - Methods of Instruction **Credits:** (3)
- EFC 350 - Classroom Management **Credits:** (3)
- EFC 416 - Educational Technology **Credits:** (3)
- EFC 440 - Education Law **Credits:** (3)
- EFC 460 - Pedagogy Capstone **Credits:** (2)
- EFC 470 - Student Teaching Secondary **Credits:** (14)
- PSY 314 - Human Development and the Learner **Credits:** (4)

Total Credits: 50

College and Department Information

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## Accessibility Studies Minor

The Accessibility Studies Minor provides an interdisciplinary opportunity to learn about the challenges facing people with disabilities and limitations, estimated to be nearly a fifth of the population. The Accessibility Studies Minor documents the graduate's demonstration of competence in recognizing where, when, and how to accommodate such needs. Competence includes facilitating accessible transitions and employment for people with disabilities and limitations, approached from different perspectives of employers, social service agencies, commercial enterprises, and the people requiring access themselves. This competence is attractive to employers who must all comply with legislation, such as the Americans with Disabilities Act, intended to protect entitlement to activities of independent living in all environments- work, home, school, shopping, medical, leisure, and virtual.

Accessibility Studies add practical depth to all pre-professional degrees, such as Business Administration; Human Resource Management; Supply Chain Management; Marketing; Public Policy; Non-Profit Organization Management; Public Health; Social Services; Safety and Health Management; Recreation and Tourism; Family and Child Life; Web Design and Management; Physical Rehabilitation Therapy; Paramedicine; Emergency Medical Technician; Communication; Graphic Design; Professional and Creative Writing; American Sign Language; Theatre Art Design and Production; Museum Studies; Anthropology; Interdisciplinary Studies in Social Sciences; Applied Computer Science; Law and Justice; Psychology; Library Information Science; Instructional Foundations-- all of which are influenced by the two primary motivations to improve accessibility: to prevent risk of lawsuits (risk management) and to increase participation by removing barriers and stigma (social justice).

The Accessibility Studies Program (ASP) courses are further designed to satisfy many General Education Program requirements.

### Admission Requirements

Admission to the program requires an application approved by the Accessibility Studies Program, including the determination of the elective necessary for graduation. This must be submitted and approved before completing any of the core courses (ASP 305; ASP 325; ASP 435). There are no prerequisites for the core courses, but they are all pre/co-requisite for the capstone course (ASP 485).

### Graduation Requirements

Successful completion of required courses with a minimum of C+ in all courses and the final exam.

### Program Requirements

The minor degree in Accessibility Studies requires the four core courses of 15+ credits plus additional credits of program-approved electives in application and issues courses to total at least 20 credits. The electives are approved by the program director designated by the department at the time of application to the program and may be revised before completing the program.

Required Courses Credits: 15

- ASP 305 - Accessibility and User Experience **Credits:** (4)
- ASP 325 - Universal Design **Credits:** (4)
- ASP 435 - Accessible Information Design **Credits:** (5)
- ASP 485 - Accessibility Studies Capstone **Credits:** (2-3)

Department-Approved Electives Credits: 5

- ASP 365 - Assistive Technology: Tactile Graphics **Credits:** (3)
- ASP 490 - Accessibility Studies Internship **Credits:** (1-12)
- ASP 492 - Advanced Practicum in Accessibility Studies **Credits:** (1-15)
- ASP 498 - Special Topics in Accessibility **Credits:** (1-6)  
**OR** Program-approved electives. The list of approved electives is extensive. Please consult an Accessibility Studies Program advisor regarding the eligibility of any course that would provide an opportunity to apply the knowledge and skills of accessibility competence. Up to five (5) credits may be courses required for a concurrent major.

Total Credits: 20-21

College and Department Information

Curriculum, Supervision, and Educational Leadership  
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# Accessibility Studies Certificate

The Accessibility Studies Certificate provides an interdisciplinary opportunity to learn about the challenges facing people with disabilities and limitations, estimated to be nearly a fifth of the population. The Accessibility Studies Certificate documents the graduate's demonstration of competence in recognizing where, when, and how to accommodate such needs. Competence includes facilitating accessible transitions and employment for people with disabilities and limitations, approached from the different perspectives of employers, social service agencies, commercial enterprises, and the people requiring access themselves. This competence is attractive to employers who must all comply with legislation, such as the Americans with Disabilities Act, intended to protect entitlement to activities of independent living in all environments- work, home, school, shopping, medical, leisure, and virtual. The Accessibility Studies certificate is a professional development opportunity of value to most fields.

Additional courses focused on application and issues of accessibility may be taken, such as:

ASP 365 Assistive Technology: Tactile Graphics  
ASP 490 Accessibility Studies Internship  
ASP 492 Advanced Practicum in Accessibility Studies  
ASP 498 Special Topics in Accessibility

## Admission Requirements

Admission to the program requires an application approved by the Accessibility Studies Program. There are no prerequisites for the introductory course, ASP 305 Accessibility and User Experience.

## Graduation Requirements

Successful completion of required courses with a minimum of C+ in all courses and the final exam.

## Program Requirements

The certificate in Accessibility Studies requires the four core courses of 15-17 credits.

## Required Courses

- ASP 305 - Accessibility and User Experience **Credits:** (4)
- ASP 325 - Universal Design **Credits:** (4)
- ASP 435 - Accessible Information Design **Credits:** (5)
- ASP 485 - Accessibility Studies Capstone **Credits:** (2-3)

Total Credits: 15-17

## College and Department Information

Curriculum, Supervision, and Educational Leadership  
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College of Education and Professional Studies

# Economics Department

College of Business  
Ellensburg  
Shaw-Smyser Hall, room 413  
Mail Stop 7486  
509-963-2664  
Fax: 509-963-1992  
www.cwu.edu/economics

See the website for how these programs may be used for educational and career purposes.

## Faculty and Staff

### Chair

Toni Sipic, PhD

### Professors

Robert J. Carbaugh, PhD  
Koushik Ghosh, PhD  
David W. Hedrick, PhD  
Peter J. Saunders, PhD  
Charles S. Wassell Jr., PhD

### Associate Professor

Toni Sipic, PhD

### Staff

Shirley Hood, secretary senior

## Department Information

Positions of responsibility in today's world are usually held by individuals who have the capacity to analyze complex problems and make intelligent decisions. Learning economics will help students think logically and improve their ability to use economic concepts to analyze "real world" problems and opportunities. In addition to preparation for business and government agency employment, an economics major is excellent preparation for law schools, masters of business administration programs, and graduate programs in economics, agricultural economics, and natural resource management. The economics department offers a Bachelor of Science degree in economics with specializations in managerial economics, general economics, and economic and business forecasting. Economics minors are offered to complement accounting, business administration, and other majors.

The BS economics major is comprised of the following components:

- Pre-admission courses providing necessary theoretical and quantitative skills to pursue studies in economics
- Core courses in both micro and macro-economic theory
- A choice of supporting courses for each of the three economics major specializations

The following objectives apply to all individuals pursuing a BS in economics:

- Students completing an economics degree will possess the tools which enable them to analyze and understand macro and micro economic problems and policies.

- Students will possess qualifications and knowledge which will help them to find employment in fields related to economics.
- Students will acquire and be able to use basic tools to enable them to carry out quantitatively oriented tasks in their employment or their field of graduate studies.
- Students completing the program should possess the communication and economic skills desirable in their future employment or graduate studies.

### Admission Requirements

Admission to an Economics major requires admission to the University.

The following requirements must be met for entry into an Economics major in the College of Business:

- Completion of 30 credits (If a student is a transfer student, credits must be transferable)
- Must be in good academic standing
- At least a 2.25 collegiate GPA
- Completion of ENG 101 and ENG 102 with a C- or higher, or equivalent

Students seeking entry to the College without these requirements may be granted pre-major standing.

International students whose native language is not English must meet one of the following English proficiency requirements:

A score of 71 or above on the Internet-based TOEFL or 525 or above on the paper-based TOEFL (195 for computer based, 71 for internet based), OR

A score of 6.0 or above on the International English Language Testing System (IELTS) exam, OR

A 3.0 (B grade) or above in each two college-level English composition courses from an accredited United States college or university. Contact the Office of Admissions to find out what courses are acceptable.

Students who have met all of the above requirements will be admitted unless the number of applicants exceeds available space. In that case, acceptance will be competitive.

### Previous or Transfer Coursework Policy

Business courses taken to fulfill the requirements for an undergraduate or graduate degree from the CWU College of Business must have been taken within the last 10 years at the time of graduation. Exceptions may be made but must be approved prior to acceptance into the College of Business by the department chair and dean or designee.

Students wishing to have credits from non-United States institutions considered for transfer into the College of Business for any major or minor must have their transcripts evaluated through outside credential evaluators who are members of the National Association of Credential Evaluation Services (NACES), such as the Foundation for International Services (FIS), the World Education Service (WES), or Educational Perspectives. Students who intend to pursue the CPA may instead decide to use the NABSA (National Association of State Boards of Accountancy) international evaluation services since it is a requirement of the CPA. Credits for current students participating in a CWU study abroad

program will be evaluated by the Office of the Registrar.

Equivalent lower-division (100-200 level) courses may be transferred toward meeting the foundation course requirements for any BS degree in the college. Upper-division (300-400 level) courses may be transferred toward meeting the major requirements only with the approval of the department chair and the college dean (or designee).

### Academic Jeopardy Policy

The College of Business is committed to the success of its students. If a student that has been admitted to the College of Business is deemed to be in academic jeopardy, the College of Business may place restrictions on the student. A student is considered in academic jeopardy for the following reasons:

- On academic warning or probation
- Frequently withdraws from class
- Repeating coursework to be successful
- Has less than a 2.5 (2.499 and below) in any of the required GPAs for graduation.
  - CWU GPA
  - Collegiate GPA (CWU and all transfer coursework combined)
  - Major GPA
  - Upper-division coursework in the major GPA
  - Accounting majors: upper-division Accounting coursework GPA

The College of Business may do the following in response to an Academic Jeopardy situation:

- Limit College of Business coursework in future quarters
- Require academic advising with both faculty and/or professional advisors
- Require academic success plans
- Double majors or double specialization students may be limited to one major plan in the College of Business

If a student is unable to improve academically while receiving intensive advising and support or does not actively participate in required advising, the student may be subjected to the College of Business Separation Policy.

### Separation Policy

If a student that has been admitted to the College of Business is placed on academic warning, probation, suspension, has repeat academic course withdrawals, or academic performance below the necessary grade point averages required to graduate, then the student's admission into the College of Business may be rescinded. Students may also be rescinded for violations of the College of Business Statement of Conduct and Code of Honor, or for engaging in Prohibited Student Conduct as defined by Washington Administrative Code (see WAC 106-125-020). Once rescinded, the student will be denied readmission to the College of Business for one year following which a written petition for readmission must be presented at least 30 days prior to the start of the quarter in which readmission is desired. The decision to readmit will be based on meeting current admission standards, analysis of the entire academic record, as well as any other sources of information deemed appropriate. Readmission is not guaranteed.



### Service to Other Majors

Students majoring in programs outside CB who are required to take courses in this college for either their major or minor will be eligible to enroll on a space-available basis. These students will be given priority over other non-college majors wishing to enroll in courses. All students must have taken prerequisites for courses prior to enrollment.

### Transfer Credits and Prior Learning Assessment

Equivalent lower-division (100-200 level) courses may be transferred toward meeting the pre-admission requirements. Upper-division (300- to 400-level) courses may also be transferred toward meeting the business core and specialization requirements, but only with the approval of the department chair and the college dean (or designee).

### Admission Information

A cumulative grade point average of 2.5 in the economics foundation requirements must be achieved with a minimum grade of C- (1.70) in each course. The credit/no credit option will not be accepted for any of these courses. The student must have earned a minimum cumulative GPA of 2.0 in all collegiate study. These criteria also apply to equivalent courses transferred from other institutions. Applicants must have also completed ENG 101 and 102.

Students who have met all the above requirements will be admitted unless the number of eligible applicants exceeds available spaces. In that case, acceptance will be competitive, based on a selection index. Students who have not met all of the above requirements may be admitted provisionally by permission of the college dean or designee.

### Graduation Requirements for all Department Specializations

A cumulative grade point average of 2.25 in the above courses must be achieved with a minimum grade of C- in each course. The credit/no credit option will not be accepted for any of these courses. The student must have earned a minimum cumulative GPA of 2.25 in all collegiate study. These criteria also apply to equivalent courses transferred from other institutions.

### Graduation Requirements for Economics I and II Minors

A cumulative grade point average of 2.25 in the above courses must be achieved with a minimum grade of C- in each course. The credit/no credit option will not be accepted for any of these courses. The student must have earned a minimum cumulative GPA of 2.25 in all collegiate study. These criteria also apply to equivalent courses transferred from other institutions.

### Repeat Policy

Business administration courses may be repeated only once.

### College of Business Admission Requirements

For information on admission requirements, please go to: College of Business.

### Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### Course Offerings

Frequency of course offering information can be found at the

department website: [www.cwu.edu/economics](http://www.cwu.edu/economics) or by contacting the department directly.

## Economics BS, Economic and Business Forecasting Specialization

### Graduates of this program will be able to demonstrate:

1. Foundation knowledge and skill in the fundamental business disciplines.
2. Effective communication in written and oral business presentations.
3. Comprehension and application of ethical principles in business decisions.
4. Problems solving ability using integrative and critical assessment of business information and appropriate technical tools.
5. Career readiness through participation in Career Center events, self-assessment, club activities, internships and other professional engagement.
6. Competency in their specialized field of study.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate comprehension of microeconomic, macroeconomic and statistical concepts.
- Create and deliver effective oral presentations.
- Students written communication skills meet professional and industry standards.
- Integrate and critically assess economic information to make effective decisions.

### Economics Requirements and Foundation Core

#### Admission Requirements

Admission to an Economics major requires admission to the University.

The following requirements must be met for entry into an Economics major in the College of Business:

- Completion of 30 credits (If a student is a transfer student, credits must be transferable)
- Must be in good academic standing
- At least a 2.25 collegiate GPA
- Completion of ENG 101 and ENG 102 with a C- or higher, or equivalent

Students seeking entry to the College without these requirements may be granted pre-major standing.

International students whose native language is not English must meet one of the following English proficiency requirements:

A score of 71 or above on the Internet-based TOEFL or 525 or above on the paper-based TOEFL (195 for computer based, 71 for internet based), OR

A score of 6.0 or above on the International English Language Testing System (IELTS) exam, OR

A 3.0 (B grade) or above in each two college-level English composition courses from an accredited United States college or university. Contact the Office of Admissions to find out what courses are acceptable.

Students who have met all of the above requirements will be admitted unless the number of applicants exceeds available space. In that case, acceptance will be competitive.

### **Previous or Transfer Coursework Policy**

Business courses taken to fulfill the requirements for an undergraduate or graduate degree from the CWU College of Business must have been taken within the last 10 years at the time of graduation. Exceptions may be made but must be approved prior to acceptance into the College of Business by the department chair and dean or designee.

Students wishing to have credits from non-United States institutions considered for transfer into the College of Business for any major or minor must have their transcripts evaluated through outside credential evaluators who are members of the National Association of Credential Evaluation Services (NACES), such as the Foundation for International Services (FIS), the World Education Service (WES), or Educational Perspectives. Students who intend to pursue the CPA may instead decide to use the NABSA (National Association of State Boards of Accountancy) international evaluation services since it is a requirement of the CPA. Credits for current students participating in a CWU study abroad program will be evaluated by the Office of the Registrar.

Equivalent lower-division (100-200 level) courses may be transferred toward meeting the foundation course requirements for any BS degree in the college. Upper-division (300-400 level) courses may be transferred toward meeting the major requirements only with the approval of the department chair and the college dean (or designee).

### **Academic Jeopardy Policy**

The College of Business is committed to the success of its students. If a student that has been admitted to the College of Business is deemed to be in academic jeopardy, the College of Business may place restrictions on the student. A student is considered in academic jeopardy for the following reasons:

- On academic warning or probation
- Frequently withdraws from class
- Repeating coursework to be successful
- Has less than a 2.5 (2.499 and below) in any of the required GPAs for graduation.
  - CWU GPA
  - Collegiate GPA (CWU and all transfer coursework combined)
  - Major GPA
  - Upper-division coursework in the major GPA
  - Accounting majors: upper-division Accounting coursework GPA

The College of Business may do the following in response to an Academic Jeopardy situation:

- Limit College of Business coursework in future quarters

- Require academic advising with both faculty and/or professional advisors
- Require academic success plans
- Double majors or double specialization students may be limited to one major plan in the College of Business

If a student is unable to improve academically while receiving intensive advising and support or does not actively participate in required advising, the student may be subjected to the College of Business Separation Policy.

### **Separation Policy**

If a student that has been admitted to the College of Business is placed on academic warning, probation, suspension, has repeat academic course withdrawals, or academic performance below the necessary grade point averages required to graduate, then the student's admission into the College of Business may be rescinded. Students may also be rescinded for violations of the College of Business Statement of Conduct and Code of Honor, or for engaging in Prohibited Student Conduct as defined by Washington Administrative Code (see WAC 106-125-020). Once rescinded, the student will be denied readmission to the College of Business for one year following which a written petition for readmission must be presented at least 30 days prior to the start of the quarter in which readmission is desired. The decision to readmit will be based on meeting current admission standards, analysis of the entire academic record, as well as any other sources of information deemed appropriate. Readmission is not guaranteed.

### **Service to Other Majors**

Students majoring in programs outside CB who are required to take courses in this college for either their major or minor will be eligible to enroll on a space-available basis. These students will be given priority over other non-college majors wishing to enroll in courses. All students must have taken prerequisites for courses prior to enrollment.

### **Transfer Credits and Prior Learning Assessment**

Equivalent lower-division (100-200 level) courses may be transferred toward meeting the pre-admission requirements. Upper-division (300- to 400-level) courses may also be transferred toward meeting the business core and specialization requirements, but only with the approval of the department chair and the college dean (or designee).

### **Repeat Policy**

Business administration courses may be repeated only once.

### **Foundation Core Requirements**

- BUS 102 - Business Computer Skills **Credits: (5)**
- BUS 221 - Introductory Business Statistics **Credits: (5)**
- ECON 201 - Principles of Economics Micro **Credits: (5)**
- ECON 202 - Principles of Economics Macro **Credits: (5)**
- ECON 130 - Foundations for Business Analytics **Credits: (5)**
- **OR** MATH 130 - Finite Mathematics **Credits: (5)**

Select one from the following for 5 credits:

- MATH 153 - Pre-Calculus Mathematics I **Credits: (5)**
- MATH 170 - Intuitive Calculus **Credits: (5)**
- MATH 172 - Calculus I **Credits: (5)**
- MATH 173 - Calculus II **Credits: (5)**

Foundation Core Requirements Total Credits: 29

Economic and Business Forecasting Specialization

This specialization is for students who seek careers involving research in economics and business, including forecasting.

Business Courses Credits: 48

- ACCT 251 - Financial Accounting **Credits: (5)**
- ACCT 252 - Managerial Accounting **Credits: (5)**
- BUS 301 - Contemporary Approaches to Personal and Professional Development **Credits: (3)**
- BUS 241 - Legal Environment of Business **Credits: (5)**
- COM 301 - Public Speaking for Business and Organizations **Credits: (2)**
- ENG 311 - Business Writing **Credits: (3)**
- FIN 370 - Introductory Financial Management **Credits: (5)**
- MGT 382 - Principles of Management **Credits: (5)**
- MIS 386 - Management Information Systems **Credits: (5)**
- MKT 362 - Essential Marketing Concepts **Credits: (5)**
- SCM 310 - Supply Chain Management **Credits: (5)**

Required Courses Credits: 30

- ECON 325 - Introduction to Forecasting **Credits: (5)**
- ECON 401 - Intermediate Microeconomic Analysis **Credits: (5)**
- ECON 402 - Intermediate Macroeconomic Analysis **Credits: (5)**
- ECON 406 - Business Analytics **Credits: (5)**
- ECON 424 - Introduction to Econometrics **Credits: (5)**
- ECON 426 - Economic Research **Credits: (5)**

Total Credits: 108

College and Department Information

Economics Department  
College of Business

### College of Business Admission Requirements

For information on admission requirements, please go to:  
College of Business.

## Economics BS, General Economics Specialization

Graduates of this program will be able to demonstrate:

1. Foundation knowledge and skill in the fundamental business disciplines.
2. Effective communication in written and oral business presentations.
3. Comprehension and application of ethical principles in business decisions.
3. Problems solving ability using integrative and critical assessment of business information and appropriate technical tools.
4. Career readiness through participation in Career Center events, self-assessment, club activities, internships and other professional engagement.
5. Competency in their specialized field of study

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate comprehension of microeconomic, macroeconomic and statistical concepts.
- Create and deliver effective oral presentations.
- Students written communication skills meet professional and industry standards.
- Integrate and critically assess economic information to make effective decisions.

Economics Requirements and Foundation Core

### Admission Requirements

Admission to an Economics major requires admission to the University.

The following requirements must be met for entry into an Economics major in the College of Business:

- Completion of 30 credits (If a student is a transfer student, credits must be transferable)
- Must be in good academic standing
- At least a 2.25 collegiate GPA
- Completion of ENG 101 and ENG 102 with a C- or higher, or equivalent

Students seeking entry to the College without these requirements may be granted pre-major standing.

International students whose native language is not English must meet one of the following English proficiency requirements:

A score of 71 or above on the Internet-based TOEFL or 525 or above on the paper-based TOEFL (195 for computer based, 71 for internet based), OR

A score of 6.0 or above on the International English Language Testing System (IELTS) exam, OR

A 3.0 (B grade) or above in each two college-level English composition courses from an accredited United States college or university. Contact the Office of Admissions to find out what courses are acceptable.

Students who have met all of the above requirements will be admitted unless the number of applicants exceeds available space. In that case, acceptance will be competitive.

### **Previous or Transfer Coursework Policy**

Business courses taken to fulfill the requirements for an undergraduate or graduate degree from the CWU College of Business must have been taken within the last 10 years at the time of graduation. Exceptions may be made but must be approved prior to acceptance into the College of Business by the department chair and dean or designee.

Students wishing to have credits from non-United States institutions considered for transfer into the College of Business for any major or minor must have their transcripts evaluated through outside credential evaluators who are members of the National Association of Credential Evaluation Services (NACES), such as the Foundation for International Services (FIS), the World Education Service (WES), or Educational Perspectives. Students who intend to pursue the CPA may instead decide to use the NABSA (National Association of State Boards of Accountancy) international evaluation services since it is a requirement of the CPA. Credits for current students participating in a CWU study abroad program will be evaluated by the Office of the Registrar.

Equivalent lower-division (100-200 level) courses may be transferred toward meeting the foundation course requirements for any BS degree in the college. Upper-division (300-400 level) courses may be transferred toward meeting the major requirements only with the approval of the department chair and the college dean (or designee).

### **Academic Jeopardy Policy**

The College of Business is committed to the success of its students. If a student that has been admitted to the College of Business is deemed to be in academic jeopardy, the College of Business may place restrictions on the student. A student is considered in academic jeopardy for the following reasons:

- On academic warning or probation
- Frequently withdraws from class
- Repeating coursework to be successful
- Has less than a 2.5 (2.499 and below) in any of the required GPAs for graduation.
  - CWU GPA
  - Collegiate GPA (CWU and all transfer coursework combined)
  - Major GPA
  - Upper-division coursework in the major GPA
  - Accounting majors: upper-division Accounting coursework GPA

The College of Business may do the following in response to an Academic Jeopardy situation:

- Limit College of Business coursework in future quarters
- Require academic advising with both faculty and/or professional advisors
- Require academic success plans
- Double majors or double specialization students may be limited to one major plan in the College of Business

If a student is unable to improve academically while receiving intensive advising and support or does not actively participate in required advising, the student may be subjected to the College of Business Separation Policy.

### **Separation Policy**

If a student that has been admitted to the College of Business is placed on academic warning, probation, suspension, has repeat academic course withdrawals, or academic performance below the necessary grade point averages required to graduate, then the student's admission into the College of Business may be rescinded. Students may also be rescinded for violations of the College of Business Statement of Conduct and Code of Honor, or for engaging in Prohibited Student Conduct as defined by Washington Administrative Code (see WAC 106-125-020). Once rescinded, the student will be denied readmission to the College of Business for one year following which a written petition for readmission must be presented at least 30 days prior to the start of the quarter in which readmission is desired. The decision to readmit will be based on meeting current admission standards, analysis of the entire academic record, as well as any other sources of information deemed appropriate. Readmission is not guaranteed.

### **Service to Other Majors**

Students majoring in programs outside CB who are required to take courses in this college for either their major or minor will be eligible to enroll on a space-available basis. These students will be given priority over other non-college majors wishing to enroll in courses. All students must have taken prerequisites for courses prior to enrollment.

### **Transfer Credits and Prior Learning Assessment**

Equivalent lower-division (100-200 level) courses may be transferred toward meeting the pre-admission requirements. Upper-division (300- to 400-level) courses may also be transferred toward meeting the business core and specialization requirements, but only with the approval of the department chair and the college dean (or designee).

### **Repeat Policy**

Business administration courses may be repeated only once.

### **Foundation Core Requirements**

- BUS 102 - Business Computer Skills **Credits:** (5)
- BUS 221 - Introductory Business Statistics **Credits:** (5)
- ECON 201 - Principles of Economics Micro **Credits:** (5)
- ECON 202 - Principles of Economics Macro **Credits:** (5)
- ECON 130 - Foundations for Business Analytics **Credits:** (5)
- **OR** MATH 130 - Finite Mathematics **Credits:** (5)

Select one from the following for 5 credits:

- MATH 153 - Pre-Calculus Mathematics I **Credits:** (5)
- MATH 170 - Intuitive Calculus **Credits:** (5)
- MATH 172 - Calculus I **Credits:** (5)
- MATH 173 - Calculus II **Credits:** (5)

Foundation Core Requirements Total Credits: 29

### General Economics Specialization

This specialization is recommended for students desiring the traditional Economics major. Highly recommended supporting courses: MATH 172, MATH 173, and FIN 370.

**There are no additional pre-admission courses required.**

Required Courses Credits: 33

- BUS 301 - Contemporary Approaches to Personal and Professional Development **Credits:** (3)
- COM 301 - Public Speaking for Business and Organizations **Credits:** (2)
- ECON 401 - Intermediate Microeconomic Analysis **Credits:** (5)
- ECON 402 - Intermediate Macroeconomic Analysis **Credits:** (5)
- ECON 406 - Business Analytics **Credits:** (5)
- ECON 424 - Introduction to Econometrics **Credits:** (5)
- ECON 426 - Economic Research **Credits:** (5)
- ENG 311 - Business Writing **Credits:** (3)

Department-Approved Electives Credits: 30

- Any 300- to 400-level economics courses; one accounting course (5) may be selected in place of one economics course.

Total Specialization Credits: 63

Total Credits: 93

### College and Department Information

Economics Department  
College of Business

#### College of Business Admission Requirements

For information on admission requirements, please go to: College of Business.

## Economics BS, Managerial Economics Specialization

#### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Foundation knowledge and skill in the fundamental business disciplines.
- Effective communication in written and oral business presentations.
- Comprehension and application of ethical principles in business decisions.

- Problems solving ability using integrative and critical assessment of business information and appropriate technical tools.
- Career readiness through participation in Career Center events, self-assessment, club activities, internships and other professional engagement.
- Competency in their specialized field of study.

### Economics Requirements and Foundation Core

#### Admission Requirements

Admission to an Economics major requires admission to the University.

The following requirements must be met for entry into an Economics major in the College of Business:

- Completion of 30 credits (If a student is a transfer student, credits must be transferable)
- Must be in good academic standing
- At least a 2.25 collegiate GPA
- Completion of ENG 101 and ENG 102 with a C- or higher, or equivalent

Students seeking entry to the College without these requirements may be granted pre-major standing.

International students whose native language is not English must meet one of the following English proficiency requirements:

A score of 71 or above on the Internet-based TOEFL or 525 or above on the paper-based TOEFL (195 for computer based, 71 for internet based), OR

A score of 6.0 or above on the International English Language Testing System (IELTS) exam, OR

A 3.0 (B grade) or above in each two college-level English composition courses from an accredited United States college or university. Contact the Office of Admissions to find out what courses are acceptable.

Students who have met all of the above requirements will be admitted unless the number of applicants exceeds available space. In that case, acceptance will be competitive.

#### Previous or Transfer Coursework Policy

Business courses taken to fulfill the requirements for an undergraduate or graduate degree from the CWU College of Business must have been taken within the last 10 years at the time of graduation. Exceptions may be made but must be approved prior to acceptance into the College of Business by the department chair and dean or designee.

Students wishing to have credits from non-United States institutions considered for transfer into the College of Business for any major or minor must have their transcripts evaluated through outside credential evaluators who are members of the National Association of Credential Evaluation Services (NACES), such as the Foundation for International Services (FIS), the World Education Service (WES), or Educational Perspectives. Students who intend to pursue the CPA may instead decide to use the NABSA (National Association of State Boards of Accountancy) international evaluation services since it is a requirement of the CPA. Credits

for current students participating in a CWU study abroad program will be evaluated by the Office of the Registrar.

Equivalent lower-division (100-200 level) courses may be transferred toward meeting the foundation course requirements for any BS degree in the college. Upper-division (300-400 level) courses may be transferred toward meeting the major requirements only with the approval of the department chair and the college dean (or designee).

### Academic Jeopardy Policy

The College of Business is committed to the success of its students. If a student that has been admitted to the College of Business is deemed to be in academic jeopardy, the College of Business may place restrictions on the student. A student is considered in academic jeopardy for the following reasons:

- On academic warning or probation
- Frequently withdraws from class
- Repeating coursework to be successful
- Has less than a 2.5 (2.499 and below) in any of the required GPAs for graduation.
  - CWU GPA
  - Collegiate GPA (CWU and all transfer coursework combined)
  - Major GPA
  - Upper-division coursework in the major GPA
  - Accounting majors: upper-division Accounting coursework GPA

The College of Business may do the following in response to an Academic Jeopardy situation:

- Limit College of Business coursework in future quarters
- Require academic advising with both faculty and/or professional advisors
- Require academic success plans
- Double majors or double specialization students may be limited to one major plan in the College of Business

If a student is unable to improve academically while receiving intensive advising and support or does not actively participate in required advising, the student may be subjected to the College of Business Separation Policy.

### Separation Policy

If a student that has been admitted to the College of Business is placed on academic warning, probation, suspension, has repeat academic course withdrawals, or academic performance below the necessary grade point averages required to graduate, then the student's admission into the College of Business may be rescinded. Students may also be rescinded for violations of the College of Business Statement of Conduct and Code of Honor, or for engaging in Prohibited Student Conduct as defined by Washington Administrative Code (see WAC 106-125-020). Once rescinded, the student will be denied readmission to the College of Business for one year following which a written petition for readmission must be presented at least 30 days prior to the start of the quarter in which readmission is desired. The decision to readmit will be based on meeting current admission standards, analysis of the entire academic record, as well as any other sources of information deemed appropriate. Readmission is not guaranteed.

### Service to Other Majors

Students majoring in programs outside CB who are required to take courses in this college for either their major or minor will be eligible to enroll on a space-available basis. These students will be given priority over other non-college majors wishing to enroll in courses. All students must have taken prerequisites for courses prior to enrollment.

### Transfer Credits and Prior Learning Assessment

Equivalent lower-division (100-200 level) courses may be transferred toward meeting the pre-admission requirements. Upper-division (300- to 400-level) courses may also be transferred toward meeting the business core and specialization requirements, but only with the approval of the department chair and the college dean (or designee).

### Repeat Policy

Business administration courses may be repeated only once.

### Foundation Core Requirements

- BUS 102 - Business Computer Skills **Credits:** (5)
- BUS 221 - Introductory Business Statistics **Credits:** (5)
- ECON 201 - Principles of Economics Micro **Credits:** (5)
- ECON 202 - Principles of Economics Macro **Credits:** (5)
- ECON 130 - Foundations for Business Analytics **Credits:** (5)
- **OR** MATH 130 - Finite Mathematics **Credits:** (5)

Select one from the following for 5 credits:

- MATH 153 - Pre-Calculus Mathematics I **Credits:** (5)
- MATH 170 - Intuitive Calculus **Credits:** (5)
- MATH 172 - Calculus I **Credits:** (5)
- MATH 173 - Calculus II **Credits:** (5)

Foundation Core Requirements Total Credits: 29

### Managerial Economics Specialization

This specialization is for students with an interest in both public and private sector employment and preparation for law school. Highly recommended supporting courses: MATH 170 or MATH 172. The managerial economics specialization can be used as part of a double major. See your advisor for details.

Required Courses Credits: 58

- ACCT 251 - Financial Accounting **Credits:** (5)
- ACCT 252 - Managerial Accounting **Credits:** (5)
- BUS 241 - Legal Environment of Business **Credits:** (5)
- BUS 301 - Contemporary Approaches to Personal and Professional Development **Credits:** (3)
- COM 301 - Public Speaking for Business and Organizations **Credits:** (2)

- ECON 352 - Managerial Economics **Credits:** (5)
- ECON 401 - Intermediate Microeconomic Analysis **Credits:** (5)
- ECON 402 - Intermediate Macroeconomic Analysis **Credits:** (5)
- ECON 406 - Business Analytics **Credits:** (5)
- ENG 311 - Business Writing **Credits:** (3)
- FIN 370 - Introductory Financial Management **Credits:** (5)
- MKT 362 - Essential Marketing Concepts **Credits:** (5)
- SCM 310 - Supply Chain Management **Credits:** (5)

Department-Approved Electives Credits: 20

- 300- to 400-level economics courses (except ECON 396, ECON 490, ECON 496) **Credits:** (15)
- Other 300- to 400-level accounting, business administration, and economics courses **Credits:** (5)

Total Specialization Credits: 78

Total Credits: 108

College and Department Information

Economics Department  
College of Business

#### **College of Business Admission Requirements**

For information on admission requirements, please go to:  
College of Business.

## **Economics Minor I**

This minor is designed to accompany the business administration and accounting majors. Prior approval of electives by the economics advisor is required.

#### **Additional Graduation Requirements**

A cumulative grade point average of 2.25 in the above courses must be achieved with a minimum grade of C- in each course. The credit/no credit option will not be accepted for any of these courses. The student must have earned a minimum cumulative GPA of 2.25 in all collegiate study. These criteria also apply to equivalent courses transferred from other institutions.

Required Courses

- ECON 201 - Principles of Economics Micro **Credits:** (5)
- ECON 202 - Principles of Economics Macro **Credits:** (5)

Department-Approved Electives Credits: 15

- Other 300-400 level economics courses with departmental approval excluding ECON 490. Credits: (15)

Total Credits: 25

College and Department Information

Economics Department  
College of Business

#### **College of Business Admission Requirements**

For information on admission requirements, please go to:  
College of Business.

## **Economics Minor II**

This minor is designed for all majors with the exception of business administration and accounting. Prior approval of electives by the economics advisor is required.

#### **Additional Graduation Requirements**

A cumulative grade point average of 2.25 in the above courses must be achieved with a minimum grade of C- in each course. The credit/no credit option will not be accepted for any of these courses. The student must have earned a minimum cumulative GPA of 2.25 in all collegiate study. These criteria also apply to equivalent courses transferred from other institutions.

Required Courses

- ECON 201 - Principles of Economics Micro **Credits:** (5)
- ECON 202 - Principles of Economics Macro **Credits:** (5)

Department-Approved Electives Credits: 10

- 300-400 level economics courses with departmental approval excluding ECON 490. Credits: (10)

Total Credits: 20

College and Department Information

Economics Department  
College of Business

#### **College of Business Admission Requirements**

For information on admission requirements, please go to:  
College of Business.

## **Business Analytics Minor or Certificate**

The business analytics minor and certificate provides opportunities to College of Business and actuarial science majors to develop additional skills in descriptive, predictive, and prescriptive business analytics. Required courses introduce students to relevant modelling and statistical methods, and management science techniques, teaching them how to analyze business and economic data with a goal of obtaining insights

needed for informed business decision making. Elective courses allow students to apply their business analytics skills to various business disciplines including accounting, economics, marketing, supply chain management, and management information systems, by taking courses focused on field specific data and software applications.

#### Admission Requirements

Admission to a College of Business major or actuarial science major.

#### Graduation Requirements

Students must earn a cumulative grade point average of 2.25 in courses allowed in fulfilling the business analytics minor and certificate requirements.

Required Courses Credits: 10

- ECON 406 - Business Analytics **Credits:** (5)
- MIS 320 - Business Process Analysis and Systems **Credits:** (5)
- MIS 386 - Management Information Systems **Credits:** (5) **OR**

Department-Approved Electives Credits: 15

No more than 10 credits can be shared with any other academic program.

- ACCT 305 - Cost Accounting **Credits:** (5)
- ACCT 455 - Accounting Information Systems **Credits:** (5)
- ACCT 461 - Fraud Examination **Credits:** (5)
- ECON 325 - Introduction to Forecasting **Credits:** (5)
- ECON 424 - Introduction to Econometrics **Credits:** (5)
- ECON 426 - Economic Research **Credits:** (5)
- MIS 446 - Systems Analysis and Design in Business **Credits:** (5)
- MIS 460 - Applied Business Analytics **Credits:** (5)
- MKT 376 - Foundations of Digital Marketing **Credits:** (5)
- MKT 469 - Market Research **Credits:** (5)
- MKT 470 - Marketing Problems and Policy **Credits:** (5)
- SCM 425 - Procurement and Supply Management **Credits:** (5)
- SCM 425A - Enterprise Purchasing and Materials Management Systems Lab **Credits:** (1)
- SCM 435 - Supply Chain Operations **Credits:** (5)
- SCM 435A - Enterprise Production Planning and Execution Systems Lab **Credits:** (1)

Total Credits: 25

College and Department Information

Economics Department  
College of Business

#### College of Business Admission Requirements

For information on admission requirements, please go to: College of Business.

# Education, Development, Teaching and Learning Department

College of Education and Professional Studies  
School of Education  
Ellensburg  
Black Hall, room 205  
Mail Stop 7406  
509-963-2049  
Fax: 509-963-1421  
[www.cwu.edu/teaching-learning/](http://www.cwu.edu/teaching-learning/)

See the website for how these programs may be used for educational and career purposes.

#### Faculty and Staff

##### Interim Chair

Kate Mastruserio Reynolds, EdD, TESOL

##### Professor

Yukari Amos, PhD, bilingual education, TESL  
Carol Butterfield, PhD, literacy, TESL  
Janet Finke, PhD, literacy  
Craig Hughes, PhD, bilingual education, TESL  
Kate Mastruserio Reynolds, EdD, TESOL  
Terrance McCain, PhD, bilingual education, TESL  
Sharryn Walker, PhD, literacy

##### Associate Professors

Dia Gary, EdD, early childhood education  
Tina Georgeson, EdD, early childhood and elementary education  
YiShan Lea, EdD, bilingual education, TESL  
Khodi Kaviani, PhD, elementary education  
Keith Salyer, PhD, early childhood and elementary education  
Teresa Walker, EdD, early childhood education

##### Assistant Professors

Grace Blum, PhD, early childhood education, elementary education  
Wendie Lappin Castillo, EdD, special education  
Pamela M Juniell, PhD, special education

##### Lecturers

Michele Jacobson, MEd, special education  
Tim Lawless, MA, special education  
Tanya Mahre, MEd, english and tesl  
Linda Velie, MEd, guidance and counseling

##### Staff

Tina Clark, administrative assistant

#### Department Information, Standards, and Requirements

Major and/or minor programs in the Education, Development,



Teaching and Learning (EDTL) department include early childhood education, elementary education, bilingual education/teaching English as a second language, literacy and special education. Additionally, the EDTL department contributes to the middle-level teaching programs in mathematics (see mathematics in the catalog) and science teaching (see science education in the catalog).

In addition to a listed major and/or minor, students must maintain full admission status in the School of Education and successfully complete all certification requirements to qualify for the Washington State teaching certificate. The early childhood education major and minor offer options in which these requirements do not apply (see descriptions below). Students completing a special education major or minor must complete EDCS 424 if they are pursuing a secondary discipline-specific teaching major (or EDLT 308 for those also seeking an elementary-specific teaching major) as part of the Professional Education Program. All students completing a secondary discipline-specific program must complete EDCS 424. All other education department majors or minors do not require the completion of this course. Also, at least 75 percent of the endorsable major or minor must be completed prior to EDCS 442, Student Teaching.

All students seeking a teacher certification endorsement must maintain a 3.0 GPA or higher for the last 45 graded credits. Students must also earn a minimum grade of "C" in all required major, minor, and Professional Education Program courses.

### Special Education Majors

The special education majors offered are specifically designed to prepare teachers for meeting the diverse competencies required for teaching individuals with disabilities. Students electing special education teaching must follow one of the outlined programs. EDSE 302 must be taken prior to or concurrently with EDSE 311.

### Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### Course Offerings

Frequency of course offering information can be found at the department website: [www.cwu.edu/teaching-learning/](http://www.cwu.edu/teaching-learning/) or by contacting the department directly.

## Early Childhood Education Major, BA

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Apply specific content understanding, theoretical knowledge, and interdisciplinary teaching practices to plan, instruct, assess, analyze, and reflect upon standards-based instruction.
- Demonstrate appropriate professionalism in all aspects: Oral and written communication, collaboration, behavior, expressions, and attire

relevant to working with children, parents, and professional colleagues in a school setting.

- Use their learning to independently create and manage a purposeful and intentional learning environment.
- Independently create and effectively deliver responsive and relevant curriculum.
- Engage in the continual development of a professional growth plan with reflective adjustment.
- Understand and implement the unique requirements of developmentally appropriate practice and domain-based learning with young children in theoretical and authentic settings.

(with Washington State Teacher Certification)

This major is intended to prepare students to become birth through grade 3 teaching specialists. As it is less than a 60-credit major it requires a minor or second major. Students who elect to complete this major for a teacher certification endorsement in early childhood education are strongly advised to simultaneously complete the elementary education major (see a department advisor as to how this may be effectively accomplished). Students seeking the teacher certification endorsement in early childhood education must complete Teacher Certification and Professional Education Program requirements. Successful completion of EDEC 492 and EDEC 493 (minimum of 12 credits) is expected before student teaching. Majors and minors will complete program as a learning cohort (beginning fall or winter quarter) EDEC 492 and EDEC 493 concurrently and then either course may be repeated individually. Candidates must be fully admitted to the major prior to beginning the six-quarter cohort sequence. Students enrolling in any course with a field experience must have a current WSP and FBI fingerprint and background clearance on file with CWU. Please check with the CWU Teacher Certification Office (Black Hall, room 228; 509-963-2660) regarding clearance.

(without Washington State Teacher Certification)

A student may complete the Early Childhood Education major without gaining entry to the Teacher Certification Program or completing the Professional Education Program. Under such circumstances a teacher certification endorsement in early childhood will not be granted. This option exists for those individuals who wish to work with young children in birth-age 8 settings that do not require teacher certification. Candidates must be fully admitted to the major or minor prior to beginning the six-quarter cohort sequence. While full application to the Teacher Certification Program is not required, students enrolling in any Early Childhood Education Program class that has a field experience, must have current WSP/FBI fingerprint and background clearance. Please check with the CWU Teacher Certification Office (Black Hall, room 228; 509-963-2660) regarding clearance.

### Required Courses

- EDEC 306 - Professional Growth and Expectations  
**Credits:** (2)
- EDEC 307 - Equity, Culture, and Anti-bias in ECE  
**Credits:** (3)

- EDEC 312 - Childhood Learning **Credits:** (3)
- EDEC 313 - Materials and Manipulatives in ECE **Credits:** (3)
- EDEC 314 - Learning through Play **Credits:** (3)
- EDEC 321 - Curriculum I **Credits:** (3)
- EDEC 322 - Parent Involvement **Credits:** (3)
- EDEC 411 - Curriculum II **Credits:** (3)
- EDEC 412 - Responsible Childhood Assessment **Credits:** (3)
- **OR** EFC 315 - Educational Assessment **Credits:** (3)
- EDEC 422 - Classroom Management in an ECE Classroom **Credits:** (3)
- **OR** EFC 350 - Classroom Management **Credits:** (3)
- EDEC 424 - Curriculum III **Credits:** (3)
- EDEC 432 - Theories in Child Development **Credits:** (3)
- EDEC 492 - Senior Seminar **Credits:** (3)
- EDEC 493 - Professional Educators Field Experience **Credits:** (3-18)

Total Credits: 50

Professional Education Program Credits: 50

Professional Education Program

Total Credits: 100

College and Department Information

Education, Development, Teaching and Learning Department  
College of Education and Professional Studies

## Middle-level Humanities Teaching Major, BA

The middle-level humanities teaching major is designed for students who are seeking teaching careers in teaching English language arts and social studies (economics, history, geography, social studies and civics) at the middle-level grades (5-8). The coursework provides experiences in the humanities subject content areas and instructional pedagogy including field experiences that are designed to prepare teacher certification and content endorsement. The middle-level humanities teaching major does not require a minor for the degree program. Students in the middle-level humanities teaching major must be admitted to the Teacher Certification Program and complete the Professional Education Program sequence (50 credits) coursework as part of the teacher certification process.

Required Courses

- EDEL 476 - Integrated Humanities at the Middle-level Grades **Credits:** (5)
- EDEL 477 - Middle School Students and Their Environment **Credits:** (4)
- EDEL 478 - Developmentally Responsive Curriculum in the Middle Grades **Credits:** (3)

- EDEL 493 - Professional Educators Field Experience **Credits:** (1-15) (Must be taken for 3 credits)
- EDLT 324 - Literacy Across the Curriculum Grades 6-12 **Credits:** (3)
- ENG 247 - Multicultural Literature **Credits:** (5)
- ENG 320 - English Grammar **Credits:** (5)
- ENG 429 - Teaching Writing in Middle-level Humanities **Credits:** (5)
- ENG 488 - Teaching Portfolio **Credits:** (2)
- ENG 492 - Practicum **Credits:** (3)
- HIST 101 - World History to 1500 **Credits:** (5)
- HIST 143 - United States History to 1865 **Credits:** (5)
- HIST 301 - Pacific Northwest History **Credits:** (5)
- POSC 210 - American Politics **Credits:** (5)

Select one from the following for 5 credits:

- ECON 101 - Economic Issues **Credits:** (5)
- ECON 102 - World Economic Issues **Credits:** (5)
- ECON 201 - Principles of Economics Micro **Credits:** (5)
- ECON 202 - Principles of Economics Macro **Credits:** (5)

Select one from the following for 5 credits:

- GEOG 101 - World Regional Geography **Credits:** (5)
- GEOG 208 - Our Human World **Credits:** (5)

Upper-Division World History to 1600

Select one from the following for 5 credits:

- HIST 313 - History of Rome 500 B.C. to 500 A. D. **Credits:** (5)
- HIST 315 - Muslim Middle East (Put on Reserve 9/16/16.) **Credits:** (5)
- HIST 325 - Renaissance and Reformation **Credits:** (5)
- HIST 370 - Medieval European History **Credits:** (5)
- HIST 383 - East Asian Civilization **Credits:** (5)
- HIST 422 - Roman and Medieval Britain **Credits:** (5)
- HIST 473 - Russia to 1881 **Credits:** (5)

Upper-Division United States History to 1900

Select one from the following for 5 credits:

- HIST 339 - Colonial British America **Credits:** (5)
- HIST 341 - The Constitution and the New Republic, 1783-1800 **Credits:** (5)
- HIST 440 - The American Revolution **Credits:** (5)
- HIST 442 - Jefferson, Jackson, and American Growth, 1800-1848 **Credits:** (5)
- HIST 443 - The West in American History **Credits:** (5)
- HIST 444 - Sectionalism, Civil War, and Reconstruction **Credits:** (5)

- HIST 450 - Exploring U.S. Cultural History **Credits:** (5)
- HIST 454 - American Environmental History **Credits:** (5)

Total Credits: 78

Professional Education Program Credits: 50

Professional Education Program

Total Credits: 128

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### Program Outcomes

Visit program outcomes to find out what you can expect to know and do after successful completion of this program.

## Elementary Education Major, BAEd

This major satisfies the Washington State teacher education endorsement for elementary (K-8) education (2014). There is not an option to complete this major without completing all state teacher certification requirements. This major includes a PEP alternative.

Students who complete this major will be endorsed to teach in regular, self-contained elementary classrooms.

### Admission Requirements

Students may take the first 2 quarters of courses as outlined in the program of study. To continue with the Elementary Education Major, students must be fully admitted to the CWU Teacher Certification Program and have completed prerequisites MATH 164 and MATH 226.

### Graduation Requirements

Candidates must complete all major courses with a C or higher, maintain a cumulative GPA of at least 3.0, and meet all requirements of the Teacher Certification Program for Washington State Teacher Certification.

Introduction to the Teaching Profession Credits: 15

Home, school, and community are emphasized as learning environments and their role in supporting the learning process.

- ELEF 212 - Introduction to Teaching in Elementary Schools **Credits:** (3)
- ELEM 292 - Lab I: Introduction to the Teaching Profession **Credits:** (1)
- ELEM 321 - Children's Literature **Credits:** (3)
- **OR** EDLT 321 - Teaching Children's Literature **Credits:** (3)

- ELEM 323 - Learners and the Learning Environment **Credits:** (4)
- PSY 314 - Human Development and the Learner **Credits:** (4)

Culture and Society Credits: 14

Emphasis on the significance of culturally relevant educational partnerships with family, educators, and community.

- ELEF 322 - Culturally Responsive Teaching **Credits:** (3)
- ELEM 325 - Integrating the Arts **Credits:** (3)
- ELEM 331 - Foundations of Teaching Literacy **Credits:** (3)
- ELEM 353 - Teaching Elementary Social Studies **Credits:** (4)
- **OR** EDEL 420 - Social Sciences in the Elementary School **Credits:** (4)
- ELEM 392 - Lab II: Culture and Society **Credits:** (1)

Instructional Design Credits: 16

Foundational learning theory is applied to instructional design, delivery, and assessment highlighting evidence-based engagement practices in content areas.

- ELEF 324 - Educational Technology for Elementary Classrooms **Credits:** (2)
- ELEF 332 - Instructional Design and Assessment **Credits:** (5)
- ELEF 492 - Practicum I: Instructional Design **Credits:** (1)
- ELEM 341 - Reading Assessment and Instruction **Credits:** (4)
- **AND** ELEM 351 - Writing Assessment and Instruction **Credits:** (4)
- **OR**
- EDLT 308 - Literacy I **Credits:** (3)
- **AND** EDLT 409 - Literacy II **Credits:** (5)

Differentiation Credits: 15

Instructional design and assessment are modified to differentiate learning concepts and approaches to meet individual interests, needs, and abilities.

- ELEF 472 - Classroom Management for Elementary Teachers **Credits:** (3)
- ELEF 493 - Practicum II: Differentiation **Credits:** (2)
- ELEM 333 - Inclusive Teaching **Credits:** (3)
- PESH 410 - Health and Physical Education for Elementary Classroom Teachers **Credits:** (4)
- ELEM 443 - Teaching in Linguistically Diverse Classrooms **Credits:** (3)
- **OR** EDBL 401 - Principles and Practices for Educating Linguistically Diverse Students **Credits:** (3)

- **OR** EDBL 430 - Sheltering Instruction for Linguistically Diverse Students **Credits:** (3) (for Bilingual/TESL minors)

Inquiry-Based Learning Credits: 9

Using guiding and supporting questions, problems, or situations to shape learner-centered investigations within educational environments.

- ELEM 342 - Teaching Elementary Science Inquiry **Credits:** (4)
- **OR** SCED 322 - Science Education in the Elementary School **Credits:** (4)
- ELEM 451 - Teaching Elementary Mathematics Early Grades **Credits:** (3)
- ELEM 494 - Practicum III: Inquiry-Based Learning **Credits:** (2)

Professional Engagement Credits: 11

Application of ethical, legal, and professional practice in a collaborative context.

- ELEF 426 - Ethics and Education Law for Elementary Teachers **Credits:** (3)
- ELEF 495 - Practicum IV: Professional Engagement **Credits:** (2)
- ELEM 452 - Teaching Elementary Mathematics Upper Grades **Credits:** (4)
- ELEM 471 - Elementary Education Capstone **Credits:** (2)

Application Credits: 16

Bridging acquired content, skills, and attitudes to effective learning and teaching implementation.

- EFC 480 - Student Teaching **Credits:** (16)

Total Credits: 96

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### Program Outcomes

Visit program outcomes to find out what you can expect to know and do after successful completion of this program.

## Special Education (P-12) Broad Area Major, BAEd

This major is for students planning to earn a teaching certificate with special education P-12 endorsement. Students majoring in special education are only allowed to teach special education unless they have another endorsable major/minor.

(NOTE: Majors of 60 or more credits do not require an accompanying minor.)

University General Education and Professional Education/Core Sequence requirements must also be met for graduation/teacher certification, as well as the completion of an approved university minor.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Identify special education as a changing discipline based on philosophies, evidence-based principles and theories, relevant laws and policies, diverse and historical points of view, and human issues that have historically influenced and continue to influence the field of special education and the education and treatment of individuals with exceptional needs both in school and society.
- Demonstrate respect for their students first as unique human beings by identifying similarities and differences in human development and the characteristics between and among individuals with and without exceptional learning needs.
- Select and compile a repertoire of evidence-based instructional strategies to individualize instruction for individuals with exceptional learning needs to promote positive learning results in general and special curricula and to appropriately modify learning environments for individuals with exceptional learning needs.
- Identify and use multiple types of assessment information for a variety of educational decisions: to help identify exceptional learning needs and to develop and implement individualized instructional programs, as well as to adjust instruction in response to ongoing learning progress
- Collaborate with families, other educators, related service providers, and personnel from community agencies in culturally responsive ways.
- Identify typical and atypical language development and use individualized strategies to enhance language development and teach communication skills to individuals with exceptional needs. Students will identify augmentative, alternative, and assistive technologies to support and enhance communication of individuals with exceptional needs.

### Required Courses

- EDEL 323 - Teaching Elementary School Mathematics **Credits:** (4)
- EDLT 308 - Literacy I **Credits:** (3)
- EDLT 409 - Literacy II **Credits:** (5)
- EDLT 422 - Teaching the Language Arts **Credits:** (4)
- EDSE 310 - Introduction and Foundations of Special Education **Credits:** (4)
- EDSE 410 - Behavior Management for Students with Disabilities **Credits:** (5)
- EDSE 411 - Assessment of Students with Exceptionalities **Credits:** (5)

- EDSE 422 - Teaching Strategies, Curriculum, and Materials for Students with Exceptionalities **Credits:** (5)
- EDSE 423 - Instructional Practices/Strategies in Literacy and Math for Students with High Incident Disabilities **Credits:** (5)
- EDSE 426 - The Child with Language Exceptionalities **Credits:** (3)
- EDSE 431 - Individualized Educational Programs for Students with Exceptionalities **Credits:** (4)
- EDSE 432 - Strategies for Working with Students with Low Incidence Disabilities **Credits:** (4)
- EDSE 460 - Collaboration with Parents, Paraprofessionals, and Community Agencies **Credits:** (4)
- EDSE 495 - Practicum **Credits:** (5-16) (must be taken for 16 credits)

Total Credits: 70

Professional Education Program Credits: 50

Professional Education Program

Total Credits: 120

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## Special Education (P-12) Major, BAEd

This major satisfies the endorsement for special education. This major is for students planning to earn a teaching certificate with special education P-12 endorsement. This major requires an endorsable content area minor. Please see an SOE or Program advisor for minor options.

### Admission Requirements

Full admittance to the Teacher Preparation Program. Admission requirements to the Teacher Preparation Program, within the School of Education, apply to this major.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Identify special education as a changing discipline based on philosophies, evidence-based principles and theories, relevant laws and policies, diverse and historical points of view, and human issues that have historically influenced and continue to influence the field of special education and the education and treatment of individuals with exceptional needs both in school and society.
- Demonstrate respect for their students first as unique human beings by identifying similarities and differences in human development and the

characteristics between and among individuals with and without exceptional learning needs.

- Select and compile a repertoire of evidence-based instructional strategies to individualize instruction for individuals with exceptional learning needs to promote positive learning results in general and special curricula and to appropriately modify learning environments for individuals with exceptional learning needs.
- Identify and use multiple types of assessment information for a variety of educational decisions: to help identify exceptional learning needs and to develop and implement individualized instructional programs, as well as to adjust instruction in response to ongoing learning progress
- Collaborate with families, other educators, related service providers, and personnel from community agencies in culturally responsive ways.
- Identify typical and atypical language development and use individualized strategies to enhance language development and teach communication skills to individuals with exceptional needs. Students will identify augmentative, alternative, and assistive technologies to support and enhance communication of individuals with exceptional needs.

Required Courses

- EDSE 310 - Introduction and Foundations of Special Education **Credits:** (4)
- EDSE 410 - Behavior Management for Students with Disabilities **Credits:** (5)
- EDSE 411 - Assessment of Students with Exceptionalities **Credits:** (5)
- EDSE 422 - Teaching Strategies, Curriculum, and Materials for Students with Exceptionalities **Credits:** (5)
- EDSE 423 - Instructional Practices/Strategies in Literacy and Math for Students with High Incident Disabilities **Credits:** (5)
- EDSE 426 - The Child with Language Exceptionalities **Credits:** (3)
- EDSE 431 - Individualized Educational Programs for Students with Exceptionalities **Credits:** (4)
- EDSE 432 - Strategies for Working with Students with Low Incidence Disabilities **Credits:** (4)
- EDSE 460 - Collaboration with Parents, Paraprofessionals, and Community Agencies **Credits:** (4)
- EDSE 495 - Practicum **Credits:** (5-16) (May be taken for an amount of credits between 8 to 16.)

Total Credits: 47-55

Professional Education Program Credits: 50

Professional Education Program

Total Credits: 97-105

College and Department Information

## Bilingual Education/Teaching English as a Second Language Minor

This minor satisfies the endorsement requirements for bilingual education and English Language Learner. This minor serves the goals and requirements of students wishing to teach in classrooms characterized by cultural and linguistic diversity. The Bilingual Education/TESL minor leads to K-12 endorsements in bilingual education and English Language Learners. Students must demonstrate proficiency in a non-English language in order to meet the bilingual education minor requirements. This is to be demonstrated by passing the foreign language examination assessment required by the State of Washington at the proficiency levels required for Bilingual Education candidates.

### Admission Requirements

Candidates must be conditionally admitted to the CWU Teacher Certification program or have a signed non-certification waiver letter on file before admission to program. Candidates may take EDBL 312: Foundations of Bilingual Education, or EDBL 438: Teaching ESL before admission to program.

### Graduation Requirements

Before graduation, candidates must pass the foreign language examination assessment required by the State of Washington at the required proficiency level.

### Required Courses

- EDBL 312 - Foundations in Bilingual Education **Credits: (3)**
- EDBL 318 - Family, Community, and Culture in Education **Credits: (3)**
- EDBL 430 - Sheltering Instruction for Linguistically Diverse Students **Credits: (3)**
- EDBL 433 - Educational Linguistics **Credits: (3)**
- EDBL 435 - Bilingual Education in the Content Areas **Credits: (3)**
- EDBL 438 - Teaching English as a Second Language **Credits: (3)**
- EDBL 439 - Assessment of Linguistically Diverse Students **Credits: (3)**
- EDBL 440 - Development of Literacy with Linguistically Diverse Students **Credits: (3)**
- EDBL 492 - Practicum **Credits: (1-15)** (Must be taken for 3 credits) (Four EDBL courses must be completed before EDBL 492 admission)

Total Credits: 27

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## Early Childhood Education Minor

(with Washington State Teacher Certification)

This minor is intended to prepare the students to become a birth through grade 3 teacher. Students who elect to complete this minor with a teaching endorsement in early childhood education are strongly advised to simultaneously complete the elementary education major (see a department advisor as to how this may be effectively accomplished). Students seeking the teacher certification endorsement in early childhood education must complete Teacher Certification and Professional Education Program requirements and courses (50 credits). Candidates must be fully admitted to the minor prior to beginning the six-quarter cohort sequence. All students in the ECE program must have WSP/FBI background and fingerprint clearance. Please check with the CWU Teacher Certification Office (Black Hall, room 228; 509-963-2660) regarding clearance.

(without Washington State Teacher Certification)

A student may complete this minor without gaining entry to the Teacher Certification Program or completing the Professional Education Program. Under such circumstances a teacher certification endorsement in early childhood will not be granted. This option exists for those individuals who wish to work with young children in an infancy/toddler/preschool setting. Candidates must be fully admitted to the minor prior to beginning the six-quarter cohort sequence. All students in the ECE program must have WSP/FBI background and fingerprint clearance. Please check with the CWU Teacher Certification Office (Black Hall, room 228; 509-963-2660) regarding clearance.

### Required Courses

- EDEC 306 - Professional Growth and Expectations **Credits: (2)**
- EDEC 307 - Equity, Culture, and Anti-bias in ECE **Credits: (3)**
- EDEC 312 - Childhood Learning **Credits: (3)**
- EDEC 313 - Materials and Manipulatives in ECE **Credits: (3)**
- EDEC 314 - Learning through Play **Credits: (3)**
- EDEC 321 - Curriculum I **Credits: (3)**
- EDEC 322 - Parent Involvement **Credits: (3)**
- EDEC 411 - Curriculum II **Credits: (3)**
- EDEC 412 - Responsible Childhood Assessment **Credits: (3)**
- **OR** EFC 315 - Educational Assessment **Credits: (3)**
- EDEC 422 - Classroom Management in an ECE Classroom **Credits: (3)**
- **OR** EFC 350 - Classroom Management **Credits: (3)**
- EDEC 424 - Curriculum III **Credits: (3)**

Total Credits: 32

### College and Department Information

## Educating Highly Capable Learners Minor

The educating highly capable learners minor is designed for students and certified teachers who are seeking additional endorsement in working with highly capable (gifted and talented) students in the P-12 educational system. While the minor does not result in an initial Washington State Endorsement, it does qualify for an "Add-on" endorsement that can be attached to an existing Washington State Teaching certificate. Teacher Education Candidates seeking a primary initial endorsement (i.e. Early Childhood Education, Elementary Education, etc.) that requires a minor can add the educating highly capable learners minor to complete the BA in education degree. However, the candidate will not be eligible for the highly capable endorsement until the initial teaching certificate has been awarded. Practicing teachers and teacher education candidates at K-12 levels can add this minor to develop a broader spectrum of developmental understanding and strategies for working with highly gifted and talented learners.

Teacher education candidates in the Educating Highly Capable Learners Minor Program must be admitted to Teacher Certification Program or currently hold a valid teaching certificate.

### Required Courses

- EDEL 401 - Foundations/Philosophy for Teaching Highly Capable Learners **Credits:** (2)
- EDEL 405 - Societal and Cultural Perceptions of Giftedness **Credits:** (3)
- EDEL 410 - Identification of Highly Capable Learners **Credits:** (2)
- EDEL 415 - Learning Environments for Highly Capable Learners **Credits:** (3)
- EDEL 425 - Curriculum Development/Modification-Highly Capable Learners **Credits:** (3)
- EDEL 430 - Individual Development of Highly Capable Learners **Credits:** (3)
- EDEL 435 - Introduction to Project-Based Learning (PBL) **Credits:** (2)
- EDEL 450 - Planning and Instruction I: Highly Capable Learners **Credits:** (3)
- EDEL 455 - Planning and Instruction II: Highly Capable Learners **Credits:** (3)
- EDEL 493 - Professional Educators Field Experience **Credits:** (1-15)

Total Credits: 30

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## Literacy Minor

The literacy minor, with campus and field experiences, is designed to prepare literacy teachers and strengthen background preparation of elementary, middle, and secondary teachers.

ELEM 321 and ELEM 331 are prerequisites for admittance to the minor (EDLT courses). All EDLT courses require acceptance into an education major. The minor is typically commenced in the junior year.

### Admission Requirements

All EDLT courses require acceptance into an education major.

### Graduation Requirements

Completion of all required courses with a C or higher.

### Required Courses

- EDLT 324 - Literacy Across the Curriculum Grades 6-12 **Credits:** (3)
- EDLT 410 - Literacy Teaching and Learning Birth-Grade 3 **Credits:** (3)
- EDLT 411 - Teaching Comprehension **Credits:** (3)
- EDLT 412 - Assessment of Literacy Skills and Processes **Credits:** (3)
- EDLT 413 - Literacy Teaching and Learning Grades 4-8 **Credits:** (3)
- EDLT 414 - Linguistics and Literacy for Diverse Learners **Credits:** (3)

Total Credits: 18

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## Middle-level English Minor (Non-Endorsement)

The middle-level English minor is designed for students who are seeking teaching careers at the elementary or middle school level. While this minor does not result in a Washington State middle-level humanities endorsement which requires both the English and social studies content areas, it does provide additional training and expertise in the English and language arts content areas. Candidates seeking the elementary endorsement (K-8) can add this minor to provide an English/language arts content focus area to the generalist teaching degree. Teacher candidates at the middle-level and secondary-level can add this minor to broaden specialized content areas as the first step in adding middle-level humanities (English language arts and social studies) endorsement.

### Required Courses

- EDEL 476 - Integrated Humanities at the Middle-level Grades **Credits:** (5)

- EDEL 477 - Middle School Students and Their Environment **Credits:** (4)
- EDEL 478 - Developmentally Responsive Curriculum in the Middle Grades **Credits:** (3)
- EDLT 324 - Literacy Across the Curriculum Grades 6-12 **Credits:** (3)
- ENG 247 - Multicultural Literature **Credits:** (5)
- ENG 303 - Principles of English Studies **Credits:** (5)
- ENG 320 - English Grammar **Credits:** (5)
- ENG 429 - Teaching Writing in Middle-level Humanities **Credits:** (5)
- ENG 488 - Teaching Portfolio **Credits:** (2)
- ENG 492 - Practicum **Credits:** (3)

Total Credits: 40

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## Middle-level Social Studies Minor (Non-Endorsement)

The middle-level social studies minor is designed for students who are seeking teaching careers at the elementary or middle school level. While this minor does not result in a Washington State middle-level humanities endorsement, which requires both the English and social studies content areas, it does provide additional training and expertise in the social studies, history, economics, civics, and geography content areas. Candidates seeking the elementary endorsement (K-8) can add this minor to provide a social studies content focus area to the generalist teaching degree. Teacher candidates at the middle-level and secondary-level can add this minor to broaden specialized content areas as the first step in adding middle-level humanities (English language arts and social studies) endorsement.

Required Courses

- EDEL 476 - Integrated Humanities at the Middle-level Grades **Credits:** (5)
- EDEL 477 - Middle School Students and Their Environment **Credits:** (4)
- EDEL 478 - Developmentally Responsive Curriculum in the Middle Grades **Credits:** (3)
- EDEL 493 - Professional Educators Field Experience **Credits:** (1-15) (Must be taken for 3 credits)

Select from the following: Credits (15)

- HIST 101 - World History to 1500 **Credits:** (5)
- HIST 143 - United States History to 1865 **Credits:** (5)
- HIST 301 - Pacific Northwest History **Credits:** (5)
- POSC 210 - American Politics **Credits:** (5)

Select from the following: Credits (5)

- GEOG 101 - World Regional Geography **Credits:** (5)
- GEOG 208 - Our Human World **Credits:** (5)

Select from the following: Credits (5)

- ECON 101 - Economic Issues **Credits:** (5)
- ECON 102 - World Economic Issues **Credits:** (5)
- ECON 201 - Principles of Economics Micro **Credits:** (5)
- ECON 202 - Principles of Economics Macro **Credits:** (5)

Select from the following: Credits (5)

### Upper-division World History to 1600

- HIST 313 - History of Rome 500 B.C. to 500 A. D. **Credits:** (5)
- HIST 315 - Muslim Middle East (Put on Reserve 9/16/16.) **Credits:** (5)
- HIST 325 - Renaissance and Reformation **Credits:** (5)
- HIST 370 - Medieval European History **Credits:** (5)
- HIST 383 - East Asian Civilization **Credits:** (5)
- HIST 422 - Roman and Medieval Britain **Credits:** (5)
- HIST 473 - Russia to 1881 **Credits:** (5)

### Upper-division United States History to 1900

- HIST 339 - Colonial British America **Credits:** (5)
- HIST 341 - The Constitution and the New Republic, 1783-1800 **Credits:** (5)
- HIST 434 - American Indian History to 1795 **Credits:** (5)
- HIST 438 - American Indian History since 1795 **Credits:** (5)
- HIST 440 - The American Revolution **Credits:** (5)
- HIST 442 - Jefferson, Jackson, and American Growth, 1800-1848 **Credits:** (5)
- HIST 443 - The West in American History **Credits:** (5)
- HIST 444 - Sectionalism, Civil War, and Reconstruction **Credits:** (5)
- HIST 450 - Exploring U.S. Cultural History **Credits:** (5)
- HIST 454 - American Environmental History **Credits:** (5)

Total Credits: 45

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# Special Education High Incidence Inclusion (K-12) Endorsable Minor

This endorsable minor is designed for students in the Teacher Preparation Program wishing to add a special education endorsement. This minor has a high incidence focus (kindergarten through 12th grade) and is designed to provide the knowledge base needed to support an inclusive or cotaught elementary, middle school, or high school classroom.

## Admission Requirements

Full admittance to the Teacher Preparation Program.

## Graduation Requirements

Completion of all coursework and field experience hours with a gpa of 3.0 or higher.

## Program Requirements

Must maintain a gpa of 3.0 or higher.

## Program Learner Outcomes

Upon successful completion of this program, students/beginning special education professionals will be able to:

- Understand how exceptionalities may interact with development and learning and use this knowledge to provide meaningful and challenging learning experiences for individuals with exceptionalities.
- Create safe, inclusive, culturally responsive learning environments so that individuals with exceptionalities become active and effective learners and develop emotional well-being, positive social interactions, and self-determination.
- Use knowledge of general and specialized curricula to individualize learning for individuals with exceptionalities.
- Use multiple methods of assessment and data sources in making educational decisions.
- Select, adapt, and use a repertoire of evidence-based instructional strategies to advance learning of individuals with exceptionalities.
- Use foundational knowledge of the field and their professional ethical principles and practice standards to inform special education practice, to engage in lifelong learning, and to advance the profession.
- Collaborate with families, other educators, related service providers, individuals with exceptionalities, and personnel from community agencies in culturally responsive ways to address the needs of individuals with exceptionalities across a range of learning experiences.

## Required Courses

- EDSE 310 - Introduction and Foundations of Special Education **Credits:** (4)
- EDSE 410 - Behavior Management for Students with Disabilities **Credits:** (5)
- EDSE 411 - Assessment of Students with Exceptionalities **Credits:** (5)

- EDSE 422 - Teaching Strategies, Curriculum, and Materials for Students with Exceptionalities **Credits:** (5)
- EDSE 423 - Instructional Practices/Strategies in Literacy and Math for Students with High Incident Disabilities **Credits:** (5)
- EDSE 431 - Individualized Educational Programs for Students with Exceptionalities **Credits:** (4)
- EDSE 460 - Collaboration with Parents, Paraprofessionals, and Community Agencies **Credits:** (4)

Total Credits: 32

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# Special Education Non-Endorsable Minor

The non-endorsable special education minor is offered to specifically prepare individuals for meeting the diverse tasks required in working with individuals with special needs. The non-endorsable minor may serve as a knowledge base plan for those wishing to work with individuals with special needs, but who do not necessarily wish to teach in a classroom. This minor is designed to provide a knowledge base for those interested in pursuing such majors as psychology, family studies, sociology, etc. A good example of the use of this minor would be an individual majoring in psychology with a non-endorsable minor in special education who plans to pursue a masters in School Psychology or become a Board-Certified Behavior Analyst. Another example may be someone interested in pursuing a career in Social Work; this minor would be ideal for such pursuits. Please see a Special Education Program advisor to discuss options.

## Admission Requirements

Current Fingerprinting completed through the School of Education Office. Liability Insurance obtained through CWU. Current GPA of 3.0 or higher. Meeting with a Special Education Program advisor.

## Graduation Requirements

A minimum gpa of 3.0 or higher within non-endorsable minor credits earned.

## Required Courses

- EDSE 310 - Introduction and Foundations of Special Education **Credits:** (4)
- EDSE 410 - Behavior Management for Students with Disabilities **Credits:** (5)
- EDSE 411 - Assessment of Students with Exceptionalities **Credits:** (5)
- EDSE 422 - Teaching Strategies, Curriculum, and Materials for Students with Exceptionalities **Credits:** (5)

- EDSE 423 - Instructional Practices/Strategies in Literacy and Math for Students with High Incident Disabilities **Credits:** (5)
- EDSE 431 - Individualized Educational Programs for Students with Exceptionalities **Credits:** (4)
- EDSE 432 - Strategies for Working with Students with Low Incidence Disabilities **Credits:** (4)
- EDSE 460 - Collaboration with Parents, Paraprofessionals, and Community Agencies **Credits:** (4)

Total Credits: 36

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## Teaching English as a Second Language (TESL) Minor

This minor satisfies the endorsement for English Language Learner. This minor prepares students to teach in classrooms where linguistically diverse students are enrolled. While the bilingual/TESL minor leads to a bilingual education endorsement, the TESL minor leads to an English Language Learners endorsement. Students must complete, or have already completed, one year of study in a foreign or second language or the equivalent (at either the high school or university level).

### Admission Requirements

Candidates must be conditionally admitted to the CWU Teacher Certification program or have a signed non-certification waiver letter on file before admission to program. Candidates may take EDBL 312: Foundations of Bilingual Education, or EDBL 438: Teaching ESL before admission to program.

### Program Requirements

EDBL 492 requires that four (4) required program courses be completed before enrollment.

Required Courses

- EDBL 312 - Foundations in Bilingual Education **Credits:** (3)
- EDBL 318 - Family, Community, and Culture in Education **Credits:** (3)
- EDBL 430 - Sheltering Instruction for Linguistically Diverse Students **Credits:** (3)
- EDBL 433 - Educational Linguistics **Credits:** (3)
- EDBL 438 - Teaching English as a Second Language **Credits:** (3)
- EDBL 439 - Assessment of Linguistically Diverse Students **Credits:** (3)
- EDBL 440 - Development of Literacy with Linguistically Diverse Students **Credits:** (3)
- EDBL 492 - Practicum **Credits:** (1-15) (Must be taken for 3 credits) (Four EDBL courses must be completed before EDBL 492 admission)

Department-Approved Electives Credits: 3

Total Credits: 27

College and Department Information

Education, Development, Teaching and Learning Department  
College of Education and Professional Studies

## Global Literacy Development Certificate

Students in the Global Literacy Development Certificate Program will gain knowledge of best practices in literacy development and effective communication strategies. They will be prepared to support professionals in creating and supporting literacy programs in communities across cultures and around the world. This certificate program will be offered at the Ellensburg campus and on-line.

Required Courses

- COM 365 - Organizational Communication **Credits:** (4)
- EDLT 317 - Early Literacy (On reserve as of 9/16/15) **Credits:** (3)
- EDLT 321 - Teaching Children's Literature **Credits:** (3)
- EDLT 414 - Linguistics and Literacy for Diverse Learners **Credits:** (3)
- EDLT 418 - Literacy and Linguistics **Credits:** (3)
- EDLT 498 - Special Topics **Credits:** (1-6)
- EDLT 499 - Seminar **Credits:** (1-5)

Total Credits: 18

College and Department Information

Education, Development, Teaching and Learning Department  
College of Education and Professional Studies

## Engineering Technologies, Safety, and Construction Department

College of Education and Professional Studies  
Ellensburg  
Hogue Technology Building, room 101  
509-963-1756

[www.cwu.edu/engineering](http://www.cwu.edu/engineering)

See website for how these programs may be used for

educational and career purposes.

### **Faculty and Staff**

#### **Chair**

Sathyaranayanan (Sathy) Rajendran, PhD, CSP, ARM, LEED-AP

#### **Professors**

Scott Calahan, MEd, industrial/technology education  
David Carns, MS, construction management  
Craig Johnson, PhD, mechanical engineering technology

#### **Associate Professors**

Roger Beardsley, MS, mechanical engineering technology  
David Martin, construction management  
Lad Holden, MT, electronics engineering technology  
Darren Olson, PhD, industrial technology  
P. Warren Plugge, PhD, construction management  
Charles Pringle, MS, mechanical engineering technology  
Sathyaranayanan (Sathy) Rajendran, PhD, CSP, ARM, LEED-AP, safety and health management  
Michael L. Whelan, PhD, construction management

#### **Assistant Professors**

Morgan Bliss, MS, safety and health management  
Greg Lyman, MS, electronics engineering technology

#### **Senior Lecturer**

Michael Andler, MS, safety and health management

#### **Lecturer**

Ted Bramble, MS, industrial engineering technology

#### **Emeritus Professors**

D. Ken Calhoun, EdD  
Stanley A. Dudley, MEd  
Robert M. Envick, EdD  
Ronald M. Frye  
Robert Wiekling, PhD  
Norman H. Wolford, MS  
Taiqian Q. Yang, PhD  
Tim Yoxtheimer, MS

#### **Staff**

Matthew Burvee, instructional and classroom support technician  
Shelley Spencer, department manager  
Jeff Wilcox, instructional and classroom support technician

#### **Department Overview**

The Department of Engineering Technologies, Safety, and Construction offers BS and BAS degree programs in various technologies.

#### **Accrediting Information**

The Construction Management program is fully accredited by the American Council for Construction Education (ACCE).

The B.S. in Electronics Engineering Technology is accredited by the Engineering Technology Accreditation Commission of ABET, <http://www.abet.org>.

The B.S. in Mechanical Engineering Technology is accredited by the Engineering Technology Accreditation Commission of ABET, <http://www.abet.org>.

#### **Department Information**

Some programs have specific admission requirements and admission deadlines. Specific information for each program can be found on the program Web site.

Students should seek advising from their program advisor prior to registration each quarter.

Courses with an additional fee are identified in the special course fee section of the student handbook published by the registrar.

#### **Program Outcomes**

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

#### **Course Offerings**

Frequency of course offering information can be found at the department website: [www.cwu.edu/engineering](http://www.cwu.edu/engineering) or by contacting the department directly.

## **Construction Management Major, BS**

#### **Co-ordinators**

David Carns, MS  
P. Warren Plugge, PhD

#### **Advisors**

David Martin, MS  
Michael Whelan, PhD

This major prepares the graduate for management positions in the construction industry. Students must be accepted into the major prior to taking upper-division CMGT courses. See [www.cwu.edu/engineering](http://www.cwu.edu/engineering) for details. Students pursuing this degree should work closely with their program advisor to ensure that prerequisites for entry into the major have been satisfied.

Construction management students have the choice to concentrate on one of two different construction types; general building or heavy civil construction.

#### **Admission Requirements**

Admission to the program is competitive; refer to construction management handbook on the program website ([www.cwu.edu/engineering/construction-management](http://www.cwu.edu/engineering/construction-management)).

#### **Exit Requirements**

Students are required to complete the Associate Constructor exam administered by American Institute of Constructors and achieve a minimum score of 60 percent to graduate with a BS in construction management.

#### **Program Learner Outcomes**

Upon successful completion of this program, students will be able to:

- **1. Cognitive: Knowledge/Knowing**
  - 1.A. Graduates shall be able to identify and describe the legal, economic and social aspects of the construction industry, the

- construction process and construction contract systems.
- 1.A.1. The student shall be able to identify and explain construction contracts and the roles and responsibilities of all parties involved with 80% accuracy.
- 1.A.2. The student shall demonstrate knowledge of lien laws, local and national labor laws and the contractors' and owners' rights pertaining to these areas with 80% accuracy.
- 1.A.3. The student shall be able to explain various construction dispute resolution techniques and various steps that may be taken to avoid disputes with 80% accuracy.
- 1.A.4. Students shall be able to describe basic management principles, organizational behavior and structure as these related to the construction industry with 80% accuracy.
- 1.B. Graduates shall demonstrate analytical skills and knowledge in the area of structures, construction finance, cost analysis, construction safety, construction materials, construction methods and building systems.
- 1.B.1. Students shall demonstrate an understanding of managerial accounting techniques as they relate to the construction industry with 80% accuracy.
- 1.B.2. Students shall demonstrate an understanding of mathematics and science; including chemistry, physics and mathematics through calculus with 80% accuracy.
- 1.B.3. The student shall demonstrate knowledge of types and uses of construction materials, including wood, steel and concrete. This knowledge shall include understanding terminology, units of measure, sizes and gradations, standard designations, specifications and testing techniques, with 75% accuracy.
- 1.B.4. Students shall demonstrate knowledge in the areas of structural mechanics, including statics and strength of materials with 80% accuracy.
- 1.B.5. Students shall demonstrate an understanding of, electrical and mechanical systems with 80% accuracy.
- 1.B.6. Students shall demonstrate knowledge of soil mechanics and foundation types and principles of design with 80% accuracy.
- 1.B.7. Students shall demonstrate a working knowledge of construction cost accounting, financing, insurance, bonding, bidding and procurement practices, depreciation and expensing, cost forecasting, cash flow requirements, time value of money and project payment procedures, with 70% accuracy.
- 1.B.8. The student shall demonstrate knowledge of construction safety training, procedures, record keeping, maintenance, inspection, penalties and compliance with state and federal regulations with 70% accuracy.
- 1.B.9. Students shall demonstrate an understanding of construction project management; including concepts, roles and responsibilities of individuals, administrative systems and procedures, cost control systems, proper job site and office documentation and quality control philosophies and applications with 70% accuracy.
- 1.B.10. Students shall be able to demonstrate knowledge of proper project planning, including staffing and equipment and material usage with 80% accuracy.
- **2. Affective: Attitudes/Feelings/Values**
  - 2.A. Graduates shall obtain employment as construction professionals in entry-level positions. Graduates shall also possess the skills, knowledge, attitude and behavior to advance within the industry.
  - 2.A.1. Students shall be able to identify and understand ethical issues relevant to the various parties in the construction process, and to react in a manner consistent with ethical standards established by the construction industry associations, with 80% accuracy.
  - 2.A.2. Students shall demonstrate the ability to work in groups and act as team players, with a success rate of 80%.
  - 2.A.3. The student shall demonstrate knowledge of construction industry organizations, such as; The Associated General Contractors of America (AGC), The National Association of Home Builders (NAHB), The Mechanical Contractors Association (MCA), The American Council for Construction Education and The American Institute of Constructors. Students shall also demonstrate knowledge of the commitment and importance of these organizations to society, with 80% accuracy.
- **3. Skills/Doing**
  - 3.A. Graduates shall be able to estimate, plan and schedule a small commercial/residential or heavy/civil project using microcomputers and appropriate software.
  - 3.A.1. Students shall be able to perform accurate detailed quantity takeoffs on a commercial/residential project, including all Construction Specification Institute (CSI) divisions, both manually and utilizing Microsoft Excel, with a success rate of 90%.
  - 3.A.2. Students shall be able to accurately prepare a bid, based on pricing of materials, labor, equipment, overhead and profit for a commercial/residential or heavy/civil project. In addition, students choosing the general construction option shall be able to utilize estimating software, such as Timberline, to create and submit a bid for a residential/commercial project. Students

- choosing the heavy/civil construction option shall be able to estimate and bid a heavy/civil project using appropriate software, with an accuracy rate of 90%.
- 3.A.3. Students shall be able to prepare, analyze and update both a Gantt chart and a network (critical path method) schedule for a commercial/residential or heavy/civil project, both manually and utilizing scheduling software (Microsoft Project, SureTrak or similar scheduling software), with a success rate of 70%.
  - 3.B. Graduates shall be able to demonstrate basic building and material testing skills.
  - 3.B.1. Students shall demonstrate the ability to perform basic field and lab tests on construction materials, including concrete, and soils with 80% accuracy.
  - 3.B.2. Students shall demonstrate the ability to properly use and care for construction surveying instruments, including levels, transits, theodolites, tapes and electronic distance measuring devices, as these instruments relate to construction projects, with 80% accuracy.
  - 3.C. Students graduating from the program shall be able to communicate clearly and effectively, orally, graphically and in writing.
  - 3.C.1. Students shall be able to effectively prepare and present a technical oral report on various construction topics, with 80% success
  - 3.C.2. Students demonstrate the ability to make business and professional oral presentations, with 80% success.
  - 3.C.3. Students shall demonstrate the ability to prepare and edit a complete set of working drawings for both a residential or commercial building using AutoCAD software, with 80% accuracy.
  - 3.C.4. Students shall be able to communicate graphically using standard sketching and engineering drawing techniques, including proper dimensioning, orthographic projections, sections, auxiliary views and detail views, with 80% accuracy.
  - 3.C.5. Students shall be able to properly research a topic, using the reference materials at the library, the Internet and industry resources to prepare written technical reports, with 80% accuracy.
  - 3.C.6. Students shall be able to clearly demonstrate their written communication skills by writing prose, business letters, resumes, and daily job reports that include proper grammar, spelling and sentence structure, with a 70% success rate.

Required Courses Credits: 127

- CMGT 101 - Construction and the Built Environment **Credits: (4)**
- CMGT 201 - Computer Applications in Construction **Credits: (3)**
- CMGT 265 - Construction Documents **Credits: (3)**
- CMGT 267 - Plane Surveying **Credits: (3)**
- **AND** CMGT 267LAB - Plane Surveying Field Session **Credits: (1)**
- **OR** CMGT 267LABHC - Heavy Civil Highway Field Session **Credits: (1)**
- CMGT 320 - Electrical Systems **Credits: (3)**
- CMGT 343 - Construction Estimating I **Credits: (4)**
- CMGT 344 - Construction Estimating II **Credits: (4)**
- **OR** CMGT 345 - Heavy Civil Estimating II **Credits: (4)**
- CMGT 346 - Construction Methods and Materials **Credits: (4)**
- **OR** CMGT 347 - Heavy Civil Methods and Materials **Credits: (4)**
- CMGT 440 - Temporary Structures **Credits: (4)**
- **OR** CMGT 441 - Wood and Steel Construction **Credits: (4)**
- CMGT 442 - Building Mechanical Systems **Credits: (3)**
- **OR** CMGT 443 - Heavy Civil Utilities **Credits: (3)**
- CMGT 444 - Codes, Contracts, and Specifications **Credits: (4)**
- **OR** CMGT 445 - Heavy Civil Contract Law **Credits: (4)**
- CMGT 447 - Construction Planning, Scheduling, and Control **Credits: (4)**
- CMGT 450 - Soils and Foundations **Credits: (4)**
- CMGT 455 - Principles of Construction Management **Credits: (4)**
- **OR** CMGT 456 - Principles of Heavy Civil Construction Management **Credits: (4)**
- CMGT 460 - Concrete Construction **Credits: (4)**
- **OR** CMGT 461 - Pavement Design and Construction **Credits: (4)**
- CMGT 481 - Construction Management Capstone **Credits: (4)**
- **OR** CMGT 495A - Construction Management Competition Preparation - Fall **Credits: (2)** (Fall)
- **AND** CMGT 495B - Construction Management Competition Preparation - Winter **Credits: (2)** (Winter)
- CMGT 485 - Construction Accounting, Finance, and Contemporary Topics **Credits: (4)**
- CMGT 488 - Professional Certification **Credits: (1)**
- COM 345 - Business and Professional Speaking **Credits: (4)**
- ECON 201 - Principles of Economics Micro **Credits: (5)**
- ETSC 161 - Architectural Computer Aided Design **Credits: (3)**
- ETSC 301 - Engineering Project Cost Analysis **Credits: (4)**
- ETSC 311 - Statics **Credits: (4)**
- ETSC 312 - Strength of Materials **Credits: (4)**
- GEOL 101 - Introduction to Geology **Credits: (4)**
- ACCT 301 - Accounting Skills for Non-Accounting Majors **Credits: (5)**
- BUS 241 - Legal Environment of Business **Credits: (5)**

- GEOL 101LAB - Introductory Geology Laboratory **Credits:** (1)
- MATH 172 - Calculus I **Credits:** (5)
- MATH 173 - Calculus II **Credits:** (5)
- MGT 380 - Organizational Management **Credits:** (5)
- PHYS 181 - General Physics I with Laboratory **Credits:** (5)
- SHM 323 - Construction Safety and Health **Credits:** (3)

Select one from the following: Credits: 4

- CMGT 452 - LEED in Sustainable Construction **Credits:** (4)
- **OR** ETSC 490 - Cooperative Education **Credits:** (1-12) (Must be taken for 4 credits)  
**OR** Department-Approved Elective Course **Credits:** (4)

Total Credits: 130

College and Department Information

Engineering Technologies, Safety, and Construction  
Department  
College of Education and Professional Studies

## Electronics Engineering Technology Major, BS

### Advisors

Lad Holden, MT  
Greg Lyman, MS

The technologists graduating from this program are applications oriented, building upon a background of mathematics, science, and technology. They interface with engineers at the product level and produce practical, workable results quickly, install and operate technical systems, devise hardware and software from proven concepts, develop and produce products, service machines, programs, and systems, manage production facilities and work groups, and provide support for technical systems' hardware and software.

Students pursuing this degree should work with the department. Due to the number of hours required, some students may find that this program requires additional time to complete.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- 3.a. An appropriate mastery of the knowledge, techniques, skills and modern tools of their disciplines.
- 3.b. An ability to apply current knowledge and adapt to emerging applications of mathematics, science, engineering and technology

- 3.c. An ability to conduct, analyze and interpret experiments and apply experimental results to improve processes.
- 3.d. An ability to apply creativity in the design of systems, components, or processes appropriate to program objectives.
- 3.e. An ability to function effectively on teams
- 3.f. An ability to identify, analyze and solve technical problems.
- 3.g. An ability to communicate effectively
- 3.h. A recognition of the need for, and an ability to engage in lifelong learning.
- 3.i. An ability to understand professional, ethical and social responsibilities.
- 3.j. A respect for diversity and a knowledge of contemporary professional, societal and global issues.
- 3.k. A commitment to quality, timeliness, and continuous improvement.
- 9.A.1. Application of circuit analysis to the building, testing, operation, and maintenance of electrical/ electronic circuits.
- 9.A.2. Application of computer programming to the building, testing, operation, and maintenance of electrical/ electronic circuits.
- 9.A.3. Application of associated software to the building, testing, operation, and maintenance of electrical/ electronic circuits.
- 9.A.4. Application of circuit analysis to the building, testing, operation, and maintenance of electrical/ electronic circuits.
- 9.A.5. Application of analog electronics to the building, testing, operation, and maintenance of electrical/ electronic circuits.
- 9.A.6. Application of digital electronics to the building, testing, operation, and maintenance of electrical/ electronic circuits.
- 9.A.7. Application of microcomputers to the building, testing, operation, and maintenance of electrical/ electronic circuits.
- 9.B. Application of physics to electrical/ electronic circuits.
- 9.a.1. The ability to analyze, design, and implement instrumentation systems.
- 9.a.2. The ability to analyze, design, and implement computer systems.
- 9.b. The ability to apply project management techniques to electrical/ electronic systems.
- 9.c.1 The ability to utilize statistics and probability in support of electrical/ electronic systems.
- 9.c.1 The ability to utilize transform methods in support of electrical/ electronic systems.

Core Requirements - Credits: 68

- CS 110 - Programming Fundamentals I **Credits:** (4)
- EET 221 - Basic Electricity **Credits:** (3)
- EET 221LAB - Basic Electricity Laboratory **Credits:** (1)
- EET 271 - Digital Circuits **Credits:** (4)
- EET 312 - Basic Electronics **Credits:** (4)

- EET 323 - Active Linear Circuits **Credits:** (4)
- EET 325 - Electrical Networks **Credits:** (4)
- EET 343 - Process Control **Credits:** (4)
- EET 372 - Advanced Digital Circuits **Credits:** (4)
- EET 373 - Introduction to Embedded Programming **Credits:** (4)
- EET 374 - Microprocessors **Credits:** (4)
- EET 376 - Advanced Microprocessors **Credits:** (4)
- EET 426 - Advanced Electrical Network **Credits:** (4)
- EET 452 - Computer Networks **Credits:** (4)
- ETSC 241 - Programmable Logic Controller Applications **Credits:** (4)
- ETSC 242 - Instrumentation **Credits:** (4)
- ETSC 265 - Three-dimensional Modeling **Credits:** (4)
- ETSC 301 - Engineering Project Cost Analysis **Credits:** (4)

Pre-Approved Elective Sequences - Credits: 16

Select two of the following sequences.

- CS 111 - Programming Fundamentals II **Credits:** (4)
- **AND** CS 301 - Data Structures **Credits:** (4)  
**OR**
- EET 332 - Electrical Machines **Credits:** (4)
- **AND** EET 433 - Transmission and Distribution of Electrical Power **Credits:** (4)  
**OR**
- EET 377 - Advanced Robotics and Automation **Credits:** (4)
- **AND** EET 477 - Industrial Robotics and Automation **Credits:** (4)  
**OR**
- ETSC 490 - Cooperative Education **Credits:** (1-12)  
(Must be taken for 8 credits.)

Mathematics Requirement - Credits: 13-15

- MATH 172 - Calculus I **Credits:** (5)
- MATH 173 - Calculus II **Credits:** (5)  
**Select one from the following:**
- MATH 211 - Statistical Concepts and Methods **Credits:** (5)
- MATH 260 - Sets and Logic **Credits:** (5)
- MATH 265 - Linear Algebra I **Credits:** (4)
- MATH 272 - Multivariable Calculus I **Credits:** (5)
- MATH 330 - Discrete Mathematics **Credits:** (5)
- MATH 376 - Differential Equations I **Credits:** (3)

Physics Requirement - Credits: 15

- PHYS 111 - Introductory Physics I with Laboratory **Credits:** (5)
- PHYS 112 - Introductory Physics II with Laboratory **Credits:** (5)
- PHYS 113 - Introductory Physics III with Laboratory **Credits:** (5)  
**OR**

- PHYS 181 - General Physics I with Laboratory **Credits:** (5)
- PHYS 182 - General Physics II with Laboratory **Credits:** (5)
- PHYS 183 - General Physics III with Laboratory **Credits:** (5)  
(CHEM 181/181LAB may be substituted for PHYS 112 or PHYS 182)

Speech Requirement - Credits: 3-5

**Select one from the following:**

- COM 207 - Introduction to Human Communication **Credits:** (5)
- COM 345 - Business and Professional Speaking **Credits:** (4)
- ETSC 389 - Technical Presentations **Credits:** (3)

Written Communications Requirement - Credits: 3-4

**Select one from the following:**

- ADMG 385 - Business Communications and Report Writing **Credits:** (4)
- CS 325 - Technical Writing in Computer Science **Credits:** (3)
- ENG 310 - Technical Writing **Credits:** (4)

Capstone Sequence - Credits: 10

- EET 487 - Senior Project Management **Credits:** (2)
- EET 487LAB - Senior Project Management Laboratory **Credits:** (2)
- EET 488 - Senior Project Quality **Credits:** (2)
- EET 488LAB - Senior Project Quality Laboratory **Credits:** (2)
- EET 489 - Senior Technical Presentations **Credits:** (2)

Department-Approved Electives - Credits: 0-7

- Technical Electives approved by your advisor.

Total Credits: 134

College and Department Information

Engineering Technologies, Safety, and Construction  
Department  
College of Education and Professional Studies

## Industrial Engineering Technology Major, BS

**Coordinator**  
Tedman Bramble, MS

### Advisors

Tedman Bramble, MS  
Lad Holden, MT  
Sathyanarayanan Rajendran, PhD, CSP

The Industrial Engineering Technology (IET) major prepares students to be interdisciplinary problem solvers by equipping them to interface with multiple areas of an organization including engineering, production, sales, and management. The curriculum is characterized by an emphasis on practical, application-based topics rather than theory. Students are well suited to careers in such fields as technical sales, industrial distribution, project management, field service, and production supervision.

Students pursuing this degree should work closely with their department advisor to assure that they have met the prerequisites for the upper-division electives.

### Admission Requirements

IET major applications are accepted throughout the academic year. For details about the IET application procedures, contact the IET program coordinator.

### Graduation Requirements

Students must earn a cumulative grade point average of 2.0 (on a scale of 4.0) in courses allowed in fulfilling the IET major requirements.

### Program Requirements

A minimum grade of "C-" is required in each of the courses used to satisfy the IET degree program.

Transfer students MUST complete a minimum of 25 credits from the ETSC Department.

Foundation Courses Credits: 23

- ADMG 385 - Business Communications and Report Writing **Credits: (4)**
- **OR** ENG 310 - Technical Writing **Credits: (4)**
- CHEM 111 - Introduction to Chemistry **Credits: (4)**
- **AND** CHEM 111LAB - Introductory Chemistry Laboratory **Credits: (1)**
- **OR** CHEM 181 - General Chemistry I **Credits: (4)**
- **AND** CHEM 181LAB - General Chemistry Laboratory I **Credits: (1)**
- COM 345 - Business and Professional Speaking **Credits: (4)**
- MATH 154 - Pre-Calculus Mathematics II **Credits: (5)**
- PHYS 111 - Introductory Physics I with Laboratory **Credits: (5)**

Technology and Engineering Required Courses Credits: 47

- EET 221 - Basic Electricity **Credits: (3)**
- EET 221LAB - Basic Electricity Laboratory **Credits: (1)**
- EET 312 - Basic Electronics **Credits: (4)**
- EET 332 - Electrical Machines **Credits: (4)**
- ETSC 150 - Engineering Graphics **Credits: (5)**

- ETSC 241 - Programmable Logic Controller Applications **Credits: (4)**
- ETSC 242 - Instrumentation **Credits: (4)**
- ETSC 277 - Introduction to Robotics **Credits: (4)**
- ETSC 300 - Industrial Engineering Technology Fundamentals **Credits: (2)**
- ETSC 341 - Programmable Logic Controller Applications II **Credits: (4)**
- ETSC 485 - Industrial Engineering Technology Capstone **Credits: (4)**
- **OR** ETSC 490 - Cooperative Education **Credits: (1-12)** (Must be taken for 4 credits)
- MET 255 - Machining **Credits: (4)**
- MET 310 - Hydraulics/Pneumatics **Credits: (4)**

Professional Management Courses Credits: 23

- ETSC 301 - Engineering Project Cost Analysis **Credits: (4)**
- ETSC 380 - Quality Control **Credits: (4)**
- ETSC 385 - Product Design and Development **Credits: (4)**
- ETSC 455 - Engineering Project Management **Credits: (4)**
- MET 345 - Lean Manufacturing **Credits: (4)**
- SHM 325 - General Industry Safety and Health **Credits: (3)**

Business Courses Credits: 11

- ADMG 201 - Introduction to Business **Credits: (3)**
- ADMG 271 - Business Math Applications **Credits: (4)**
- RMT 340 - Principles of Selling **Credits: (4)**

Department-Approved Electives Credits: 4-5

Total Credits: 108-109

College and Department Information

Engineering Technologies, Safety, and Construction  
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### Program Outcomes

Visit program outcomes to find out what you can expect to know and do after successful completion of this program.

## Mechanical Engineering Technology Major, BS

The bachelor of science degree in mechanical engineering technology (MET) has emphasis in mechanical or manufacturing technology. The major provides a broad foundation in the practical application of mechanical engineering principles. Graduates concentrating in mechanical technology may pursue one of the following career paths:



machine and product design, product and system evaluation, plant operation and management, technical sales, field service, environmental quality control, and energy production. Graduates specializing in manufacturing technology are prepared to enter career paths as tool designers, tool and production planners, numerical control programmers, machine planners, computer-assisted machine planners, manufacturing process analysts, quality assurance, and technical field representatives.

Those students who are interested in taking advanced engineering courses after graduation should complete the general physics sequence, (PHYS 181, 182, 183) and mathematics through differential equations.

Students pursuing the MET degree should work with the departmental advisor to ensure that the prerequisites for the upper-division electives have been met. Due to the number of hours in this program, some students may find that this program requires additional time to complete.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- 3.a. an appropriate mastery of the knowledge, techniques, skills and modern tools of their disciplines
- 3.b. an ability to apply current knowledge and adapt to emerging applications of mathematics, science, engineering and technology.
- 3.c. an ability to conduct, analyze and interpret experiments and apply experimental results to improve processes.
- 3.d. an ability to apply creativity in the design of systems, components, or processes appropriate to program objectives.
- 3.e. an ability to function effectively on teams
- 3.f. an ability to identify, analyze and solve technical problems.
- 3.g. an ability to communicate effectively.
- 3.h. a recognition of the need for, and an ability to engage in lifelong learning.
- 3.i. an ability to understand professional, ethical and social responsibilities.
- 3.j. a respect for diversity and a knowledge of contemporary professional, societal and global issues.
- 3.k. a commitment to quality, timeliness, and continuous improvement.
- ABET 9.a Students must design, analyze mechanical systems (statics, strengths, dynamics)
- ABET 9.b Students must select, design and specify materials and processing to support mechanical systems
- ABET 9.c Students must create and communicate effective in a CAD (3D) environment.
- ABET 9.d Students must evaluate materials using standards for experiments and test procedures
- ABET 9.e Students must design, analyze and optimize thermal systems
- ABET 9.f Students must design, analyze and optimize fluid systems
- ABET 9.g Students must design, analyze and optimize electro-mechanical and machine systems

### Required Courses

Select either:

- CHEM 111 - Introduction to Chemistry **Credits: (4)**
- CHEM 111LAB - Introductory Chemistry Laboratory **Credits: (1)**
- OR**
- CHEM 181 - General Chemistry I **Credits: (4)**
- CHEM 181LAB - General Chemistry Laboratory I **Credits: (1)**
- COM 345 - Business and Professional Speaking **Credits: (4)**
- EET 221 - Basic Electricity **Credits: (3)**
- EET 221LAB - Basic Electricity Laboratory **Credits: (1)**
- ENG 310 - Technical Writing **Credits: (4)**
- ETSC 160 - Computer-Aided Design and Drafting **Credits: (4)**
- ETSC 265 - Three-dimensional Modeling **Credits: (4)**
- ETSC 301 - Engineering Project Cost Analysis **Credits: (4)**
- ETSC 311 - Statics **Credits: (4)**
- ETSC 312 - Strength of Materials **Credits: (4)**
- MATH 172 - Calculus I **Credits: (5)**
- MATH 173 - Calculus II **Credits: (5)**
- MET 255 - Machining **Credits: (4)**
- MET 314 - Applied Thermodynamics **Credits: (4)**
- MET 314LAB - Applied Thermodynamics Laboratory **Credits: (1)**
- MET 315 - Fluid Dynamics **Credits: (4)**
- MET 315LAB - Fluid Dynamics Laboratory **Credits: (1)**
- MET 327 - Technical Dynamics **Credits: (4)**
- MET 327LAB - Technical Dynamics Laboratory **Credits: (1)**
- MET 351 - Metallurgy/Materials and Processes **Credits: (4)**
- MET 351LAB - Metallurgy/Materials and Processes Laboratory **Credits: (1)**
- MET 387 - Engineering Ethics **Credits: (2)**
- MET 418 - Mechanical Design I **Credits: (4)**
- MET 418LAB - Mechanical Design I Laboratory **Credits: (1)**
- MET 419 - Mechanical Design II **Credits: (4)**
- MET 419LAB - Mechanical Design II Laboratory **Credits: (1)**
- MET 426 - Applications in Strength of Materials **Credits: (4)**
- MET 426LAB - Applications in Strength of Materials Laboratory **Credits: (1)**
- MET 488 - Professional Certification Exam Preparation **Credits: (2)**
- MET 489A - Senior Project I **Credits: (4)**
- MET 489B - Senior Project II **Credits: (4)**
- MET 489C - Senior Project III **Credits: (4)**

General or Introductory Physics - Credits: 5

- PHYS 111 - Introductory Physics I with Laboratory **Credits: (5)**
- **OR** PHYS 181 - General Physics I with Laboratory **Credits: (5)**

General or Introductory Physics - Credits: 5

- PHYS 112 - Introductory Physics II with Laboratory **Credits: (5)**
- **OR** PHYS 182 - General Physics II with Laboratory **Credits: (5)**

General or Introductory Physics - Credits: 5

- PHYS 113 - Introductory Physics III with Laboratory **Credits: (5)**
- **OR** PHYS 183 - General Physics III with Laboratory **Credits: (5)**

Total Required Courses Credits: 117

Department-Approved Technical Electives Credits: 20

- ETSC 242 - Instrumentation **Credits: (4)**
- ETSC 260 - NURBS Modeling **Credits: (4)**
- ETSC 241 - Programmable Logic Controller Applications **Credits: (4)**
- ETSC 380 - Quality Control **Credits: (4)**
- ETSC 457 - Advanced Foundry **Credits: (4)**
- MET 257 - Casting Processes **Credits: (4)**
- MET 310 - Hydraulics/Pneumatics **Credits: (4)**
- MET 316 - Applied Heat Transfer **Credits: (4)**
- MET 316LAB - Applied Heat Transfer Laboratory **Credits: (1)**
- MET 345 - Lean Manufacturing **Credits: (4)**
- MET 355 - Advanced Machining and CNC Programming **Credits: (4)**
- MET 357 - Welding/Fabrication **Credits: (4)**
- MET 382 - Plastics and Composites **Credits: (4)**
- MET 411 - Energy Systems I **Credits: (4)**
- MET 411LAB - Energy Systems I Laboratory **Credits: (1)**
- MET 420 - Finite Element Analysis **Credits: (4)**
- MET 423 - Computer-aided Design and Manufacturing **Credits: (4)**
- MET 483 - Ceramics and Composites **Credits: (4)**

Total Credits: 137

College and Department Information

Engineering Technologies, Safety, and Construction  
Department  
College of Education and Professional Studies

## Safety and Health Management Major, BS

### Program Information

Occupational Safety & Health (OS&H) professionals are essential members of every organization. Through hazard analysis and risk reduction, they create safe and healthy work settings in industries such as agriculture, petrochemical, government, construction, insurance, and many more. OS&H professionals use a variety of concepts and principles from diverse areas such as business administration, enforcement, engineering, health, risk management, and statistics to prevent harm to people, property, and the environment.

The Safety and Health Management (SHM) program mission is to prepare students to be excellent, industry-ready OS&H professionals who have the confidence and leadership capabilities to navigate the complex organizational and knowledge networks necessary to succeed in contemporary safety and health management.

The SHM program at Central will prepare you for a rewarding career as a high demand OS&H professional. Our students have a near 100 percent job placement, with high entry-level salaries. The safety and health field includes many industries, functions, and occupations. Most of our students are employed in Washington, Oregon, and California, with the majority working in construction, manufacturing, and insurance.

The BS degree program in Safety and Health Management is accredited by the Applied and Natural Science Accreditation Commission of ABET, <http://www.abet.org>. ABET is the global accreditor of college and university programs in applied and natural science, computing, engineering and engineering technology.

The BS degree also meets the Board of Certified Safety Professionals (BCSP) Qualified Academic Program (QAP) requirements. Our graduates are eligible to apply and secure the nationally recognized Graduate Safety Practitioner® (GSP®) designation upon graduation.

### Admission Requirements

Admission to CWU does not ensure admission to the SHM program. Admission to the SHM Program is governed by both the program, through a major application process, and by the university requirements as stated in the catalog. SHM pre-major and major applications are accepted throughout the academic year, and students officially start in the fall quarter. Admission to the program is based upon a review of completed prerequisite courses, and application materials. Please see the program application at [www.cwu.edu/engineering](http://www.cwu.edu/engineering).

### Graduation Requirements

A student is expected to complete each course used to fulfill the degree program requirement with a grade of C or higher. Students are encouraged to complete all CWU general education requirements prior to beginning 400-level SHM coursework.

### Program Requirements

Admission to any SHM course (with prefix SHM) requires a grade of C or higher in each prerequisite listed. Students who do

not meet the prerequisite grade requirement may be dropped from the course.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Understanding of professional and ethical responsibilities as safety and health professionals.
- Apply their applied science knowledge and solve problems using algebra, statistics, human physiology and anatomy, physics, chemistry, as it pertains to the practice of safety and health discipline.
- Design and conduct experiments, and to analyze and interpret data pertinent to the safety and health discipline.
- Identify and describe the fundamental aspects of safety and health management.
- Identify and describe the fundamental aspects of industrial hygiene.
- Identify and describe the fundamental aspects of environmental management.
- Identify and describe the fundamental aspects of fire safety.
- Identify and describe the fundamental aspects of ergonomics.
- Identify and describe the fundamental aspects of hazardous materials.
- Identify and describe the fundamental aspects of emergency management.
- Identify and describe the fundamental aspects of systems safety.
- Identify and describe the fundamental aspects of fleet safety.
- Identify and describe the fundamental aspects of construction (or) manufacturing safety.
- Anticipate, recognize, evaluate, and develop control strategies for hazardous conditions and work practices.
- Apply business and risk management concepts as part of a comprehensive safety and health management program.
- Identify and apply applicable standards, regulations, and codes in the safety and health discipline.
- Design and evaluate a comprehensive safety and health program.
- Complete worker safety and health training by applying adult learning theories.
- Conduct an incident investigation and analysis.
- Apply the principles of safety and health in a non-academic setting through an internship, cooperative, or supervised experience.
- Use the techniques, skills, and modern scientific and technical tools necessary for professional practice in the safety and health discipline.
- Function effectively on multidisciplinary teams.
- Communicate effectively, both oral and written.
- Engage in life-long learning in chosen professional career.
- Identify the contemporary safety and health issues, their impacts and solutions within a global and societal context, through a broad education.

Foundation Courses Credits: 30

- BIOL 201 - Human Physiology **Credits:** (5)
- MATH 130 - Finite Mathematics **Credits:** (5)
- MATH 155 - Applied Precalculus **Credits:** (5)
- PHYS 106 - Physics Inquiry **Credits:** (5)
- PSY 101 - General Psychology **Credits:** (5)

Choose one of the following chemistry courses: (5)

- CHEM 101 - Chemistry and Planet Earth **Credits:** (5)  
**OR**
- CHEM 111 - Introduction to Chemistry **Credits:** (4)
- CHEM 111LAB - Introductory Chemistry Laboratory **Credits:** (1)  
**OR**
- CHEM 181 - General Chemistry I **Credits:** (4)
- CHEM 181LAB - General Chemistry Laboratory I **Credits:** (1)

Professional Management Courses Credits: 31-33

- ADMG 385 - Business Communications and Report Writing **Credits:** (4)
- BUS 241 - Legal Environment of Business **Credits:** (5)
- COM 345 - Business and Professional Speaking **Credits:** (4)
- HRM 381 - Management of Human Resources **Credits:** (5)

Choose one of the following statistics courses: (5)

- BUS 221 - Introductory Business Statistics **Credits:** (5)
- PSY 362 - Introductory Statistics **Credits:** (5)

Choose one of the following management courses: (4-5)

- MGT 380 - Organizational Management **Credits:** (5)
- PSY 456 - Industrial and Organizational Psychology **Credits:** (4)

Choose one of the following project management courses: (4-5)

- ADMG 374 - Project Management **Credits:** (5)
- ETSC 455 - Engineering Project Management **Credits:** (4)

Technical Courses Credits: 63

- SHM 301 - Fundamentals of Safety and Health Management **Credits:** (3)
- SHM 302 - Workplace Safety and Substance Abuse Program **Credits:** (3)
- SHM 323 - Construction Safety and Health **Credits:** (3)

- SHM 325 - General Industry Safety and Health **Credits:** (3)
- SHM 351 - Incident Analysis **Credits:** (3)
- SHM 353 - Risk and Insurance **Credits:** (4)
- SHM 371 - Emergency Planning and Preparedness **Credits:** (4)
- SHM 377 - Hazardous Materials Management **Credits:** (4)
- SHM 379 - Facility and Building Safety **Credits:** (4)
- SHM 454 - Risk Management Principles and Practices **Credits:** (4)
- SHM 471 - Fundamentals of Industrial Hygiene **Credits:** (4)
- SHM 472 - Ergonomics **Credits:** (3)
- SHM 474 - Safety and Health Management Systems **Credits:** (4)
- SHM 477 - Environmental Management **Credits:** (4)
- SHM 480 - Safety and Health Laboratory **Credits:** (2)
- SHM 481 - Evolving Issues in Safety and Health Management **Credits:** (2)
- SHM 485 - Safety and Health Management Capstone **Credits:** (3)
- SHM 490 - Cooperative Education **Credits:** (1-12)  
(Must be taken for at least 6 credits)

Total Credits: 124-126

#### College and Department Information

Engineering Technologies, Safety, and Construction  
Department  
College of Education and Professional Studies

## Technology Education Broad Area Major, BS

This bachelor of science teaching major satisfies the endorsement for technology education.

Students selecting this major must have a basic background in woods, metals, drafting, and mathematics through trigonometry. ETSC 430 is a prerequisite for student teaching. Students taking this major are required to apply to the Teacher Certification Program and complete the Professional Education Program requirements offered through the Department of Educational Foundations and Curriculum.

#### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate effective oral and written communication skills
- Demonstrate effective planning, preparation, and delivery of technology education lessons and plans.
- Demonstrate the ability to use a variety of technology including computers, industrial machines, and equipment commonly used in public schools and industry.

- Demonstrate competence in at least five of the seven major areas of the Designed World (STL):
  - Medical
  - Agriculture and Biotechnologies
  - Energy and Power
  - Information and Communication
  - Construction
  - Manufacturing
  - Transportation
- Demonstrate, practice, and use safety and safety principles as used currently in industry and public schools
- Demonstrate familiarity with the concepts, theoretical perspectives, and historic trends in vocational education/Career & Tech. Ed. (CTE).
- Students are committed to ongoing personal and professional development via participation in club activities and professional memberships.

Pre-admission Requirements Credits: 15

- CHEM 111 - Introduction to Chemistry **Credits:** (4)
- CHEM 111LAB - Introductory Chemistry Laboratory **Credits:** (1)
- MATH 153 - Pre-Calculus Mathematics I **Credits:** (5)
- PHYS 111 - Introductory Physics I with Laboratory **Credits:** (5)

#### Required Courses

- CTE 410 - Career and Technical Education School to Work Programs **Credits:** (4)
- EET 271 - Digital Circuits **Credits:** (4)
- ETSC 145 - Machine Woodworking **Credits:** (4)
- ETSC 160 - Computer-Aided Design and Drafting **Credits:** (4)
- ETSC 265 - Three-dimensional Modeling **Credits:** (4)
- ETSC 277 - Introduction to Robotics **Credits:** (4)
- ETSC 385 - Product Design and Development **Credits:** (4)
- ETSC 430 - Methods of Teaching Technology Education **Credits:** (3)
- ETSC 433 - Technology Education Laboratory Planning **Credits:** (3)
- ETSC 435 - Technology Education Exit Assessment **Credits:** (1)
- ETSC 442 - Alternative Energy Resources and Technology **Credits:** (5)
- MET 255 - Machining **Credits:** (4)
- MET 310 - Hydraulics/Pneumatics **Credits:** (4)
- MET 345 - Lean Manufacturing **Credits:** (4)
- MET 357 - Welding/Fabrication **Credits:** (4)
- MET 382 - Plastics and Composites **Credits:** (4)
- SHM 325 - General Industry Safety and Health **Credits:** (3)

Department-Approved Electives Credits: 7-10

Total Credits: 85-88

Professional Education Program Credits: 50

Professional Education Program

Total Credits: 135-138

College and Department Information

Engineering Technologies, Safety, and Construction  
Department  
College of Education and Professional Studies

## Technology Education Major, BS

### Coordinator

Scott Calahan, MEd

This bachelor of science teaching major satisfies the endorsement for technology education.

Students selecting this major must also select a minor or other education endorsement. ETSC 430 is a prerequisite for student teaching. Students taking this major are required to apply to the Teacher Certification Program and complete the Professional Education Program requirements offered through the Department of Educational Foundations and Curriculum.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate effective oral and written communication skills
- Demonstrate effective planning, preparation, and delivery of technology education lessons and plans.
- Demonstrate the ability to use a variety of technology including computers, industrial machines, and equipment commonly used in public schools and industry.
- Demonstrate competence in at least five of the seven major areas of the Designed World (STL):
  - Medical
  - Agriculture and Biotechnologies
  - Energy and Power
  - Information and Communication
  - Construction
  - Manufacturing
  - Transportation
- Demonstrate, practice, and use safety and safety principles as used currently in industry and public schools
- Demonstrate familiarity with the concepts, theoretical perspectives, and historic trends in vocational education/Career & Tech. Ed. (CTE).
- Students are committed to ongoing personal and professional development via participation in club activities and professional memberships.

Pre-admission Requirements Credits: 15

- CHEM 111 - Introduction to Chemistry **Credits: (4)**

- CHEM 111LAB - Introductory Chemistry Laboratory **Credits: (1)**
- MATH 153 - Pre-Calculus Mathematics I **Credits: (5)**
- PHYS 111 - Introductory Physics I with Laboratory **Credits: (5)**

Required Courses

- CTE 410 - Career and Technical Education School to Work Programs **Credits: (4)**
- EET 271 - Digital Circuits **Credits: (4)**
- ETSC 145 - Machine Woodworking **Credits: (4)**
- ETSC 160 - Computer-Aided Design and Drafting **Credits: (4)**
- ETSC 265 - Three-dimensional Modeling **Credits: (4)**
- ETSC 277 - Introduction to Robotics **Credits: (4)**
- ETSC 385 - Product Design and Development **Credits: (4)**
- ETSC 430 - Methods of Teaching Technology Education **Credits: (3)**
- ETSC 433 - Technology Education Laboratory Planning **Credits: (3)**
- ETSC 435 - Technology Education Exit Assessment **Credits: (1)**
- ETSC 442 - Alternative Energy Resources and Technology **Credits: (5)**
- MET 255 - Machining **Credits: (4)**
- MET 310 - Hydraulics/Pneumatics **Credits: (4)**
- MET 345 - Lean Manufacturing **Credits: (4)**
- MET 357 - Welding/Fabrication **Credits: (4)**

Total Credits: 71

Additional Information

The ETSC department strongly suggests for a student to be more competitive in the job market, the following additional courses should be taken.

- MET 382 - Plastics and Composites **Credits: (4)**
- SHM 325 - General Industry Safety and Health **Credits: (3)**

Professional Education Program Credits: 50

Professional Education Program

Total Credits: 121

College and Department Information

Engineering Technologies, Safety, and Construction  
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## Construction Minor or Certificate

All students will meet the new general education requirements for Academic Writing I: Critical Reading & Responding, Academic Writing II: Reasoning & Research and Quantitative Reasoning (or the old general education requirements ENG 101, ENG 102 and mathematics requirements) to be admitted into the minor with a grade of C or higher. The construction minor provides a broad coverage of construction issues that affect performance during construction work. Enrollment in upper-division CMGT courses is based upon space availability.

Admission to any course requires a grade of C or higher in each prerequisite listed. Students who do not meet the prerequisite grade requirement will be dropped from the course. Students are expected to complete each course used to fulfill a program requirement with a grade of C or higher.

### Admission Requirements

All students will meet the new general education requirements for Academic Writing I: Critical Reading & Responding, Academic Writing II: Reasoning & Research and Quantitative Reasoning (or the old general education requirements ENG 101, ENG 102 and mathematics requirements) to be admitted into the minor with a grade of C or higher. Admission to any course within the construction minor requires a grade of C or higher in each prerequisite listed. Students who do not meet the prerequisite grade requirement will be dropped from the course. Please see the program application available on the Web at <https://www.cwu.edu/engineering/construction-management> for additional information.

### Graduation Requirements

Students are expected to complete each course used to fulfill a program requirement with a grade of C or higher. All students must earn a cumulative grade point average of 2.25 in the construction minor courses to receive the construction minor.

Required Courses Credits: 22

- BUS 241 - Legal Environment of Business **Credits:** (5)
- CMGT 101 - Construction and the Built Environment **Credits:** (4)
- CMGT 265 - Construction Documents **Credits:** (3)
- CMGT 346 - Construction Methods and Materials **Credits:** (4)
- **OR** CMGT 347 - Heavy Civil Methods and Materials **Credits:** (4)
- ETSC 161 - Architectural Computer Aided Design **Credits:** (3)
- SHM 323 - Construction Safety and Health **Credits:** (3)

Select one of the following Credits: 3-4

- CMGT 320 - Electrical Systems **Credits:** (3)
- CMGT 442 - Building Mechanical Systems **Credits:** (3)
- CMGT 443 - Heavy Civil Utilities **Credits:** (3)

- CMGT 452 - LEED in Sustainable Construction **Credits:** (4)

Total Credits: 25-26

College and Department Information

Engineering Technologies, Safety, and Construction  
Department  
College of Education and Professional Studies

## Industrial Technology Minor

### Advisors

Scott Calahan, MEd  
Lad Holden, MT  
Craig Johnson, PhD

Required Courses

Courses to be selected from Department of Industrial Technology courses under department advisement.

Total Credits: 25

College and Department Information

Engineering Technologies, Safety, and Construction  
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## Risk Management Minor

The Risk Management Minor (RMM) will provide in-depth knowledge needed to assess and respond to the numerous hazard (insurable) risks faced by all organizations. The RMM will help prepare students for exciting careers within their major, by helping the students build a strong foundation in the science of risk management. The RMM will help students gain practical skills to avoid, reduce, and manage risk, and to develop and implement a balanced hazard risk financing strategy using retention, transfer, and hybrid strategies.

### Admission Requirements

Risk Management Minor (RMM) applications are accepted during the spring quarter, and the students start in the fall quarter. Any CWU student interested in improving their career opportunities can obtain the RMM. For details about the RMM application procedures, contact the Safety and Health Management Program Director.

### Graduation Requirements

Students must earn a cumulative grade point average of 2.0 (on a scale of 4.0) in courses allowed in fulfilling the Risk Management Minor requirements.

### Program Requirements

A minimum grade of "C" is required in each of the courses used to satisfy the Risk Management Minor.

## Required Courses

- SHM 301 - Fundamentals of Safety and Health Management **Credits:** (3)
- SHM 353 - Risk and Insurance **Credits:** (4)
- SHM 454 - Risk Management Principles and Practices **Credits:** (4)
- SHM 455 - Risk Assessment and Treatment **Credits:** (4)
- SHM 456 - Risk Financing for Safety and Health Management **Credits:** (4)
- SHM 482 - Evolving Issues in Risk Management **Credits:** (1)

Total Credits: 20

## College and Department Information

Engineering Technologies, Safety, and Construction  
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## Robotics and Automation Minor

The robotics and automation minor provides students with an introduction to hardware, software, and manufacturing concepts regarding industrial automation.

### Admission Requirements

Students need ETSC Departmental permission to enter the program.

### Graduation Requirements

Student must earn a 2.25 cumulative GPA in the minor courses.

### Program Requirements

Contact the ETSC department for program requirement details.

## Required Courses

- EET 221 - Basic Electricity **Credits:** (3)
- EET 221LAB - Basic Electricity Laboratory **Credits:** (1)
- EET 377 - Advanced Robotics and Automation **Credits:** (4)
- EET 477 - Industrial Robotics and Automation **Credits:** (4)
- ETSC 241 - Programmable Logic Controller Applications **Credits:** (4)
- ETSC 242 - Instrumentation **Credits:** (4)
- ETSC 277 - Introduction to Robotics **Credits:** (4)

Total Credits: 24

## College and Department Information

Engineering Technologies, Safety, and Construction  
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College of Education and Professional Studies

## Safety and Health Management Minor or Certificate

### Advisors

Sathyanarayanan Rajendran, PhD, CSP  
Allen Sullivan, PhD  
Michael Andler, senior lecturer

### Program Information

Pursuing the safety and health management (SHM) minor and certificate will provide a basic foundation for students to develop the skills necessary to promote a hazard-free work environment in many industries. Students will gain practical skills to identify and control workplace hazards, to prevent worker injuries, illnesses, and fatalities.

The SHM minor and certificate may be used in combination with many majors to enhance a student's career opportunities and gain a competitive advantage in the job market. It is an excellent addition for students with majors in aviation management, biology, chemistry construction management, human resources management, industrial engineering technology, information technology and administration management, sociology, psychology, and public health. Job opportunities exist in all occupational settings, including construction, consulting, government, hospitals, insurance, risk management, manufacturing, and retail.

### Admission Requirements

The SHM minor and certificate applications are accepted throughout the year, and typically the students start in the fall quarter. Any CWU student interested in improving their career opportunities can obtain the SHM minor and certificate. For details about the application procedures, contact the SHM program director Dr. Sathy Rajendran at rajendrands@cwu.edu.

### Graduation Requirements

Students should complete the requirements for the minor and certificate with a 2.0 (on a scale of 4.0) as a minimum cumulative grade point average (GPA) in the coursework.

### Program Requirements

A minimum grade of "C" is required in each of the courses used to satisfy the SHM minor and certificate.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Communicate effectively in both oral and written forms.
- Recognize the need to engage in life-long learning in a chosen professional career.
- Describe the fundamental aspects of safety and health management.
- Identify and apply standards, regulations, codes, and guidelines associated with the safety and health management discipline.
- Anticipate, recognize, evaluate, and develop control strategies for hazardous conditions and work practices.
- Explain the purpose and operation of insurance.
- Develop a workplace emergency management plan.

- Design and evaluate an organization's safety management system using ISO 45001.
- Complete safety management training by applying adult learning theories.
- Conduct an incident investigation and analysis.

#### Required Courses

- SHM 301 - Fundamentals of Safety and Health Management **Credits:** (3)
- SHM 323 - Construction Safety and Health **Credits:** (3)
- **OR** SHM 325 - General Industry Safety and Health **Credits:** (3)
- SHM 351 - Incident Analysis **Credits:** (3)
- SHM 353 - Risk and Insurance **Credits:** (4)
- SHM 371 - Emergency Planning and Preparedness **Credits:** (4)
- SHM 474 - Safety and Health Management Systems **Credits:** (4)

Total Credits: 21

#### College and Department Information

Engineering Technologies, Safety, and Construction  
Department  
College of Education and Professional Studies

## Traffic Safety Education Minor

#### Advisor

Scott Calahan, MEd (Summer On)

Students desiring an endorsement to teach traffic safety education in the public schools are required to take SED 382, SED 481, SED 482 and SED 484. These courses are taught concurrently during the six-week summer session.

#### Required Courses

- SED 382 - Driver Task Analysis **Credits:** (3)  
Required for state endorsement.
- SED 481 - Teaching Traffic Safety Education: Classroom and Simulation Instruction **Credits:** (3)  
Required for state endorsement.
- SED 482 - Teaching Traffic Safety Education: In Car **Credits:** (5)  
Required for state endorsement.
- SED 484 - Safety Program Supervision **Credits:** (3)  
Required for state endorsement.
- SHM 375 - Transportation and Fleet Safety **Credits:** (4)

Total Credits: 18

#### College and Department Information

Engineering Technologies, Safety, and Construction  
Department  
College of Education and Professional Studies

## Insurance Management Certificate

The Insurance Management Certificate (IMC) will provide students a basic understanding of risk management, insurance operations, and the types of insurances available to manage the various hazard (insurable) risks faced by all organizations. The IMC may be used in combination with many majors to enhance a student's career opportunities and gain a competitive advantage in the job market. Particularly students seeking or currently pursuing careers as construction professionals, project engineers, project managers, safety and health professionals, safety engineers, risk management professionals, loss control specialists, etc., may consider adding the IMC to their undergraduate degree plan.

#### Admission Requirements

IMC applications are accepted throughout the academic year, and the students start in the Winter quarter. Both matriculated, and non-matriculated students interested in improving their career opportunities can obtain the IMC. For details about the application procedures, contact the SHM Program Director Dr. Sathy Rajendran at rajendrands@cwu.edu.

#### Graduation Requirements

Students will receive the IMC after completion of the requirements with a 2.0 (on a scale of 4.0) as a minimum cumulative grade point average (GPA) in the IMC coursework.

#### Program Requirements

A minimum grade of "C-" is required in each of the courses used to satisfy the IMC.

#### Required Courses

- SHM 353 - Risk and Insurance **Credits:** (4)
- SHM 450 - Commercial Property Risk Management and Insurance **Credits:** (3)
- SHM 451 - Commercial Liability Risk Management and Insurance **Credits:** (3)
- SHM 452 - Risk Management for Public Entities **Credits:** (4)
- **OR** SHM 453 - Construction Risk and Insurance Management **Credits:** (4)
- SHM 482 - Evolving Issues in Risk Management **Credits:** (1)

Total Credits: 15

## Risk Management Certificate

The Risk Management Certificate (RMC) will provide in-depth knowledge needed to assess and respond to the numerous hazard (insurable) risks faced by all organizations. The RMC will help prepare students for exciting careers within their major, by helping the students build a strong foundation in the science of



risk management. The RMC will help students gain practical skills to avoid, reduce, and manage risk, and to develop and implement a balanced hazard risk financing strategy using retention, transfer, and hybrid strategies.

### Admission Requirements

RMC applications are accepted throughout the academic year, and the students typically start in the Spring quarter and can complete the program in just three quarters. Both matriculated, and non-matriculated students interested in improving their career opportunities can obtain the RMC. For details about the application procedures, contact the SHM Program Director Dr. Sathy Rajendran at rajendr@cwu.edu.

### Graduation Requirements

Students will receive the RMC after completion of the requirements with a 2.0 (on a scale of 4.0) as a minimum cumulative grade point average (GPA) in the RMC coursework.

### Program Requirements

A minimum grade of "C-" is required in each of the courses used to satisfy the RMC requirements.

### Required Courses

- SHM 454 - Risk Management Principles and Practices **Credits:** (4)
- SHM 455 - Risk Assessment and Treatment **Credits:** (4)
- SHM 456 - Risk Financing for Safety and Health Management **Credits:** (4)
- SHM 482 - Evolving Issues in Risk Management **Credits:** (1)

Total Credits: 13

## English Department

College of Arts and Humanities

Ellensburg

Language and Literature Bldg., room 423

Mail Stop 7558

509-963-1546

[www.cwu.edu/english](http://www.cwu.edu/english)

See the website for how these programs may be used for educational and career purposes.

### Faculty and Staff

#### Chair

Katharine Whitcomb, MFA

#### Professors

Bobby Cummings, PhD, rhetoric, English education, computer composition

George Drake, PhD, British literature, literary theory

Loretta Gray, PhD, applied linguistics, composition, TESOL

Charles X. Li, PhD, linguistics, TESOL, linguistic approaches to literature

Lisa Norris, MFA, creative writing

Paulus Pimomo, PhD, British literature, post-colonial studies

Christopher Schedler, PhD, American and multicultural

literature

Katharine Whitcomb, MFA, creative writing

#### Assistant Professor

Michelle O'Brien, PhD, postcolonial lit, critical race, interdisciplinary gender, and transnational/transpacific literary studies

Cynthia Pengilly, PhD, rhetoric and technical communication

Sarah Sillin, PhD, American Indian oral and nonfiction

literature, English studies, literature and history

Zachary VandeZande, PhD, creative writing-fiction

Joshua Welsh, PhD, rhetoric, scientific and technical

communication

Maya Zeller, MFA, creative writing

#### Emeritus Professors

Liahna Armstrong, PhD, American literature, popular culture, film

Patricia Callaghan, DA, rhetoric, world literature, English education

Toni Culjak, PhD, American, world and multicultural literature, film

Philip B. Garrison, MA, non-fiction, poetry writing, world, and Chicano literature

Karen Gookin, MA, general education, technical writing

Mark W. Halperin, MFA, poetry writing, folk literature, modern poetry

Virginia Mack, PhD, general education, Irish literature

Teresa Martin, PhD, English education, women's literature

Steven Olson, PhD, American literature, film

Joseph Powell, MFA, creative writing, modern poetry

Gerald J. Stacy, PhD, English Renaissance literature

John L. Vifian, PhD 18th century literature, English novel

#### Senior Lecturers

Melissa Brouwer, MA

Stephanie Dringenberg, MA

Ruthi Erdman, MA

Lila Harper, PhD

Colin Hester, MFA

Karen Hull, MA

Marisa Humphrey, MA

Kevin Leaverton, MA

Matthew Martinson, MA

Amanda Ross, MA

Robert Schnelle, MA

#### Lecturers

Chloe Allmand, MA

Joshua Aubol, MA

Taneum Bambrick, MA

R. Cass Bruner, MFA

Pedro Xavier Cavazos, MFA

Paula Collucci, MA

Seanse Ducken, MFA

Sonya Dunning, MFA

Victoria Flanagan, MA

Kayla Jeffress, MA

Maili Jonas, MA

Peter Rampa, MA

Cindy Cecile Reyna, MA

Emma Saucedo, MA

Travis Smith, MA

Eric Stephens, PhD

Shannon Wilson, PhD

## Staff

Rhonda Muller, secretary supervisor  
Krislon Rhynes, office assistant III

## Department Information

The Department of English offers undergraduate and graduate courses in American, British, and world literature, English language and linguistics, English education, film study, and professional and creative writing. The study of English helps students to develop and enhance skills in critical analysis and written and oral communication. English program graduates pursue a variety of careers, including business, education, government, law, publishing, and writing.

## Departmental Honors in English

The honors program in English recognizes the superior scholarship of qualified majors. To qualify for the program, students must have a minimum GPA of 3.4 overall and 3.7 in English and be recommended by three faculty members. In addition to their regular course of study, qualified students complete an individual study course culminating in an honors paper. A student whose honors paper is accepted will graduate with departmental honors in English. For additional details, consult the department website.

## Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

## Course Offerings

Frequency of course offering information can be found at the department website: [www.cwu.edu/english](http://www.cwu.edu/english) or by contacting the department directly.

# English Language and Literature Major, BA

The study of literature trains students in reflective reading, theoretically based inquiry, critical analysis, and effective verbal and written expression. Students are taught to analyze literary works as representations of literary genres and in historical and cultural contexts as well as to examine literary influence and explore literature through the lens of critical theory. Majors are expected to complete English 302 and English 303 during their first quarter in the major.

## Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Understand and be able to articulate orally and in writing how literature is contextualized historically.
- Demonstrate knowledge of the range of literary perspectives, conventions, and forms.
- Understand and be able to articulate orally and in writing how literature is contextualized culturally.
- Demonstrate their writing competence by successfully meeting the rhetorical needs of situations requiring the application of a variety of genres and styles.
- Demonstrate knowledge of literary critical theories.
- Demonstrate proficiency in research methodologies

- Demonstrate a functional knowledge of grammar and linguistics.

## Required Courses

- ENG 302 - Poetry and Poetics **Credits:** (5)
- ENG 303 - Principles of English Studies **Credits:** (5)
- ENG 320 - English Grammar **Credits:** (5)
- ENG 363 - Shakespeare **Credits:** (5)
- ENG 489 - Senior Colloquium **Credits:** (2)

Select two literary forms courses - Credits: 10

- ENG 380 - Studies in Drama **Credits:** (5)
- ENG 453 - Studies in Fiction **Credits:** (5)
- ENG 454 - Studies in Nonfiction **Credits:** (5)
- ENG 455 - Studies in Poetry **Credits:** (5)

Select one language and linguistics course- Credits: 5

- ENG 420 - English Linguistics **Credits:** (5)
- ENG 423 - History of the English Language **Credits:** (5)

Select two literature and history courses - Credits: 10

- ENG 371 - Literature and History I **Credits:** (5)
- ENG 372 - Literature and History II **Credits:** (5)
- ENG 373 - Literature and History III **Credits:** (5)
- ENG 374 - Literature and History IV **Credits:** (5)

Select one critical studies course - Credits: 5

- ENG 415 - Critical Studies in American Literature **Credits:** (5)
- ENG 417 - Critical Studies in World Literature **Credits:** (5)
- ENG 419 - Critical Studies in British Literature **Credits:** (5)

Select two literature and culture courses - Credits: 10

- ENG 330 - African American Literature **Credits:** (5)
- ENG 331 - Latina/o Literature **Credits:** (5)
- ENG 332 - American Indian Literature **Credits:** (5)
- ENG 333 - Asian American Literature **Credits:** (5)
- ENG 334 - American Indian Oral and Nonfiction Literature **Credits:** (5)
- ENG 335 - Women's Literature **Credits:** (5)

Department-Approved Electives - Credits: 10

Select 10 credits of English literature, language, writing or film studies (Elective credits may be taken from any English literature, language, or film studies course at the 300 level or above. No more than 5 credits of film studies may be counted as elective credits in the English language and literature major. One

200-level course (up to 5 credits) may be counted as an elective.)

Total Credits: 72

College and Department Information

English Department  
College of Arts and Humanities

## English Language Arts Teaching Major, BA

This major satisfies the endorsement for English/language arts. Majors must complete the Teacher Certification Program requirements for secondary certification available through the Department of Education Foundations and Curriculum. Majors are expected to complete ENG 302 and ENG 303 prior to enrolling in other upper-division major requirements. English 422, 430, 488 and 492 are required prior to student teaching. English 430, 488 and 492 must be taken concurrently. All other major requirements must be completed before enrollment in or taken concurrently with ENG 488. Enrollment in ENG 488 is by permission.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate their understanding of the relationship between English studies and educational principles and practices by designing and presenting age-appropriate and pedagogically sound applications of language and literature.

Required Courses

- ENG 222 - Multicultural Literature for Teachers **Credits: (5)**
- ENG 302 - Poetry and Poetics **Credits: (5)**
- ENG 303 - Principles of English Studies **Credits: (5)**
- ENG 320 - English Grammar **Credits: (5)**
- ENG 363 - Shakespeare **Credits: (5)**
- ENG 420 - English Linguistics **Credits: (5)**
- ENG 422 - Teaching Young Adult Literature **Credits: (5)**  
Prerequisite: admission to Teacher Education Program and 15 credits of professional sequence.
- ENG 430 - Teaching Writing in the Secondary School **Credits: (5)**  
Prerequisite: EDCS 311 and 28 credits in English.
- ENG 488 - Teaching Portfolio **Credits: (2)**  
Requires concurrent enrollment in ENG 430 and ENG 492.
- ENG 492 - Practicum **Credits: (3)**  
Requires concurrent enrollment in ENG 430 and ENG 488.

Select one literary forms course - Credits: 5

- ENG 380 - Studies in Drama **Credits: (5)**
- ENG 453 - Studies in Fiction **Credits: (5)**
- ENG 454 - Studies in Nonfiction **Credits: (5)**
- ENG 455 - Studies in Poetry **Credits: (5)**

Select two literature and history courses - Credits: 10

- ENG 371 - Literature and History I **Credits: (5)**
- ENG 372 - Literature and History II **Credits: (5)**
- ENG 373 - Literature and History III **Credits: (5)**
- ENG 374 - Literature and History IV **Credits: (5)**

Select one writing course - Credits: 5

- ENG 263 - Introduction to Creative Writing **Credits: (5)**
- ENG 364 - Fiction Writing **Credits: (5)**
- ENG 365 - Poetry Writing **Credits: (5)**
- ENG 366 - Creative Nonfiction Writing **Credits: (5)**

Select one critical studies course Credits: 5

- ENG 415 - Critical Studies in American Literature **Credits: (5)**
- ENG 417 - Critical Studies in World Literature **Credits: (5)**
- ENG 419 - Critical Studies in British Literature **Credits: (5)**

Total Credits: 70

Professional Education Program Credits: 50

Professional Education Program

Total Credits: 120

College and Department Information

English Department  
College of Arts and Humanities

## English Professional and Creative Writing, BA

The major combines a liberal arts background in literature with specialized writing courses in creative writing (fiction, poetry, creative nonfiction, screenwriting), business writing, professional writing, scientific and technical writing, editing, and publishing.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate their writing competence by successfully meeting the rhetorical needs of situations requiring the application of a variety of genres and styles.
- Demonstrate knowledge of a range of literary perspectives, genres, conventions, and forms.
- Apply knowledge of writing in a professional setting
- Use their knowledge of traditional grammar, writing craft, and rhetorical techniques to revise and edit their own writing.
- Develop a professional disposition for working collaboratively and providing effective feedback to other authors
- Understand and be able to articulate orally and in writing how literature is contextualized historically and culturally.

#### Required Courses

- ENG 263 - Introduction to Creative Writing **Credits:** (5)
- **OR** ENG 264 - Introduction to Creative Writing and the Environment **Credits:** (5)
- **OR** ENG 265 - Introduction to Creative Writing as "Mindfulness, Health and Well-Being" **Credits:** (5)
- ENG 301 - Rhetoric for Professional Writers **Credits:** (5)
- ENG 302 - Poetry and Poetics **Credits:** (5)
- ENG 303 - Principles of English Studies **Credits:** (5)
- ENG 320 - English Grammar **Credits:** (5)
- ENG 323 - Writing and Editing for Publication **Credits:** (5)
- ENG 489 - Senior Colloquium **Credits:** (2)

Total Required Courses Credits: 32

#### Approved Writing Electives

Select 27 credits from a combination of creative writing, professional writing and editing, and practicum courses. At least 2 credits must be practicum credits and at least one 400-level creative writing or professional writing and editing elective class is required.

#### Creative Writing Courses:

- ASP 435 - Accessible Information Design **Credits:** (5)
- COM 409 - Magazine Freelancing **Credits:** (4)
- FILM 267 - Screenwriting Fundamentals **Credits:** (4)
- **OR** ENG 267 - Screenwriting Fundamentals **Credits:** (4)
- FILM 357 - Writing for Serial Media **Credits:** (4)
- **OR** ENG 357 - Writing for Serial Media **Credits:** (4)
- FILM 457 - Narrative Screenwriting II **Credits:** (5)
- ENG 311 - Business Writing **Credits:** (3)
- ENG 364 - Fiction Writing **Credits:** (5)
- ENG 365 - Poetry Writing **Credits:** (5)
- ENG 366 - Creative Nonfiction Writing **Credits:** (5)

- ENG 368 - Multi-Genre Writing Workshop **Credits:** (5)
- ENG 369 - Variable Topics Writing Workshop **Credits:** (5)
- ENG 464 - Advanced Fiction Writing **Credits:** (5)
- ENG 465 - Advanced Poetry Writing **Credits:** (5)
- ENG 466 - Advanced Creative Nonfiction Writing **Credits:** (5)
- ENG 468 - Contemporary Writers Colloquium **Credits:** (5)
- ENG 473 - Grant Writing: Theory and Practice **Credits:** (5)
- TH 330 - Introduction to Playwriting **Credits:** (4)

#### Practicum Courses:

- COM 446 - Pulse **Credits:** (2)
- COM 468 - Observer **Credits:** (1-3)
- ENG 484 - Manastash: Literary Editing **Credits:** (3)
- ENG 485 - Manastash: Literary Design and Production **Credits:** (2)
- ENG 490 - Cooperative Education **Credits:** (1-12)
- ENG 493 - Online Practicum **Credits:** (3-5)

#### Professional Writing and Editing Courses:

- ADMG 385 - Business Communications and Report Writing **Credits:** (4)
- COM 208 - Introduction to Public Relations Writing **Credits:** (4)
- COM 347 - Copy Editing **Credits:** (4)
- COM 348 - Publication Design **Credits:** (4)
- ENG 310 - Technical Writing **Credits:** (4)
- ENG 311 - Business Writing **Credits:** (3)
- ENG 404 - Advanced Technical Writing **Credits:** (5)
- ENG 472 - Research Methods for Workplace Writers **Credits:** (5)
- IT 248 - Web Fundamentals **Credits:** (4)
- IT 288 - Business Presentation Applications **Credits:** (2)
- LAJ 410 - Legal Writing **Credits:** (4)

Total Approved Writing Electives Credits: 27

#### Literature Course Credits: 5

Select one course from the following:

- ENG 330 - African American Literature **Credits:** (5)
- ENG 331 - Latina/o Literature **Credits:** (5)
- ENG 332 - American Indian Literature **Credits:** (5)
- ENG 333 - Asian American Literature **Credits:** (5)
- ENG 334 - American Indian Oral and Nonfiction Literature **Credits:** (5)
- ENG 335 - Women's Literature **Credits:** (5)
- ENG 363 - Shakespeare **Credits:** (5)
- ENG 371 - Literature and History I **Credits:** (5)
- ENG 372 - Literature and History II **Credits:** (5)

- ENG 373 - Literature and History III **Credits:** (5)
- ENG 374 - Literature and History IV **Credits:** (5)
- ENG 380 - Studies in Drama **Credits:** (5)
- ENG 453 - Studies in Fiction **Credits:** (5)
- ENG 454 - Studies in Nonfiction **Credits:** (5)

Literature, Linguistics, and Film Electives Credits: 10

Select 10 additional credits of literature, linguistics, and film studies courses at or above the 300-level. No more than 5 credits of film may be counted as elective credits in the professional and creative writing major. Courses used to meet the "Literature" electives section may be re-used in this section if the course is taken under a different topic.

- ENG 343 - Cinema Studies II: Modern American Film History **Credits:** (4)
- **OR** FILM 343 - Cinema Studies II: Modern American Film History **Credits:** (4)
- ENG 344 - Cinema Studies III: Film Theory **Credits:** (5)
- **OR** FILM 344 - Cinema Studies III: Film Theory **Credits:** (5)
- ENG 354 - History of Television **Credits:** (4)
- **OR** FILM 354 - History of Television **Credits:** (4)
- ENG 355 - History of Documentary **Credits:** (4)
- **OR** FILM 355 - History of Documentary **Credits:** (4)
- ENG 360 - Cinema Studies IV: Survey of World Cinema **Credits:** (5)
- **OR** FILM 360 - Cinema Studies IV: Survey of World Cinema **Credits:** (5)
- ENG 371 - Literature and History I **Credits:** (5)
- ENG 372 - Literature and History II **Credits:** (5)
- ENG 373 - Literature and History III **Credits:** (5)
- ENG 374 - Literature and History IV **Credits:** (5)
- ENG 380 - Studies in Drama **Credits:** (5)
- **OR** TH 380 - Studies in Drama **Credits:** (5)
- ENG 415 - Critical Studies in American Literature **Credits:** (5)
- ENG 417 - Critical Studies in World Literature **Credits:** (5)
- ENG 419 - Critical Studies in British Literature **Credits:** (5)
- ENG 423 - History of the English Language **Credits:** (5)
- ENG 434 - Discourse Analysis **Credits:** (5)
- ENG 435 - Linguistics, Literature, and TESOL **Credits:** (5)
- ENG 437 - Pedagogical Grammar and Discourse **Credits:** (5)
- ENG 453 - Studies in Fiction **Credits:** (5)
- ENG 454 - Studies in Nonfiction **Credits:** (5)
- ENG 455 - Studies in Poetry **Credits:** (5)
- ENG 456 - Studies in Rhetoric **Credits:** (5)
- ENG 461 - Studies in Film and Culture **Credits:** (5)
- **OR** FILM 461 - Studies in Film and Culture **Credits:** (5)

- ENG 462 - Studies in Film and/or Television Genres **Credits:** (5)
- **OR** FILM 462 - Studies in Film and/or Television Genres **Credits:** (5)
- ENG 463 - Studies in the Film Auteur **Credits:** (5)
- **OR** FILM 463 - Studies in the Film Auteur **Credits:** (5)
- WLC 311 - Popular Cultures of the World **Credits:** (5)

Total Credits: 74

College and Department Information

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## Creative Writing Minor

This minor allows students to develop their craft in poetry, fiction, creative nonfiction and other genres through workshops led by faculty who are practicing writers.

Required Courses

- ENG 302 - Poetry and Poetics **Credits:** (5)

Select 20 credits of creative writing courses:

- ENG 263 - Introduction to Creative Writing **Credits:** (5)
- **OR** ENG 264 - Introduction to Creative Writing and the Environment **Credits:** (5)
- **OR** ENG 265 - Introduction to Creative Writing as "Mindfulness, Health and Well-Being" **Credits:** (5)
- ENG 267 - Screenwriting Fundamentals **Credits:** (4)
- *OR* FILM 267 - Screenwriting Fundamentals **Credits:** (4)
- ENG 357 - Writing for Serial Media **Credits:** (4)
- **OR** FILM 357 - Writing for Serial Media **Credits:** (4)
- ENG 364 - Fiction Writing **Credits:** (5)
- ENG 365 - Poetry Writing **Credits:** (5)
- ENG 366 - Creative Nonfiction Writing **Credits:** (5)
- ENG 368 - Multi-Genre Writing Workshop **Credits:** (5)
- ENG 369 - Variable Topics Writing Workshop **Credits:** (5)
- ENG 464 - Advanced Fiction Writing **Credits:** (5)
- ENG 465 - Advanced Poetry Writing **Credits:** (5)
- ENG 466 - Advanced Creative Nonfiction Writing **Credits:** (5)
- ENG 468 - Contemporary Writers Colloquium **Credits:** (5)
- TH 313 - Writing for Theatre for Young Audiences **Credits:** (3)
- TH 330 - Introduction to Playwriting **Credits:** (4)

Select one literature course at the 300-level or above - Credits: 5

Total Credits: 30

College and Department Information

English Department  
College of Arts and Humanities

## English Language and Literature Minor

As with the English major, the English minor trains students in reflective reading, theoretically based inquiry, critical analysis, and effective verbal and written expression. The skills developed in the English minor readily complement a wide variety of majors across the university.

Required Courses

- ENG 302 - Poetry and Poetics **Credits: (5)**
- ENG 303 - Principles of English Studies **Credits: (5)**

Department-Approved Electives Credits: 20

Select 20 credits of literature or language courses at the 300-level or above.

Total Credits: 30

College and Department Information

English Department  
College of Arts and Humanities

## Linguistics Minor

The linguistics minor allows students to gain a broader understanding of language and language acquisition. It draws on multiple disciplines and complements a wide range of majors.

Required Courses Credits: 15

- ENG 320 - English Grammar **Credits: (5)**
- ENG 420 - English Linguistics **Credits: (5)** and one from the following:
- ENG 432 - Phonetics and Phonology **Credits: (5)**
- ENG 437 - Pedagogical Grammar and Discourse **Credits: (5)**

Department-Approved Electives Credits: 10

Select 10 credits from the following or other courses by advisement.

- ANTH 180 - Language and Culture **Credits: (5)**
- ANTH 381 - Anthropology of Language **Credits: (4)**
- ANTH 382 - Descriptive Linguistics **Credits: (4)**
- ANTH 384 - Language and Gender **Credits: (4)**
- COM 302 - Intercultural Communication **Credits: (4)**
- EDBL 433 - Educational Linguistics **Credits: (3)**
- EDBL 438 - Teaching English as a Second Language **Credits: (3)**
- EDBL 440 - Development of Literacy with Linguistically Diverse Students **Credits: (3)**
- ENG 423 - History of the English Language **Credits: (5)**
- ENG 435 - Linguistics, Literature, and TESOL **Credits: (5)**
- ENG 496 - Individual Study **Credits: (1-6)**
- WL 481 - Methods and Materials for Language Teaching **Credits: (4)**
- WL 483 - Sociolinguistics **Credits: (4)**

Total Credits: 25

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## Technical Writing Minor

The interdisciplinary minor in technical writing provides students a focused understanding of technical writing, editing, and design skills for the workplace. It can be completed entirely online to serve professionals already working in careers as well as students planning to begin professional or technical careers. The minor provides practical, hands-on skills as well as opportunities for service learning with real-world clients. Note: Students in the Professional and Creative Writing major may not enroll in the Technical Writing Minor.

### Admission Requirements

Admission to the program requires an application approved by the English Department.

### Graduation Requirements

Successful completion of required and elective courses with a minimum of C in all courses.

Required Courses Credits: 9

- ENG 310 - Technical Writing **Credits: (4)**
- ENG 404 - Advanced Technical Writing **Credits: (5)**

Information Design Credits: 5

Choose one from the following:

- ASP 435 - Accessible Information Design **Credits: (5)**
- ENG 315 - Visual Rhetoric and Document Design **Credits: (5)**

Department-Approved Electives Credits: 11-15

Choose three of the following writing courses:

- ASP 305 - Accessibility and User Experience **Credits:** (4)
- ASP 325 - Universal Design **Credits:** (4)
- ASP 435 - Accessible Information Design **Credits:** (5)
- ENG 301 - Rhetoric for Professional Writers **Credits:** (5)
- ENG 315 - Visual Rhetoric and Document Design **Credits:** (5)
- ENG 456 - Studies in Rhetoric **Credits:** (5) (No more than 5 credits of ENG 456 may be applied to the minor)
- ENG 472 - Research Methods for Workplace Writers **Credits:** (5)
- ENG 473 - Grant Writing: Theory and Practice **Credits:** (5)
- IT 248 - Web Fundamentals **Credits:** (4)

Total Credits: 25-29

College and Department Information

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College of Arts and Humanities

## Professional Writing Certificate (ENG)

Professional Writing Certificate

The professional writing certificate allows students to develop their writing skills for professional and business environments. It is delivered entirely online to serve professionals already working in careers as well as students planning to begin professional or business careers. Students will learn the rhetorical requirements for specific forms of written communication, including letters, memos, reports, proposals, promotional materials, and press releases. They will also learn to edit their own writing for clarity, correctness, and style.

Required Courses

- ENG 301 - Rhetoric for Professional Writers **Credits:** (5)
- ENG 310 - Technical Writing **Credits:** (4)
- COM 347 - Copy Editing **Credits:** (4)
- COM 370 - Advanced Public Relations Writing **Credits:** (4)

Total Credits: 17

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## TESOL Certificate

The TESOL Certificate Program fosters the awareness, understanding, and foundational skills necessary for the effective teaching of English to speakers of other languages. Through hands-on experience tutoring and teaching and through coursework in language, culture, and pedagogy, this program prepares educators to work with language learners in the United States and abroad.

The TESOL certificate program is a university certificate, which does not provide a teaching license/endorsement for K-12 schools in the United States.

Required Courses

- ENG 320 - English Grammar **Credits:** (5)
- ENG 420 - English Linguistics **Credits:** (5)
- ENG 431 - Principles and Practices of TESOL **Credits:** (5)
- ENG 437 - Pedagogical Grammar and Discourse **Credits:** (5)
- ENG 490 - Cooperative Education **Credits:** (1-12) (For Off-campus Field Experience Credits: 5)
- **OR** ESL 492 - TESOL Certificate Practicum **Credits:** (5) (For On-campus Field Experience Credits: 5)

Total Credits: 25

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## Environmental Studies Program

College of the Sciences  
Ellensburg

Discovery Hall, room 111a/b  
Mail Stop 7534  
509-963-2222

[www.cwu.edu/environmental](http://www.cwu.edu/environmental)

See website for how this program may be used for educational and career purposes.

**Director**

Pamela McMullin-Messier, PhD

**Program Information**

The Environmental Studies Program at CWU was established in the 1970s to provide an interdisciplinary approach to the study of environmental issues. The program is administered through the College of the Sciences and has options for both a major

(BS) in five areas of specialization and a minor. The program core features team-taught courses including General Education courses that are taught by faculty from multiple disciplines.

### **Bachelor of Science**

#### **Environmental Sciences Major**

The major in environmental sciences provides students with an interdisciplinary understanding of the natural science of environmental issues as well as the social science context of the intersection of social, cultural, political, and economic factors that contribute to policy and planning decisions. Through this major, students will gain the necessary professional and technical skills for entry into successful environmental careers or for graduate studies in environmental fields. The major offers five specialization options in environmental biology, environmental chemistry, environmental geology, environmental geography, and environmental policy.

#### **Requirements for Major (BS) in Environmental Sciences**

The requirements for the major in environment sciences have three parts:

- Foundational courses in supporting disciplines. Some of these courses also serve as prerequisites for courses within the specializations. These foundational courses must be completed before students enroll in ENST 304.
- A core requirement consisting of seven interdisciplinary ENST courses, two upper-level electives, and a culminating experience outside of the classroom (research, internship, service learning, or study abroad).
- A specialization consisting of 6-8 courses that focus on a specific area of study.
- A minimum 2.0 GPA for program credits, earning at least a C- in all ENST core courses.

#### **Requirements for a double major with BS in environmental sciences**

The following double major combinations will have the environmental sciences specialization course requirements waived for the BS degree in environmental sciences; all environmental sciences foundation and core course requirements must be completed. Required courses for the first degree major may not be used to fulfill upper-division environmental sciences elective requirements (7-10 credits).

Bachelor Degree (Disciplinary)

Bachelor Degree (Environmental Sciences)

BS Biology

BS Environmental Sciences: Environmental Biology  
Specialization

BS Chemistry

BS Environmental Sciences: Environmental Chemistry  
Specialization

BS Environmental Geological Sciences

BS Environmental Sciences: Environmental Geology  
Specialization

BA Geography

BS Environmental Sciences: Environmental Geography

### **Specialization**

#### **BS Public Policy**

BS Environmental Sciences: Environmental Policy  
Specialization

The interdisciplinary major in public policy (BS) may be combined with the environmental sciences specialization in environmental policy by completing the specific course requirements for both majors. Students who combine majors in public policy and environmental sciences with a specialization in environmental policy will earn a BS degree in public policy and a BS degree in environmental sciences. As some public policy requirements and electives count toward both degrees or majors, the additional coursework needed to fulfill the requirements of the second degree or major may be as low as 19 credits.

Students may complete more than one specialization within the environmental sciences major. To be eligible for a second specialization, a minimum of 20 unique credits must be completed; unique means credits that have not already been used towards another environmental sciences specialization.

#### **Program Outcomes**

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

#### **Course Offerings**

Frequency of course offering information can be found at the department website: [www.cwu.edu/environmental](http://www.cwu.edu/environmental) or by contacting the department directly.

## **Environmental Sciences BS, Environmental Biology Specialization**

#### **Program Learner Outcomes**

Upon successful completion of this program, students will be able to:

- Students possess fundamental understanding of current environmental issues
- Describe the various perspectives that different constituencies bring to environmental issues
- Make informed decisions (e.g., voting and other life choices) that account for relevant environmental issues
- Develop critical thinking skills necessary to carry out scientific research and assess and develop policy choices
- Integrate knowledge from different perspectives
- Students possess oral and written communication skills
- Have depth of knowledge in an area of specialization

#### **Environmental Sciences Core and Requirements**

The major in environmental sciences provides students with an interdisciplinary understanding of the natural science of environmental issues as well as the social science context of the



intersection of social, cultural, political, and economic factors that contribute to policy and planning decisions. Through this major, students will gain the necessary professional and technical skills for entry into successful environmental careers or for graduate studies in environmental fields. The major offers five specialization options in environmental biology, environmental chemistry, environmental geology, environmental geography, and environmental policy.

### Requirements for Major (BS) in Environmental Sciences

The requirements for the major in environment sciences have three parts:

- Foundational courses in supporting disciplines. Some of these courses also serve as prerequisites for courses within the specializations. These foundational courses must be completed before students enroll in ENST 304.
- A core requirement consisting of seven interdisciplinary ENST courses, two upper-level electives, and a culminating experience outside of the classroom (research, internship, service learning, or study abroad).
- A specialization consisting of 6-8 courses that focus on a specific area of study.
- A minimum 2.0 GPA for program credits, earning at least a C- in all ENST core courses.

### Requirements for a double major with BS in environmental sciences

The following double major combinations will have the environmental sciences specialization course requirements waived for the BS degree in environmental sciences; all environmental sciences foundation and core course requirements must be completed. Required courses for the first degree major may not be used to fulfill upper-division environmental sciences elective requirements (7-10 credits).

Bachelor Degree (Disciplinary)  
Bachelor Degree (Environmental Sciences)

BS Biology  
BS Environmental Sciences: Environmental Biology  
Specialization

BS Chemistry  
BS Environmental Sciences: Environmental Chemistry  
Specialization

BS Environmental Geological Sciences  
BS Environmental Sciences: Environmental Geology  
Specialization

BA Geography  
BS Environmental Sciences: Environmental Geography  
Specialization

BS Public Policy  
BS Environmental Sciences: Environmental Policy  
Specialization

The interdisciplinary major in public policy (BS) may be combined with the environmental sciences specialization in environmental policy by completing the specific course

requirements for both majors. Students who combine majors in public policy and environmental sciences with a specialization in environmental policy will earn a BS degree in public policy and a BS degree in environmental sciences. As some public policy requirements and electives count toward both degrees or majors, the additional coursework needed to fulfill the requirements of the second degree or major may be as low as 19 credits.

Students may complete more than one specialization within the environmental sciences major. To be eligible for a second specialization, a minimum of 20 unique credits must be completed; unique means credits that have not already been used towards another environmental sciences specialization.

Foundational Courses Credits: 25

Please refer to general and major advisors and ENST advising worksheet(s) to select required and/or requisite courses for the specialization(s).

Biology Credits: (5)

Select one from the following:

- BIOL 101 - Fundamentals of Biology **Credits: (5)**
- BIOL 181 - General Biology I **Credits: (5)**
- BIOL 200 - Plants in the Modern World **Credits: (5)**

Chemistry Credits: (5)

Select one from the following:

- CHEM 101 - Chemistry and Planet Earth **Credits: (5)**
- CHEM 111 - Introduction to Chemistry **Credits: (4)**
- **AND** CHEM 111LAB - Introductory Chemistry Laboratory **Credits: (1)**
- CHEM 181 - General Chemistry I **Credits: (4)**
- **AND** CHEM 181LAB - General Chemistry Laboratory I **Credits: (1)**

Economics Credits: (5)

Select one from the following:

- ECON 101 - Economic Issues **Credits: (5)**
- ECON 201 - Principles of Economics Micro **Credits: (5)**

Geoscience Credits: (5)

Select one from the following:

- GEOL 101 - Introduction to Geology **Credits: (4)**
- **OR** GEOL 103 - Geology of Washington **Credits: (4)**
- **OR** GEOL 108 - Earth and Energy Resources **Credits: (4)**
- **AND** GEOL 101LAB - Introductory Geology Laboratory **Credits: (1)**

- GEOG 107 - Our Dynamic Earth **Credits: (5)**

Social Science Credits: (5)

Select one from the following:

- ANTH 130 - Cultural Worlds **Credits: (5)**
- GEOG 101 - World Regional Geography **Credits: (5)**
- GEOG 208 - Our Human World **Credits: (5)**
- SOC 107 - Principles of Sociology **Credits: (5)**

Core Courses Credits: 33-35

- ENST 201 - Earth as an Ecosystem **Credits: (5)**
- **OR** ENST 202 - Environment and Society **Credits: (5)**
- ENST 300 - Applied Environmental Sciences **Credits: (5)**
- ENST 303 - Environmental Management **Credits: (5)**
- ENST 304 - Environmental Methods and Analysis **Credits: (5)**
- ENST 330 - Environmental Leadership and Advocacy **Credits: (5)**
- **OR** ENST 360 - Environmental Justice **Credits: (5)**
- ENST 444 - Environmental Policy Formulation **Credits: (4)**
- ENST 487 - End-of-Major Capstone **Credits: (1)**

Culminating Experience Credits: (3-5)

Select one or a combination of the following (internship, research, service-learning, or study abroad experience):

- ENST 490 - Cooperative Education **Credits: (1-12)**
- ENST 495 - Senior Research **Credits: (1-12)** **OR** (other 495 Senior Research)
- UNIV 304 - International Sustainable Development **Credits: (5)**
- UNIV 309 - Civic Engagement **Credits: (2)**

Department-Approved Upper-Level Electives: Credits: 8-10

Select two of the following courses. Note: these courses cannot be used to fulfill specialization requirements.

- ANTH 352 - Anthropology of Environmental Issues **Credits: (4)**
- ANTH 440 - Ecology and Culture **Credits: (4)**
- **OR** GEOG 440 - Ecology and Culture **Credits: (4)**
- BIOL 302 - Sustainability and Environmental Change **Credits: (5)**
- BIOL 362 - Biomes of the Pacific Northwest **Credits: (4)**
- BIOL 377 - Regional Natural History **Credits: (2)**
- **AND** BIOL 377LAB - Regional Natural History **Credits: (3)**
- **OR** GEOL 377 - Regional Natural History **Credits: (2)**

- **AND** GEOL 377LAB - Regional Natural History **Credits: (3)**
- BUS 389 - Sustainable Business **Credits: (5)**
- CMGT 452 - LEED in Sustainable Construction **Credits: (4)**
- ECON 462 - Environmental and Resource Economics **Credits: (5)**
- ECON 463 - Energy Economics **Credits: (5)**
- ENST 310 - Energy and Society **Credits: (5)**
- ENST 330 - Environmental Leadership and Advocacy **Credits: (5)**
- ENST 360 - Environmental Justice **Credits: (5)**
- ENST 455 - Environmental Literature **Credits: (3)**
- ENST 460 - Environmental Law **Credits: (5)**
- **OR** GEOG 445 - Environmental Law **Credits: (5)**
- GEOG 373 - Water Resources **Credits: (4)**
- GEOG 388 - Weather and Climate **Credits: (5)**
- GEOG 442 - Alternative Energy **Credits: (5)**
- GEOG 456 - Recreation Geography **Credits: (5)**
- GEOL 302 - Oceans and Atmosphere **Credits: (4)**
- GEOL 380 - Natural Hazards **Credits: (5)**
- GEOL 441 - Climate Variability and Climate Change **Credits: (5)**
- HIST 454 - American Environmental History **Credits: (5)**
- IEM 301 - Energy Management **Credits: (5)**
- IEM 330 - Geopolitics of Fossil Fuels **Credits: (5)**
- IEM 302 - Energy, Environment, and Climate Change **Credits: (4)**
- PHIL 306 - Environmental Ethics **Credits: (5)**
- PHIL 314 - American Wilderness Philosophy **Credits: (5)**
- POSC 344 - Environmental Politics **Credits: (5)**
- PSY 413 - Conservation Psychology **Credits: (4)**
- PUBH 320 - Environmental Health **Credits: (4)**
- HTE 330 - Sustainable Resources for Tourism **Credits: (3)**
- SOC 380 - Environmental Sociology **Credits: (5)**

Total Environmental Sciences Core Credits: 66-70

Environmental Biology Specialization

Note: BIOL 181 and CHEM 181/181LAB are required as foundational courses for this specialization.

- BIOL 182 - General Biology II **Credits: (5)**
- BIOL 183 - General Biology III **Credits: (5)**
- BIOL 213 - Introductory Biostatistics **Credits: (4)**
- BIOL 360 - General Ecology **Credits: (5)**
- CHEM 182 - General Chemistry II **Credits: (4)**
- **AND** CHEM 182LAB - General Chemistry Laboratory II **Credits: (1)**
- CHEM 183 - General Chemistry III **Credits: (4)**
- **AND** CHEM 183LAB - General Chemistry Laboratory III **Credits: (1)**

Choose one field course from the following: Credits: 4-5

- BIOL 362 - Biomes of the Pacific Northwest **Credits:** (4)
- BIOL 377 - Regional Natural History **Credits:** (2)
- **AND** BIOL 377LAB - Regional Natural History **Credits:** (3)
- BIOL 461 - Community Ecology **Credits:** (3)
- **AND** BIOL 461LAB - Community Ecology Laboratory **Credits:** (2)
- BIOL 462 - Wildlife and Fisheries Ecology **Credits:** (5)
- BIOL 463 - Limnology **Credits:** (5)
- BIOL 464 - Terrestrial Plant Ecology **Credits:** (5)
- BIOL 466 - Conservation Biology **Credits:** (5)
- BIOL 467 - Biological Field Techniques **Credits:** (5)

Specialization Subtotal Credits: 33-34

Total Credits: 99-104

College and Department Information

Environmental Studies Program  
College of the Sciences

## Environmental Sciences BS, Environmental Chemistry Specialization

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Students possess fundamental understanding of current environmental issues
- Describe the various perspectives that different constituencies bring to environmental issues
- Make informed decisions (e.g., voting and other life choices) that account for relevant environmental issues
- Develop critical thinking skills necessary to carry out scientific research and assess and develop policy choices
- Integrate knowledge from different perspectives
- Students possess oral and written communication skills
- Have depth of knowledge in an area of specialization

Environmental Sciences Core and Requirements

The major in environmental sciences provides students with an interdisciplinary understanding of the natural science of environmental issues as well as the social science context of the intersection of social, cultural, political, and economic factors that contribute to policy and planning decisions. Through this major, students will gain the necessary professional and technical skills for entry into successful environmental careers or for graduate studies in environmental fields. The major offers five specialization options in environmental biology,

environmental chemistry, environmental geology, environmental geography, and environmental policy.

### Requirements for Major (BS) in Environmental Sciences

The requirements for the major in environment sciences have three parts:

- Foundational courses in supporting disciplines. Some of these courses also serve as prerequisites for courses within the specializations. These foundational courses must be completed before students enroll in ENST 304.
- A core requirement consisting of seven interdisciplinary ENST courses, two upper-level electives, and a culminating experience outside of the classroom (research, internship, service learning, or study abroad).
- A specialization consisting of 6-8 courses that focus on a specific area of study.
- A minimum 2.0 GPA for program credits, earning at least a C- in all ENST core courses.

### Requirements for a double major with BS in environmental sciences

The following double major combinations will have the environmental sciences specialization course requirements waived for the BS degree in environmental sciences; all environmental sciences foundation and core course requirements must be completed. Required courses for the first degree major may not be used to fulfill upper-division environmental sciences elective requirements (7-10 credits).

Bachelor Degree (Disciplinary)

Bachelor Degree (Environmental Sciences)

BS Biology

BS Environmental Sciences: Environmental Biology Specialization

BS Chemistry

BS Environmental Sciences: Environmental Chemistry Specialization

BS Environmental Geological Sciences

BS Environmental Sciences: Environmental Geology Specialization

BA Geography

BS Environmental Sciences: Environmental Geography Specialization

BS Public Policy

BS Environmental Sciences: Environmental Policy Specialization

The interdisciplinary major in public policy (BS) may be combined with the environmental sciences specialization in environmental policy by completing the specific course requirements for both majors. Students who combine majors in public policy and environmental sciences with a specialization in environmental policy will earn a BS degree in public policy and a BS degree in environmental sciences. As some public policy requirements and electives count toward both degrees or majors, the additional coursework needed to fulfill the

requirements of the second degree or major may be as low as 19 credits.

Students may complete more than one specialization within the environmental sciences major. To be eligible for a second specialization, a minimum of 20 unique credits must be completed; unique means credits that have not already been used towards another environmental sciences specialization.

Foundational Courses Credits: 25

Please refer to general and major advisors and ENST advising worksheet(s) to select required and/or requisite courses for the specialization(s).

Biology Credits: (5)

Select one from the following:

- BIOL 101 - Fundamentals of Biology **Credits: (5)**
- BIOL 181 - General Biology I **Credits: (5)**
- BIOL 200 - Plants in the Modern World **Credits: (5)**

Chemistry Credits: (5)

Select one from the following:

- CHEM 101 - Chemistry and Planet Earth **Credits: (5)**
- CHEM 111 - Introduction to Chemistry **Credits: (4)**
- **AND** CHEM 111LAB - Introductory Chemistry Laboratory **Credits: (1)**
- CHEM 181 - General Chemistry I **Credits: (4)**
- **AND** CHEM 181LAB - General Chemistry Laboratory I **Credits: (1)**

Economics Credits: (5)

Select one from the following:

- ECON 101 - Economic Issues **Credits: (5)**
- ECON 201 - Principles of Economics Micro **Credits: (5)**

Geoscience Credits: (5)

Select one from the following:

- GEOL 101 - Introduction to Geology **Credits: (4)**
- **OR** GEOL 103 - Geology of Washington **Credits: (4)**
- **OR** GEOL 108 - Earth and Energy Resources **Credits: (4)**
- **AND** GEOL 101LAB - Introductory Geology Laboratory **Credits: (1)**
- GEOG 107 - Our Dynamic Earth **Credits: (5)**

Social Science Credits: (5)

Select one from the following:

- ANTH 130 - Cultural Worlds **Credits: (5)**
- GEOG 101 - World Regional Geography **Credits: (5)**
- GEOG 208 - Our Human World **Credits: (5)**
- SOC 107 - Principles of Sociology **Credits: (5)**

Core Courses Credits: 33-35

- ENST 201 - Earth as an Ecosystem **Credits: (5)**
- **OR** ENST 202 - Environment and Society **Credits: (5)**
- ENST 300 - Applied Environmental Sciences **Credits: (5)**
- ENST 303 - Environmental Management **Credits: (5)**
- ENST 304 - Environmental Methods and Analysis **Credits: (5)**
- ENST 330 - Environmental Leadership and Advocacy **Credits: (5)**
- **OR** ENST 360 - Environmental Justice **Credits: (5)**
- ENST 444 - Environmental Policy Formulation **Credits: (4)**
- ENST 487 - End-of-Major Capstone **Credits: (1)**

Culminating Experience Credits: (3-5)

Select one or a combination of the following (internship, research, service-learning, or study abroad experience):

- ENST 490 - Cooperative Education **Credits: (1-12)**
- ENST 495 - Senior Research **Credits: (1-12)** **OR** (other 495 Senior Research)
- UNIV 304 - International Sustainable Development **Credits: (5)**
- UNIV 309 - Civic Engagement **Credits: (2)**

Department-Approved Upper-Level Electives: Credits: 8-10

Select two of the following courses. Note: these courses cannot be used to fulfill specialization requirements.

- ANTH 352 - Anthropology of Environmental Issues **Credits: (4)**
- ANTH 440 - Ecology and Culture **Credits: (4)**
- **OR** GEOG 440 - Ecology and Culture **Credits: (4)**
- BIOL 302 - Sustainability and Environmental Change **Credits: (5)**
- BIOL 362 - Biomes of the Pacific Northwest **Credits: (4)**
- BIOL 377 - Regional Natural History **Credits: (2)**
- **AND** BIOL 377LAB - Regional Natural History **Credits: (3)**
- **OR** GEOL 377 - Regional Natural History **Credits: (2)**
- **AND** GEOL 377LAB - Regional Natural History **Credits: (3)**
- BUS 389 - Sustainable Business **Credits: (5)**
- CMGT 452 - LEED in Sustainable Construction **Credits: (4)**
- ECON 462 - Environmental and Resource Economics **Credits: (5)**

- ECON 463 - Energy Economics **Credits:** (5)
- ENST 310 - Energy and Society **Credits:** (5)
- ENST 330 - Environmental Leadership and Advocacy **Credits:** (5)
- ENST 360 - Environmental Justice **Credits:** (5)
- ENST 455 - Environmental Literature **Credits:** (3)
- ENST 460 - Environmental Law **Credits:** (5)
- **OR** GEOG 445 - Environmental Law **Credits:** (5)
- GEOG 373 - Water Resources **Credits:** (4)
- GEOG 388 - Weather and Climate **Credits:** (5)
- GEOG 442 - Alternative Energy **Credits:** (5)
- GEOG 456 - Recreation Geography **Credits:** (5)
- GEOL 302 - Oceans and Atmosphere **Credits:** (4)
- GEOL 380 - Natural Hazards **Credits:** (5)
- GEOL 441 - Climate Variability and Climate Change **Credits:** (5)
- HIST 454 - American Environmental History **Credits:** (5)
- IEM 301 - Energy Management **Credits:** (5)
- IEM 330 - Geopolitics of Fossil Fuels **Credits:** (5)
- IEM 302 - Energy, Environment, and Climate Change **Credits:** (4)
- PHIL 306 - Environmental Ethics **Credits:** (5)
- PHIL 314 - American Wilderness Philosophy **Credits:** (5)
- POSC 344 - Environmental Politics **Credits:** (5)
- PSY 413 - Conservation Psychology **Credits:** (4)
- PUBH 320 - Environmental Health **Credits:** (4)
- HTE 330 - Sustainable Resources for Tourism **Credits:** (3)
- SOC 380 - Environmental Sociology **Credits:** (5)

Total Environmental Sciences Core Credits: 66-70

#### Environmental Chemistry Specialization

Note: CHEM 181/181LAB is required as a foundational course for this specialization.

- CHEM 182 - General Chemistry II **Credits:** (4)
- **AND** CHEM 182LAB - General Chemistry Laboratory II **Credits:** (1)
- CHEM 183 - General Chemistry III **Credits:** (4)
- **AND** CHEM 183LAB - General Chemistry Laboratory III **Credits:** (1)
- CHEM 332 - Quantitative Analysis **Credits:** (3)
- **AND** CHEM 332LAB - Quantitative Analysis Laboratory **Credits:** (2)
- CHEM 345 - Environmental Chemistry **Credits:** (5)
- MATH 154 - Pre-Calculus Mathematics II **Credits:** (5)

Select one from the following: Credits: 5

- BIOL 220 - Introductory Cell Biology **Credits:** (5)
- BIOL 322 - Introductory Microbiology **Credits:** (5)
- CHEM 452 - Instrumental Analysis Lecture **Credits:** (3)

- **AND** CHEM 452LAB - Instrumental Analysis Laboratory **Credits:** (2)
- GEOL 425 - Environmental Geochemistry **Credits:** (5)

Specialization Subtotal Credits: 30

Total Credits: 96-100

#### College and Department Information

Environmental Studies Program  
College of the Sciences

## Environmental Sciences BS, Environmental Geography Specialization

#### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Students possess fundamental understanding of current environmental issues
- Describe the various perspectives that different constituencies bring to environmental issues
- Make informed decisions (e.g., voting and other life choices) that account for relevant environmental issues
- Develop critical thinking skills necessary to carry out scientific research and assess and develop policy choices
- Integrate knowledge from different perspectives
- Students possess oral and written communication skills
- Have depth of knowledge in an area of specialization

#### Environmental Sciences Core and Requirements

The major in environmental sciences provides students with an interdisciplinary understanding of the natural science of environmental issues as well as the social science context of the intersection of social, cultural, political, and economic factors that contribute to policy and planning decisions. Through this major, students will gain the necessary professional and technical skills for entry into successful environmental careers or for graduate studies in environmental fields. The major offers five specialization options in environmental biology, environmental chemistry, environmental geology, environmental geography, and environmental policy.

#### Requirements for Major (BS) in Environmental Sciences

The requirements for the major in environment sciences have three parts:

- Foundational courses in supporting disciplines. Some of these courses also serve as prerequisites for courses within the specializations. These foundational courses

must be completed before students enroll in ENST 304.

- A core requirement consisting of seven interdisciplinary ENST courses, two upper-level electives, and a culminating experience outside of the classroom (research, internship, service learning, or study abroad).
- A specialization consisting of 6-8 courses that focus on a specific area of study.
- A minimum 2.0 GPA for program credits, earning at least a C- in all ENST core courses.

### Requirements for a double major with BS in environmental sciences

The following double major combinations will have the environmental sciences specialization course requirements waived for the BS degree in environmental sciences; all environmental sciences foundation and core course requirements must be completed. Required courses for the first degree major may not be used to fulfill upper-division environmental sciences elective requirements (7-10 credits).

Bachelor Degree (Disciplinary)

Bachelor Degree (Environmental Sciences)

BS Biology

BS Environmental Sciences: Environmental Biology Specialization

BS Chemistry

BS Environmental Sciences: Environmental Chemistry Specialization

BS Environmental Geological Sciences

BS Environmental Sciences: Environmental Geology Specialization

BA Geography

BS Environmental Sciences: Environmental Geography Specialization

BS Public Policy

BS Environmental Sciences: Environmental Policy Specialization

The interdisciplinary major in public policy (BS) may be combined with the environmental sciences specialization in environmental policy by completing the specific course requirements for both majors. Students who combine majors in public policy and environmental sciences with a specialization in environmental policy will earn a BS degree in public policy and a BS degree in environmental sciences. As some public policy requirements and electives count toward both degrees or majors, the additional coursework needed to fulfill the requirements of the second degree or major may be as low as 19 credits.

Students may complete more than one specialization within the environmental sciences major. To be eligible for a second specialization, a minimum of 20 unique credits must be completed; unique means credits that have not already been used towards another environmental sciences specialization.

Foundational Courses Credits: 25

Please refer to general and major advisors and ENST advising worksheet(s) to select required and/or requisite courses for the specialization(s).

Biology Credits: (5)

Select one from the following:

- BIOL 101 - Fundamentals of Biology **Credits: (5)**
- BIOL 181 - General Biology I **Credits: (5)**
- BIOL 200 - Plants in the Modern World **Credits: (5)**

Chemistry Credits: (5)

Select one from the following:

- CHEM 101 - Chemistry and Planet Earth **Credits: (5)**
- CHEM 111 - Introduction to Chemistry **Credits: (4)**
- **AND** CHEM 111LAB - Introductory Chemistry Laboratory **Credits: (1)**
- CHEM 181 - General Chemistry I **Credits: (4)**
- **AND** CHEM 181LAB - General Chemistry Laboratory I **Credits: (1)**

Economics Credits: (5)

Select one from the following:

- ECON 101 - Economic Issues **Credits: (5)**
- ECON 201 - Principles of Economics Micro **Credits: (5)**

Geoscience Credits: (5)

Select one from the following:

- GEOL 101 - Introduction to Geology **Credits: (4)**
- **OR** GEOL 103 - Geology of Washington **Credits: (4)**
- **OR** GEOL 108 - Earth and Energy Resources **Credits: (4)**
- **AND** GEOL 101LAB - Introductory Geology Laboratory **Credits: (1)**
- GEOG 107 - Our Dynamic Earth **Credits: (5)**

Social Science Credits: (5)

Select one from the following:

- ANTH 130 - Cultural Worlds **Credits: (5)**
- GEOG 101 - World Regional Geography **Credits: (5)**
- GEOG 208 - Our Human World **Credits: (5)**
- SOC 107 - Principles of Sociology **Credits: (5)**

Core Courses Credits: 33-35

- ENST 201 - Earth as an Ecosystem **Credits: (5)**

- **OR** ENST 202 - Environment and Society **Credits:** (5)
- ENST 300 - Applied Environmental Sciences **Credits:** (5)
- ENST 303 - Environmental Management **Credits:** (5)
- ENST 304 - Environmental Methods and Analysis **Credits:** (5)
- ENST 330 - Environmental Leadership and Advocacy **Credits:** (5)
- **OR** ENST 360 - Environmental Justice **Credits:** (5)
- ENST 444 - Environmental Policy Formulation **Credits:** (4)
- ENST 487 - End-of-Major Capstone **Credits:** (1)

Culminating Experience Credits: (3-5)

Select one or a combination of the following (internship, research, service-learning, or study abroad experience):

- ENST 490 - Cooperative Education **Credits:** (1-12)
- ENST 495 - Senior Research **Credits:** (1-12) **OR** (other 495 Senior Research)
- UNIV 304 - International Sustainable Development **Credits:** (5)
- UNIV 309 - Civic Engagement **Credits:** (2)

Department-Approved Upper-Level Electives: Credits: 8-10

Select two of the following courses. Note: these courses cannot be used to fulfill specialization requirements.

- ANTH 352 - Anthropology of Environmental Issues **Credits:** (4)
- ANTH 440 - Ecology and Culture **Credits:** (4)
- **OR** GEOG 440 - Ecology and Culture **Credits:** (4)
- BIOL 302 - Sustainability and Environmental Change **Credits:** (5)
- BIOL 362 - Biomes of the Pacific Northwest **Credits:** (4)
- BIOL 377 - Regional Natural History **Credits:** (2)
- **AND** BIOL 377LAB - Regional Natural History **Credits:** (3)
- **OR** GEOL 377 - Regional Natural History **Credits:** (2)
- **AND** GEOL 377LAB - Regional Natural History **Credits:** (3)
- BUS 389 - Sustainable Business **Credits:** (5)
- CMGT 452 - LEED in Sustainable Construction **Credits:** (4)
- ECON 462 - Environmental and Resource Economics **Credits:** (5)
- ECON 463 - Energy Economics **Credits:** (5)
- ENST 310 - Energy and Society **Credits:** (5)
- ENST 330 - Environmental Leadership and Advocacy **Credits:** (5)
- ENST 360 - Environmental Justice **Credits:** (5)
- ENST 455 - Environmental Literature **Credits:** (3)
- ENST 460 - Environmental Law **Credits:** (5)
- **OR** GEOG 445 - Environmental Law **Credits:** (5)

- GEOG 373 - Water Resources **Credits:** (4)
- GEOG 388 - Weather and Climate **Credits:** (5)
- GEOG 442 - Alternative Energy **Credits:** (5)
- GEOG 456 - Recreation Geography **Credits:** (5)
- GEOL 302 - Oceans and Atmosphere **Credits:** (4)
- GEOL 380 - Natural Hazards **Credits:** (5)
- GEOL 441 - Climate Variability and Climate Change **Credits:** (5)
- HIST 454 - American Environmental History **Credits:** (5)
- IEM 301 - Energy Management **Credits:** (5)
- IEM 330 - Geopolitics of Fossil Fuels **Credits:** (5)
- IEM 302 - Energy, Environment, and Climate Change **Credits:** (4)
- PHIL 306 - Environmental Ethics **Credits:** (5)
- PHIL 314 - American Wilderness Philosophy **Credits:** (5)
- POSC 344 - Environmental Politics **Credits:** (5)
- PSY 413 - Conservation Psychology **Credits:** (4)
- PUBH 320 - Environmental Health **Credits:** (4)
- HTE 330 - Sustainable Resources for Tourism **Credits:** (3)
- SOC 380 - Environmental Sociology **Credits:** (5)

Total Environmental Sciences Core Credits: 66-70

Environmental Geography Specialization

Note: GEOG 107 AND GEOG 208 are required as foundational courses for this specialization. GEOG 107 is a prerequisite to most courses listed below. Additional prerequisites are noted with asterisks.

Physical Geography Courses Credits: 10

Choose two of the following:

- GEOG 361 - Soils **Credits:** (5)
- GEOG 382 - Hydrology **Credits:** (5)
- GEOG 386 - Geomorphology **Credits:** (5)
- GEOG 387 - Biogeography **Credits:** (5)
- GEOG 388 - Weather and Climate **Credits:** (5)
- GEOG 453 - Riparian and Wetlands Analysis **Credits:** (5)
- GEOG 483 - Snow **Credits:** (5)

Techniques Courses Credits: 10

Choose two of the following:

- GEOG 303 - GIS and Data Management **Credits:** (5) \*
- GEOG 325 - Field Methods in Geography **Credits:** (5)
- GEOG 330 - Airphoto Interpretation **Credits:** (5) \*
- GEOG 404 - GIS Analysis **Credits:** (5) \*\*\*
- GEOG 409 - Quantitative Methods in Geography **Credits:** (5)

- GEOG 430 - Remote Sensing **Credits: (5) \*\***  
\* requires prerequisite of GEOG 301.  
\*\* requires corequisite or prerequisite of GEOG 330 or GEOL 210 or consent of instructor.  
\*\*\* requires prerequisite of GEOG 303.

Resource Courses Credits: 8-10

Choose two of the following:

- GEOG 373 - Water Resources **Credits: (4)**
- GEOG 441 - Climate Change: Human and Biophysical Dimensions (Put on reserve 9/16/18) **Credits: (4)**
- GEOG 442 - Alternative Energy **Credits: (5)**
- GEOG 449 - Environmental Hazard Analysis and Management **Credits: (5)**
- GEOG 455 - Pyrogeography **Credits: (4)**
- GEOG 456 - Recreation Geography **Credits: (5)**
- GEOG 458 - People, Parks, and Protected Areas **Credits: (4)**

Geography Electives Credits: 5

Choose one from the following:

- GEOG 450 - Arid Environments **Credits: (5)**
- GEOG 451 - Mountain Environments **Credits: (5)**
- GEOG 452 - Coastal Environments **Credits: (5)**
- GEOG 454 - Forest Environments **Credits: (5)**
- GEOG 479 - Geography of the West **Credits: (1-12)**

Specialization Subtotal Credits: 33-35

Total Credits: 99-105

College and Department Information

Environmental Studies Program  
College of the Sciences

## Environmental Sciences BS, Environmental Geology Specialization

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Students possess fundamental understanding of current environmental issues
- Describe the various perspectives that different constituencies bring to environmental issues
- Make informed decisions (e.g., voting and other life choices) that account for relevant environmental issues

- Develop critical thinking skills necessary to carry out scientific research and assess and develop policy choices
- Integrate knowledge from different perspectives
- Students possess oral and written communication skills
- Have depth of knowledge in an area of specialization

Environmental Sciences Core and Requirements

The major in environmental sciences provides students with an interdisciplinary understanding of the natural science of environmental issues as well as the social science context of the intersection of social, cultural, political, and economic factors that contribute to policy and planning decisions. Through this major, students will gain the necessary professional and technical skills for entry into successful environmental careers or for graduate studies in environmental fields. The major offers five specialization options in environmental biology, environmental chemistry, environmental geology, environmental geography, and environmental policy.

### Requirements for Major (BS) in Environmental Sciences

The requirements for the major in environment sciences have three parts:

- Foundational courses in supporting disciplines. Some of these courses also serve as prerequisites for courses within the specializations. These foundational courses must be completed before students enroll in ENST 304.
- A core requirement consisting of seven interdisciplinary ENST courses, two upper-level electives, and a culminating experience outside of the classroom (research, internship, service learning, or study abroad).
- A specialization consisting of 6-8 courses that focus on a specific area of study.
- A minimum 2.0 GPA for program credits, earning at least a C- in all ENST core courses.

### Requirements for a double major with BS in environmental sciences

The following double major combinations will have the environmental sciences specialization course requirements waived for the BS degree in environmental sciences; all environmental sciences foundation and core course requirements must be completed. Required courses for the first degree major may not be used to fulfill upper-division environmental sciences elective requirements (7-10 credits).

Bachelor Degree (Disciplinary)  
Bachelor Degree (Environmental Sciences)

BS Biology  
BS Environmental Sciences: Environmental Biology  
Specialization

BS Chemistry  
BS Environmental Sciences: Environmental Chemistry  
Specialization

BS Environmental Geological Sciences



BS Environmental Sciences: Environmental Geology Specialization

BA Geography

BS Environmental Sciences: Environmental Geography Specialization

BS Public Policy

BS Environmental Sciences: Environmental Policy Specialization

The interdisciplinary major in public policy (BS) may be combined with the environmental sciences specialization in environmental policy by completing the specific course requirements for both majors. Students who combine majors in public policy and environmental sciences with a specialization in environmental policy will earn a BS degree in public policy and a BS degree in environmental sciences. As some public policy requirements and electives count toward both degrees or majors, the additional coursework needed to fulfill the requirements of the second degree or major may be as low as 19 credits.

Students may complete more than one specialization within the environmental sciences major. To be eligible for a second specialization, a minimum of 20 unique credits must be completed; unique means credits that have not already been used towards another environmental sciences specialization.

Foundational Courses Credits: 25

Please refer to general and major advisors and ENST advising worksheet(s) to select required and/or requisite courses for the specialization(s).

Biology Credits: (5)

Select one from the following:

- BIOL 101 - Fundamentals of Biology **Credits:** (5)
- BIOL 181 - General Biology I **Credits:** (5)
- BIOL 200 - Plants in the Modern World **Credits:** (5)

Chemistry Credits: (5)

Select one from the following:

- CHEM 101 - Chemistry and Planet Earth **Credits:** (5)
- CHEM 111 - Introduction to Chemistry **Credits:** (4)
- **AND** CHEM 111LAB - Introductory Chemistry Laboratory **Credits:** (1)
- CHEM 181 - General Chemistry I **Credits:** (4)
- **AND** CHEM 181LAB - General Chemistry Laboratory I **Credits:** (1)

Economics Credits: (5)

Select one from the following:

- ECON 101 - Economic Issues **Credits:** (5)

- ECON 201 - Principles of Economics Micro **Credits:** (5)

Geoscience Credits: (5)

Select one from the following:

- GEOL 101 - Introduction to Geology **Credits:** (4)
- **OR** GEOL 103 - Geology of Washington **Credits:** (4)
- **OR** GEOL 108 - Earth and Energy Resources **Credits:** (4)
- **AND** GEOL 101LAB - Introductory Geology Laboratory **Credits:** (1)
- GEOG 107 - Our Dynamic Earth **Credits:** (5)

Social Science Credits: (5)

Select one from the following:

- ANTH 130 - Cultural Worlds **Credits:** (5)
- GEOG 101 - World Regional Geography **Credits:** (5)
- GEOG 208 - Our Human World **Credits:** (5)
- SOC 107 - Principles of Sociology **Credits:** (5)

Core Courses Credits: 33-35

- ENST 201 - Earth as an Ecosystem **Credits:** (5)
- **OR** ENST 202 - Environment and Society **Credits:** (5)
- ENST 300 - Applied Environmental Sciences **Credits:** (5)
- ENST 303 - Environmental Management **Credits:** (5)
- ENST 304 - Environmental Methods and Analysis **Credits:** (5)
- ENST 330 - Environmental Leadership and Advocacy **Credits:** (5)
- **OR** ENST 360 - Environmental Justice **Credits:** (5)
- ENST 444 - Environmental Policy Formulation **Credits:** (4)
- ENST 487 - End-of-Major Capstone **Credits:** (1)

Culminating Experience Credits: (3-5)

Select one or a combination of the following (internship, research, service-learning, or study abroad experience):

- ENST 490 - Cooperative Education **Credits:** (1-12)
- ENST 495 - Senior Research **Credits:** (1-12) **OR** (other 495 Senior Research)
- UNIV 304 - International Sustainable Development **Credits:** (5)
- UNIV 309 - Civic Engagement **Credits:** (2)

Department-Approved Upper-Level Electives: Credits: 8-10

Select two of the following courses. Note: these courses cannot be used to fulfill specialization requirements.

- ANTH 352 - Anthropology of Environmental Issues **Credits:** (4)
- ANTH 440 - Ecology and Culture **Credits:** (4)
- **OR** GEOG 440 - Ecology and Culture **Credits:** (4)
- BIOL 302 - Sustainability and Environmental Change **Credits:** (5)
- BIOL 362 - Biomes of the Pacific Northwest **Credits:** (4)
- BIOL 377 - Regional Natural History **Credits:** (2)
- **AND** BIOL 377LAB - Regional Natural History **Credits:** (3)
- **OR** GEOL 377 - Regional Natural History **Credits:** (2)
- **AND** GEOL 377LAB - Regional Natural History **Credits:** (3)
- BUS 389 - Sustainable Business **Credits:** (5)
- CMGT 452 - LEED in Sustainable Construction **Credits:** (4)
- ECON 462 - Environmental and Resource Economics **Credits:** (5)
- ECON 463 - Energy Economics **Credits:** (5)
- ENST 310 - Energy and Society **Credits:** (5)
- ENST 330 - Environmental Leadership and Advocacy **Credits:** (5)
- ENST 360 - Environmental Justice **Credits:** (5)
- ENST 455 - Environmental Literature **Credits:** (3)
- ENST 460 - Environmental Law **Credits:** (5)
- **OR** GEOG 445 - Environmental Law **Credits:** (5)
- GEOG 373 - Water Resources **Credits:** (4)
- GEOG 388 - Weather and Climate **Credits:** (5)
- GEOG 442 - Alternative Energy **Credits:** (5)
- GEOG 456 - Recreation Geography **Credits:** (5)
- GEOL 302 - Oceans and Atmosphere **Credits:** (4)
- GEOL 380 - Natural Hazards **Credits:** (5)
- GEOL 441 - Climate Variability and Climate Change **Credits:** (5)
- HIST 454 - American Environmental History **Credits:** (5)
- IEM 301 - Energy Management **Credits:** (5)
- IEM 330 - Geopolitics of Fossil Fuels **Credits:** (5)
- IEM 302 - Energy, Environment, and Climate Change **Credits:** (4)
- PHIL 306 - Environmental Ethics **Credits:** (5)
- PHIL 314 - American Wilderness Philosophy **Credits:** (5)
- POSC 344 - Environmental Politics **Credits:** (5)
- PSY 413 - Conservation Psychology **Credits:** (4)
- PUBH 320 - Environmental Health **Credits:** (4)
- HTE 330 - Sustainable Resources for Tourism **Credits:** (3)
- SOC 380 - Environmental Sociology **Credits:** (5)

Total Environmental Sciences Core Credits: 66-70

Environmental Geology Specialization

Note: GEOL 101/101LAB or GEOL 103/101LAB or GEOL 107/101LAB or GEOL 108/101LAB is required as foundational

courses for this specialization and a prerequisite for most of the courses listed below.

- GEOL 200 - Earth's Evolution and Global Change **Credits:** (5)
- GEOL 302 - Oceans and Atmosphere **Credits:** (4)
- **OR** GEOL 384 - Ocean, Atmosphere and Climate Interactions **Credits:** (4) (note: this course is writing intensive)
- GEOL 380 - Natural Hazards **Credits:** (5)
- **OR** GEOL 382 - Earth Resources and Pollution **Credits:** (4)
- GEOL 386 - Geomorphology **Credits:** (5)
- GEOL 445 - Hydrogeology **Credits:** (5)
- MATH 154 - Pre-Calculus Mathematics II **Credits:** (5)

Field Course Credits: 4-5

Choose one field course from the following:

- GEOL 210 - Introduction to Geologic Field Methods **Credits:** (4)
- GEOL 377 - Regional Natural History **Credits:** (2)
- **AND** GEOL 377LAB - Regional Natural History **Credits:** (3)
- GEOL 493 - Field Methods in Environmental Geology **Credits:** (4)

Specialization Subtotal Credits: 32-34

Total Credits: 98-104

College and Department Information

Environmental Studies Program  
College of the Sciences

## Environmental Sciences BS, Environmental Policy Specialization

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Students possess fundamental understanding of current environmental issues
- Describe the various perspectives that different constituencies bring to environmental issues
- Make informed decisions (e.g., voting and other life choices) that account for relevant environmental issues
- Develop critical thinking skills necessary to carry out scientific research and assess and develop policy choices
- Integrate knowledge from different perspectives
- Students possess oral and written communication skills

- Have depth of knowledge in an area of specialization

#### Environmental Sciences Core and Requirements

The major in environmental sciences provides students with an interdisciplinary understanding of the natural science of environmental issues as well as the social science context of the intersection of social, cultural, political, and economic factors that contribute to policy and planning decisions. Through this major, students will gain the necessary professional and technical skills for entry into successful environmental careers or for graduate studies in environmental fields. The major offers five specialization options in environmental biology, environmental chemistry, environmental geology, environmental geography, and environmental policy.

#### Requirements for Major (BS) in Environmental Sciences

The requirements for the major in environment sciences have three parts:

- Foundational courses in supporting disciplines. Some of these courses also serve as prerequisites for courses within the specializations. These foundational courses must be completed before students enroll in ENST 304.
- A core requirement consisting of seven interdisciplinary ENST courses, two upper-level electives, and a culminating experience outside of the classroom (research, internship, service learning, or study abroad).
- A specialization consisting of 6-8 courses that focus on a specific area of study.
- A minimum 2.0 GPA for program credits, earning at least a C- in all ENST core courses.

#### Requirements for a double major with BS in environmental sciences

The following double major combinations will have the environmental sciences specialization course requirements waived for the BS degree in environmental sciences; all environmental sciences foundation and core course requirements must be completed. Required courses for the first degree major may not be used to fulfill upper-division environmental sciences elective requirements (7-10 credits).

Bachelor Degree (Disciplinary)

Bachelor Degree (Environmental Sciences)

BS Biology

BS Environmental Sciences: Environmental Biology Specialization

BS Chemistry

BS Environmental Sciences: Environmental Chemistry Specialization

BS Environmental Geological Sciences

BS Environmental Sciences: Environmental Geology Specialization

BA Geography

BS Environmental Sciences: Environmental Geography Specialization

BS Public Policy

BS Environmental Sciences: Environmental Policy Specialization

The interdisciplinary major in public policy (BS) may be combined with the environmental sciences specialization in environmental policy by completing the specific course requirements for both majors. Students who combine majors in public policy and environmental sciences with a specialization in environmental policy will earn a BS degree in public policy and a BS degree in environmental sciences. As some public policy requirements and electives count toward both degrees or majors, the additional coursework needed to fulfill the requirements of the second degree or major may be as low as 19 credits.

Students may complete more than one specialization within the environmental sciences major. To be eligible for a second specialization, a minimum of 20 unique credits must be completed; unique means credits that have not already been used towards another environmental sciences specialization.

Foundational Courses Credits: 25

Please refer to general and major advisors and ENST advising worksheet(s) to select required and/or requisite courses for the specialization(s).

Biology Credits: (5)

Select one from the following:

- BIOL 101 - Fundamentals of Biology **Credits: (5)**
- BIOL 181 - General Biology I **Credits: (5)**
- BIOL 200 - Plants in the Modern World **Credits: (5)**

Chemistry Credits: (5)

Select one from the following:

- CHEM 101 - Chemistry and Planet Earth **Credits: (5)**
- CHEM 111 - Introduction to Chemistry **Credits: (4)**
- **AND** CHEM 111LAB - Introductory Chemistry Laboratory **Credits: (1)**
- CHEM 181 - General Chemistry I **Credits: (4)**
- **AND** CHEM 181LAB - General Chemistry Laboratory I **Credits: (1)**

Economics Credits: (5)

Select one from the following:

- ECON 101 - Economic Issues **Credits: (5)**
- ECON 201 - Principles of Economics Micro **Credits: (5)**

Geoscience Credits: (5)

Select one from the following:

- GEOL 101 - Introduction to Geology **Credits: (4)**
- **OR** GEOL 103 - Geology of Washington **Credits: (4)**
- **OR** GEOL 108 - Earth and Energy Resources **Credits: (4)**
- **AND** GEOL 101LAB - Introductory Geology Laboratory **Credits: (1)**
- GEOG 107 - Our Dynamic Earth **Credits: (5)**

Social Science Credits: (5)

Select one from the following:

- ANTH 130 - Cultural Worlds **Credits: (5)**
- GEOG 101 - World Regional Geography **Credits: (5)**
- GEOG 208 - Our Human World **Credits: (5)**
- SOC 107 - Principles of Sociology **Credits: (5)**

Core Courses Credits: 33-35

- ENST 201 - Earth as an Ecosystem **Credits: (5)**
- **OR** ENST 202 - Environment and Society **Credits: (5)**
- ENST 300 - Applied Environmental Sciences **Credits: (5)**
- ENST 303 - Environmental Management **Credits: (5)**
- ENST 304 - Environmental Methods and Analysis **Credits: (5)**
- ENST 330 - Environmental Leadership and Advocacy **Credits: (5)**
- **OR** ENST 360 - Environmental Justice **Credits: (5)**
- ENST 444 - Environmental Policy Formulation **Credits: (4)**
- ENST 487 - End-of-Major Capstone **Credits: (1)**

Culminating Experience Credits: (3-5)

Select one or a combination of the following (internship, research, service-learning, or study abroad experience):

- ENST 490 - Cooperative Education **Credits: (1-12)**
- ENST 495 - Senior Research **Credits: (1-12)** **OR** (other 495 Senior Research)
- UNIV 304 - International Sustainable Development **Credits: (5)**
- UNIV 309 - Civic Engagement **Credits: (2)**

Department-Approved Upper-Level Electives: Credits: 8-10

Select two of the following courses. Note: these courses cannot be used to fulfill specialization requirements.

- ANTH 352 - Anthropology of Environmental Issues **Credits: (4)**
- ANTH 440 - Ecology and Culture **Credits: (4)**
- **OR** GEOG 440 - Ecology and Culture **Credits: (4)**
- BIOL 302 - Sustainability and Environmental Change **Credits: (5)**

- BIOL 362 - Biomes of the Pacific Northwest **Credits: (4)**
- BIOL 377 - Regional Natural History **Credits: (2)**
- **AND** BIOL 377LAB - Regional Natural History **Credits: (3)**
- **OR** GEOL 377 - Regional Natural History **Credits: (2)**
- **AND** GEOL 377LAB - Regional Natural History **Credits: (3)**
- BUS 389 - Sustainable Business **Credits: (5)**
- CMGT 452 - LEED in Sustainable Construction **Credits: (4)**
- ECON 462 - Environmental and Resource Economics **Credits: (5)**
- ECON 463 - Energy Economics **Credits: (5)**
- ENST 310 - Energy and Society **Credits: (5)**
- ENST 330 - Environmental Leadership and Advocacy **Credits: (5)**
- ENST 360 - Environmental Justice **Credits: (5)**
- ENST 455 - Environmental Literature **Credits: (3)**
- ENST 460 - Environmental Law **Credits: (5)**
- **OR** GEOG 445 - Environmental Law **Credits: (5)**
- GEOG 373 - Water Resources **Credits: (4)**
- GEOG 388 - Weather and Climate **Credits: (5)**
- GEOG 442 - Alternative Energy **Credits: (5)**
- GEOG 456 - Recreation Geography **Credits: (5)**
- GEOL 302 - Oceans and Atmosphere **Credits: (4)**
- GEOL 380 - Natural Hazards **Credits: (5)**
- GEOL 441 - Climate Variability and Climate Change **Credits: (5)**
- HIST 454 - American Environmental History **Credits: (5)**
- IEM 301 - Energy Management **Credits: (5)**
- IEM 330 - Geopolitics of Fossil Fuels **Credits: (5)**
- IEM 302 - Energy, Environment, and Climate Change **Credits: (4)**
- PHIL 306 - Environmental Ethics **Credits: (5)**
- PHIL 314 - American Wilderness Philosophy **Credits: (5)**
- POSC 344 - Environmental Politics **Credits: (5)**
- PSY 413 - Conservation Psychology **Credits: (4)**
- PUBH 320 - Environmental Health **Credits: (4)**
- HTE 330 - Sustainable Resources for Tourism **Credits: (3)**
- SOC 380 - Environmental Sociology **Credits: (5)**

Total Environmental Sciences Core Credits: 66-70

Environmental Policy Specialization

Note: ECON 201 is required as a foundation course.

Core Policy - Credits: 18

The following courses are required for the specialization:

- ECON 462 - Environmental and Resource Economics **Credits: (5)**

- ENST 460 - Environmental Law **Credits:** (5)
- POSC 320 - Public Administration **Credits:** (5)
- POSC 325 - Introduction to Public Policy **Credits:** (3)

Research Tools - Credits: 5

Select one of the following courses:

- BUS 221 - Introductory Business Statistics **Credits:** (5)
- MATH 211 - Statistical Concepts and Methods **Credits:** (5)
- PSY 362 - Introductory Statistics **Credits:** (5)
- SOC 364 - Data Analysis in Sociology **Credits:** (5)

Department-Approved Electives - Credits: 7-10

Select two of the following courses:

- ANTH 352 - Anthropology of Environmental Issues **Credits:** (4)
- BUS 389 - Sustainable Business **Credits:** (5)
- ENST 330 - Environmental Leadership and Advocacy **Credits:** (5)
- ENST 360 - Environmental Justice **Credits:** (5)
- GEOG 303 - GIS and Data Management **Credits:** (5)
- GEOG 305 - Introduction to Land Use Planning **Credits:** (5)
- GEOG 346 - Political Geography **Credits:** (4)
- GEOG 373 - Water Resources **Credits:** (4)
- GEOG 381 - Urban Geography **Credits:** (4)
- GEOG 440 - Ecology and Culture **Credits:** (4)
- **OR** ANTH 440 - Ecology and Culture **Credits:** (4)
- GEOG 442 - Alternative Energy **Credits:** (5)
- GEOG 443 - Energy Policy **Credits:** (5)
- GEOG 456 - Recreation Geography **Credits:** (5)
- GEOL 380 - Natural Hazards **Credits:** (5)
- HIST 454 - American Environmental History **Credits:** (5)
- IEM 330 - Geopolitics of Fossil Fuels **Credits:** (5)
- PHIL 306 - Environmental Ethics **Credits:** (5)
- POSC 318 - Political Parties and Interest Groups **Credits:** (5)
- POSC 344 - Environmental Politics **Credits:** (5)
- POSC 429 - Research Seminar in Public Policy **Credits:** (3-5)
- PSY 413 - Conservation Psychology **Credits:** (4)
- PUBH 320 - Environmental Health **Credits:** (4)
- HTE 330 - Sustainable Resources for Tourism **Credits:** (3)
- SOC 338 - Political Sociology **Credits:** (5)
- SOC 380 - Environmental Sociology **Credits:** (5)

Specialization Subtotal Credits: 30-33

Total Credits: 96-103

College and Department Information

Environmental Studies Program  
College of the Sciences

## Environmental Studies Minor

The environmental studies minor is designed to serve undergraduate education and environmental literacy, with an emphasis on research and community service. The Environmental Studies program's priority is primarily geared towards providing a large number of students with the opportunity to assess the nature, scope, and complexities of present and impending environmental problems. Other objectives include the provision of public education programs on environmental issues and the stimulation of interdisciplinary research on environmental problems. The development of expertise as an environmental specialist requires specialized work and can be pursued through exploring the environmental sciences major.

### Program Requirements

The minor requires that students finish with a minimum 2.0 GPA for the 25-30 program credits; students must also earn at least a C- in ENST courses.

Required Courses Credits: 15

- ENST 201 - Earth as an Ecosystem **Credits:** (5)
- **OR** ENST 202 - Environment and Society **Credits:** (5)
- ENST 300 - Applied Environmental Sciences **Credits:** (5)
- ENST 303 - Environmental Management **Credits:** (5)

Upper-Level ENST Electives Credits 7-10

Select two from the following courses:

- ENST 304 - Environmental Methods and Analysis **Credits:** (5)
- ENST 310 - Energy and Society **Credits:** (5)
- ENST 330 - Environmental Leadership and Advocacy **Credits:** (5)
- ENST 360 - Environmental Justice **Credits:** (5)
- ENST 444 - Environmental Policy Formulation **Credits:** (4)
- ENST 455 - Environmental Literature **Credits:** (3)

Department-Approved Elective Credits: 3-5

Students participating in the ENST minor are welcome to propose an environment-related upper-division elective course in consultation with the ENST Director. *This elective course must be taken in a department outside of the student's major.*

Students are encouraged to explore upper-level electives from the ENST specializations and can choose one of the following courses:

- ANTH 352 - Anthropology of Environmental Issues **Credits:** (4)

- ANTH 440 - Ecology and Culture **Credits:** (4)
- BIOL 302 - Sustainability and Environmental Change **Credits:** (5)
- BIOL 362 - Biomes of the Pacific Northwest **Credits:** (4)
- BUS 389 - Sustainable Business **Credits:** (5)
- ECON 462 - Environmental and Resource Economics **Credits:** (5)
- ECON 463 - Energy Economics **Credits:** (5)
- GEOG 373 - Water Resources **Credits:** (4)
- GEOG 388 - Weather and Climate **Credits:** (5)
- GEOG 441 - Climate Change: Human and Biophysical Dimensions (Put on reserve 9/16/18) **Credits:** (4)
- GEOG 442 - Alternative Energy **Credits:** (5)
- GEOL 302 - Oceans and Atmosphere **Credits:** (4)
- GEOL 380 - Natural Hazards **Credits:** (5)
- HIST 454 - American Environmental History **Credits:** (5)
- IEM 301 - Energy Management **Credits:** (5)
- IEM 302 - Energy, Environment, and Climate Change **Credits:** (4)
- IEM 330 - Geopolitics of Fossil Fuels **Credits:** (5)
- PHIL 306 - Environmental Ethics **Credits:** (5)
- PHIL 314 - American Wilderness Philosophy **Credits:** (5)
- POSC 344 - Environmental Politics **Credits:** (5)
- PSY 413 - Conservation Psychology **Credits:** (4)
- PUBH 320 - Environmental Health **Credits:** (4)
- HTE 330 - Sustainable Resources for Tourism **Credits:** (3)
- SOC 380 - Environmental Sociology **Credits:** (5)

Total Credits: 25-30

#### College and Department Information

Environmental Studies Program  
College of the Sciences

## Sustainability Certificate

The sustainability certificate offers an opportunity for students from any academic path to develop experiential, service-learning projects that focus on improving sustainability needs of the university or a community partner. While earning this certificate, students will learn fundamental concepts related to sustainability in environmental, economic, and social issues while earning practical technical skills about developing and managing a project to improve organizational effectiveness. The sustainability certificate will prepare students for entry into public or private sector jobs related to organizational or environmental sustainability.

#### Admission Requirements

Minimum cumulative GPA of 2.0.

#### Graduation Requirements

Minimum grade of C- in all courses.

#### Required Courses Credits: 9

- SUST 301 - Introduction to Sustainability **Credits:** (4)
- SUST 309 - Sustainability Civic Engagement Experience **Credits:** (1-6) (Must be taken for 4 credits)
- SUST 487 - Sustainability Project Capstone **Credits:** (1)

#### Department-Approved Electives Credits: 16-19

A minimum of 3 elective classes must be taken. Two electives of pre-approved courses categorized into each of three sustainability categories: environment, economy, society.

#### Economics Sustainability

- ANTH 363 - Culture and Economy **Credits:** (4)
- BUS 389 - Sustainable Business **Credits:** (5)
- ECON 463 - Energy Economics **Credits:** (5)
- ENST 460 - Environmental Law **Credits:** (5)
- **OR** GEOG 445 - Environmental Law **Credits:** (5)
- GEOG 304 - Economic Geography **Credits:** (5)
- GEOG 443 - Energy Policy **Credits:** (5)
- IEM 301 - Energy Management **Credits:** (5)
- CMGT 265 - Construction Documents **Credits:** (3)
- **AND** CMGT 452 - LEED in Sustainable Construction **Credits:** (4)
- CMGT 444 - Codes, Contracts, and Specifications **Credits:** (4)
- **OR** CMGT 445 - Heavy Civil Contract Law **Credits:** (4)
- **AND** CMGT 485 - Construction Accounting, Finance, and Contemporary Topics **Credits:** (4)

#### Environmental Sustainability

- BIOL 302 - Sustainability and Environmental Change **Credits:** (5)
- CMGT 265 - Construction Documents **Credits:** (3)
- **AND** CMGT 452 - LEED in Sustainable Construction **Credits:** (4)
- ECON 462 - Environmental and Resource Economics **Credits:** (5)
- ENST 303 - Environmental Management **Credits:** (5)
- ENST 360 - Environmental Justice **Credits:** (5)
- ENST 460 - Environmental Law **Credits:** (5)
- **OR** GEOG 445 - Environmental Law **Credits:** (5)
- GEOG 355 - Geography of the Pacific Northwest **Credits:** (4)
- GEOG 373 - Water Resources **Credits:** (4)
- GEOG 442 - Alternative Energy **Credits:** (5)
- GEOG 449 - Environmental Hazard Analysis and Management **Credits:** (5)
- GEOG 458 - People, Parks, and Protected Areas **Credits:** (4)
- GEOL 303 - Water: Science and Society **Credits:** (5)
- GEOL 380 - Natural Hazards **Credits:** (5)

- HIST 454 - American Environmental History **Credits:** (5)
- IEM 302 - Energy, Environment, and Climate Change **Credits:** (4)
- PHIL 306 - Environmental Ethics **Credits:** (5)
- POSC 344 - Environmental Politics **Credits:** (5)
- PUBH 320 - Environmental Health **Credits:** (4)
- SOC 380 - Environmental Sociology **Credits:** (5)

#### Social/Cultural Sustainability

- ANTH 363 - Culture and Economy **Credits:** (4)
- ANTH 440 - Ecology and Culture **Credits:** (4)
- ENST 303 - Environmental Management **Credits:** (5)
- ENST 330 - Environmental Leadership and Advocacy **Credits:** (5)
- ENST 360 - Environmental Justice **Credits:** (5)
- GEOG 305 - Introduction to Land Use Planning **Credits:** (5)
- GEOG 422 - Geography of Food and Agriculture **Credits:** (4)
- GEOG 440 - Ecology and Culture **Credits:** (4)
- GEOG 458 - People, Parks, and Protected Areas **Credits:** (4)
- GEOL 303 - Water: Science and Society **Credits:** (5)
- HIST 454 - American Environmental History **Credits:** (5)
- LEAD 301 - Organizational Leadership **Credits:** (5)
- PHIL 306 - Environmental Ethics **Credits:** (5)
- POSC 320 - Public Administration **Credits:** (5)
- POSC 325 - Introduction to Public Policy **Credits:** (3)
- POSC 344 - Environmental Politics **Credits:** (5)
- PSY 413 - Conservation Psychology **Credits:** (4)
- PUBH 320 - Environmental Health **Credits:** (4)
- SOC 322 - Sociology of Food **Credits:** (5)
- SOC 380 - Environmental Sociology **Credits:** (5)

Total Credits: 25-29

# Family and Consumer Sciences Department

College of Education and Professional Studies  
 Ellensburg  
 Michaelsen Hall, room 100  
 Mail Stop 7565  
 509-963-2766  
 Fax 509-963-2787  
[www.cwu.edu/family-consumer](http://www.cwu.edu/family-consumer)  
 See website for how this program may be used for educational and career purposes.

#### Faculty and Staff Chair

Duane Dowd, PhD

#### Professors

Kimberlee Bartel, PhD, business and marketing, career and technical education director

#### Associate Professors

Amy Claridge, PhD, family and child life  
 Duane Dowd, PhD, CLFE, family and child life  
 Andrea Eklund, MA, apparel, textiles and merchandising  
 Sarah Feeney, PhD, family and child life  
 John Hudelson, PhD, global wine trade

#### Assistant Professors

Carla Jellum, PhD, recreation, tourism and events  
 Astrid Vidalon-Shields, MA, apparel, textiles and merchandising

#### Lecturers

Se Eun Lee, PhD, recreation, tourism and events  
 Jodi Musser, MA, business and marketing, career and technical education  
 Jill Perillo-Clarke, MS, global wine trade  
 Natalie Porter, family and child life  
 Katie Tenhulzen, MS, family and child life

#### Emeritus Professors

Joan Amby, PhD, family studies  
 Dorothy Chase, PhD, recreation and tourism  
 Willa Dene Powell, PhD, family and consumer sciences education  
 Carolyn Schactler, MS, apparel design  
 William Vance, EdD, recreation and tourism  
 Marla Wyatt, PhD, family and consumer sciences education

#### Staff

Alex Lange, secretary senior

#### Program Directors

Amy Claridge, PhD, family and child life program, family resource center director  
 Andrea Eklund, MA apparel, textiles and merchandising  
 Jodi Musser, MA, business marketing education, family and consumer sciences education, career and technical education

John Hudelson, PhD, global wine trade  
Carla Jellum, PhD, tourism and events

### Department Information

The Department of Family and Consumer Sciences' programs lead to baccalaureate degrees in: Apparel, Textiles and Merchandising; Family and Consumer Sciences Career and Technical Education Teaching; Business and Marketing Teacher Preparation; Family and Child Life (with concentrations in Family Science, Child Development and Child Life); Wine Studies (with concentrations in Global Wine Trade and Wine Industry Management); and Hospitality, Tourism, and Event Management.

Students may complete a minor in any of the following areas: Apparel Textiles and Merchandising; Apparel Design; Child Development; Event Planning; Family and Consumer Sciences; Family and Consumer Sciences Education; Family Science; Program Development; Sustainable Tourism; Tourism Management; and Wine Trade and Tourism.

### Admission Policy for Family and Consumer Sciences

- A completed Family and Consumer Sciences (FCS) major application form must be signed by a program advisor after an initial advising meeting. The advisor will submit it to the FCS chair for approval.
- Students should apply for the major early in their academic career, and First-Year students are encouraged to apply.
- Students seeking a major or minor should see specific requirements in the appropriate program section of this catalog.
- For information on teacher certification for marketing education or business education, contact Professor Jodi Musser.

### Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### Course Offerings

Frequency of course offering information can be found at the department website: [www.cwu.edu/family-consumer](http://www.cwu.edu/family-consumer) or by contacting the department directly.

## Family and Consumer Sciences Major, BA

The BA in family and consumer sciences comprises a general introduction to the broad areas of family and consumer sciences and, with an appropriate minor, can provide students with a well-rounded preparation for life or for further advanced study. This major requires a minor or double major. Students must have a cumulative GPA of at least 2.3 for full admission to this major and a 2.5 GPA for graduation.

### Required Courses

- ATM 355 - Consumer Textiles **Credits:** (4)
- FCS 371 - Real World Finance **Credits:** (3)
- FCS 472 - Life Management **Credits:** (5)

- FCL 232 - Child Development **Credits:** (3)
- FCL 234 - Contemporary Families **Credits:** (4)
- FCL 336 - Parent Education and Guidance **Credits:** (4)
- FCL 337 - Human Sexuality **Credits:** (4)
- FCS 205 - FCS Entry Assessment **Credits:** (1)
- FCS 405 - FCS Exit Assessment **Credits:** (1)
- NUTR 101 - Introduction to Human Nutrition **Credits:** (5)
- NUTR 240 - Introduction to Foods **Credits:** (2)
- FCS 367 - Family Housing **Credits:** (3)
- NUTR 240LAB - Introduction to Foods Laboratory **Credits:** (2)

Choose two of the following: Credits 6

- ATM 280 - Basic Sewing Techniques **Credits:** (3)
- FCL 235 - Relationships and Personal Development **Credits:** (3)
- FCS 166 - Applied Creativity **Credits:** (3)
- FCS 320 - Program Management and Planning (Put on reserve 9/16/18) **Credits:** (4)

Total Credits: 51

### College and Department Information

Family and Consumer Sciences Department  
College of Education and Professional Studies

### Program Outcomes

Visit program outcomes to find out what you can expect to know and do after successful completion of this program.

## Apparel, Textiles and Merchandising Major, BS

The Apparel, Textiles and Merchandising Program is designed to help you gain the knowledge you need to recognize industry trends, analyze market and consumer behavior, and evaluate retail needs in the diverse, fast-paced, and ever-changing fashion industry. Students will build a well-rounded base knowledge about textile and apparel products, merchandising strategies, product development, production processes, trends, consumers and sustainability. Field experiences allow students to network with industry professionals and study abroad opportunities are highly encouraged. Students gain additional hands-on professional experience during summer internships. Quarterly meetings with the faculty advisor assures the student is academically on track to achieve their professional goals.

### Admission Requirements

To be admitted to a major in the Apparel, Textiles and Merchandising Program, a student must have a cumulative GPA of 2.3 (or be a freshman or transfer).

### Graduation Requirements

A minimum grade of C- must be earned in each course counted toward fulfilling major requirements.



### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate effective oral and written communication skills.
- Demonstrate effective planning, preparation, and delivery of family and consumer science education lessons and plans.
- Demonstrate the ability to meet the diverse needs of individuals, families, and communities in FCSE content areas.
- Demonstrate competence in at least five of the eight major areas of the FCS discipline.
  - Nutrition
  - Child Development
  - Family and Parenting
  - Wellness
  - Personal Finance
  - Consumerism
  - Life Management
  - Interpersonal Relationships
- Demonstrate, practice, and use safety principles according to current industry and public schools.
- Demonstrate familiarity with the concepts, theoretical perspectives, and historic trends in Career and Technical Education (CTE).
- Students are committed to ongoing personal and professional development through participation in club activities and professional membership.

Required Courses Credits: 67

- ATM 251 - Style Principles: Body to Store **Credits:** (3)
- ATM 270 - Digital Presentation Techniques **Credits:** (4)
- ATM 280 - Basic Sewing Techniques **Credits:** (3)
- ATM 281 - Socio-cultural Aspects of Apparel **Credits:** (4)
- ATM 285 - Buying and Merchandising Math **Credits:** (4)
- ATM 289 - Northwest Field Experience in Apparel and Textiles **Credits:** (3)
- ATM 301 - Introduction to the Fashion Industry **Credits:** (4)
- ATM 353 - Apparel Manufacturing **Credits:** (5)
- ATM 355 - Consumer Textiles **Credits:** (4)
- ATM 379 - ATM Internship Planning **Credits:** (1)
- ATM 381 - Fashion Show Production **Credits:** (2)
- ATM 389 - Fashion Trend Analysis **Credits:** (3)
- ATM 452 - History of Fashion **Credits:** (4)
- ATM 487 - Fashion Merchandising Exit Assessment **Credits:** (1)
- ATM 489 - Merchandise Buying and Planning **Credits:** (4)
- ATM 492 - Apparel, Textiles and Merchandising Practicum **Credits:** (1-10) (Must be taken for 8 credits.)
- IT 258 - Spreadsheet Applications **Credits:** (3)
- RMT 330 - Principles of Retailing **Credits:** (4)

- HTE 419 - Applied Research and Evaluation **Credits:** (3)

Department-Approved Electives - Credits 12

Total Credits: 79

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## Business and Marketing Education Major, BS

This bachelor of sciences teaching major satisfies the endorsement for business and marketing education teaching for career and technical education. It is designed for students who are seeking teaching careers in business and marketing education at the secondary grade levels (7-12). The coursework provides experiences in the business and marketing education content areas and instructional pedagogy including field experiences that are designed to prepare teacher certification and content endorsement. Students in the business and marketing education major must be admitted to the Teacher Certification Program and complete the Professional Education Program sequence coursework as part of the Teacher Certification Program.

### Program Requirements and Pre-admission Requirements

Students wishing to obtain a teaching certificate in business and marketing education will:

- Complete the business and marketing career and technical education teaching major
  - Successfully complete CTE 310 before being fully admitted to the major
  - Have a university-level cumulative GPA of at least 2.3 for full admission to this major and a 3.0 minimum cumulative GPA in the major to exit the program and to graduate from CWU with teacher certification
  - Earn a minimum grade of C in each course counted toward fulfilling major requirements
  - Apply, be accepted into, and complete the Teacher Certification Program
  - Student teach in a CTE -approved program
  - Hold a valid first aid card with CPR
  - Complete 2,000 hours of paid work experience in the last six years
  - Provide documentation of occupational safety
- Required to take the Professional Education Program for 50 credits.

Required Courses

- ADMG 385 - Business Communications and Report Writing **Credits:** (4)
- BME 346 - Basic Accounting for Business and Marketing Education **Credits:** (5)

- BME 450 - Curriculum Development for Business and Marketing Education **Credits:** (4)
- BME 451 - Methods and Materials for Teaching Information Technology **Credits:** (3)
- BME 452 - Methods and Materials for Teaching Basic Business and Marketing **Credits:** (3)
- BUS 241 - Legal Environment of Business **Credits:** (5)
- CS 101 - Computer Basics **Credits:** (4)
- OR IT 101 - Computer Applications **Credits:** (3)
- CTE 310 - Introduction to Career and Technical Education **Credits:** (3)
- CTE 410 - Career and Technical Education School to Work Programs **Credits:** (4)
- CTE 460 - Business and Marketing Education Exit Assessment **Credits:** (4)
- ECON 101 - Economic Issues **Credits:** (5)
- FCS 320 - Program Management and Planning (Put on reserve 9/16/18) **Credits:** (4)
- FCS 379 - Professional Development and Internship Planning **Credits:** (3)
- HTE 420 - Program Promotion, Sales and Advertising **Credits:** (5)
- IT 260 - Integrated Information Technology Application Projects **Credits:** (4)
- REC 321 - Leadership in Human Development **Credits:** (4)

Total Credits: 65-66

Professional Education Program Credits: 50

Professional Education Program

Total Credits: 115-116

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### Program Outcomes

Visit program outcomes to find out what you can expect to know and do after successful completion of this program.

## Family and Child Life Major BS, Child Development Specialization

The child development specialization applies child development theory to the practice of working with children and families across a variety of contexts and professions. Graduates are well prepared with knowledge and skills for professional careers that involve work with children including in early childhood learning, child welfare, adoption, and family social service settings. Students will also be prepared to pursue graduate training in social work, marriage and family therapy, mental health counseling, family and child life, or other related fields.

Family and Child Life Core

The bachelor of science family and child life major is an interdisciplinary study of interpersonal and family relationships and their impact on child development. Family and child life majors are actively engaged in community involvement and practical application of knowledge.

Family and child life majors in both specializations must complete a practicum experience that includes 360 total hours (12 academic credits) of field related service within the community. Students are encouraged to apply for the major early in their academic careers to allow for proper planning and placement in the family and child life practicum.

### Admission Requirements

Students wishing to declare a major in family and child life must be incoming freshman or have a cumulative CWU GPA of 2.8.

### Graduation Requirements

Family and child life majors must maintain a cumulative GPA of 2.7 or higher to remain in the major and must earn a "C" or higher in all courses used to satisfy the family and child life major.

### Family and Child Life Core Requirements

- FCL 101 - Skills for Marriage and Intimate Relationships **Credits:** (4)
- FCL 234 - Contemporary Families **Credits:** (4)
- FCL 235 - Relationships and Personal Development **Credits:** (3)
- FCL 336 - Parent Education and Guidance **Credits:** (4)
- FCL 344 - Foundations of Marriage and Family Therapy **Credits:** (4)
- FCL 405 - Professional Obligations and Responsibilities **Credits:** (4)
- FCL 419 - Research in Family and Child Life **Credits:** (5)
- FCL 434 - Diversity in Families **Credits:** (4)
- FCL 492 - Family and Child Life Practicum **Credits:** (1-6) (Must be taken for a total of 12 credits.)
- FCL 495 - Undergraduate Research **Credits:** (1-6) (Must be taken for 1 credit)

Total Core Requirements Credits: 45

### Child Development Specialization

The child development specialization applies child development theory to the practice of working with children and families across a variety of contexts and professions. Graduates are well prepared with knowledge and skills for professional careers that involve work with children including in early childhood learning, child welfare, adoption, and family social service settings. Students will also be prepared to pursue graduate training in social work, marriage and family therapy, mental health counseling, family and child life, or other related fields.

Required Courses Credits: 34

- FCL 232 - Child Development **Credits:** (3)

- FCL 332 - Trauma and Resilience in Children and Adolescents **Credits:** (4)
- FCL 339 - Adolescence and Emerging Adulthood **Credits:** (4)
- FCL 340 - Supporting Children with Special Needs and Their Families **Credits:** (4)
- FCL 345 - Advanced Concepts in Child Development **Credits:** (4)
- FCL 414 - Coping with Grief and Loss **Credits:** (4)
- FCL 415 - Therapeutic Play **Credits:** (4)
- FCL 432 - Theories in Child Development **Credits:** (3)
- FCL 438 - Attachment Theory and Practice **Credits:** (4)

Department-Approved Electives Credits: 11

- FCL 310 - Family Issues in the 21st Century **Credits:** (4)
- FCL 333 - Culture and Marriage **Credits:** (4)
- FCL 337 - Human Sexuality **Credits:** (4)
- FCL 403 - Family Communication **Credits:** (4)
- FCL 435 - Family Gerontology **Credits:** (4)
- FCL 439 - Families and Public Policy **Credits:** (4)
- FCL 440 - Teaching for Family and Child Life **Credits:** (1-3)

Total Specialization Credits: 45

Total Credits: 90

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## Family and Child Life Major BS, Child Life Specialization

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate strong critical thinking skills.
- Use excellent relationship and interpersonal skills and demonstrate collaboration in work with peers and faculty.
- Demonstrate strong written communication skills.
- Use effective oral communication and presentation skills.
- Demonstrate insight into their own biases and privilege and will demonstrate respect for diverse ways of being and thinking.
- Apply knowledge of the scientific process to critique existing research and conduct research projects.
- Summarize family systems and developmental theories and apply theories in practice with children and families.

Family and Child Life Core

The bachelor of science family and child life major is an interdisciplinary study of interpersonal and family relationships and their impact on child development. Family and child life majors are actively engaged in community involvement and practical application of knowledge.

Family and child life majors in both specializations must complete a practicum experience that includes 360 total hours (12 academic credits) of field related service within the community. Students are encouraged to apply for the major early in their academic careers to allow for proper planning and placement in the family and child life practicum.

### Admission Requirements

Students wishing to declare a major in family and child life must be incoming freshman or have a cumulative CWU GPA of 2.8.

### Graduation Requirements

Family and child life majors must maintain a cumulative GPA of 2.7 or higher to remain in the major and must earn a "C" or higher in all courses used to satisfy the family and child life major.

Family and Child Life Core Requirements

- FCL 101 - Skills for Marriage and Intimate Relationships **Credits:** (4)
- FCL 234 - Contemporary Families **Credits:** (4)
- FCL 235 - Relationships and Personal Development **Credits:** (3)
- FCL 336 - Parent Education and Guidance **Credits:** (4)
- FCL 344 - Foundations of Marriage and Family Therapy **Credits:** (4)
- FCL 405 - Professional Obligations and Responsibilities **Credits:** (4)
- FCL 419 - Research in Family and Child Life **Credits:** (5)
- FCL 434 - Diversity in Families **Credits:** (4)
- FCL 492 - Family and Child Life Practicum **Credits:** (1-6) (Must be taken for a total of 12 credits.)
- FCL 495 - Undergraduate Research **Credits:** (1-6) (Must be taken for 1 credit)

Total Core Requirements Credits: 45

Child Life Specialization

The child life specialization applies child development theory to the practice of helping children and families through traumatic events, specifically related to hospitalization. The curriculum meets the recommendations of the Association of Child Life Professionals and includes several courses taught by Certified Child Life Specialists. Graduates are well prepared for career opportunities that involve work with children, or to pursue a child life internship and child life graduate study required to become a certified child life specialist.

Required Courses Credits: 42

- FCL 232 - Child Development **Credits:** (3)
- FCL 339 - Adolescence and Emerging Adulthood **Credits:** (4)
- FCL 340 - Supporting Children with Special Needs and Their Families **Credits:** (4)
- FCL 345 - Advanced Concepts in Child Development **Credits:** (4)
- FCL 414 - Coping with Grief and Loss **Credits:** (4)
- FCL 415 - Therapeutic Play **Credits:** (4)
- FCL 416 - Child Life I: Child Life Scope of Practice **Credits:** (4)
- FCL 417 - Pediatric Diagnoses and Medical Terminology **Credits:** (4)
- FCL 418 - Child Life II: Impact of Child Hospitalization **Credits:** (4)
- FCL 432 - Theories in Child Development **Credits:** (3)
- FCL 438 - Attachment Theory and Practice **Credits:** (4)

Department-Approved Electives Credits: 7

- ANTH 353 - Childhood and Culture **Credits:** (4)
- FCL 310 - Family Issues in the 21st Century **Credits:** (4)
- FCL 333 - Culture and Marriage **Credits:** (4)
- FCL 334 - Family Problems and Mediation **Credits:** (4)
- FCL 335 - Divorce and Remarriage **Credits:** (3)
- FCL 337 - Human Sexuality **Credits:** (4)
- FCL 403 - Family Communication **Credits:** (4)
- FCL 435 - Family Gerontology **Credits:** (4)
- FCL 439 - Families and Public Policy **Credits:** (4)
- FCL 440 - Teaching for Family and Child Life **Credits:** (1-3) (Repeatable up to 6 credits)
- PHIL 308 - Medical Ethics **Credits:** (5)
- SOC 320 - Death and Dying **Credits:** (5)

Total Specialization Credits: 49

Total Credits: 94

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Family and Consumer Sciences Department  
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## Family and Child Life Major BS, Family Science Specialization

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate strong critical thinking skills.

- Use excellent relationship and interpersonal skills and demonstrate collaboration in work with peers and faculty.
- Demonstrate strong written communication skills.
- Use effective oral communication and presentation skills.
- Demonstrate insight into their own biases and privilege and will demonstrate respect for diverse ways of being and thinking.
- Apply knowledge of the scientific process to critique existing research and conduct research projects.
- Summarize family systems and developmental theories and apply theories in practice with children and families.

### Family and Child Life Core

The bachelor of science family and child life major is an interdisciplinary study of interpersonal and family relationships and their impact on child development. Family and child life majors are actively engaged in community involvement and practical application of knowledge.

Family and child life majors in both specializations must complete a practicum experience that includes 360 total hours (12 academic credits) of field related service within the community. Students are encouraged to apply for the major early in their academic careers to allow for proper planning and placement in the family and child life practicum.

### Admission Requirements

Students wishing to declare a major in family and child life must be incoming freshman or have a cumulative CWU GPA of 2.8.

### Graduation Requirements

Family and child life majors must maintain a cumulative GPA of 2.7 or higher to remain in the major and must earn a "C" or higher in all courses used to satisfy the family and child life major.

### Family and Child Life Core Requirements

- FCL 101 - Skills for Marriage and Intimate Relationships **Credits:** (4)
- FCL 234 - Contemporary Families **Credits:** (4)
- FCL 235 - Relationships and Personal Development **Credits:** (3)
- FCL 336 - Parent Education and Guidance **Credits:** (4)
- FCL 344 - Foundations of Marriage and Family Therapy **Credits:** (4)
- FCL 405 - Professional Obligations and Responsibilities **Credits:** (4)
- FCL 419 - Research in Family and Child Life **Credits:** (5)
- FCL 434 - Diversity in Families **Credits:** (4)
- FCL 492 - Family and Child Life Practicum **Credits:** (1-6) (Must be taken for a total of 12 credits.)
- FCL 495 - Undergraduate Research **Credits:** (1-6) (Must be taken for 1 credit)

Total Core Requirements Credits: 45

### Family Science Specialization

Students in the family science specialization are well prepared for career opportunities in family service agencies, parent education programs, family counseling centers, other family life education settings, or advanced study in family relations. All family science specialization graduates are eligible to become Certified Family Life Educators by the National Council on Family Relations.

Required Courses Credits: 23

- FCS 371 - Real World Finance **Credits:** (3)
- FCL 320 - Theories of Family Dynamics **Credits:** (4)
- FCL 337 - Human Sexuality **Credits:** (4)
- FCL 433 - Family Life Education **Credits:** (4)
- FCL 439 - Families and Public Policy **Credits:** (4)
- PSY 313 - Developmental Psychology **Credits:** (4)

Department-Approved Electives Credits: 13

- FCL 232 - Child Development **Credits:** (3)
- FCL 310 - Family Issues in the 21st Century **Credits:** (4)
- FCL 333 - Culture and Marriage **Credits:** (4)
- FCL 334 - Family Problems and Mediation **Credits:** (4)
- FCL 335 - Divorce and Remarriage **Credits:** (3)
- FCL 339 - Adolescence and Emerging Adulthood **Credits:** (4)
- FCL 403 - Family Communication **Credits:** (4)
- FCL 414 - Coping with Grief and Loss **Credits:** (4)
- FCL 415 - Therapeutic Play **Credits:** (4)
- FCL 416 - Child Life I: Child Life Scope of Practice **Credits:** (4)
- FCL 417 - Pediatric Diagnoses and Medical Terminology **Credits:** (4)
- FCL 418 - Child Life II: Impact of Child Hospitalization **Credits:** (4)
- FCL 432 - Theories in Child Development **Credits:** (3)
- FCL 438 - Attachment Theory and Practice **Credits:** (4)
- FCL 440 - Teaching for Family and Child Life **Credits:** (1-3) (May be repeated up to 6 credits.)

Total Specialization Credits: 36

Total Credits: 81

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## Family and Consumer Sciences Career and Technical Education Teaching Major, BS

This bachelor of sciences teaching major satisfies the endorsement for family and consumer sciences teaching for career and technical education.

### Special requirements:

Students wishing to obtain a teaching certificate in family and consumer sciences education will:

- Complete the family and consumer sciences career and technical education teaching major
- Successfully complete FCSG 205 before being fully admitted to the major
- Have a university-level cumulative GPA of at least 2.3 for full admission to this major and a 3.0 minimum cumulative GPA in the major to exit the program and to graduate from CWU with teacher certification
- Earn a grade of C or higher in each course counted toward fulfilling major requirements
- Apply, be accepted into, and complete the Teacher Certification Program
- Student teach in a CTE-approved program
- Hold a valid first aid card with CPR
- Complete 2,000 hours of paid work experience in the last six years
- Provide documentation of occupational safety

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate effective oral and written communication skills
- Demonstrate effective planning, preparation, and delivery of family and consumer science education lessons and plans.
- Demonstrate the ability to meet the diverse needs of individuals, families, and communities in FCSE content areas.
- Demonstrate competence in at least five of the eight major areas of the FCS discipline
  - Nutrition
  - Child Development
  - Family and Parenting
  - Wellness
  - Personal Finance
  - Consumerism
  - Life Management
  - Interpersonal Relationships
- Demonstrate, practice, and use safety principles according to current industry and public schools
- Demonstrate familiarity with the concepts, theoretical perspectives, and historic trends in Career and Technical Education (CTE).
- Students are committed to ongoing personal and professional development through participation in club activities and professional membership

## Required Courses

- ATM 355 - Consumer Textiles **Credits:** (4)
- CTE 410 - Career and Technical Education School to Work Programs **Credits:** (4)
- CTE 422 - Impact of Education Reform on Career and Technical Education **Credits:** (2)
- FCL 232 - Child Development **Credits:** (3)
- FCL 234 - Contemporary Families **Credits:** (4)
- FCL 336 - Parent Education and Guidance **Credits:** (4)
- FCL 337 - Human Sexuality **Credits:** (4)
- FCS 371 - Real World Finance **Credits:** (3)
- FCS 472 - Life Management **Credits:** (5)
- FCSE 326 - Curriculum in Career and Technical Education for Family and Consumer Sciences **Credits:** (4)
- FCSE 426 - Methods and Materials of Teaching Family and Consumer Sciences **Credits:** (3)
- FCSE 451 - Methods and Materials of Teaching FCS Laboratory Course Content **Credits:** (3)
- FCS 205 - FCS Entry Assessment **Credits:** (1)
- FCS 405 - FCS Exit Assessment **Credits:** (1)
- FCS 367 - Family Housing **Credits:** (3)
- NUTR 101 - Introduction to Human Nutrition **Credits:** (5)
- NUTR 240 - Introduction to Foods **Credits:** (2)
- NUTR 240LAB - Introduction to Foods Laboratory **Credits:** (2)

Choose two of the following - Credits: 6-7

- ATM 280 - Basic Sewing Techniques **Credits:** (3)
- FCL 235 - Relationships and Personal Development **Credits:** (3)
- FCS 166 - Applied Creativity **Credits:** (3)
- PSY 447 - Psychology of Adolescence **Credits:** (4)

Total Credits: 67-68

Professional Education Program Credits: 50

Professional Education Program

Total Credits: 117-118

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## Hospitality, Tourism and Event Management BS, Event Management Specialization

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Understand and promote principles of sustainability.
- Demonstrate professional practice to meet workplace demands.
- Identify research, comprehend, and communicate fundamentals, philosophy, and practices of the field.
- Demonstrate ability to effectively produce and manage projects and activities in diverse groups.
- Analyze and interpret emergent policy issues and trends prevalent in RT industry sectors.
- Demonstrate critical, conceptual, and analytical thinking skills.
- Demonstrate competencies in planning, marketing, administration, risk/legal, budgets/accounting, leadership, information technology through core curriculum and approved electives.
- Articulate practicum, internship, and career opportunities in RT field.

### Hospitality, Tourism and Event Management Core

The Hospitality, Tourism and Event Management Program (HTE) prepares students for positions in one of the top three industries in Washington state and the world's number-one industry. Professional positions are numerous. The following list is a sampling of the types of professional positions currently held by HTE graduates: city parks and recreation director, recreation manager, front office and training manager, director of youth programs, guest services manager, and winery marketing manager, general manager, event and meeting planner, marketer, entrepreneur, among others.

### Admission Requirements

To be admitted to a major or minor in Hospitality, Tourism and Event Management, a student must have a cumulative GPA of 2.3 (or be a freshman or transfer).

### Program Requirements

A minimum grade of C- must be earned in each course counted toward fulfilling major and minor requirements.

Students should plan to complete their Senior Practicum education during the summer term.

Elective courses must be pre-approved by an advisor prior to registration for course(s).

### Hospitality, Tourism and Event Management Core Requirements

- HRM 381 - Management of Human Resources **Credits:** (5)

- HTE 201 - Introduction to Hospitality, Tourism, and Event Management **Credits:** (4)
- HTE 230 - Program and Event Budgeting **Credits:** (2)
- HTE 292 - Practicum **Credits:** (1-4) (Must be taken for 4 credits.)
- HTE 313 - Career Planning and Preparation **Credits:** (3)
- HTE 373D - Convention and Meeting Management **Credits:** (5)
- HTE 419 - Applied Research and Evaluation **Credits:** (3)
- HTE 420 - Program Promotion, Sales and Advertising **Credits:** (5)
- HTE 484 - Hospitality Law, Negotiation, and Risk Management **Credits:** (5)
- HTE 492 - Senior Practicum **Credits:** (1-12) (Must be taken for 10 credits.)

Total Core Credits: 46

#### Event Management Specialization

The event management specialization prepares students for positions in special events coordination and operation, lodging sales and marketing, convention centers, destination marketing organizations, tourism planning, recreation and sports centers, and many others.

The Hospitality, Tourism and Event Program (HTE) prepares students for positions in one of the top three industries in Washington State and the world's number-one industry. Professional positions are numerous.

Required Courses Credits: 31

- ACCT 301 - Accounting Skills for Non-Accounting Majors **Credits:** (5)
- **OR** BME 146 - Basic Accounting **Credits:** (5)
- **OR** HTE 430 - Grants, Sponsorship, and Fundraising for HTE **Credits:** (5)
- HTE 230 - Program and Event Budgeting **Credits:** (2)
- HTE 331 - Sustainable Events: Best Practices **Credits:** (3)
- HTE 351 - Online and App Strategies for HTE **Credits:** (4)
- HTE 374 - Festivals **Credits:** (5)
- HTE 405 - Hospitality Catering **Credits:** (3)
- HTE 443 - Event Tourism **Credits:** (4)
- **OR** HTE 492 - Senior Practicum **Credits:** (1-12) (Must be taken for 4 credits)
- HTE 485 - Events Production Capstone **Credits:** (5)

Department-Approved Electives Credits: 11

Students must consult with major advisor in selecting elective credits.

Total Specialization Credits: 42

Total Credits: 88

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## Hospitality, Tourism and Event Management BS, Tourism Management Specialization

#### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Understand and promote principles of sustainability.
- Demonstrate professional practice to meet workplace demands.
- Identify research, comprehend, and communicate fundamentals, philosophy, and practices of the field.
- Demonstrate ability to effectively produce and manage projects and activities in diverse groups.
- Analyze and interpret emergent policy issues and trends prevalent in RT industry sectors.
- Demonstrate critical, conceptual, and analytical thinking skills.
- Demonstrate competencies in planning, marketing, administration, risk/legal, budgets/accounting, leadership, information technology through core curriculum and approved electives.
- Articulate practicum, internship, and career opportunities in RT field.

#### Hospitality, Tourism and Event Management Core

The Hospitality, Tourism and Event Management Program (HTE) prepares students for positions in one of the top three industries in Washington state and the world's number-one industry. Professional positions are numerous. The following list is a sampling of the types of professional positions currently held by HTE graduates: city parks and recreation director, recreation manager, front office and training manager, director of youth programs, guest services manager, and winery marketing manager, general manager, event and meeting planner, marketer, entrepreneur, among others.

#### Admission Requirements

To be admitted to a major or minor in Hospitality, Tourism and Event Management, a student must have a cumulative GPA of 2.3 (or be a freshman or transfer).

#### Program Requirements

A minimum grade of C- must be earned in each course counted toward fulfilling major and minor requirements.

Students should plan to complete their Senior Practicum education during the summer term.

Elective courses must be pre-approved by an advisor prior to registration for course(s).

## Hospitality, Tourism and Event Management Core Requirements

- HRM 381 - Management of Human Resources **Credits:** (5)
- HTE 201 - Introduction to Hospitality, Tourism, and Event Management **Credits:** (4)
- HTE 230 - Program and Event Budgeting **Credits:** (2)
- HTE 292 - Practicum **Credits:** (1-4) (Must be taken for 4 credits.)
- HTE 313 - Career Planning and Preparation **Credits:** (3)
- HTE 373D - Convention and Meeting Management **Credits:** (5)
- HTE 419 - Applied Research and Evaluation **Credits:** (3)
- HTE 420 - Program Promotion, Sales and Advertising **Credits:** (5)
- HTE 484 - Hospitality Law, Negotiation, and Risk Management **Credits:** (5)
- HTE 492 - Senior Practicum **Credits:** (1-12) (Must be taken for 10 credits.)

Total Core Credits: 46

### Tourism Management Specialization

The student with a specialization in tourism management may choose a career in travel- and tourism-related industries, including hotels, resorts, convention centers, cruise lines, airlines, visitor centers, casinos, tour companies, meeting and event planning, and others.

Required Courses Credits: 36

- HTE 230 - Program and Event Budgeting **Credits:** (2)
- HTE 273 - Airline Operations **Credits:** (4)
- HTE 303 - Hospitality Leadership **Credits:** (4)
- HTE 337 - Tour and Interpretive Program Development **Credits:** (3)
- HTE 355 - Sustainable Tourism **Credits:** (3)
- HTE 371 - Tourism Essentials **Credits:** (3)
- HTE 393N - Destination Marketing **Credits:** (4)
- HTE 443 - Event Tourism **Credits:** (4)
- **OR** HTE 492 - Senior Practicum **Credits:** (1-12) (Must be taken for 4 credits)
- HTE 452 - Regional Wine Tourism **Credits:** (4)
- HTE 480 - Tourism Administration Capstone **Credits:** (5)

Department-Approved Electives Credits: 6

Students must consult with major advisor before enrolling in elective credits.

Total Specialization Credits: 42

Total Credits: 88

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# Hospitality, Tourism and Event Management BS, Hospitality Management Specialization

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Understand and promote principles of sustainability.
- Demonstrate professional practice to meet workplace demands.
- Identify research, comprehend, and communicate fundamentals, philosophy, and practices of the field.
- Demonstrate ability to effectively produce and manage projects and activities in diverse groups.
- Analyze and interpret emergent policy issues and trends prevalent in RT industry sectors.
- Demonstrate critical, conceptual, and analytical thinking skills.
- Demonstrate competencies in planning, marketing, administration, risk/legal, budgets/accounting, leadership, information technology through core curriculum and approved electives.
- Articulate practicum, internship, and career opportunities in RT field.

### Hospitality, Tourism and Event Management Core

The Hospitality, Tourism and Event Management Program (HTE) prepares students for positions in one of the top three industries in Washington state and the world's number-one industry. Professional positions are numerous. The following list is a sampling of the types of professional positions currently held by HTE graduates: city parks and recreation director, recreation manager, front office and training manager, director of youth programs, guest services manager, and winery marketing manager, general manager, event and meeting planner, marketer, entrepreneur, among others.

### Admission Requirements

To be admitted to a major or minor in Hospitality, Tourism and Event Management, a student must have a cumulative GPA of 2.3 (or be a freshman or transfer).

### Program Requirements

A minimum grade of C- must be earned in each course counted toward fulfilling major and minor requirements.

Students should plan to complete their Senior Practicum education during the summer term.

Elective courses must be pre-approved by an advisor prior to registration for course(s).



## Hospitality, Tourism and Event Management Core Requirements

- HRM 381 - Management of Human Resources **Credits:** (5)
- HTE 201 - Introduction to Hospitality, Tourism, and Event Management **Credits:** (4)
- HTE 230 - Program and Event Budgeting **Credits:** (2)
- HTE 292 - Practicum **Credits:** (1-4) (Must be taken for 4 credits.)
- HTE 313 - Career Planning and Preparation **Credits:** (3)
- HTE 373D - Convention and Meeting Management **Credits:** (5)
- HTE 419 - Applied Research and Evaluation **Credits:** (3)
- HTE 420 - Program Promotion, Sales and Advertising **Credits:** (5)
- HTE 484 - Hospitality Law, Negotiation, and Risk Management **Credits:** (5)
- HTE 492 - Senior Practicum **Credits:** (1-12) (Must be taken for 10 credits.)

Total Core Credits: 46

## Hospitality Management Specialization

The hospitality management specialization prepares students for entry-level supervisory and managerial positions within hotels, restaurants and the service industry. In addition, entrepreneurial skills are developed for those interested in starting their own business. The Hospitality, Tourism and Events Program (HTE) prepares students for positions in one of the top three industries in Washington State and the world's number-one industry. Professional positions are numerous.

### Admission Requirements

To be admitted to a major or minor in Hospitality Tourism and Event Management, a student must have a cumulative GPA of 2.3 (or be a freshman or transfer).

### Program Requirements

A minimum grade of C- must be earned in each course counted toward fulfilling major and minor requirements.

Students should plan to complete their Senior Practicum education during the summer term.

Elective courses must be pre-approved by an advisor prior to registration for course(s).

Required Courses Credits: 35

- HTE 202 - Food and Beverage Operations **Credits:** (3)
- HTE 272 - Lodging Operations I **Credits:** (4)
- HTE 303 - Hospitality Leadership **Credits:** (4)
- HTE 309 - Facility Planning, Maintenance and Safety **Credits:** (4)
- HTE 310 - Customer Service Operations **Credits:** (4)
- HTE 361 - Hospitality Technology **Credits:** (3)

- HTE 430 - Grants, Sponsorship, and Fundraising for HTE **Credits:** (5)
- HTE 474 - Lodging Operations II **Credits:** (3)
- HTE 488 - Revenue Management **Credits:** (5)
- MGT 487 - Entrepreneurism and Small Business Management **Credits:** (5)

Department-Approved Electives Credits: 7

Students may take any HTE courses to fulfill this requirement.

Total Specialization Credits: 42

Total Credits: 88

## College and Department Information

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## Wine Studies BS, Global Wine Studies Specialization

Students completing the Global Wine Studies concentration will have an addition focus on International Wine production, wine tourism and have specialized training in the critical analysis of wines. The Global Wine Studies specialization requires 28 credits of coursework in addition to 48 credits for the Wine Studies core for a total of 76 credits.

### Wine Studies, BS Core

This Interdisciplinary Program provides students with a broad understanding of the wine industry. The program prepares graduates for careers in wine marketing, direct to consumer sales, distribution, compliance, and consulting.

In the major, students complete 48 major core credits to acquire a broad base of knowledge and skills related to wine, wine business, and the wine industry. Students will also select an area of specialization (Wine Industry Management- 29 credits or Global Wine Studies- 28 credits) to enhance their base knowledge from the core. Students will also gain valuable experience by participating in a required international field experience and an internship with a wine-related business, either in the U.S. or abroad. Students in Wine Studies will be expected to participate in outside the classroom on projects, field trips, and assignments.

### Admission Requirements

Students must complete the pre-admission requirements prior to admission into the degree program. An overall minimum 2.5 GPA will be required for admission. Students must fill out an application that includes an essay of motivation and goals. Upon approval of the application, an in-person or telephone interview will be conducted between the advisor for the global wine studies major and the prospective student. Permission of the major advisor is required. Upon admittance to the program students must agree to sign a written statement regarding professional conduct and responsibility.

Students must be 18 years of age to apply for the major. It should be understood that all classroom courses involving tasting will require students to taste and spit (Washington State legislation RCW 66.20.010 (12) a-f).

### Course Requirements

Students will be expected to spend significant amounts of time outside the classroom on projects, field trips, and assignments. Students must earn a cumulative GPA of 2.7 in the wine studies core courses.

### Tuition

Wine Studies (WINE) course tuition is the same as the regular CWU tuition for undergraduates. Some courses have lab fees to cover additional costs.

### Graduation Requirements

Students must earn a cumulative GPA of 2.7 in the wine studies core courses.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate an understanding of the fundamentals, issues and financial aspects of viticulture and enology.
- Demonstrate knowledge of grape varieties and wine styles in wine regions around the world. Students will demonstrate an understanding of consumption patterns, regulations, classifications, trade structured and international agreements.
- Develop a branding, marketing and PR plan for a business in the wine industry. Students will be able to demonstrate an understanding of financial issues, investments, global markets and distribution systems
- Professionally evaluate a wine using sensory and organoleptic techniques to assess quality, wine faults, and commercial placement. Students will be able to perform a number of basic wine analysis tests and understand their results.
- Through a study abroad program, students will learn about different practices and issues in an international wine region.

### Wine Studies Core Courses

- WINE 201 - Wine Service and Food Pairing **Credits:** (4)
- WINE 202 - A Social History of Beer, Wine, and Distilled Spirits **Credits:** (4)
- WINE 302 - Fundamentals of Viticulture and Enology **Credits:** (4)
- WINE 303 - Major Wine Regions of the World **Credits:** (4)
- WINE 304 - Wine Marketing and Branding **Credits:** (4)
- WINE 325 - Winery Administration and Budgeting **Credits:** (4)
- WINE 353 - Tasting Room and Wine Club Management **Credits:** (4)
- WINE 402 - Issues in Viticulture and Enology **Credits:** (4)

- WINE 406 - Professional Wine Analysis **Credits:** (3)
- WINE 452 - Regional Wine Tourism **Credits:** (4)
- WINE 490 - Cooperative Education **Credits:** (1-12) (6 credits required)
- WINE 492 - Field Experience **Credits:** (3) (study abroad)

Total Core Credits: 48

### Global Wine Studies Specialization

- CHEM 111 - Introduction to Chemistry **Credits:** (4)
- CHEM 111LAB - Introductory Chemistry Laboratory **Credits:** (1)
- GEOG 101 - World Regional Geography **Credits:** (5)
- WINE 402 - Issues in Viticulture and Enology **Credits:** (4)
- WINE 408 - Advanced Sensory Analysis **Credits:** (4)
- WINE 410 - Wine Faults **Credits:** (3)
- WINE 412 - Advanced Wine Regions **Credits:** (3)
- WINE 454 - Wine Tourism Applications **Credits:** (4)

Total Specialization Credits: 28

Total Credits: 76

### College and Department Information

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## Wine Studies BS, Wine Industry Management Specialization

The Wine Industry Specialization further prepares Wine Studies students to participate in wine business professions. The curriculum focuses on Wine Distribution, Wine Law and advanced digital marketing. The Specialization is 29 credits in addition to 48 credits for the Wine Studies core for a total of 77 credits.

### Wine Studies, BS Core

This Interdisciplinary Program provides students with a broad understanding of the wine industry. The program prepares graduates for careers in wine marketing, direct to consumer sales, distribution, compliance, and consulting.

In the major, students complete 48 major core credits to acquire a broad base of knowledge and skills related to wine, wine business, and the wine industry. Students will also select an area of specialization (Wine Industry Management- 29 credits or Global Wine Studies- 28 credits) to enhance their base knowledge from the core. Students will also gain valuable experience by participating in a required international field experience and an internship with a wine-related business, either in the U.S. or abroad. Students in Wine Studies will be expected

to participate in outside the classroom on projects, field trips, and assignments.

### Admission Requirements

Students must complete the pre-admission requirements prior to admission into the degree program. An overall minimum 2.5 GPA will be required for admission. Students must fill out an application that includes an essay of motivation and goals. Upon approval of the application, an in-person or telephone interview will be conducted between the advisor for the global wine studies major and the prospective student. Permission of the major advisor is required. Upon admittance to the program students must agree to sign a written statement regarding professional conduct and responsibility.

Students must be 18 years of age to apply for the major. It should be understood that all classroom courses involving tasting will require students to taste and spit (Washington State legislation RCW 66.20.010 (12) a-f).

### Course Requirements

Students will be expected to spend significant amounts of time outside the classroom on projects, field trips, and assignments. Students must earn a cumulative GPA of 2.7 in the wine studies core courses.

### Tuition

Wine Studies (WINE) course tuition is the same as the regular CWU tuition for undergraduates. Some courses have lab fees to cover additional costs.

### Graduation Requirements

Students must earn a cumulative GPA of 2.7 in the wine studies core courses.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate an understanding of the fundamentals, issues and financial aspects of viticulture and enology.
- Demonstrate knowledge of grape varieties and wine styles in wine regions around the world. Students will demonstrate an understanding of consumption patterns, regulations, classifications, trade structured and international agreements.
- Develop a branding, marketing and PR plan for a business in the wine industry. Students will be able to demonstrate an understanding of financial issues, investments, global markets and distribution systems
- Professionally evaluate a wine using sensory and organoleptic techniques to assess quality, wine faults, and commercial placement. Students will be able to perform a number of basic wine analysis tests and understand their results.
- Through a study abroad program, students will learn about different practices and issues in an international wine region.

### Wine Studies Core Courses

- WINE 201 - Wine Service and Food Pairing **Credits:** (4)

- WINE 202 - A Social History of Beer, Wine, and Distilled Spirits **Credits:** (4)
- WINE 302 - Fundamentals of Viticulture and Enology **Credits:** (4)
- WINE 303 - Major Wine Regions of the World **Credits:** (4)
- WINE 304 - Wine Marketing and Branding **Credits:** (4)
- WINE 325 - Winery Administration and Budgeting **Credits:** (4)
- WINE 353 - Tasting Room and Wine Club Management **Credits:** (4)
- WINE 402 - Issues in Viticulture and Enology **Credits:** (4)
- WINE 406 - Professional Wine Analysis **Credits:** (3)
- WINE 452 - Regional Wine Tourism **Credits:** (4)
- WINE 490 - Cooperative Education **Credits:** (1-12) (6 credits required)
- WINE 492 - Field Experience **Credits:** (3) (study abroad)

Total Core Credits: 48

### Wine Industry Management Specialization

- HTE 351 - Online and App Strategies for HTE **Credits:** (4)
- MGT 380 - Organizational Management **Credits:** (5)
- WINE 301 - Wine Distribution Management **Credits:** (4)
- WINE 315 - Survey of Washington Wines **Credits:** (4)
- WINE 332 - Social Media Theory and Practice **Credits:** (4)
- WINE 403 - Advanced Topics in Wine Marketing and Branding **Credits:** (5)
- WINE 404 - Wine Law and Winery Compliance **Credits:** (4)

Total Specialization Credits: 29

Total Credits: 77

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## Adventure Leadership Minor

Students pursuing this minor will discuss and practice leadership theories to improve their problem-solving, critical thinking, group development, communication, and social change skills related to the field of recreation. Students become both competent with technical skills and acquire techniques to effectively lead people in experiential education and outdoor recreation.

Required Courses Credits: 18

- REC 322 - Recreation Programming and Activities **Credits:** (3)
- HTE 292 - Practicum **Credits:** (1-4) (Must take for 4 credits)
- REC 340 - Introduction to Adventure Programming **Credits:** (3)
- **OR** REC 431 - Recreation Administration of Retreats and Camps **Credits:** (3)
- REC 381 - Recreational Sports Management **Credits:** (3)
- REC 487 - Outdoor Recreation Issues **Credits:** (3)
- HTE 492 - Senior Practicum **Credits:** (1-12) (Must take for 2 credits)

Department-Approved Electives Credits: 2

Complete two courses from the following for two credits.

- PE 118 - Climbing Wall to Rock **Credits:** (1)
- PEID 137 - Hiking and Orienteering **Credits:** (1)
- PEF 161 - Challenge Course Experience **Credits:** (1)
- PEF 162 - Backpacking **Credits:** (1)
- PEF 163 - Introduction to White Water Kayaking **Credits:** (1)

Total Credits: 20

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## Apparel Design Minor

A minor in apparel design is administered jointly by the Apparel, Textiles and Merchandising Program and theatre arts department. It is designed to enable students with career interests in this field to gain experience in the competency areas expected of apparel designers. This minor allows the student to learn to apply the basic principles of design and creativity in developing apparel. Students will study the application of artistic and creative design elements, selection, and use of fabrics and textiles, and the techniques for transforming design concepts into garments in order to create a final sale-able product for a target market.

To be admitted to a minor in Apparel Design, a student must have a cumulative GPA of 2.3 (or be a freshman or transfer). A minimum grade of C- must be earned in each course counted toward fulfilling major and minor requirements.

Required Courses

- ATM 270 - Digital Presentation Techniques **Credits:** (4)
- ATM 280 - Basic Sewing Techniques **Credits:** (3)
- **OR** TH 261 - Costume Technology **Credits:** (3)

- ATM 301 - Introduction to the Fashion Industry **Credits:** (4)
- ATM 355 - Consumer Textiles **Credits:** (4)
- ATM 388 - Advanced Fashion Design **Credits:** (3)
- **OR** TH 361 - Stage Costuming **Credits:** (3)
- ATM 389 - Fashion Trend Analysis **Credits:** (3)
- ATM 488 - Fashion Line Development **Credits:** (3)
- TH 140 - Introduction to Theatre Design **Credits:** (3)
- TH 461 - Costume Design **Credits:** (4)
- TH 465 - Costume and Fashion Drawing **Credits:** (3)

Total Credits: 34

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## Apparel, Textiles and Merchandising Minor

The minor in apparel, textiles and merchandising is designed for those students wanting some expertise in the apparel industry to strengthen their majors in business, marketing, communication, advertising, graphic design, theatre arts, event planning, accounting, retail management, etc. Students are exposed to various aspects of merchandising, trend analysis, textiles, buying, sustainability, and fashion event planning. Completing the minor will contribute to future career competitiveness and broaden opportunities.

### Admission Requirements

To be admitted to a minor in Apparel, Textiles and Merchandising, a student must have a cumulative GPA of 2.3 (or be a freshman or transfer).

### Graduation Requirements

A minimum grade of C- must be earned in each course counted toward fulfilling minor requirements.

Required Courses

- ATM 270 - Digital Presentation Techniques **Credits:** (4)
- ATM 281 - Socio-cultural Aspects of Apparel **Credits:** (4)
- ATM 301 - Introduction to the Fashion Industry **Credits:** (4)
- ATM 355 - Consumer Textiles **Credits:** (4)
- ATM 381 - Fashion Show Production **Credits:** (2)
- ATM 389 - Fashion Trend Analysis **Credits:** (3)

Total Credits: 21

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## Child Development Minor

A minor in child development is designed for students who want some expertise in child development to improve their ability to work with children or parents in their chosen profession. Students majoring in psychology, early childhood education, special education, sociology, social services, public health, law and justice, physical and health education, and recreation and tourism may benefit from the child development minor. Students in the minor will learn about theories of child development; cutting-edge research about how children develop in multiple domains, with a focus on how development occurs in the context of family, community, and culture; and skills for practical application of child development. Completing the minor will enhance students' competitiveness for jobs involving interaction with children in a variety of disciplines.

### Pre-Admission Requirements

Students wishing to declare a minor in Child Development must be incoming freshmen, transfer students, or have a cumulative GPA of 2.5. Child Development minors must maintain a cumulative GPA of 2.5 or higher to remain in the minor.

### Required Courses

- FCL 232 - Child Development **Credits: (3)**
- FCL 336 - Parent Education and Guidance **Credits: (4)**
- FCL 438 - Attachment Theory and Practice **Credits: (4)**

### Department-approved Electives Credits: 15-16

- FCL 339 - Adolescence and Emerging Adulthood **Credits: (4)**
- FCL 414 - Coping with Grief and Loss **Credits: (4)**
- FCL 415 - Therapeutic Play **Credits: (4)**
- FCL 416 - Child Life I: Child Life Scope of Practice **Credits: (4)**
- FCL 417 - Pediatric Diagnoses and Medical Terminology **Credits: (4)**
- FCL 418 - Child Life II: Impact of Child Hospitalization **Credits: (4)**
- FCL 432 - Theories in Child Development **Credits: (3)**

Total Credits: 26-27

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## Event Management Minor

This minor will give the student a solid understanding of special event programming and management. It will also provide experiential learning opportunities through event production. Students in various majors including global wine studies,

business, the arts, communication and others may find this minor a beneficial supplement.

### Requirements

To be admitted to a major or minor in Hospitality, Tourism and Events, a student must have a cumulative GPA of 2.3 (or be a freshman or transfer). A minimum grade of C- must be earned course counted toward fulfilling major and minor requirements.

### Required Courses Credits: 24

- HTE 230 - Program and Event Budgeting **Credits: (2)**
- HTE 373D - Convention and Meeting Management **Credits: (5)**
- HTE 374 - Festivals **Credits: (5)**
- HTE 405 - Hospitality Catering **Credits: (3)**
- HTE 484 - Hospitality Law, Negotiation, and Risk Management **Credits: (5)**
- HTE 492 - Senior Practicum **Credits: (1-12)** (Must be taken for 4 credits.)

### Department-Approved Electives Credits: 3-5

- ADMG 385 - Business Communications and Report Writing **Credits: (4)**
- COM 312 - Introduction to Non-Profit Leadership **Credits: (4)**
- COM 345 - Business and Professional Speaking **Credits: (4)**
- HTE 272 - Lodging Operations I **Credits: (4)**
- HTE 371 - Tourism Essentials **Credits: (3)**
- HTE 373E - Resort Management **Credits: (5)**
- HTE 452 - Regional Wine Tourism **Credits: (4)**
- MKT 360 - Principles of Marketing **Credits: (5)**
- REC 322 - Recreation Programming and Activities **Credits: (3)**
- REC 381 - Recreational Sports Management **Credits: (3)**
- REC 431 - Recreation Administration of Retreats and Camps **Credits: (3)**
- WINE 452 - Regional Wine Tourism **Credits: (4)**
- UNIV 304 - International Sustainable Development **Credits: (5)**

Total Credits: 27-29

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## Family and Consumer Sciences Education Minor

**This minor does not meet endorsement requirements to teach family and consumer sciences.**

### Required Courses

- FCS 371 - Real World Finance **Credits:** (3)
- FCSE 426 - Methods and Materials of Teaching Family and Consumer Sciences **Credits:** (3)
- FCL 232 - Child Development **Credits:** (3)
- FCL 234 - Contemporary Families **Credits:** (4)
- FCL 336 - Parent Education and Guidance **Credits:** (4)
- NUTR 101 - Introduction to Human Nutrition **Credits:** (5)

Total Credits: 26

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## Family and Consumer Sciences Minor

In consultation with a faculty advisor, students select a minimum of 20 credits of coursework as appropriate to individual interests and professional goals. The planned course of study must have the signature of both the student and the faculty advisor before submission to the department chair for approval.

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## Family Science Minor

The Family Science minor is designed for students who want to improve their ability to work with families in their chosen profession. Students in the minor will learn about Family Systems Theory and family dynamics, will develop skills for healthy romantic and familial relationships, and will gain practical skills to work with families. Completing the minor will enhance students' competitiveness for jobs involving interaction with families in a variety of disciplines.

### Admission Requirements

Students wishing to declare a minor in Family Science must be incoming first year students, transfer students, or have a cumulative GPA of 2.5.

### Graduation Requirements

Family Science minors must maintain a cumulative GPA of 2.5 or higher to remain in the minor.

Required Courses

- FCL 101 - Skills for Marriage and Intimate Relationships **Credits:** (4)
- FCL 234 - Contemporary Families **Credits:** (4)

- FCL 235 - Relationships and Personal Development **Credits:** (3)
- FCL 336 - Parent Education and Guidance **Credits:** (4)

FCL Elective Courses: Credits 10

- Any course with an FCL prefix.

Total Credits: 25

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## Hospitality Management Minor

Students who complete the hospitality management minor will gain important skills which will complement their major program of study in preparing them to serve within the growing hospitality industry, including basic knowledge within hotel and restaurant management.

### Admission Requirements

Students must have a GPA of 2.3 to apply for the minor in hospitality management.

Required Courses Credits: 15

- HTE 201 - Introduction to Hospitality, Tourism, and Event Management **Credits:** (4)
- HTE 202 - Food and Beverage Operations **Credits:** (3)
- HTE 272 - Lodging Operations I **Credits:** (4)
- HTE 303 - Hospitality Leadership **Credits:** (4)

Department-Approved Electives Credits: 10

Students will select 10 credits of HTE courses as part of the minor.

Total Credits: 25

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## Physical Activity and Recreation Programming Minor (FCS)

Physical Activity and Recreation Programming Minor Core

### Program Directors

Heidi Henschel Pellett, EdD, physical education and school

health

Barbara Masberg, PhD, recreation and tourism

### Program Advisors

Debra D'Acquisto, MA, physical activity

Robert Perkins, EdD, recreation and tourism

This interdisciplinary physical activity and recreation programming minor is designed for students who want to instruct and direct activities in various settings, such as, parks and recreation, nonprofit organizations, cruise lines, resorts, and other active lifestyle organizations.

### Admission Requirements

Applications are accepted throughout the academic year. To be admitted to the minor, all students must have a cumulative grade point average of a 2.75. For the application procedure, contact a program director in Physical Education and School Health or Recreation and Tourism to complete a specific application form. All courses in the minor require a grade of a C or higher.

### Required Courses

- HTE 484 - Hospitality Law, Negotiation, and Risk Management **Credits: (5)**
- PESH 341 - Characteristics of Effective Physical Education Teaching **Credits: (3)**
- PESH 343 - Pedagogical Application of Teaching Styles and Systematic Reflection **Credits: (3)**
- PESH 356 - Teaching Lifelong Physical Activity Pursuits **Credits: (3)**
- PESH 456 - Facilitating and Leading Adventure Activities in the Schools **Credits: (2)**

Select from one of the following Credits: (3)

- REC 322 - Recreation Programming and Activities **Credits: (3)**
- **OR** Choose three (3) Physical Activity Courses from the following categories:  
**PEID (1), PEF (1), PEAQ (1) PETS (1), PED (1)**

Select from one of the following Credits: (3-4)

- PESH 330 - Positive Youth Development in Physical Activity **Credits: (3)**
- REC 321 - Leadership in Human Development **Credits: (4)**

Select from one of the following Credits: (2-4)

- REC 300 - Challenge Course Leadership **Credits: (4)**
- REC 431 - Recreation Administration of Retreats and Camps **Credits: (3)**
- RTE 293 - Outdoor Leadership Training **Credits: (2)**
- REC 360 - Outdoor Survival **Credits: (3)**

Select from one the following Credits: (3-5)

- REC 381 - Recreational Sports Management **Credits: (3)**
- REC 382 - Community Recreation **Credits: (3)**
- REC 487 - Outdoor Recreation Issues **Credits: (3)**

Choose certifications totaling Credits: (3)

- EMS 245 - Advanced First Aid and Emergency Response **Credits: (3)**
- PE 115 - Beginning Climbing **Credits: (1)**
- PE 116 - Intermediate Climbing **Credits: (1)**
- PE 220 - Climbing Wall Instructor **Credits: (2)**
- PEAQ 221 - Lifeguard Training **Credits: (3)**
- PEAQ 320 - Water Safety Instructor **Credits: (3)**

Total Credits: 30-35

### College and Department Information

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## Program Development Minor

Students take a series of courses addressing the strategies and techniques of planning and managing a program for events, training, education, seminars, entertainment, or meetings.

### Required Courses

- REC 321 - Leadership in Human Development **Credits: (4)**
- HTE 230 - Program and Event Budgeting **Credits: (2)**
- FCS 320 - Program Management and Planning (Put on reserve 9/16/18) **Credits: (4)**
- FCS 379 - Professional Development and Internship Planning **Credits: (3)**
- HTE 419 - Applied Research and Evaluation **Credits: (3)**
- HTE 420 - Program Promotion, Sales and Advertising **Credits: (5)**

Choose one course from the following: Credits: 2-3

- EDCS 509 - Civic Engagement **Credits: (3)**
- UNIV 309 - Civic Engagement **Credits: (2)**
- FCS 490 - Cooperative Education **Credits: (1-12)**  
Credits: 2

Total Credits: 23-24

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## Sustainable Tourism Minor

The sustainable tourism minor prepares students for careers related to the impacts and opportunities associated with the economic, cultural, and environmental dimensions of tourism.

Required Courses Credits: 19

- ENST 201 - Earth as an Ecosystem **Credits:** (5)
- **OR** ENST 202 - Environment and Society **Credits:** (5)
- ENST 303 - Environmental Management **Credits:** (5)
- HTE 330 - Sustainable Resources for Tourism **Credits:** (3)
- HTE 355 - Sustainable Tourism **Credits:** (3)
- HTE 371 - Tourism Essentials **Credits:** (3)

Choose one from the following: Credits: 3-5

- ENST 310 - Energy and Society **Credits:** (5)
- ENST 330 - Environmental Leadership and Advocacy **Credits:** (5)
- HTE 331 - Sustainable Events: Best Practices **Credits:** (3)
- HTE 337 - Tour and Interpretive Program Development **Credits:** (3)
- HTE 374 - Festivals **Credits:** (5)
- HTE 480 - Tourism Administration Capstone **Credits:** (5)
- HTE 492 - Senior Practicum **Credits:** (1-12)
- REC 333 - Outdoor Adventures in Public Lands **Credits:** (4)
- REC 487 - Outdoor Recreation Issues **Credits:** (3)
- UNIV 304 - International Sustainable Development **Credits:** (5)

Total Credits: 22-24

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## Tourism Management Minor

Students who have a major in another area may desire to diversify their abilities by choosing to complete a minor program in Hospitality and Tourism. This minor complement numerous major programs and expands career opportunities.

### Requirements

To be admitted to a major or minor in Hospitality, Tourism and Events, a student must have a cumulative GPA of 2.3 (or be a freshman or transfer). A minimum grade of C- must be earned in each course counted toward fulfilling major and minor requirements.

Required Courses Credits: 24

- HTE 201 - Introduction to Hospitality, Tourism, and Event Management **Credits:** (4)
- HTE 230 - Program and Event Budgeting **Credits:** (2)
- HTE 371 - Tourism Essentials **Credits:** (3)
- HTE 373E - Resort Management **Credits:** (5)
- HTE 480 - Tourism Administration Capstone **Credits:** (5)
- HTE 484 - Hospitality Law, Negotiation, and Risk Management **Credits:** (5)

Department-Approved Electives Credits: 8-9

Other courses not listed may be used with approval by HTE advisor.

- HTE 272 - Lodging Operations I **Credits:** (4)
- HTE 337 - Tour and Interpretive Program Development **Credits:** (3)
- HTE 373D - Convention and Meeting Management **Credits:** (5)
- HTE 374 - Festivals **Credits:** (5)
- HTE 379 - Cruise Line Industry **Credits:** (3)
- REC 381 - Recreational Sports Management **Credits:** (3)
- HTE 405 - Hospitality Catering **Credits:** (3)
- HTE 452 - Regional Wine Tourism **Credits:** (4)
- **OR** WINE 452 - Regional Wine Tourism **Credits:** (4)
- HTE 454 - Wine Tourism Applications **Credits:** (4)
- HTE 292 - Practicum **Credits:** (1-4) (Must be taken for 3 credits.)
- **OR** HTE 492 - Senior Practicum **Credits:** (1-12) (Must be taken for 3 credits.)
- UNIV 304 - International Sustainable Development **Credits:** (5)

Total Credits: 32-33

College and Department Information

Family and Consumer Sciences Department  
College of Education and Professional Studies

## Wine Trade and Tourism Minor

This cross-disciplinary program prepares individuals for employment in many areas of the wine industry, including tourism, hospitality services, retailing, wine sales, marketing, and tasting room and event management.

### Admission Requirements

Admission to the minor requires admission to the Wine Trade Professional Certificate Program. Students must be 21 years of age or older and must apply for acceptance into the program. Permission of the Wine Studies certificate advisor is required.

### Financial Obligations

Because the Wine Studies (WINE) courses are in a self-supported program no tuition waiver programs apply for WINE



courses. Additional course fees and continuing education tuition apply. Tuition for WINE classes may be higher than regular CWU tuition. Tuition for the HTE courses will be at the regular CWU tuition rate and waivers can be applied to the HTE courses.

#### Required Courses

- HTE 371 - Tourism Essentials **Credits:** (3)
- HTE 374 - Festivals **Credits:** (5)
- HTE 452 - Regional Wine Tourism **Credits:** (4)
- **OR** WINE 452 - Regional Wine Tourism **Credits:** (4)
- HTE 454 - Wine Tourism Applications **Credits:** (4)
- **OR** WINE 454 - Wine Tourism Applications **Credits:** (4)
- WINE 302 - Fundamentals of Viticulture and Enology **Credits:** (4)
- WINE 303 - Major Wine Regions of the World **Credits:** (4)
- WINE 304 - Wine Marketing and Branding **Credits:** (4)
- WINE 406 - Professional Wine Analysis **Credits:** (3)

Total Credits: 31

#### College and Department Information

Family and Consumer Sciences Department  
College of Education and Professional Studies

## Child Development Certificate

The child development certificate provides students with knowledge and practical skills to work with children from birth through emerging adulthood. Students in the program will learn about theories of child development; cutting-edge research about how children develop in multiple domains, with a focus on how development occurs in the context of family, community, and culture; and skills for practical application of child development. The certificate is designed for matriculated and non-matriculated students who want to enhance their expertise in child development to improve their ability to work with children or parents in their chosen profession.

#### Required Courses

- FCL 232 - Child Development **Credits:** (3)
- FCL 336 - Parent Education and Guidance **Credits:** (4)
- FCL 339 - Adolescence and Emerging Adulthood **Credits:** (4)
- FCL 415 - Therapeutic Play **Credits:** (4)
- FCL 432 - Theories in Child Development **Credits:** (3)
- FCL 438 - Attachment Theory and Practice **Credits:** (4)

Total Credits: 22

#### College and Department Information

Family and Consumer Sciences Department  
College of Education and Professional Studies

## Professional Sommelier Certificate

This certificate program focuses on learning the techniques involved in becoming a Sommelier. A Sommelier works in the dining aspects of the beverage industry including pairing food with wine, beer, spirits and other beverages along with managing the beverage component of a dining establishment. This certificate covers beverage and food pairing, wine service techniques and beverage management, cost and pricing structures, developing beverage lists, and includes a professional tasting component to cover wine, beer, spirits and other beverages. Graduates are prepared for food and beverage related careers in the dining and hospitality industry. Students will be expected to spend significant amounts of time outside the classroom working on projects, field trips and assignments.

#### Admission Requirements

Students must be 18 years of age to apply for the certificate. It should be understood that all classroom courses involving tasting will require students to taste spit (Washington State legislation RCW 66.20.010 (12) a-f).

#### Tuition

Global Wine Studies (GWS) course tuition is the same as the regular CWU tuition for undergraduates. Some courses have lab fees to cover additional costs.

#### Required Courses

- WINE 303 - Major Wine Regions of the World **Credits:** (4)
- WINE 201 - Wine Service and Food Pairing **Credits:** (4)
- WINE 407 - Beverage Management and Service for the Sommelier (Put on reserve 9/16/18) **Credits:** (4)
- WINE 409 - Applied Professional Tasting Analysis (Put on Reserve 9/16/16.) **Credits:** (4)

Total Credits: 16

#### Department and College Information

Family and Consumer Sciences Department  
College of Education and Professional Studies

## Wine Trade Professional Certificate

This certificate program focuses on the business and trade aspects of the wine industry. Topics covered include the business of wine, world wine regions, trade structures, wine marketing, wine merchandising, viticulture, winemaking, wine

styles, and professional evaluation techniques. Graduates are prepared for wine-related careers in sales and merchandising, distribution, marketing, import/export, consulting, hospitality, and more.

This certificate program is a 10-week, intensive program and all four courses must be taken. Students will be expected to spend significant amounts of time outside the classroom working on projects, field trips, and assignments. Students must obtain a grade of B- or above in all four courses to receive the certificate.

### Admission Requirements

Students must be 18 years of age to apply for the certificate. It should be understood that all classroom courses involving tasting will require students to taste and spit (Washington State legislation RCW 66.20.010 (12) a-f).

### Course Requirements

Students will be expected to spend significant amounts of time outside the classroom working on projects, field trips, and assignments. Students must earn a cumulative GPA of 2.7 in the wine studies core courses.

### Tuition

Wine Studies (WINE) course tuition is the same as the regular CWU tuition for undergraduates. Some courses have lab fees to cover additional costs.

### Required Courses

- WINE 302 - Fundamentals of Viticulture and Enology **Credits:** (4)
- WINE 303 - Major Wine Regions of the World **Credits:** (4)
- WINE 304 - Wine Marketing and Branding **Credits:** (4)
- WINE 406 - Professional Wine Analysis **Credits:** (3)

Total Credits: 15

### Department and College Information

Family and Consumer Sciences Department  
College of Education and Professional Studies

## Film Program

College of Arts and Humanities  
Ellensburg  
Bouillon Hall, room 224

509-963-2893

[www.cwu.edu/film](http://www.cwu.edu/film)

See website for how this program may be used for educational and career purposes.

### Faculty and Staff

#### Program Director

Maria Sanders, MFA, film

#### Associate Professor

Maria Sanders, MFA, film

### Lecturers

Michael Caldwell, MFA, film

Luther Clement, MFA, documentary media

Melissa Johnson, MA, English

Patrick Smith, MFA, film

Jason Tucholke, MFA, sound and media design, arts technology

Jon Ward, MA, film

### Staff

Bianca Scott, secretary senior

### Program Information

The Film program is an innovative, interdisciplinary, undergraduate program leading to a BA in Film or a minor in Production, Cinema Studies, or Screenwriting.

In the BA program, students are provided the opportunity to pursue a course of study that encompasses the scholarly study of film as well as the production and technical aspects of the moving image and writing for the screen. The program employs a scholarly, creative, and professional approach to the study of film and seeks to help each student discover his or her talent as an independent critic, artist, and communicator.

The Film BA is designed to build specific skills in media production from a strong foundation of general knowledge in film. Students can choose from a range of courses that offer both introductory as well as more advanced study in all aspects of mediated storytelling, from writing and producing to directing, cinematography, and editing. The program emphasizes exploration of the student's personal creative voice through hands-on productions.

All students begin by making short programs, then progress to more complex productions while learning the collaborative nature of film/video production through crew experiences. Students are encouraged to experiment with traditional narrative structures, documentary, and multi-camera production, as the curriculum allows and their interests dictate.

To complete the learning experience and help students prepare for the job market, all students pursuing the major are strongly encouraged to take advantage of internship opportunities and are required to compile a portfolio and capstone project.

### Admission Requirements

A Film major or minor can be selected by students using the normal major or minor declaration process and with assistance from a faculty advisor. Any student who has a minimum CWU grade point average of 2.4 or higher may be admitted to this program. Admission is dependent upon the number of slots available.

### Graduation Requirements

Students must maintain a 2.4 CWU GPA or higher with a minimum grade of C- in all courses counted toward fulfilling the film major or minor requirements.

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### Course Offerings

Frequency of course offering information can be found at the

department website: [www.cwu.edu/film](http://www.cwu.edu/film) or by contacting the department directly.

## Film Major, BA

The Film program is an innovative, interdisciplinary, undergraduate program leading to a BA in Film or a minor in Production, Cinema Studies, or Screenwriting.

In the BA program, students are provided the opportunity to pursue a course of study that encompasses the scholarly study of film as well as the production and technical aspects of the moving image and writing for the screen. The program employs a scholarly, creative, and professional approach to the study of film and seeks to help each student discover his or her talent as an independent critic, artist, and communicator.

The Film BA is designed to build specific skills in media production from a strong foundation of general knowledge in film. Students can choose from a range of courses that offer both introductory as well as more advanced study in all aspects of mediated storytelling, from writing and producing to directing, cinematography, and editing. The program emphasizes exploration of the student's personal creative voice through hands-on productions.

All students begin by making short programs, then progress to more complex productions while learning the collaborative nature of film/video production through crew experiences. Students are encouraged to experiment with traditional narrative structures, documentary, and multi-camera production, as the curriculum allows and their interests dictate.

To complete the learning experience and help students prepare for the job market, all students pursuing the major are strongly encouraged to take advantage of internship opportunities and are required to compile a portfolio and capstone project.

### Admission Requirements

A Film major or minor can be selected by students using the normal major or minor declaration process and with assistance from a faculty advisor. Any student who has a minimum CWU grade point average of 2.4 or higher may be admitted to this program. Admission is dependent upon the number of slots available.

### Graduation Requirements

Students must maintain a 2.4 CWU GPA or higher with a minimum grade of C- in all courses counted toward fulfilling the film major or minor requirements.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate themselves to be expressive, innovative visual thinkers.
- Demonstrate the ability to analyze and interpret emotional, psychological, and cognitive influences in the perception of visual media.
- Demonstrate an understanding of the distinguishing features of American and International cinema.

- Demonstrate a meaningful understanding of the production elements and narrative structures employed in film.
- Demonstrate knowledge of theoretical approaches to cinema (genre, auteurism, structuralism, poststructuralism, semiotics, psychoanalysis, feminism, and post-colonialism).
- Demonstrate the knowledge of and ability to apply different theoretical perspectives on the role and power of media within society to influence social values, political beliefs, identities, and behaviors.
- Demonstrate a basic skill set in producing, directing, cinematography, and editing.
- Identify and effectively use the fundamental structure and features of a screenplay.

Required Courses Credits: 69

- FILM 216 - Basic Audio Technology **Credits:** (1)
- FILM 250 - Introduction to Film **Credits:** (5)
- FILM 267 - Screenwriting Fundamentals **Credits:** (4)
- **OR** ENG 267 - Screenwriting Fundamentals **Credits:** (4)
- FILM 340 - Production I **Credits:** (5)
- FILM 342 - Cinema Studies I: Early American Film History **Credits:** (4)
- **OR** ENG 342 - Cinema Studies I: Early American Film History **Credits:** (4)
- FILM 343 - Cinema Studies II: Modern American Film History **Credits:** (4)
- **OR** ENG 343 - Cinema Studies II: Modern American Film History **Credits:** (4)
- FILM 344 - Cinema Studies III: Film Theory **Credits:** (5)
- **OR** ENG 344 - Cinema Studies III: Film Theory **Credits:** (5)
- FILM 346 - Producing **Credits:** (4)
- FILM 350 - Production II **Credits:** (5)
- FILM 360 - Cinema Studies IV: Survey of World Cinema **Credits:** (5)
- **OR** ENG 360 - Cinema Studies IV: Survey of World Cinema **Credits:** (5)
- FILM 380 - Production III **Credits:** (4)
- FILM 440 - Production IV **Credits:** (4)
- FILM 450 - Production V **Credits:** (4)
- FILM 480 - Production VI **Credits:** (5)
- FILM 489 - Film Career Seminar **Credits:** (1)

Select one from the following: (4 credits)

- FILM 430 - Cinematography **Credits:** (4)
- FILM 431 - Advanced Editing **Credits:** (4)
- FILM 432 - Directing **Credits:** (4)

Select one from the following: (5 credits)

- FILM 461 - Studies in Film and Culture **Credits:** (5)
- **OR** ENG 461 - Studies in Film and Culture **Credits:** (5)

- FILM 462 - Studies in Film and/or Television Genres **Credits: (5)**
- **OR** ENG 462 - Studies in Film and/or Television Genres **Credits: (5)**
- FILM 463 - Studies in the Film Auteur **Credits: (5)**
- **OR** ENG 463 - Studies in the Film Auteur **Credits: (5)**

Department-Approved Electives Credits: 6

Select at least 6 credits from the following:

- ANTH 351 - Visual Anthropology **Credits: (4)**
- **OR** COM 351 - Visual Anthropology **Credits: (4)**
- CHIN 461 - Chinese Cinema **Credits: (4)**
- COM 321 - Visual Storytelling **Credits: (5)**
- FILM 214 - Basic Film Equipment **Credits: (1)**
- FILM 217 - Basic Editing: Final Cut Pro **Credits: (1)**
- FILM 218 - Basic Editing: Premiere **Credits: (1)**
- FILM 219 - Basic Editing: DaVinci Resolve **Credits: (1)**
- FILM 220 - Basic After Effects **Credits: (1)**
- FILM 221 - Color Correction **Credits: (1)**
- FILM 222 - Advanced Equipment **Credits: (1)**
- FILM 225 - Film Classics **Credits: (1)**
- FILM 256 - Sound and Mixing - Aesthetics and Essentials **Credits: (3)**
- **OR** TH 256 - Sound and Mixing - Aesthetics and Essentials **Credits: (3)**
- FILM 298 - Special Topics **Credits: (1-6)**
- FILM 299 - Seminar **Credits: (1-5)**
- FILM 327 - Scriptwriter in Development and Production **Credits: (4)**
- FILM 337 - Documentary Scriptwriting (Put on reserve 9/16/18) **Credits: (4)**
- FILM 354 - History of Television **Credits: (4)**
- **OR** ENG 354 - History of Television **Credits: (4)**
- FILM 355 - History of Documentary **Credits: (4)**
- **OR** ENG 355 - History of Documentary **Credits: (4)**
- FILM 356 - Writing for Screen Genre **Credits: (4)**
- FILM 357 - Writing for Serial Media **Credits: (4)**
- **OR** ENG 357 - Writing for Serial Media **Credits: (4)**
- FILM 452 - Applied Studio Production **Credits: (1-2)**
- FILM 453 - Wildcat Films **Credits: (3)**
- FILM 456 - Advanced Concepts in Sound for Film and Stage **Credits: (4)**
- FILM 470 - The Writer's Room **Credits: (5)**
- FILM 490 - Cooperative Education **Credits: (1-12)**
- FILM 491 - Workshop **Credits: (1-6)**
- FILM 492 - Practicum **Credits: (2)**
- FILM 496 - Individual Study **Credits: (1-6)**
- FILM 498 - Special Topics **Credits: (1-6)**
- FILM 499 - Seminar **Credits: (1-6)**
- FR 460 - French Cinema (Put on reserve 9/16/18) **Credits: (4)**
- JAPN 462 - Japanese Cinema **Credits: (5)**
- RUSS 462 - Russian Cinema **Credits: (4)**
- SPAN 446 - Hispanic Cinema **Credits: (5)**

- TH 144 - Foundations of Acting **Credits: (3)**
- TH 329 - Directing I **Credits: (3)**
- TH 330 - Introduction to Playwriting **Credits: (4)**
- TH 356 - Stage Sound **Credits: (3)**
- TH 368 - Stage Lighting **Credits: (3)**

Total Credits: 75

College and Department Information

Film Program

College of Arts and Humanities

## Cinema Studies Minor

Students wishing to explore the history, theory, and criticism of film and television in addition to their major course of study, are encouraged to minor in cinema studies. In this minor, students examine the role of cinema as a unique twentieth-century art form and as an influence on cultural practices of enduring social significance.

### Admission Requirements

The cinema studies minor is open only to non-film majors.

### Graduation Requirements

Students must maintain a 2.4 GPA or higher with a minimum grade of C- in all courses counted toward fulfilling the cinema studies minor requirements.

Required Courses

- FILM 250 - Introduction to Film **Credits: (5)**
- ENG 342 - Cinema Studies I: Early American Film History **Credits: (4)**
- **OR** FILM 342 - Cinema Studies I: Early American Film History **Credits: (4)**
- ENG 343 - Cinema Studies II: Modern American Film History **Credits: (4)**
- **OR** FILM 343 - Cinema Studies II: Modern American Film History **Credits: (4)**
- ENG 344 - Cinema Studies III: Film Theory **Credits: (5)**
- **OR** FILM 344 - Cinema Studies III: Film Theory **Credits: (5)**
- ENG 360 - Cinema Studies IV: Survey of World Cinema **Credits: (5)**
- **OR** FILM 360 - Cinema Studies IV: Survey of World Cinema **Credits: (5)**
- ENG 460 - Cinema Studies V: Advanced World Cinema **Credits: (5)**
- **OR** FILM 460 - Cinema Studies V: Advanced World Cinema **Credits: (5)**
- FILM 492 - Practicum **Credits: (2)**

Choose two of the following:

- ENG 461 - Studies in Film and Culture **Credits: (5)**

- **OR** FILM 461 - Studies in Film and Culture **Credits:** (5)
- ENG 462 - Studies in Film and/or Television Genres **Credits:** (5)
- **OR** FILM 462 - Studies in Film and/or Television Genres **Credits:** (5)
- ENG 463 - Studies in the Film Auteur **Credits:** (5)
- **OR** FILM 463 - Studies in the Film Auteur **Credits:** (5)

Total Credits: 40

College and Department Information

Film Program  
College of Arts and Humanities

## Film Production Minor

For students who would like to study film production as a supplement to a major in another area, the Film Production minor offers a solid foundation in techniques and approaches to cinematic storytelling. Minors will graduate with a useful set of skills and vocabulary in writing, directing, editing, and camera operation.

### Admission Requirements

A Film major or minor can be selected by students using the normal major or minor declaration process and with assistance from a faculty advisor. Any student who has a minimum CWU grade point average of 2.4 or higher may be admitted to this program. Admission is dependent upon the number of slots available.

### Graduation Requirements

Students must maintain a 2.4 CWU GPA or higher with a minimum grade of C- in all courses counted toward fulfilling the film major or minor requirements.

Required Courses

- FILM 216 - Basic Audio Technology **Credits:** (1)
- FILM 217 - Basic Editing: Final Cut Pro **Credits:** (1)
- FILM 221 - Color Correction **Credits:** (1)
- FILM 250 - Introduction to Film **Credits:** (5)
- FILM 267 - Screenwriting Fundamentals **Credits:** (4)
- **OR** ENG 267 - Screenwriting Fundamentals **Credits:** (4)
- FILM 340 - Production I **Credits:** (5)
- FILM 350 - Production II **Credits:** (5)
- FILM 380 - Production III **Credits:** (4)
- FILM 453 - Wildcat Films **Credits:** (3)

Select one from the following: (4 credits)

- FILM 342 - Cinema Studies I: Early American Film History **Credits:** (4)
- **OR** ENG 342 - Cinema Studies I: Early American Film History **Credits:** (4)

- FILM 343 - Cinema Studies II: Modern American Film History **Credits:** (4)
- **OR** ENG 343 - Cinema Studies II: Modern American Film History **Credits:** (4)

Select one from the following: (5 credits)

- FILM 344 - Cinema Studies III: Film Theory **Credits:** (5)
- **OR** ENG 344 - Cinema Studies III: Film Theory **Credits:** (5)
- FILM 360 - Cinema Studies IV: Survey of World Cinema **Credits:** (5)
- **OR** ENG 360 - Cinema Studies IV: Survey of World Cinema **Credits:** (5)

Total Credits: 38

College and Department Information

Film Program  
College of Arts and Humanities

## Screenwriting Minor

The screenwriting minor offers students already majoring in film the opportunity to develop more advanced skills in cinematic storytelling, theoretical approaches to screenwriting, adaptation of other media to the screen and screenwriting for non-traditional story structures. Under the mentorship of faculty, screenwriting minors will spend considerable time writing and rewriting scripts, which will be added to a library of scripts available for development and production by students in the program.

This minor is open only to Film majors.

### Graduation Requirements

Students must maintain a 2.4 GPA or higher with a minimum grade of C- in all courses counted toward fulfilling the screenwriting minor requirements.

Required Courses

- FILM 327 - Scriptwriter in Development and Production **Credits:** (4)
- FILM 356 - Writing for Screen Genre **Credits:** (4)
- ENG 357 - Writing for Serial Media **Credits:** (4)
- **OR** FILM 357 - Writing for Serial Media **Credits:** (4)
- ENG 460 - Cinema Studies V: Advanced World Cinema **Credits:** (5)
- **OR** FILM 460 - Cinema Studies V: Advanced World Cinema **Credits:** (5)
- FILM 492 - Practicum **Credits:** (2)

Take three times for a total of 15 credits:

- FILM 470 - The Writer's Room **Credits:** (5)

Total Credits: 34

College and Department Information

Film Program  
College of Arts and Humanities

# Finance and Supply Chain Management Department

College of Business  
Ellensburg (E)  
Shaw-Smyser Hall, room 413  
CWU-Des Moines (D)  
CWU-Lynnwood (L)  
CWU-Pierce County (P)  
CWU-Joint Base Lewis McChord

Mail Stop 7485  
509-963-2032  
Fax: 509-963-2875  
[www.cwu.edu/finance-supply](http://www.cwu.edu/finance-supply)  
See website for how this program may be used for educational and career purposes.

## Faculty and Staff Chair

Carlo D. Smith, PhD (D)

## Professors

Ozden Bayazit, PhD, supply chain management (L)  
Kun Liao, PhD, supply chain management (L)

## Associate Professors

Grace Ke, PhD, supply chain management (D)  
Yong Joo Lee, PhD, supply chain management (E)  
Carlo Smith, PhD, supply chain management (D)  
Thomas Tenerelli, PhD, finance (E)  
Fang Wang, PhD, finance (L)  
Michael Young, PhD, finance (E)

## Assistant Professor

B. Steele Campbell, personal financial planning  
Yuntaek Pae, PhD (D)  
Jae-Young Oh, PhD (E) supply chain management

## Staff

Shirley Hood, secretary senior

## Bachelor of Science in Business Administration Program

The Department of Finance and SCM and the Department of Management jointly support the bachelor of science in business administration and business minor. The department offers coursework leading to the bachelor of science in business administration (BSBA) degree. In addition to the university general education requirements, the BSBA major is comprised of three principal components:

Foundation courses that provide foundation knowledge and skills needed for further study in business

Business core courses that build on the foundation group and focus on decision making in the main functional areas of business

Specialization courses that allow for advanced study in one of the functional areas.

Students select a 25-credit specialization within the BSBA program in one of seven areas: finance, general business, human resource management, leadership and management, marketing management, personal financial planning or supply chain management.

## Program Goals for BSBA

The departments have identified overall educational outcomes related to knowledge, values, and skills for all BSBA graduates. Following are the outcomes for the bachelor of science in business administration (BSBA) programs:

1. Knowledge-based educational outcomes. Upon completion of the BSBA program, students should:

- Have a working knowledge of business administration that will aid them in private, government, or non-profit careers and/or prepare them for additional study

2. Values-based educational outcomes. Upon completion of the BSBA program, students should:

- Comprehend ethical issues and be able to apply an ethical decision-making framework to business decisions

3. Skills-based educational outcomes. Upon completion of the BSBA program, students should:

- Function effectively when in teams both as a leader and as a member
- Demonstrate effective oral communication skills
- Demonstrate effective written communication skills
- Apply quantitative and qualitative critical thinking skills to develop, access, and use information to analyze business problems and propose feasible solutions

## Additional BSBA Graduation Requirements

The following special rules apply to students seeking the BSBA major:

- Students must earn a minimum cumulative GPA of 2.25 in the 99- to 100-credit in-the-major coursework to be eligible for a degree. In addition, the department requires a minimum GPA of 2.25 in the 59- to 60-credit upper-division component of the in-the-major total.
- Transfer students must complete at least 40 College of Business credits at CWU to be eligible for the BSBA degree, including MGT 489. Additionally, students seeking a Human Resource Management specialization must complete HRM 486 at CWU and students seeking a Marketing specialization must complete MKT 470 at CWU.

- The BSBA program requires a single specialization of at least 25 credits. Occasionally a student requests a second specialization. To be eligible for a second specialization, a minimum of 20 unique credits must be completed. Unique in this sense means the credits have not been used as part of any other BSBA specialization.

#### **Repeat Policy**

Business administration courses may be repeated only once.

#### **College of Business Admission Requirements**

For information on admission requirements, please go to: College of Business.

#### **Program Outcomes**

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

#### **Course Offerings**

Frequency of course offering information can be found at the department website: [www.cwu.edu/finance-supply](http://www.cwu.edu/finance-supply) or by contacting the department directly.

## **Supply Chain Management, BAS**

Supply Chain Management (SCM) builds and prepares students for careers as analysts, decision makers and managers in any and all segments of an organization's supply, production distribution chain. Students who complete this program will have a fundamental understanding of the systematic, integrated nature of the creation and delivery of goods and services, and the manner in which the supply, production and distribution chain includes or involves other internal and external entities. Students will be able to solve problems and make decisions in this environment by using concepts from other business administration areas, computing and analytical skills, and appropriate quantitative and qualitative models.

The bachelor of applied science in supply chain management (BAS-SCM) is designed for students with an approved applied or technical associates' degree to gain a baccalaureate degree in a timely fashion.

#### **Undergraduate Business Program Learning Goals:**

The Departments have identified overall educational outcomes related to knowledge, values, and skills for all Business graduates. Following are the outcomes for the Bachelor of Applied Science in Supply Chain Management. Graduates of this program will be able to demonstrate:

1. Foundation knowledge and skill in the fundamental business disciplines.
2. Effective communication in written and oral business presentations.
3. Comprehension and application of ethical principles in business decisions.
4. Problems solving ability using integrative and critical assessment of business information and appropriate technical tools.
5. Career readiness through participation in Career Center events, self-assessment, club activities, internships and other professional engagement.
6. Competency in their specialized field of study.

#### **Admission Requirements**

Applicants for the BAS Supply Chain Management must meet the following requirements prior to admission.

- Completion of an approved applied or technical degree from a community or technical college.
- A minimum collegiate GPA of 2.25.
- ENG 101 - Academic Writing I, with grade of 1.7 or better
- A world language is not required.
- Students applying to this program must meet with an advisor for the College of Business for a full evaluation of credits and requirements prior to be admitted to the program.

Application forms are available in the Department offices. The completed form must be accompanied by transcripts that reflect all prior college work.

These criteria apply to equivalent courses transferred from other institutions.

Students who have met all of the above requirements will be admitted unless the number of applicants exceeds available space. In that case, acceptance will be competitive, based on a selection index.

#### **Graduation Requirements**

The following special rules apply to students seeking the BAS Supply Chain Management major:

- Students must earn a minimum cumulative GPA of 2.25 in-the-major coursework to be eligible for a degree. In addition, the department requires a minimum GPA of 2.25 in the upper-division component of the in-the-major total.
- Transfer students must complete at least 40 College of Business credits at CWU to be eligible for the BAS degree.

Admission Requirements Credits: 5

- ENG 101 - Academic Writing I: Critical Reading and Responding **Credits: (5)**

Foundation Courses Credits: 25

- ACCT 251 - Financial Accounting **Credits: (5)**
- **OR** ACCT 301 - Accounting Skills for Non-Accounting Majors **Credits: (5)**
- BUS 221 - Introductory Business Statistics **Credits: (5)**
- BUS 241 - Legal Environment of Business **Credits: (5)**
- ECON 130 - Foundations for Business Analytics **Credits: (5)**
- **OR** MATH 130 - Finite Mathematics **Credits: (5)**
- ECON 201 - Principles of Economics Micro **Credits: (5)**

Core Courses Credits: 35

- BUS 102 - Business Computer Skills **Credits:** (5)
- BUS 301 - Contemporary Approaches to Personal and Professional Development **Credits:** (3)
- BUS 489 - AACSB Assessment **Credits:** (2)
- FIN 370 - Introductory Financial Management **Credits:** (5)
- MGT 382 - Principles of Management **Credits:** (5)
- MIS 320 - Business Process Analysis and Systems **Credits:** (5)
- **OR** MIS 386 - Management Information Systems **Credits:** (5)
- MKT 362 - Essential Marketing Concepts **Credits:** (5)
- SCM 310 - Supply Chain Management **Credits:** (5)

Required Courses Credits: 20

- SCM 425 - Procurement and Supply Management **Credits:** (5)
- SCM 435 - Supply Chain Operations **Credits:** (5)
- SCM 450 - Logistics and Transportation **Credits:** (5)
- SCM 480 - Supply Chain Strategy **Credits:** (5)

Select a minimum of 5 credits from the following:

- SCM 310A - Enterprise Sales and Distribution Systems Lab **Credits:** (1)
- SCM 420 - Lean/Six Sigma Processes **Credits:** (5)
- SCM 425A - Enterprise Purchasing and Materials Management Systems Lab **Credits:** (1)
- SCM 435A - Enterprise Production Planning and Execution Systems Lab **Credits:** (1)
- SCM 475 - Global Trade and Supply Chain Management **Credits:** (5)
- SCM 490 - Supply Chain Management Internship **Credits:** (1-12) (Must be taken for 5 credits)
- SCM 492 - Lean Six Sigma Practicum **Credits:** (5)
- SCM 493 - Supply Chain Boot Camp **Credits:** (1-6)
- SCM 496 - Individual Study **Credits:** (1-6)

Total Credits: 90

College and Department Information

Finance and Supply Chain Management Department  
College of Business

#### College of Business Admission Requirements

For information on admission requirements, please go to College of Business.

#### Program Outcomes

Visit program outcomes to find out what you can expect to know and do after successful completion of this program.

## Business Administration BS (BSBA), Finance Specialization

Finance builds on the business core and focuses on decision making in three interrelated areas: managerial finance, investments, and financial markets and institutions. The business core and finance specialization courses provide academic preparation for a wide variety of entry-level positions in managerial finance and the financial services industry.

#### Undergraduate Business Program Learning Goals:

The departments have identified overall educational outcomes related to knowledge, values, and skills for all BSBA graduates. Following are the outcomes for the bachelor of science in business administration (BSBA) programs. Graduates of this program will be able to demonstrate:

1. Foundation knowledge and skill in the fundamental business disciplines.
2. Effective communication in written and oral business presentations.
3. Comprehension and application of ethical principles in business decisions.
4. Problems solving ability using integrative and critical assessment of business information and appropriate technical tools.
5. Career readiness through participation in Career Center events, self-assessment, club activities, internships and other professional engagement.
6. Competency in their specialized field of study.

#### Graduation Requirements

The following special rules apply to students seeking the BSBA major:

- Students must earn a minimum cumulative GPA of 2.25 in-the-major coursework to be eligible for a degree. In addition, the department requires a minimum GPA of 2.25 in the upper-division component of the in-the-major total.
- Transfer students must complete at least 40 College of Business credits at CWU to be eligible for the BSBA degree, including MGT 489. Additionally, students seeking a Human Resource Management specialization must complete HRM 486 at CWU and students seeking a Marketing specialization must complete MKT 470 at CWU.
- The BSBA program requires a single specialization of at least 25 credits. Occasionally a student requests a second specialization. To be eligible for a second specialization, a minimum of 20 unique credits must be completed. Unique in this sense means the credits have not been used as part of any other BSBA specialization.

#### Repeat Policy

Business administration courses may be repeated only once.

#### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Develop foundation knowledge and skills in Management, Marketing, Human Resource



Management, and Business Law, Finance and Supply Chain Management.

- Demonstrate competency in specialized field of study (e.g., human resource management, supply chain management, leadership and management, finance, marketing).
- Create and deliver effective oral presentations.
- Students written communication skills meet professional and industry standards.
- Comprehend ethical issues in business and demonstrate an ability to make ethical decisions.
- Integrate and critically assess business information to make strategic decisions.
- Work effectively in small and large teams.

#### Business Foundation Courses

- ACCT 251 - Financial Accounting **Credits: (5)**
- ACCT 252 - Managerial Accounting **Credits: (5)**
- BUS 102 - Business Computer Skills **Credits: (5)**
- BUS 110 - Professional Development 1 **Credits: (1)**
- BUS 221 - Introductory Business Statistics **Credits: (5)**
- BUS 241 - Legal Environment of Business **Credits: (5)**
- ECON 201 - Principles of Economics Micro **Credits: (5)**  
Select one from the following: 5 credits
- ECON 130 - Foundations for Business Analytics **Credits: (5)**
- MATH 130 - Finite Mathematics **Credits: (5)**
- MATH 170 - Intuitive Calculus **Credits: (5)**

Select one from the following: 5 credits

- MATH 153 - Pre-Calculus Mathematics I **Credits: (5)**
- MATH 154 - Pre-Calculus Mathematics II **Credits: (5)**
- MATH 170 - Intuitive Calculus **Credits: (5)** (May only be used once in the program)
- MATH 172 - Calculus I **Credits: (5)**
- MATH 173 - Calculus II **Credits: (5)**

Foundation Total Credits: 41

#### Business Core Courses

- BUS 301 - Contemporary Approaches to Personal and Professional Development **Credits: (3)**
- **OR** MGT 200 - Essential Skills for Business Professionals **Credits: (5)**
- BUS 310 - Professional Development 2 **Credits: (1)**
- COM 301 - Public Speaking for Business and Organizations **Credits: (2)**
- ECON 202 - Principles of Economics Macro **Credits: (5)**
- ENG 311 - Business Writing **Credits: (3)**
- FIN 370 - Introductory Financial Management **Credits: (5)**

- MGT 382 - Principles of Management **Credits: (5)**
- MIS 320 - Business Process Analysis and Systems **Credits: (5)**
- **OR** MIS 386 - Management Information Systems **Credits: (5)**
- MKT 362 - Essential Marketing Concepts **Credits: (5)**
- SCM 310 - Supply Chain Management **Credits: (5)**

Business Core Total Credits: 39-41

#### Finance Specialization Courses

##### Required Courses

- ECON 330 - Money and Banking **Credits: (5)**
- FIN 470 - Intermediate Financial Management **Credits: (5)**
- FIN 475 - Investments **Credits: (5)**

Select a minimum of 10 credits from the following:

(with no more than 5 credits from ECON classes)

- BUS 490 - Cooperative Education **Credits: (1-12)**  
(Must be taken for 5 credits)
- ECON 310 - International Economics **Credits: (5)**
- ECON 332 - Public Finance **Credits: (5)**
- ECON 352 - Managerial Economics **Credits: (5)**
- FIN 466 - Working Capital Management **Credits: (5)**
- FIN 474 - Personal Financial Planning **Credits: (5)**
- FIN 477 - International Finance **Credits: (5)**
- FIN 493 - Finance Boot Camp **Credits: (1-6)**  
or one other course approved in advance by a financial advisor **Credits: (5)**

Total Specialization Credits: 25

##### College of Business Capstone

- BUS 489 - AACSB Assessment **Credits: (2)**
- MGT 489 - Strategic Management **Credits: (5)**

Capstone Total Credits: 7

Total Credits: 112-114

#### College and Department Information

Finance and Supply Chain Management Department  
College of Business

#### College of Business Admission Requirements

For information on admission requirements, please go to:  
College of Business.

# Business Administration BS (BSBA), Personal Financial Planning Specialization

Personal Financial Planning (PFP) prepares graduates to become fee-for-service professional planners with strong ethical standards who work with families and individuals developing specific budget, asset management, and related planning processes. The program design and content also meets educational requirements to sit for the Certified Financial Planning Board of Standards, Inc. accreditation examination.

## Undergraduate Business Program Learning Goals:

The departments have identified overall educational outcomes related to knowledge, values, and skills for all BSBA graduates. Following are the outcomes for the Bachelor of Science in business administration (BSBA) programs. Graduates of this program will be able to demonstrate:

1. Foundation knowledge and skill in the fundamental business disciplines.
2. Effective communication in written and oral business presentations.
3. Comprehension and application of ethical principles in business decisions.
4. Problems solving ability using integrative and critical assessment of business information and appropriate technical tools.
5. Career readiness through participation in Career Center events, self-assessment, club activities, internships and other professional engagement.
6. Competency in their specialized field of study.

## Graduation Requirements

The following special rules apply to students seeking the BSBA major:

- Students must earn a minimum cumulative GPA of 2.25 in-the-major coursework to be eligible for a degree. In addition, the department requires a minimum GPA of 2.25 in the upper-division component of the in-the-major total.
- Transfer students must complete at least 40 College of Business credits at CWU to be eligible for the BSBA degree, including MGT 489. Additionally, students seeking a Human Resource Management specialization must complete HRM 486 at CWU and students seeking a Marketing specialization must complete MKT 470 at CWU.
- The BSBA program requires a single specialization of at least 25 credits. Occasionally a student requests a second specialization. To be eligible for a second specialization, a minimum of 20 unique credits must be completed. Unique in this sense means the credits have not been used as part of any other BSBA specialization.

## Repeat Policy

Business administration courses may be repeated only once.

## Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Develop foundation knowledge and skills in Management, Marketing, Human Resource Management, and Business Law, Finance and Supply Chain Management.
- Demonstrate competency in specialized field of study (e.g., human resource management, supply chain management, leadership and management, finance, marketing).
- Create and deliver effective oral presentations.
- Students written communication skills meet professional and industry standards.
- Comprehend ethical issues in business and demonstrate an ability to make ethical decisions.
- Integrate and critically assess business information to make strategic decisions.
- Work effectively in small and large teams.

## Business Foundation Courses

- ACCT 251 - Financial Accounting **Credits: (5)**
- ACCT 252 - Managerial Accounting **Credits: (5)**
- BUS 102 - Business Computer Skills **Credits: (5)**
- BUS 110 - Professional Development 1 **Credits: (1)**
- BUS 221 - Introductory Business Statistics **Credits: (5)**
- BUS 241 - Legal Environment of Business **Credits: (5)**
- ECON 201 - Principles of Economics Micro **Credits: (5)**  
Select one from the following: 5 credits
- ECON 130 - Foundations for Business Analytics **Credits: (5)**
- MATH 130 - Finite Mathematics **Credits: (5)**
- MATH 170 - Intuitive Calculus **Credits: (5)**

Select one from the following: 5 credits

- MATH 153 - Pre-Calculus Mathematics I **Credits: (5)**
- MATH 154 - Pre-Calculus Mathematics II **Credits: (5)**
- MATH 170 - Intuitive Calculus **Credits: (5)** (May only be used once in the program)
- MATH 172 - Calculus I **Credits: (5)**
- MATH 173 - Calculus II **Credits: (5)**

Foundation Total Credits: 41

## Business Core Courses

- BUS 301 - Contemporary Approaches to Personal and Professional Development **Credits: (3)**
- **OR** MGT 200 - Essential Skills for Business Professionals **Credits: (5)**
- ECON 202 - Principles of Economics Macro **Credits: (5)**
- FIN 370 - Introductory Financial Management **Credits: (5)**
- MGT 382 - Principles of Management **Credits: (5)**

- MIS 386 - Management Information Systems **Credits:** (5)
- MKT 362 - Essential Marketing Concepts **Credits:** (5)
- SCM 310 - Supply Chain Management **Credits:** (5)  
Select one from the following for 4-5 credits:
- ADMG 385 - Business Communications and Report Writing **Credits:** (4)
- COM 345 - Business and Professional Speaking **Credits:** (4)
- ENG 310 - Technical Writing **Credits:** (4)

Business Core Total Credits: 37-40

Personal Financial Planning Specialization

Required Courses

- ACCT 303 - Tax Planning for Personal Finance **Credits:** (5)
- PFP 310 - Introduction to the Financial Planning Profession **Credits:** (5)
- PFP 440 - Estate Planning **Credits:** (5)
- PFP 450 - Insurance and Risk Management **Credits:** (5)
- PFP 475 - Financial Planning Investments **Credits:** (5)
- **OR** FIN 475 - Investments **Credits:** (5)
- PFP 460 - Retirement Planning **Credits:** (5)
- PFP 480 - Financial Planning Capstone **Credits:** (5)

Total Required Courses Credits: 35

College of Business Capstone

- BUS 489 - AACSB Assessment **Credits:** (2)
- MGT 489 - Strategic Management **Credits:** (5)

Capstone Total Credits: 7

Total Credits: 120-123

College and Department Information

Finance and Supply Chain Management Department  
College of Business

#### College of Business Admission Requirements

For information on admission requirements, please go to:  
College of Business.

## Business Administration BS (BSBA), Supply Chain Management Specialization

Supply Chain Management (SCM) builds on the business core and prepares students for careers as analysts, decision makers

and managers in any and all segments of the organization's supply, production and distribution chain. Students who complete this program will have a fundamental understanding of the systematic, integrated nature of the creation and delivery of goods and services, and the manner in which the supply, production and distribution chain includes or involves other internal and external entities. Students will be able to solve problems and make decisions in this environment by using concepts from accounting, economics and other business administration areas, computing and analytical skills, and appropriate quantitative and qualitative models.

#### Program Goals for BSBA

The departments have identified overall educational outcomes related to knowledge, values, and skills for all BSBA graduates. Following are the outcomes for the bachelor of science in business administration (BSBA) programs:

1. Knowledge-based educational outcomes. Upon completion of the BSBA program, students should:

- Have a working knowledge of business administration that will aid them in private, government, or non-profit careers and/or prepare them for additional study

2. Values-based educational outcomes. Upon completion of the BSBA program, students should:

- Comprehend ethical issues and be able to apply an ethical decision-making framework to business decisions

3. Skills-based educational outcomes. Upon completion of the BSBA program, students should:

- Function effectively when in teams both as a leader and as a member
- Demonstrate effective oral communication skills
- Demonstrate effective written communication skills
- Apply quantitative and qualitative critical thinking skills to develop, access, and use information to analyze business problems and propose feasible solutions

#### Additional BSBA Graduation Requirements

The following special rules apply to students seeking the BSBA major:

- Students must earn a minimum cumulative GPA of 2.25 in the 99- to 100-credit in-the-major coursework to be eligible for a degree. In addition, the department requires a minimum GPA of 2.25 in the 59- to 60-credit upper-division component of the in-the-major total.
- Transfer students must complete at least 40 College of Business credits at CWU to be eligible for the BSBA degree, including MGT 489. Additionally, students seeking a Human Resource Management specialization must complete HRM 486 at CWU and students seeking a Marketing specialization must complete MKT 470 at CWU.
- The BSBA program requires a single specialization of at least 25 credits. Occasionally a student requests a second specialization. To be eligible for a second specialization, a minimum of 20 unique credits must

be completed. Unique in this sense means the credits have not been used as part of any other BSBA specialization.

#### **Repeat Policy**

Business administration courses may be repeated only once.

#### **Program Learner Outcomes**

Upon successful completion of this program, students will be able to:

- Develop foundation knowledge and skills in Management, Marketing, Human Resource Management, and Business Law, Finance and Supply Chain Management.
- Demonstrate competency in specialized field of study (e.g., human resource management, supply chain management, leadership and management, finance, marketing).
- Create and deliver effective oral presentations.
- Students written communication skills meet professional and industry standards.
- Comprehend ethical issues in business and demonstrate an ability to make ethical decisions.
- Integrate and critically assess business information to make strategic decisions.
- Work effectively in small and large teams.

#### **Business Foundation Courses**

- ACCT 251 - Financial Accounting **Credits:** (5)
- ACCT 252 - Managerial Accounting **Credits:** (5)
- BUS 102 - Business Computer Skills **Credits:** (5)
- BUS 110 - Professional Development 1 **Credits:** (1)
- BUS 221 - Introductory Business Statistics **Credits:** (5)
- BUS 241 - Legal Environment of Business **Credits:** (5)
- ECON 201 - Principles of Economics Micro **Credits:** (5)  
Select one from the following: 5 credits
- ECON 130 - Foundations for Business Analytics **Credits:** (5)
- MATH 130 - Finite Mathematics **Credits:** (5)
- MATH 170 - Intuitive Calculus **Credits:** (5)

Select one from the following: 5 credits

- MATH 153 - Pre-Calculus Mathematics I **Credits:** (5)
- MATH 154 - Pre-Calculus Mathematics II **Credits:** (5)
- MATH 170 - Intuitive Calculus **Credits:** (5) (May only be used once in the program)
- MATH 172 - Calculus I **Credits:** (5)
- MATH 173 - Calculus II **Credits:** (5)

Foundation Total Credits: 41

#### **Business Core Courses**

- BUS 301 - Contemporary Approaches to Personal and Professional Development **Credits:** (3)
- **OR** MGT 200 - Essential Skills for Business Professionals **Credits:** (5)
- BUS 310 - Professional Development 2 **Credits:** (1)
- COM 301 - Public Speaking for Business and Organizations **Credits:** (2)
- ECON 202 - Principles of Economics Macro **Credits:** (5)
- ENG 311 - Business Writing **Credits:** (3)
- FIN 370 - Introductory Financial Management **Credits:** (5)
- MGT 382 - Principles of Management **Credits:** (5)
- MIS 320 - Business Process Analysis and Systems **Credits:** (5)
- **OR** MIS 386 - Management Information Systems **Credits:** (5)
- MKT 362 - Essential Marketing Concepts **Credits:** (5)
- SCM 310 - Supply Chain Management **Credits:** (5)

Business Core Total Credits: 39-41

#### **Supply Chain Management Specialization Courses**

#### **Required Courses**

- SCM 425 - Procurement and Supply Management **Credits:** (5)
- SCM 435 - Supply Chain Operations **Credits:** (5)
- SCM 450 - Logistics and Transportation **Credits:** (5)
- SCM 480 - Supply Chain Strategy **Credits:** (5)

Select a minimum of 5 credits from the following:

- ACCT 305 - Cost Accounting **Credits:** (5)
- MIS 460 - Applied Business Analytics **Credits:** (5)
- SCM 310A - Enterprise Sales and Distribution Systems Lab **Credits:** (1)
- SCM 420 - Lean/Six Sigma Processes **Credits:** (5)
- SCM 425A - Enterprise Purchasing and Materials Management Systems Lab **Credits:** (1)
- SCM 435A - Enterprise Production Planning and Execution Systems Lab **Credits:** (1)
- SCM 450 - Logistics and Transportation **Credits:** (5)
- SCM 475 - Global Trade and Supply Chain Management **Credits:** (5)
- SCM 490 - Supply Chain Management Internship **Credits:** (1-12)
- SCM 492 - Lean Six Sigma Practicum **Credits:** (5)
- SCM 496 - Individual Study **Credits:** (1-6)  
**OR** one other course approved in advance by SCM advisor **Credits:** (5)

Total Specialization Credits: 25

#### **College of Business Capstone**

- BUS 489 - AACSB Assessment **Credits:** (2)

- MGT 489 - Strategic Management **Credits: (5)**

Capstone Total Credits: 7

Total Credits: 112-114

College and Department Information

Finance and Supply Chain Management Department  
College of Business

### College of Business Admission Requirements

For information on admission requirements, please go to:  
College of Business.

## Personal Financial Planning, BS

Personal Financial Planning (PFP) prepares graduates to become fee-for service professional planners with strong ethical standards who work with families and individuals developing specific budget, asset management, and related planning processes. The program design and content also meets educational requirements to sit for the Certified Financial Planning Board of Standards, Inc. accreditation examination.

### Undergraduate Business Program Learning Goals:

The departments have identified overall educational outcomes related to knowledge, values, and skills for all BSBA graduates. Following are the outcomes for the Bachelor of Science in business administration (BSBA) programs. Graduates of this program will be able to demonstrate:

1. Foundation knowledge and skill in the fundamental business disciplines.
2. Effective communication in written and oral business presentations.
3. Comprehension and application of ethical principles in business decisions.
4. Problems solving ability using integrative and critical assessment of business information and appropriate technical tools.
5. Career readiness through participation in Career Center events, self-assessment, club activities, internships and other professional engagement.
6. Competency in their specialized field of study.

### Graduation Requirements

The following special rules apply to students seeking the BS PFP major:

- Students must earn a minimum cumulative GPA of 2.25 in-the-major coursework to be eligible for a degree. In addition, the department requires a minimum GPA of 2.25 in the upper-division component of the in-the-major total.
- Transfer students must complete at least 40 College of Business credits at CWU to be eligible for the BS PFP degree.

### Repeat Policy

Business administration and Personal Financial Planning courses may be repeated only once.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Develop foundation knowledge and skills in Management, Marketing, Human Resource Management, and Business Law, Finance and Supply Chain Management.
- Demonstrate competency in specialized field of study (e.g., human resource management, supply chain management, leadership and management, finance, marketing).
- Create and deliver effective oral presentations.
- Have written communication skills meet professional and industry standards.
- Comprehend ethical issues in business and demonstrate an ability to make ethical decisions.
- Integrate and critically assess business information to make strategic decisions.
- Work effectively in small and large teams.

Foundation Course Credits: 30

- BUS 221 - Introductory Business Statistics **Credits: (5)**
- BUS 241 - Legal Environment of Business **Credits: (5)**
- ECON 201 - Principles of Economics Micro **Credits: (5)**
- ECON 202 - Principles of Economics Macro **Credits: (5)**  
Select one from the following:
- ECON 130 - Foundations for Business Analytics **Credits: (5)**
- MATH 130 - Finite Mathematics **Credits: (5)**  
Select one from the following:
- ACCT 251 - Financial Accounting **Credits: (5)**
- ACCT 301 - Accounting Skills for Non-Accounting Majors **Credits: (5)** (or approved substitute)

Core Course Credits: 30-32

- BUS 301 - Contemporary Approaches to Personal and Professional Development **Credits: (3)**
- **OR** MGT 200 - Essential Skills for Business Professionals **Credits: (5)**
- BUS 102 - Business Computer Skills **Credits: (5)**
- BUS 489 - AACSB Assessment **Credits: (2)**
- FIN 370 - Introductory Financial Management **Credits: (5)**
- MGT 382 - Principles of Management **Credits: (5)**
- MKT 362 - Essential Marketing Concepts **Credits: (5)**
- SCM 310 - Supply Chain Management **Credits: (5)**

Required Course Credits: 48

- ACCT 303 - Tax Planning for Personal Finance **Credits: (5)**
- **OR** ACCT 340 - Income Tax Accounting I **Credits: (5)**

- FCL 355 - Family Financial Counseling **Credits: (4)**
- PFP 310 - Introduction to the Financial Planning Profession **Credits: (5)**
- PFP 386 - Information Technologies for Financial Planning **Credits: (4)**
- PFP 440 - Estate Planning **Credits: (5)**
- PFP 450 - Insurance and Risk Management **Credits: (5)**
- PFP 460 - Retirement Planning **Credits: (5)**
- PFP 475 - Financial Planning Investments **Credits: (5)**
- PFP 480 - Financial Planning Capstone **Credits: (5)**
- PFP 490 - Personal Financial Planning Internship **Credits: (1-12)** (Must be taken for 5 credits.)

Written and Verbal Communications Course Credits: 5

- COM 301 - Public Speaking for Business and Organizations **Credits: (2)**
- ENG 311 - Business Writing **Credits: (3)**

Total Credits: 113-115

College and Department Information

Finance and Supply Chain Management Department  
College of Business

#### College of Business Admission Requirements

For information on admission requirements, please go to: College of Business.

#### Program Outcomes

Visit program outcomes to find out what you can expect to know and do after successful completion of this program.

## Business Minor (FSCM)

The business minor provides students with an introduction to several key areas of business administration. Business minors are only available to students with declared majors. Declaration forms, with instructions, are available online, in department and in center offices. Students must earn a cumulative grade point average of 2.25 in courses allowed in fulfilling the business administration minor requirements.

Business Minor Core

Required Courses

- ACCT 252 - Managerial Accounting **Credits: (5)**
- **OR** ACCT 301 - Accounting Skills for Non-Accounting Majors **Credits: (5)**
- BUS 241 - Legal Environment of Business **Credits: (5)**
- BUS 374 - Personal Investments **Credits: (5)**
- **OR** ECON 201 - Principles of Economics Micro **Credits: (5)**

- HRM 381 - Management of Human Resources **Credits: (5)**
- MKT 360 - Principles of Marketing **Credits: (5)**
- MGT 380 - Organizational Management **Credits: (5)**

Total Credits: 30

College and Department Information

Finance and Supply Chain Management Department  
College of Business

#### College of Business Admission Requirements

For information on admission requirements, please go to: College of Business.

## Finance Minor

The finance minor provides students in business, economics, accounting and actuarial sciences with grounding in key financial principles and practices. Finance minors are only available to students who are currently pursuing a major in business, accounting or actuarial sciences. Declaration forms, with instructions, are available online, in department and in center offices. Students must earn a cumulative grade point average of 2.25 in courses allowed in fulfilling the finance minor requirements.

Required Courses

- ECON 202 - Principles of Economics Macro **Credits: (5)**
- ECON 330 - Money and Banking **Credits: (5)**
- FIN 370 - Introductory Financial Management **Credits: (5)**
- FIN 470 - Intermediate Financial Management **Credits: (5)**
- FIN 475 - Investments **Credits: (5)**

Total Credits: 25

College and Department Information

Finance and Supply Chain Management Department  
College of Business

#### College of Business Admission Requirements

For information on admission requirements, please go to: College of Business.

## Supply Chain Management Minor

The minor program provides the opportunity for the student to gain knowledge and skills in the full spectrum of supply chain activities-supplier relationships, purchasing management, operations and inventory management, logistics and transportation, quality management, and information

technology. Typical job titles include: purchasing/supply manager, procurement manager, materials manager, demand planner, logistics analyst as well as others.

#### Additional Notes:

This program is open to current accounting, economics, finance, management and marketing students, and CWU students in other academic programs who have completed the necessary pre-requisite courses. The courses in the minor may be used as part of the BS Business Administration Program.

#### Required Courses

- ECON 130 - Foundations for Business Analytics **Credits:** (5)
- **OR** MATH 130 - Finite Mathematics **Credits:** (5)
  
- ECON 201 - Principles of Economics Micro **Credits:** (5)
- SCM 310 - Supply Chain Management **Credits:** (5)
- SCM 425 - Procurement and Supply Management **Credits:** (5)
- SCM 435 - Supply Chain Operations **Credits:** (5)
- SCM 475 - Global Trade and Supply Chain Management **Credits:** (5)

Select a minimum of 5 credits from the following:

- ACCT 305 - Cost Accounting **Credits:** (5)
- BUS 490 - Cooperative Education **Credits:** (1-12)
- MGT 484 - International Management (Put on reserve 9/16/18) **Credits:** (5)
- SCM 302 - Supply Chain Bootcamp **Credits:** (2)
- SCM 420 - Lean/Six Sigma Processes **Credits:** (5)
- SCM 450 - Logistics and Transportation **Credits:** (5)

Total Credits: 35

#### College and Department Information

Finance and Supply Chain Management Department  
College of Business

#### College of Business Admission Requirements

For information on admission requirements, please go to: College of Business.

#### Program Outcomes

Visit program outcomes to find out what you can expect to know and do after successful completion of this program.

## Enterprise Process and Systems Integration Certificate

The enterprise process and systems integration certificate provides students with critical grounding in business process management and the role of enterprise systems in the support and improvement of business processes and organizational performance. Students are exposed to business

processes in all areas of an organization including accounting, purchasing, operations, distribution, sales, finance and others. Students receive hand-on experience with a leading enterprise resources planning system as a user. They learn business process analysis and how to configure an enterprise system to better support business processes. They learn how to leverage data stored in such systems to conduct sophisticated analyses to support business decisions.

#### Admission Requirements

This program is open to current accounting, economics, finance, management and marketing students, CWU students in other academic programs who have completed certificate course prerequisites and persons in other fields who have completed program prerequisite courses. The courses in the certificate program may be used as part of the BS Business Administration program.

#### Required Courses

- MIS 320 - Business Process Analysis and Systems **Credits:** (5)
- MIS 446 - Systems Analysis and Design in Business **Credits:** (5)
- MIS 460 - Applied Business Analytics **Credits:** (5)

Total Credits: 15

#### College and Department Information

Finance and Supply Chain Management Department  
College of Business

#### College of Business Admission Requirements

For information on admission requirements, please go to: College of Business.

Visit program outcomes to find out what you can expect to know and do after successful completion of this program.

## Lean Six Sigma Greenbelt Certificate

The courses in Lean Six Sigma Greenbelt Certificate provide students with the necessary concepts, skills, techniques and experiences to improve operating processes and quality in all sectors of profit and not-for-profit organizations in a manufacturing, services or administrative environment.

#### Admission Requirements

##### Additional Notes:

This program is open to current accounting, economics, finance, management and marketing students, CWU students in other academic programs who have completed certificate course prerequisites and persons in other fields who have completed program prerequisite courses. The courses in the certificate program may be used as part of the BS Business Administration program. A cumulative GPA of 3.0 must be earned in the program to be eligible for the certificate.

Prerequisite Credits: 5

- BUS 221 - Introductory Business Statistics **Credits:** (5)

Required Courses Credits: 10

- SCM 420 - Lean/Six Sigma Processes **Credits:** (5)
- SCM 492 - Lean Six Sigma Practicum **Credits:** (5)

Total Credits: 15

College and Department Information

Finance and Supply Chain Management Department  
College of Business

#### College of Business Admission Requirements

For information on admission requirements, please go to:  
College of Business.

## Personal Financial Planning Certificate

The Personal Financial Planning Certificate incorporates all course requirements necessary to qualify for CFP Boards Certified Financial Planner examination.

#### Program Requirements

Students must complete 35 credits of the Personal Financial Planning Certificate in residency.

#### Additional Notes

This certificate program is directed toward graduates and working adults.

Required Courses

- ACCT 251 - Financial Accounting **Credits:** (5)
- ACCT 301 - Accounting Skills for Non-Accounting Majors **Credits:** (5)
- ACCT 303 - Tax Planning for Personal Finance **Credits:** (5)
- PFP 310 - Introduction to the Financial Planning Profession **Credits:** (5)
- PFP 440 - Estate Planning **Credits:** (5)
- PFP 450 - Insurance and Risk Management **Credits:** (5)
- PFP 460 - Retirement Planning **Credits:** (5)
- PFP 475 - Financial Planning Investments **Credits:** (5)
- PFP 480 - Financial Planning Capstone **Credits:** (5)

Total Credits: 40

College and Department Information

Finance and Supply Chain Management Department  
College of Business

## Supply Chain Management Certificate

The certificate program provides the opportunity for professionals to gain knowledge and skills in the full spectrum of supply chain activities-supplier relationships, purchasing management, operations and inventory management, logistics and transportation, quality management, and information technology. Typical job titles include: purchasing/ supply manager, procurement manager, materials manager, contracts manager, purchasing agent, senior buyer and buyer/planner.

#### Program Requirements

Students must complete 25 credits of the supply chain management certificate in residency.

A cumulative GPA of 3.0 must be earned in the program to be eligible for the certificate.

#### Additional Notes

This certificate program is directed toward graduates and working adults. Current students in accounting, economics, finance, management, marketing and those in other academic programs are encouraged to pursue a minor in supply chain management.

Required Courses

- SCM 310 - Supply Chain Management **Credits:** (5)
- SCM 425 - Procurement and Supply Management **Credits:** (5)
- SCM 450 - Logistics and Transportation **Credits:** (5)
- Select one from:**
- SCM 420 - Lean/Six Sigma Processes **Credits:** (5)
- SCM 435 - Supply Chain Operations **Credits:** (5)

Select a minimum of 5 credits from the following:

- ACCT 305 - Cost Accounting **Credits:** (5)
- MGT 484 - International Management (Put on reserve 9/16/18) **Credits:** (5)
- SCM 310A - Enterprise Sales and Distribution Systems Lab **Credits:** (1)
- SCM 420 - Lean/Six Sigma Processes **Credits:** (5)
- SCM 425A - Enterprise Purchasing and Materials Management Systems Lab **Credits:** (1)
- SCM 435A - Enterprise Production Planning and Execution Systems Lab **Credits:** (1)
- SCM 475 - Global Trade and Supply Chain Management **Credits:** (5)
- SCM 480 - Supply Chain Strategy **Credits:** (5)
- SCM 490 - Supply Chain Management Internship **Credits:** (1-12)
- SCM 492 - Lean Six Sigma Practicum **Credits:** (5)
- SCM 493 - Supply Chain Boot Camp **Credits:** (1-6)

Total Credits: 25

College and Department Information



Finance and Supply Chain Management Department  
College of Business

### **College of Business Admission Requirements**

For information on admission requirements, please go to:  
College of Business.

### **Program Outcomes**

Visit program outcomes to find out what you can expect to know and do after successful completion of this program.

# Geography Department

College of the Sciences  
Ellensburg  
Dean Hall, room 301  
Mail Stop 7420  
509-963-1188  
Fax: 509-963-1047

[www.cwu.edu/geography](http://www.cwu.edu/geography)

See website for how this program may be used for educational and career purposes.

### **Faculty and Staff Chair**

Michael Pease, PhD

### **Professors**

John Bowen, PhD, economic geography, transportation geography, Asia  
Anthony Gabriel, PhD, hydrology, lake and river ecosystems, coastal and wetlands management  
Robert Hickey, PhD, environmental impacts, coastal zones, GIS, Australia  
Karl Lillquist, PhD, physical geography, geomorphology, soils, environmental change in arid and alpine watersheds

### **Associate Professors**

Elvin E. Delgado, PhD, political ecology, energy and capitalism, political economy and nature, critical resource geography, health geography  
Jennifer Lipton, PhD, cultural ecology, remote sensing, climate change, Latin America  
Michael Pease, PhD, water resources, watershed planning and analysis, environmental law  
Craig Revels, PhD, cultural-historical geography, landscape, Latin America  
Megan Walsh, PhD, biogeography, paleoecology, NW fire history, climate change

### **Assistant Professors**

Sterling Quinn, PhD, GIS-geographic information systems, crowdsourced data, critical cartography, Latin America

### **Senior Lecturers**

Holly English, MS, environmental policy and energy resources  
Elaine Glenn, MS, political geography, world regional geography, Middle East, Russia

### **Emeritus Faculty**

Dee Eberhart, MA  
Kenneth Hammond, PhD  
James Huckabay, PhD

Nancy Hultquist, PhD  
Robert Kuhlken, PhD  
John Ressler, PhD  
Morris Uebelacker, PhD

### **Staff**

David Cordner, instructional and classroom support technician III  
Monica Reece-Bruya, secretary senior

### **Department Information**

An understanding of geography is integral to an educated person's ability to live and act effectively in today's changing world. A broad range of human, environmental, and technological factors are at work shaping the future of our planet, and it is the mission of the department of geography to prepare students to be active participants in that emerging future. Geography's traditional concern with human-environment interactions, the interrelationships between places, and the associated impacts and problems of these processes provides important insights into today's complex societal challenges. The department emphasizes critical thinking and applied approaches to analysis, while providing our graduates with the skills necessary to deal with issues at scales ranging from local to global.

Courses in the department of geography introduce students to world regions such as Asia and Latin America while also providing a fuller understanding for the patterns and relationships of our home region, the Pacific Northwest. We emphasize field learning and a holistic approach to the physical and societal characteristics of places. Majors in geography hone their written, verbal, and map communication skills while gaining proficiency in specialized tools such as geographic information systems (GIS) and remote sensing technology. Skills in geospatial analysis are useful in addressing a wide range of problems, from choosing a location for a neighborhood coffee shop to minimizing damage from wildfire to assessing the likely impacts of climate change.

The department maintains a state-of-the-art lab for instruction in GIS, air photo interpretation, remote sensing, and quantitative methods. Students also learn from and collaborate with faculty members in the department's well-equipped soils, paleoecology, and hydrology labs. The department also encourages students to connect their geography training with related university programs, especially those in which the department is an active participant, including: Environmental Studies, Energy Studies, Asia Studies, Latin American Studies, International Studies and Programs, and the Resource Management Graduate Program.

Upon graduation, geography majors work in a wide range of careers, with particular success in geospatial data analysis (e.g. computer mapping and GIS), urban and regional planning, and employment in local, state, and federal government agencies. In addition, the interdisciplinary nature of geography provides many other opportunities for our majors, including graduate school.

All students who wish to major in geography must:

1. Have a 2.25 minimum GPA in all coursework taken up to the time of admission
2. Apply for acceptance into the geography major
3. Upon acceptance into the program, meet with their assigned advisor to develop a major contract

- Earn a C- or higher grade in each of the courses in their major contract

### Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### Course Offerings

Frequency of course offering information can be found at the department website: [www.cwu.edu/geography](http://www.cwu.edu/geography) or by contacting the department directly.

## Geography Major, BA

This major of 65 credits offers students the greatest flexibility and is suited for students with interests outside of the specializations listed below. In consultation with a departmental advisor, students may choose a specialization and design a program of component courses which best fits specific career goals and aspirations. In addition to the core requirements, students pursuing this option must take a set of department-approved electives that includes an upper-division course from each of five subfields. To satisfy the overall major requirement, at least 8 of the credits must be in 400-level geography courses in addition to Geography 489 - Geography Capstone.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate improved familiarity with the basic geography of the Earth, especially the distribution of countries, major cities, and key physical features.
- Demonstrate improved familiarity with the discipline's vocabulary, concepts and themes.
- Demonstrate improved critical thinking ability with respect to the interactions of human systems and physical systems, the networks of intra- and international interdependence, and the manner in which human and physical systems modify each other and control the Earth's surface and resources.
- Effectively prepared by the Department of Geography for future careers.
- Communicate effectively in oral, written and a variety of graphical forms
- Effectively integrate ideas and information from human geography, physical geography, resource geography, regional geography, and techniques courses.

### Geography Core

#### Admission to the Major

All students who wish to major in geography must:

- Have a 2.25 minimum GPA in all coursework taken up to the time of admission
- Apply for acceptance into the geography major
- Upon acceptance into the program, meet with their assigned advisor to develop a major contract
- Earn a C- or higher grade in each of the courses in their major contract

### Core Requirements

- GEOG 101 - World Regional Geography **Credits:** (5)
- GEOG 107 - Our Dynamic Earth **Credits:** (5)
- GEOG 208 - Our Human World **Credits:** (5)
- GEOG 301 - Introduction to GIS and Maps **Credits:** (4)
- GEOG 250 - Resource Exploitation and Conservation **Credits:** (4)
- GEOG 489 - Geography Capstone **Credits:** (2)

Total Core Requirement Credits: 25

### Department-approved Electives

Must include one upper-division geography course in each of the five subfields: regional, physical, human, resource, and techniques.

Total Electives Credits: 40

Total Credits: 65

### College and Department Information

Geography Department  
College of the Sciences

## Geography BS, Environmental and Resource Geography Specialization

This specialization engages students in courses that primarily use field and laboratory techniques to study Earth's environmental systems and the human dimensions of resource use and allocation. The curriculum is designed to provide majors with an applied approach for developing data collection and analysis skills, as well as an ability to evaluate the societal and physical dimensions of environmental sustainability. This specialization places a strong emphasis on understanding human-environmental interactions, including climate change, hazards, and watershed and landscape dynamics in aquatic, mountain, arid, and forest environments, particularly the Pacific Northwest. Students who complete this specialization will be prepared for careers in natural resource management and are likely to be employed by federal, state, and tribal agencies, as well as private consulting firms. Students interested in graduate study in the field of environmental geography or resource management should work closely with their advisor to tailor this specialization to their particular field of interest.

### Geography Core

#### Admission to the Major

All students who wish to major in geography must:

1. Have a 2.25 minimum GPA in all coursework taken up to the time of admission
2. Apply for acceptance into the geography major
3. Upon acceptance into the program, meet with their assigned advisor to develop a major contract
4. Earn a C- or higher grade in each of the courses in their major contract

#### Core Requirements

- GEOG 101 - World Regional Geography **Credits: (5)**
- GEOG 107 - Our Dynamic Earth **Credits: (5)**
- GEOG 208 - Our Human World **Credits: (5)**
- GEOG 301 - Introduction to GIS and Maps **Credits: (4)**
- GEOG 250 - Resource Exploitation and Conservation **Credits: (4)**
- GEOG 489 - Geography Capstone **Credits: (2)**

Total Core Requirement Credits: 25

#### Environmental Geography Specialization

Environmental Geography Credits: 15

Choose three from the following:

- GEOG 361 - Soils **Credits: (5)**
- GEOG 382 - Hydrology **Credits: (5)**
- GEOG 483 - Snow **Credits: (5)**
- GEOG 386 - Geomorphology **Credits: (5)**
- GEOG 387 - Biogeography **Credits: (5)**
- GEOG 388 - Weather and Climate **Credits: (5)**
- GEOG 453 - Riparian and Wetlands Analysis **Credits: (5)**

Regional Courses Credits: 5

Choose one from the following:

- GEOG 450 - Arid Environments **Credits: (5)**
- GEOG 451 - Mountain Environments **Credits: (5)**
- GEOG 452 - Coastal Environments **Credits: (5)**
- GEOG 454 - Forest Environments **Credits: (5)**

Techniques Courses Credits: 10

- GEOG 409 - Quantitative Methods in Geography **Credits: (5)**  
and choose one from the following:
- GEOG 303 - GIS and Data Management **Credits: (5)**
- GEOG 325 - Field Methods in Geography **Credits: (5)**
- GEOG 330 - Airphoto Interpretation **Credits: (5)**

Resource Geography Courses Credits: 12-15

Choose three from the following:

- GEOG 305 - Introduction to Land Use Planning **Credits: (5)**
- GEOG 373 - Water Resources **Credits: (4)**
- GEOG 441 - Climate Change: Human and Biophysical Dimensions (Put on reserve 9/16/18) **Credits: (4)**
- GEOG 443 - Energy Policy **Credits: (5)**
- GEOG 444 - Mineral Resources (Put on reserve 9/16/18) **Credits: (4)**
- GEOG 445 - Environmental Law **Credits: (5)**
- GEOG 449 - Environmental Hazard Analysis and Management **Credits: (5)**
- GEOG 455 - Pyrogeography **Credits: (4)**
- GEOG 456 - Recreation Geography **Credits: (5)**

Culminating Experience Courses Credits: 5

Choose one from the following for 5 credits:

- GEOG 490 - Cooperative Education **Credits: (1-12)**
- GEOG 493 - Geography Field Experience **Credits: (1-12)**
- GEOG 496 - Individual Study **Credits: (1-6)**

Department-Approved Electives Credits: 13-15

Taken from environmental, techniques, regional, and resource courses above, or by advisement.

Total Specialization Credits: 60-65

Total Credits: 85-90

College and Department Information

Geography Department  
College of the Sciences

#### Program Outcomes

Visit program outcomes to find out what you can expect to know and do after successful completion of this program.

## Geography BS, GIScience Specialization

This GIScience specialization recognizes the increasing importance of spatial information in understanding and managing environmental and human systems, providing majors training in the processing, display, and analysis of geographical data. Students develop familiarity with the theoretical underpinnings of spatial analytical tools and techniques as well as their application to real-world problems. Issues pertaining to the collection, management, analysis, and dissemination of spatial information are covered through courses in GIS, aerial photo interpretation, remote sensing, and quantitative analysis. Graduates of the program will be well-prepared for employment as managers and analysts of spatial information, including positions in business, governmental agencies, and private

consulting, as well as graduate study and advanced professional certification.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Improve the ability of our students to observe and interpret the world around them in terms of its physical and cultural landscapes, and to articulate the powerful concept of place that is operative at many scales, from the local to the global.
- Improve the ability of students to think critically about spatial patterns and spatial interaction and physical systems modify each other and control the Earth's surface and resources.
- Have the knowledge, skills, and attitudes to be successful in their chosen fields.
- Maintain a teaching-learning facility and major program of study that expresses the integrative, synthesizing character of geography as a discipline.
- Augment regional expertise in scientific approaches to the development and application of geographic information systems, remote sensing, and other geotechniques
- Encourage faculty research and public service, and support student involvement in faculty research and civic engagement.
- Engage alumni and community partners more involved in program activities and events.

### Geography Core

#### Admission to the Major

All students who wish to major in geography must:

1. Have a 2.25 minimum GPA in all coursework taken up to the time of admission
2. Apply for acceptance into the geography major
3. Upon acceptance into the program, meet with their assigned advisor to develop a major contract
4. Earn a C- or higher grade in each of the courses in their major contract

#### Core Requirements

- GEOG 101 - World Regional Geography **Credits:** (5)
- GEOG 107 - Our Dynamic Earth **Credits:** (5)
- GEOG 208 - Our Human World **Credits:** (5)
- GEOG 301 - Introduction to GIS and Maps **Credits:** (4)
- GEOG 250 - Resource Exploitation and Conservation **Credits:** (4)
- GEOG 489 - Geography Capstone **Credits:** (2)

Total Core Requirement Credits: 25

#### GIScience Specialization

Required Courses Credits: 29-30

- GEOG 303 - GIS and Data Management **Credits:** (5)
- GEOG 330 - Airphoto Interpretation **Credits:** (5)
- GEOG 404 - GIS Analysis **Credits:** (5)
- GEOG 409 - Quantitative Methods in Geography **Credits:** (5)
- GEOG 411 - GIS Programming **Credits:** (5)
- **OR** CS 110 - Programming Fundamentals I **Credits:** (4)
- GEOG 430 - Remote Sensing **Credits:** (5)

Upper-level Geography Courses Credits: 13-15

Human/Regional Geography (one course required):

- GEOG 304 - Economic Geography **Credits:** (5)
- GEOG 308 - Cultural Geography **Credits:** (4)
- GEOG 346 - Political Geography **Credits:** (4)
- GEOG 352 - Geography of North America **Credits:** (4)
- GEOG 355 - Geography of the Pacific Northwest **Credits:** (4)
- GEOG 366 - Geography of the Middle East **Credits:** (4)
- GEOG 368 - Geography of Middle America **Credits:** (4)
- GEOG 370 - Geography of South America **Credits:** (4)
- GEOG 371 - Geography of Europe **Credits:** (4)
- GEOG 372 - Geography of Russia **Credits:** (4)
- GEOG 375 - Geography of Asia **Credits:** (4)
- GEOG 381 - Urban Geography **Credits:** (4)

Physical Geography (one course required):

- GEOG 361 - Soils **Credits:** (5)
- GEOG 382 - Hydrology **Credits:** (5)
- GEOG 386 - Geomorphology **Credits:** (5)
- GEOG 387 - Biogeography **Credits:** (5)
- GEOG 388 - Weather and Climate **Credits:** (5)
- GEOG 453 - Riparian and Wetlands Analysis **Credits:** (5)
- GEOG 483 - Snow **Credits:** (5)

Human-Environment Relationships (one course required):

- GEOG 305 - Introduction to Land Use Planning **Credits:** (5)
- GEOG 306 - Transportation Geography and Planning **Credits:** (4)
- GEOG 373 - Water Resources **Credits:** (4)
- GEOG 422 - Geography of Food and Agriculture **Credits:** (4)
- GEOG 442 - Alternative Energy **Credits:** (5)
- GEOG 449 - Environmental Hazard Analysis and Management **Credits:** (5)
- GEOG 455 - Pyrogeography **Credits:** (4)
- GEOG 456 - Recreation Geography **Credits:** (5)

- GEOG 458 - People, Parks, and Protected Areas **Credits: (4)**

Culminating Experience Credits: 4

- GEOG 417 - Advanced GIS **Credits: (4)**

Department-Approved Electives Credits: 12

(minimum 12 credits total)

- CS 111 - Programming Fundamentals II **Credits: (4)**
- CS 351 - Web Development Technologies II **Credits: (4)**
- ENG 310 - Technical Writing **Credits: (4)**
- GEOG 485 - Topics in GIS or Remote Sensing **Credits: (1-5)**
- GEOG 490 - Cooperative Education **Credits: (1-12)**  
(May be taken for 1-6 credits)
- GEOG 494 - Applied GIS Project **Credits: (2-6)**
- GEOG 496 - Individual Study **Credits: (1-6)**
- MATH 153 - Pre-Calculus Mathematics I **Credits: (5)**
- Other computer science classes, with approval from the Geography Chair.  
**NOTE:** GEOG 490 and GEOG 496 must employ a spatial technique and be approved by the Geography Chair.

Total Specialization Credits: 58-61

Total Credits: 83-86

College and Department Information

Geography Department  
College of the Sciences

### Program Outcomes

Visit program outcomes to find out what you can expect to know and do after successful completion of this program.

## Public Policy, BS

Public policy is a science dedicated to study of the policies and laws implemented by governments to address the needs of contemporary society. The bachelor of science in public policy is an interdisciplinary program aimed at exploration and analysis of the historical legacies as well as the contemporary forces that frame the policy making process. Because the world is increasingly pluralistic, public policy at CWU is not free-standing and must be combined with another major, frequently economics, environmental studies, geography, public health, political science, or sociology (students combining public policy and geography, political science, public health, or sociology will receive a bachelor of science degree in public policy and a bachelor of arts degree in geography or political science, public health, or sociology).

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Thoroughly familiar with the discipline's vocabulary, concepts and themes, and the complexity of physical, human, and cultural systems and issues.
- Identify the patterns created through the interactions of political systems and economic systems, the networks of intra-and inter-national interdependence, and the manner in which social and legal systems modify each other.
- Communicate effectively in oral, written and a variety of graphical forms.
- Demonstrate the ability to analyze and describe political, legal, and economic systems using sound analytical techniques and principles.

Public Policy Core Credits: 35-37

- ECON 201 - Principles of Economics Micro **Credits: (5)**
- ECON 202 - Principles of Economics Macro **Credits: (5)**
- ECON 332 - Public Finance **Credits: (5)**
- ENST 202 - Environment and Society **Credits: (5)**
- **OR** GEOG 250 - Resource Exploitation and Conservation **Credits: (4)**
- IT 238 - Introduction to Cyberwarfare **Credits: (4)**
- **OR** SOC 459 - Organizations **Credits: (5)**
- PUBH 209 - Consumer Health **Credits: (4)**
- *OR* PUBH 250 - Introduction to Health Policy and Systems **Credits: (4)**
- POSC 320 - Public Administration **Credits: (5)**
- POSC 325 - Introduction to Public Policy **Credits: (3)**

Research Tool Elective Credits: 4-5

Select one from the following:

- BUS 221 - Introductory Business Statistics **Credits: (5)**
- GEOG 301 - Introduction to GIS and Maps **Credits: (4)**
- GEOG 409 - Quantitative Methods in Geography **Credits: (5)**
- LAJ 400 - Research Methods in Criminal Justice **Credits: (4)**
- MATH 211 - Statistical Concepts and Methods **Credits: (5)**
- PSY 362 - Introductory Statistics **Credits: (5)**
- SOC 364 - Data Analysis in Sociology **Credits: (5)**

Department-Approved Electives Credits: 12-15

Electives in economics, environmental studies, geography, information technology and management, law and justice, political science, public health, or sociology.

Total Credits: 51-57

## Energy Studies Minor

Students interested in investigating energy issues are encouraged to pursue the following interdisciplinary minor which provides:

1. An introduction to the technical concepts and language relevant to energy.
2. An investigation of current and projected energy use patterns and their associated environmental conflicts.
3. A study of the legal, institutional and economic factors that influence energy policy.

With the approval of the director of energy studies, the student will select appropriate electives to meet personal and professional goals.

### Required Courses

- ENST 310 - Energy and Society **Credits:** (5)
- GEOG 442 - Alternative Energy **Credits:** (5)
- **OR** ETSC 442 - Alternative Energy Resources and Technology **Credits:** (5)
- GEOG 443 - Energy Policy **Credits:** (5)
- PHYS 111 - Introductory Physics I with Laboratory **Credits:** (5)

Select one from the following - Credits: 5

- ECON 101 - Economic Issues **Credits:** (5)
- ECON 201 - Principles of Economics Micro **Credits:** (5)
- ETSC 101 - Modern Technology and Energy **Credits:** (5)

Select one from the following - Credits: 4-5

- CMGT 452 - LEED in Sustainable Construction **Credits:** (4)
- ECON 462 - Environmental and Resource Economics **Credits:** (5)
- SCED 301 - Interdisciplinary Science and Engineering Inquiry **Credits:** (5)

Select 2 credits of Cooperative Education - Credits: 2

- BIOL 490 - Cooperative Education **Credits:** (1-12)
- ENST 490 - Cooperative Education **Credits:** (1-12)
- GEOG 490 - Cooperative Education **Credits:** (1-12)
- ETSC 490 - Cooperative Education **Credits:** (1-12)

Total Credits: 31-32

College and Department Information

## Geography Minor

All students who wish to minor in geography must:

1. Apply for acceptance into the geography minor;
2. Have a 2.25 minimum GPA in all coursework taken up to the time of admission;
3. Earn a C- or higher grade in each of the courses required for the minor.

### Required Courses

- GEOG 101 - World Regional Geography **Credits:** (5)
- GEOG 107 - Our Dynamic Earth **Credits:** (5)
- GEOG 208 - Our Human World **Credits:** (5)
- GEOG 250 - Resource Exploitation and Conservation **Credits:** (4)
- GEOG 301 - Introduction to GIS and Maps **Credits:** (4)
- Any upper-division geography courses **Credits:** (7)

Total Credits: 30

College and Department Information

## Geographic Information Systems (GIS) Certificate

The GIS certificate provides recognition for students completing the required number of GIS-related classes at a high level of competence (minimum average GPA of 2.7). Certification will provide students with a powerful tool to assist their future job searches.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge of GIS and selected ancillary data- gathering techniques
- Demonstrate excellence in using GIS in major concluding project
- Demonstrate an appreciation for the fragility of data and the ethics central to honest data display and representation

Required Courses Credits: 19

- GEOG 301 - Introduction to GIS and Maps **Credits:** (4)
- GEOG 303 - GIS and Data Management **Credits:** (5)
- GEOG 330 - Airphoto Interpretation **Credits:** (5)

- **OR** GEOG 411 - GIS Programming **Credits:** (5)
- GEOG 404 - GIS Analysis **Credits:** (5)
- GEOG 430 - Remote Sensing **Credits:** (5)

Department-Approved Electives Credits: 8

Choose from the following courses:

- CS 110 - Programming Fundamentals I **Credits:** (4)
- GEOG 330 - Airphoto Interpretation **Credits:** (5) (if not taken to fulfill core requirements)
- GEOG 409 - Quantitative Methods in Geography **Credits:** (5)
- GEOG 411 - GIS Programming **Credits:** (5) (if not taken to fulfill core requirements)
- GEOG 417 - Advanced GIS **Credits:** (4)
- GEOG 430 - Remote Sensing **Credits:** (5)
- GEOG 485 - Topics in GIS or Remote Sensing **Credits:** (1-5)
- GEOG 490 - Cooperative Education **Credits:** (1-12) (with a GIS focus)
- GEOG 494 - Applied GIS Project **Credits:** (2-6)
- GEOG 496 - Individual Study **Credits:** (1-6) (with a GIS focus)  
(Individual study classes must have a GIS focus. Online classes may count toward 496 credit at a rate of 30 hours of online class work = 1 credit.)
- Other Electives as approved by the director

Total Credits: 27

College and Department Information

Geography Department  
College of the Sciences

## Natural Resource Management Certificate

The Natural Resource Management certificate (22-25 credits) provides recognition for students completing a sequence of laboratory- and field-based science courses related to natural resources. Through advisement students choose a suite of closely related courses providing the knowledge and skills relevant to management of a specific kind of natural resource (e.g., water, wildlands). Certification, which requires a minimum GPA of 2.5 in the certificate courses, will provide students with a powerful tool to assist their future job searches.

Core Course Credits: 4-5

- ENST 202 - Environment and Society **Credits:** (5)
- **OR** GEOG 250 - Resource Exploitation and Conservation **Credits:** (4)

Physical Environments Courses Credits: 5

Choose one course from the following:

- GEOG 450 - Arid Environments **Credits:** (5)
- GEOG 451 - Mountain Environments **Credits:** (5)
- GEOG 452 - Coastal Environments **Credits:** (5)
- GEOG 454 - Forest Environments **Credits:** (5)

Environmental Processes Courses Credits: 5

Choose one course from the following:

- GEOG 361 - Soils **Credits:** (5)
- GEOG 382 - Hydrology **Credits:** (5)
- GEOG 386 - Geomorphology **Credits:** (5)
- **OR** GEOL 386 - Geomorphology **Credits:** (5)
- GEOG 387 - Biogeography **Credits:** (5)
- GEOG 388 - Weather and Climate **Credits:** (5)
- GEOG 453 - Riparian and Wetlands Analysis **Credits:** (5)
- GEOG 483 - Snow **Credits:** (5)

Resource Geography Courses Credits: 4-5

Choose one course from the following:

- GEOG 305 - Introduction to Land Use Planning **Credits:** (5)
- GEOG 373 - Water Resources **Credits:** (4)
- GEOG 442 - Alternative Energy **Credits:** (5)
- GEOG 445 - Environmental Law **Credits:** (5)
- **OR** ENST 460 - Environmental Law **Credits:** (5)
- GEOG 449 - Environmental Hazard Analysis and Management **Credits:** (5)
- GEOG 455 - Pyrogeography **Credits:** (4)
- GEOG 456 - Recreation Geography **Credits:** (5)
- GEOG 458 - People, Parks, and Protected Areas **Credits:** (4)

Department-Approved Electives Credits: 4-5

Choose one more courses from the Environmental Geography or Resource Geography categories. By advisement, students may choose relevant courses not listed above.

Total Credits: 22-25

College and Department Information

Geography Department  
College of the Sciences

## Geological Sciences Department

College of the Sciences  
Ellensburg  
Discovery Hall, room 129  
Mail Stop 7418

509-963-2701  
Fax: 509-963-2821  
www.geology.cwu.edu

See website for how these programs could be used for educational and career purposes.

### **Faculty and Staff**

#### **Chair**

Chris Mattinson, PhD

#### **Professors**

Wendy A. Bohron, PhD, volcanology, isotope geochemistry, igneous petrology  
Lisa L. Ely, PhD, geomorphology, paleohydrology, and quaternary geology  
Carey Gazis, PhD, environmental geochemistry, stable isotope geochemistry, and hydrogeology  
Jeffrey Lee, PhD, active and regional tectonics, structural geology  
Timothy I. Melbourne, PhD, seismology, continental dynamics

#### **Associate Professors**

Anne Egger, PhD, Earth science education and structural geology  
Audrey Huerta, PhD, geodynamics, climate, and mountain building  
Susan Kaspari, PhD, climate and environmental variability and glaciochemistry  
Breanyn MacInnes, PhD, sedimentary geology, coastal geomorphology  
Chris Mattinson, PhD, metamorphic petrology, geochronology, tectonics

#### **Assistant Professor**

Walter Szeliga, PhD, geophysics and GPS geodesy

#### **Faculty Research Associates**

Beth Pratt-Sitaula, PhD, earth science education and geomorphology  
Paul Winberry, PhD, glacier dynamics, seismology

#### **Lecturers**

Keegan Fengler, MS, earthquakes  
Winston Norrish, PhD, petroleum geology

#### **Emeritus Professors**

Robert D. Bentley, PhD, structural geology, igneous and metamorphic petrology, regional geology of the Pacific Northwest  
James Hinthorne, PhD, mineralogy, geochemistry, spatial information systems

#### **Staff**

Rex Flake, tiltmeter engineer, PANGA network engineer and geologist  
Angela Halfpenny, engineering technician  
Moriah Kauer, fiscal specialist  
Carol Ready, WASSER laboratory technician  
V. Marcelo Santillan, scientific programmer and GPS data analyst  
Craig Scrivner, systems analyst  
Nick Zentner, geology outreach and education director

#### **Department Information**

Geosciences encompass the scientific study of the origin and evolution of the earth. Energy, mineral and water resources,

geologic hazards, pollution of natural waters, and earthquake prediction are just a few of the pressing societal concerns that are addressed by geoscientists. The geological sciences program has two major parts: (1) solid-earth geosciences, such as rocks, minerals, deformation, and tectonic evolution of the Earth's crust; and (2) Earth processes over the last 10,000 years, such as active faulting, environmental geochemistry, hydrogeology and water resources, geologic hazards, seismology, surface processes, and volcanology. Field, laboratory, and computer skills are essential to the study of the geological sciences. Research in the geosciences is active and varied, with faculty and students interacting closely. BS and BA degrees are offered in geology and a BS degree in environmental geological sciences. A BA in Earth sciences is also offered and is intended for future secondary school teachers. Minors in geology and Earth sciences are also available to supplement careers in other fields.

Students who declare a major in geology must register with the department and work out a specific program of study with the chairperson or an assigned advisor. Course programs can be tailored to the student's needs and interests with the aid of an academic advisor. Other course requirements may be modified in cases where past performance indicates superior ability. Students must be evaluated for math placement upon declaration of the major with the goal of establishing proficiency at the MATH 154 level early in the major program.

#### **Program Outcomes**

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

#### **Course Offerings**

Frequency of course offering information can be found at the department website: [www.cwu.edu/geology/](http://www.cwu.edu/geology/) or by contacting the department directly.

## **Geology Major, BA**

The BA degree is designed for students preparing to incorporate geosciences into broader careers such as teaching, educational outreach, resource management, environmental planning, business, or law. It is the appropriate major for students seeking an endorsement in teaching high school Earth science. The BA degree may be an appropriate prerequisite for some graduate programs, but a BS is recommended for students who anticipate pursuing a graduate degree or career in the geological sciences.

The BA in Geology pairs well with minors or double majors in communication, computer science, energy studies, environmental studies, museum studies (anthropology), science education K-8, and any other study that requires fundamental scientific skills with an emphasis on communication.

#### **Teaching Endorsement**

This major partially satisfies the criteria for a teaching endorsement in Earth Science (5-12), qualifying students to teach Earth science at the high school, middle, or junior high levels. Students who successfully complete the Geology BA and STEM Teaching Program (an alternative to the Professional Education Program) are eligible to apply for Washington State teacher certification. Teacher certification candidates must receive a C grade or higher in all major and STEM Teaching



Program courses, have a GPA of at least 3.0 for either the last 45 graded quarter credits or overall CWU/transfer cumulative, and meet all Washington State teacher certification requirements. See the geology/Earth science teaching advisor as soon as possible to develop a course of study.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Present an analysis of data and interpretations orally and in a professionally written report
- Critically interpret published scientific literature; differentiate data from interpretation
- Interpret representations of data, including graphs, maps, cross-sections
- Demonstrate working knowledge of standard geologic reference tools and resources, e.g. library, web, computer databases
- Calculate quantitative problems in the discipline
- Demonstrate knowledge of core areas of geology

### Required Courses

- GEOL 101 - Introduction to Geology **Credits: (4)**
- **OR** GEOL 103 - Geology of Washington **Credits: (4)**
- **OR** GEOL 107 - Earth's Changing Surface **Credits: (4)**
- **OR** GEOL 108 - Earth and Energy Resources **Credits: (4)**
- **OR** SCED 102 - Integrated Earth and Space Science **Credits: (5)**
- GEOL 101LAB - Introductory Geology Laboratory **Credits: (1)**
- GEOL 200 - Earth's Evolution and Global Change **Credits: (5)**
- GEOL 210 - Introduction to Geologic Field Methods **Credits: (4)**
- GEOL 305 - Quantitative Reasoning for Geoscientists **Credits: (4)**
- GEOL 320 - Rocks and Minerals **Credits: (5)**
- GEOL 351 - Geology of the Pacific Northwest **Credits: (3)**
- GEOL 370 - Sedimentology and Stratigraphy **Credits: (5)**
- GEOL 380 - Natural Hazards **Credits: (5)**
- **OR** GEOL 382 - Earth Resources and Pollution **Credits: (4)**
- GEOL 384 - Ocean, Atmosphere and Climate Interactions **Credits: (4)**
- GEOL 386 - Geomorphology **Credits: (5)**
- GEOL 487 - End-of-major Review Seminar **Credits: (1)**
- GEOL 490 - Cooperative Education **Credits: (1-12)**
- **OR** GEOL 493 - Field Methods in Environmental Geology **Credits: (4)**
- PHYS 101 - Introductory Astronomy I **Credits: (5)**
- **OR** PHYS 102 - Introduction to Astronomy **Credits: (4)**

Select one of the following courses (2-5) credits:

- ANTH 361 - Museum Exhibit Design **Credits: (4)**
- COM 207 - Introduction to Human Communication **Credits: (5)**
- ENG 310 - Technical Writing **Credits: (4)**
- ENST 330 - Environmental Leadership and Advocacy **Credits: (5)**
- GEOL 306 - Communicating Geoscience **Credits: (4)**
- SCED 411 - Field Experience in Communicating Science to the Public **Credits: (2)**

Department-Approved Electives Credits: 8-10

Students must take two additional department-approved electives.

Total Credits: 62-70

Allied Science Requirements Credits: 15

- MATH 154 - Pre-Calculus Mathematics II **Credits: (5)**

Select 10 credits from the following:

- CHEM 111 - Introduction to Chemistry **Credits: (4)**
- CHEM 111LAB - Introductory Chemistry Laboratory **Credits: (1)**
- CHEM 112 - Introduction to Organic Chemistry **Credits: (4)**
- CHEM 112LAB - Introduction to Organic Chemistry Laboratory **Credits: (1)**
- CHEM 181 - General Chemistry I **Credits: (4)**
- CHEM 181LAB - General Chemistry Laboratory I **Credits: (1)**
- CHEM 182 - General Chemistry II **Credits: (4)**
- CHEM 182LAB - General Chemistry Laboratory II **Credits: (1)**
- MATH 172 - Calculus I **Credits: (5)**
- MATH 173 - Calculus II **Credits: (5)**
- PHYS 111 - Introductory Physics I with Laboratory **Credits: (5)**
- PHYS 112 - Introductory Physics II with Laboratory **Credits: (5)**
- PHYS 181 - General Physics I with Laboratory **Credits: (5)**
- PHYS 182 - General Physics II with Laboratory **Credits: (5)**

Total Credits: 77-85

Professional Education Program Credits: 50

Professional Education Program

Total Credits: 127-135

## College and Department Information

Geological Sciences Department  
College of the Sciences

# Environmental Geological Sciences Major, BS

This major in environmental geological sciences focuses on the interactions between solid Earth and the atmosphere and hydrosphere, including ground water, soils, and climate. The BS program builds on a solid foundation in allied sciences and math and prepares students for graduate school and a variety of careers in the environmental and geological sciences, including environmental consulting and water resources.

## Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Gain experience in conducting original research, developing a hypothesis or research questions, predictions, data gathering and analysis, and literature review. Present analysis either orally or in a professionally written report
- Interpret representations of data (e.g. graphs, maps, cross-sections) including uncertainties, differentiate data from interpretation
- Apply quantitative reasoning skills to problems in environmental geology
- Become familiar with environmental policies and practices, e.g. responsible ways to recover, use, and conserve non-renewable geological resources; environmental hazard mitigation
- Demonstrate knowledge of core areas of environmental geology, e.g. processes and risks associated with natural and anthropogenic environmental hazards.

## Required Courses Credits: (56)

- GEOL 101 - Introduction to Geology **Credits: (4)**
- **OR** GEOL 103 - Geology of Washington **Credits: (4)**
- **OR** GEOL 107 - Earth's Changing Surface **Credits: (4)**
- **OR** GEOL 108 - Earth and Energy Resources **Credits: (4)**
- **OR** SCED 102 - Integrated Earth and Space Science **Credits: (5)**
- GEOL 101LAB - Introductory Geology Laboratory **Credits: (1)**
- GEOL 200 - Earth's Evolution and Global Change **Credits: (5)**
- GEOL 210 - Introduction to Geologic Field Methods **Credits: (4)**
- GEOL 305 - Quantitative Reasoning for Geoscientists **Credits: (4)**
- GEOL 320 - Rocks and Minerals **Credits: (5)**

- GEOL 370 - Sedimentology and Stratigraphy **Credits: (5)**
- GEOL 380 - Natural Hazards **Credits: (5)**
- GEOL 382 - Earth Resources and Pollution **Credits: (4)**
- GEOL 384 - Ocean, Atmosphere and Climate Interactions **Credits: (4)**
- GEOL 386 - Geomorphology **Credits: (5)**
- GEOL 445 - Hydrogeology **Credits: (5)**
- GEOL 487 - End-of-major Review Seminar **Credits: (1)**
- GEOL 493 - Field Methods in Environmental Geology **Credits: (4)**

## Electives selected from the following - Credits: (18)

- BIOL 362 - Biomes of the Pacific Northwest **Credits: (4)**
- CHEM 345 - Environmental Chemistry **Credits: (5)**
- GEOG 361 - Soils **Credits: (5)**
- GEOG 382 - Hydrology **Credits: (5)**
- GEOL 306 - Communicating Geoscience **Credits: (4)**
- GEOL 351 - Geology of the Pacific Northwest **Credits: (3)**
- GEOL 377 - Regional Natural History **Credits: (2)**
- **AND** GEOL 377LAB - Regional Natural History **Credits: (3)**
- GEOL 415 - Earthquake Geology and Neotectonics **Credits: (5)**
- GEOL 423 - The Cryosphere **Credits: (5)**
- GEOL 425 - Environmental Geochemistry **Credits: (5)**
- GEOL 430 - Remote Sensing **Credits: (5)**
- GEOL 434 - Petroleum Geology **Credits: (5)**
- GEOL 441 - Climate Variability and Climate Change **Credits: (5)**
- GEOL 474 - Quaternary Geology **Credits: (4)**
- GEOL 476 - Advanced Sedimentology **Credits: (4)**
- GEOL 478 - Volcanology **Credits: (5)**
- GEOL 483 - Isotope Geochemistry **Credits: (5)**
- **Must take at least one of the following courses: Credits: (4-5)**
- ANTH 352 - Anthropology of Environmental Issues **Credits: (4)**
- ECON 462 - Environmental and Resource Economics **Credits: (5)**
- ENST 303 - Environmental Management **Credits: (5)**
- ENST 310 - Energy and Society **Credits: (5)**
- ENST 330 - Environmental Leadership and Advocacy **Credits: (5)**
- GEOG 305 - Introduction to Land Use Planning **Credits: (5)**
- GEOG 373 - Water Resources **Credits: (4)**
- GEOG 445 - Environmental Law **Credits: (5)**
- HIST 454 - American Environmental History **Credits: (5)**
- PHIL 306 - Environmental Ethics **Credits: (5)**

Total Required Course Credits: 74

Allied Science Requirements for Bachelor of Science  
Environmental Geological Sciences Degree

Chemistry - Credits: (15)

- CHEM 181 - General Chemistry I **Credits:** (4)
- CHEM 181LAB - General Chemistry Laboratory I **Credits:** (1)
- CHEM 182 - General Chemistry II **Credits:** (4)
- CHEM 182LAB - General Chemistry Laboratory II **Credits:** (1)
- CHEM 183 - General Chemistry III **Credits:** (4)
- CHEM 183LAB - General Chemistry Laboratory III **Credits:** (1)

Physics - Credits: (10)

- PHYS 181 - General Physics I with Laboratory **Credits:** (5)
- PHYS 182 - General Physics II with Laboratory **Credits:** (5)

Mathematics - Credits: (10)

- MATH 172 - Calculus I **Credits:** (5)
- MATH 173 - Calculus II **Credits:** (5)

Total Allied Science Credits: 35

Total Credits: 109

College and Department Information

Geological Sciences Department  
College of the Sciences

## Geology Major, BS

The BS in geology prepares students for graduate school and careers in solid-earth geosciences and other scientific fields. The program includes required courses across the breadth of the geosciences and allows for focused study in Earth structure and tectonics, hazards and resources, Earth materials or climate and surface processes. The core required geoscience courses build on a solid foundation in allied sciences and math and culminate in a capstone field mapping experience, thus preparing students for graduate school and a variety of careers in the geosciences, including geotechnical consulting and in Washington. The BS degree is also appropriate for students who wish to continue in other quantitative scientific fields or directions (e.g., medical school).

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Present an analysis of data and interpretations orally and in a professionally written report

- Critically interpret published scientific literature; differentiate data from interpretation
- Interpret representations of data, including graphs, maps, cross-sections
- Demonstrate working knowledge of standard geologic reference tools and resources, e.g. library, web, computer databases
- Calculate quantitative problems in the discipline
- Demonstrate knowledge of core areas of geology

Required Courses Credits: 52

- GEOL 101 - Introduction to Geology **Credits:** (4)
- **OR** GEOL 103 - Geology of Washington **Credits:** (4)
- **OR** GEOL 107 - Earth's Changing Surface **Credits:** (4)
- **OR** GEOL 108 - Earth and Energy Resources **Credits:** (4)
- **OR** SCED 102 - Integrated Earth and Space Science **Credits:** (5)
- GEOL 101LAB - Introductory Geology Laboratory **Credits:** (1)
- GEOL 200 - Earth's Evolution and Global Change **Credits:** (5)
- GEOL 210 - Introduction to Geologic Field Methods **Credits:** (4)
- GEOL 305 - Quantitative Reasoning for Geoscientists **Credits:** (4)
- GEOL 320 - Rocks and Minerals **Credits:** (5)
- GEOL 346 - Mineralogy **Credits:** (5)
- GEOL 360 - Structural Geology **Credits:** (5)
- GEOL 370 - Sedimentology and Stratigraphy **Credits:** (5)
- GEOL 384 - Ocean, Atmosphere and Climate Interactions **Credits:** (4)
- GEOL 487 - End-of-major Review Seminar **Credits:** (1)
- GEOL 489 - Geologic Field Methods **Credits:** (6-12)

Department-Approved Electives Credits: 17-20

Select at least four department-approved electives that total at least 17 credits. The groups of courses shown below are meant to offer guidance to students who wish to specialize in a sub-discipline or take courses across the breadth of the geological sciences. Up to 4 credits of department-approved seminars and research may count towards elective units as well.

### Climate and Surface Processes

- GEOL 377 - Regional Natural History **Credits:** (2)
- **AND** GEOL 377LAB - Regional Natural History **Credits:** (3)
- GEOL 386 - Geomorphology **Credits:** (5)
- GEOL 423 - The Cryosphere **Credits:** (5)
- GEOL 441 - Climate Variability and Climate Change **Credits:** (5)
- GEOL 474 - Quaternary Geology **Credits:** (4)

## Earth Materials

- GEOL 475 - Petrography and Petrogenesis **Credits:** (5)
- GEOL 476 - Advanced Sedimentology **Credits:** (4)
- GEOL 478 - Volcanology **Credits:** (5)
- GEOL 483 - Isotope Geochemistry **Credits:** (5)
- GEOL 484 - Geochronology **Credits:** (5)

## Earth Structure and Tectonics

- GEOL 351 - Geology of the Pacific Northwest **Credits:** (3)
- GEOL 432 - Field Geodetic Techniques **Credits:** (3)
- GEOL 453 - Seismology **Credits:** (5)
- GEOL 456 - Geodynamics **Credits:** (5)

## Hazards and Resources

- GEOL 380 - Natural Hazards **Credits:** (5)
- GEOL 382 - Earth Resources and Pollution **Credits:** (4)
- GEOL 415 - Earthquake Geology and Neotectonics **Credits:** (5)
- GEOL 425 - Environmental Geochemistry **Credits:** (5)
- GEOL 434 - Petroleum Geology **Credits:** (5)
- GEOL 445 - Hydrogeology **Credits:** (5)

Allied Science Requirements for Bachelor of Science Degree  
Credits: 30

## Chemistry - Credits: (10)

- CHEM 181 - General Chemistry I **Credits:** (4)
- CHEM 181LAB - General Chemistry Laboratory I **Credits:** (1)
- CHEM 182 - General Chemistry II **Credits:** (4)
- CHEM 182LAB - General Chemistry Laboratory II **Credits:** (1)

## Physics - Credits: (10)

- PHYS 181 - General Physics I with Laboratory **Credits:** (5)
- PHYS 182 - General Physics II with Laboratory **Credits:** (5)

## Mathematics - Credits: (10)

- MATH 172 - Calculus I **Credits:** (5)
- MATH 173 - Calculus II **Credits:** (5)

Total Credits: 99-102

## College and Department Information

Geological Sciences Department  
College of the Sciences

## Geology Minor

The geology minor allows students to pursue their interests within the department's course offerings and can be combined with virtually any other major. It may be particularly useful for students in anthropology, biology, chemistry, computer science, economics, geography, history, physics, or science education.

## Required Courses (15 credits)

- GEOL 101 - Introduction to Geology **Credits:** (4)
- **OR** GEOL 103 - Geology of Washington **Credits:** (4)
- **OR** GEOL 107 - Earth's Changing Surface **Credits:** (4)
- **OR** GEOL 108 - Earth and Energy Resources **Credits:** (4)
- **OR** SCED 102 - Integrated Earth and Space Science **Credits:** (5)
- GEOL 101LAB - Introductory Geology Laboratory **Credits:** (1)
- GEOL 200 - Earth's Evolution and Global Change **Credits:** (5)
- GEOL 320 - Rocks and Minerals **Credits:** (5)

Department-Approved Electives Credits: (18-20 credits)

Select a set of department-approved electives in geological sciences that total 18-20 credits.

Total Credits: 33-35

## Department and College Information

Geological Sciences Department  
College of the Sciences

## Health Sciences Department

College of Education and Professional Studies  
Ellensburg  
Dorothy Purser Hall., room 101  
Mail Stop 7571  
509-963-1912  
[www.cwu.edu/health-science](http://www.cwu.edu/health-science)

See website for how these programs may be used for educational and career purposes.

## Faculty and Staff Chair

Ethan A. Bergman, PhD, RDN, CD, FADA, FAND

## Clinical Physiology Program Director

Vincent M. Nethery, PhD

**Emergency Medical Services- EMS Paramedicine Program Director**

Douglas Presta DPM, NR-Paramedic

**Exercise Science Program Director**

Timothy R. Burnham, PhD

**Food and Nutrition Sciences Program Director**

David L. Gee, PhD

**Medical Director**

Kenneth Lindsey

**Public Health Director**

Tishra Beeson, PhD, MHP

Melody Madlem, PhD

**Professors**

Ethan A. Bergman, PhD, RDN, CD, FADA, FAND, nutrition and dietetics

Timothy R. Burnham, PhD, clinical physiology, sport physiology, human anatomy

Leonardo J. D'Acquisto, EdD, sport physiology, kinesiology, human anatomy

James DePaepe, PhD, clinical and sport physiology, neurophysiology, and research

David L. Gee, PhD, nutrition and metabolism, nutrition and chronic diseases, nutritional epidemiology

Susan Hawk, PhD, RDN, dietetics, clinical nutrition

Melody Madlem, PhD, public health

Vincent M. Nethery, PhD, clinical physiology, sport physiology, environmental physiology, human anatomy

**Associate Professors**

Dana Ogan, MS, RDN, CD, dietetic internship director

Rebecca Pearson, PhD, MPH, public health

Kelly Pritchett, PhD, RDN, sports nutrition

Robert Pritchett, PhD

Karen Roemer, PhD, biomechanics, clinical mechanics, kinematics and kinetics

Nicole Stendell-Hollis, PhD, MS, RDN, obesity, nutrition and chronic disease

**Assistant Professors**

Tishra Beeson, PhD, MPH, public health

Tefare Belay, PhD, nutrition

Jill Hoxmeier, PhD, public health

Eric Foch, PhD

Casey Mace-Firebaugh, PhD, MPH, public health

Douglas Presta, DPM, NR-Paramedic

**Lecturers**

Steve Chrisman, paramedicine

Hilllary Conner, exercise science

Ryan Gallindo, exercise science

James Pierce, paramedicine

**Staff**

Jan Clark, secretary supervisor

Bryan Contreras, MS, instructional classroom support technician- clinical physiology and exercise science

Lucinda Engel, instructional classroom support technician- food

science

Beth Snider, office assistant

**Department Information**

The Department of Health Sciences prepares students in a variety of professions that focus on the physical and functional abilities of humans. Human functioning is the overriding theme of all curricula offerings. In addition to didactic aspects, many classes provide experiential learning through structured laboratories, practicums, and internships. All programs provide opportunities to interact with faculty and to participate in both undergraduate and graduate research.

**Health Sciences offers the following undergraduate degrees:**

Bachelor of Science: Clinical Physiology

Bachelor of Science: Exercise Science

Bachelor of Science: FSN-Dietetics Specialization

Bachelor of Science: FSN-Foods and Nutrition Specialization

Bachelor of Science: Paramedicine

Public Health Major - Community Health Specialization

Public Health Major - Pre-nursing in Public Health Specialization

Public Health - Community Health Education Minor

**Health Sciences offers the following supporting minors:**

Exercise Science

Athletic Training

Nutrition

Food Service Management

**Health Sciences offers the following certificate programs:**

Paramedic

Emergency Medical Technician

Dietetic Internship (Accredited by the Academy of Nutrition and Dietetics Accreditation Council for Education in Nutrition and Dietetics (ACEND))

**Health Sciences offers the following graduate degrees - (For details: See Graduate Studies and Research section)**

Master of Science: Exercise Science

Master of Science: Nutrition

**Admission Requirements**

To be admitted to a major or minor, all students must:

- Meet with an advisor in the specific program of interest. Because of the variety of options and the pre-admission requirements of programs, it is advisable to meet with an advisor early to plan the program schedule and to facilitate timely graduation.
- Complete specific pre-admission requirements (see individual programs).
- Complete and file a major application with the department office, signed by the academic advisor and the program director. Application forms can be obtained from the advisor or the department office.
- Complete and file with the department office, a program of study that lists the required and elective courses necessary for program completion. Course of study forms can be obtained from the academic advisor.

**Student Scholarly Activities:**

The department is student oriented and all programs provide a wide range of laboratory and field experiences as part of specific degree requirements and degree options. Students who engage

early in optional learning experiences gain a better understanding of their profession, are more competitive in the job market, and increase their chances for graduate school admission.

#### **Student Organizations:**

**Exercise Science Club:** All EXSC students are required to join the EXSC Club. This student-run organization meets regularly to discuss academic planning and career opportunities, performs service activities, and plans recreational outings.

**Nutrition Science Club:** The NSC provides opportunities for students to use their knowledge and skills in performing service activities, learn about career opportunities, discuss academic planning, and engage in recreational activities.

**EMT Club:** The EMT Club is a student organization that is purposed to provide basic life support services to on-campus activities as a means of first-line-response. The EMT Club is comprised of current students that are certified emergency medical technicians. The EMT Club is supervised by a faculty member of the Paramedic Program and is provided the necessary emergency medical equipment and continuing education to provide essential emergency medical services.

#### **Fees:**

Additional fees are assessed for many of the department's laboratory and field experience courses. These fees are used to partially support materials purchased and transportation costs.

#### **Graduation Requirements**

- Satisfactory completion of all requirements of the university and of the specific degree program of study.
- Application for the bachelor's degree must be filed by the second Friday of the quarter preceding the quarter in which the degree is to be received. Instructions and deadlines are available through Registrar Services.

#### **Program Outcomes**

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

#### **Course Offerings**

Frequency of course offering information can be found at the department website: [www.cwu.edu/health-science](http://www.cwu.edu/health-science) or by contacting the department directly.

## **Clinical Physiology Major, BS**

#### **Program Director**

Vincent M. Nethery, PhD

#### **Faculty**

Timothy Burnham PhD  
Leonardo D'Acquisto, EdD  
James DePaepe, PhD  
Eric Foch, PhD  
Vincent Nethery, PhD  
Kelly Pritchett, PhD, RDN  
Robert Pritchett, PhD  
Karen Roemer, PhD

The bachelor of science - clinical physiology specifically

prepares students to enter graduate or specialized post-baccalaureate professional programs in critical high-demand, health-care arenas including physical and occupational therapy, physicians' assistants, cardiopulmonary rehabilitation, sports medicine-athletic training, chiropractic medicine, and others. This degree also prepares students for advanced graduate study in integrated human and exercise physiology. Most clinical health-care professions require education beyond the bachelor degree level. Additional courses may be needed to satisfy all prerequisites for admission eligibility to some graduate and professional programs.

**A grade of C or higher is required in all pre-admission, required courses, and elective courses in this major.**

#### **Program Learner Outcomes**

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge of structural components and the interrelationships between these structural components in the human organism.
- Demonstrate knowledge of the physiologic processes that govern organism functioning and maintain homeostasis with specific emphasis on humans.
- Describe the impact of personal behaviors - lifestyle decisions (e.g.) physical activity and energy balance on human structural and functional integrity.
- Identify, describe, and employ the various components of scientific inquiry including deductive reasoning, the analysis of data and the establishment of defensible conclusions.

#### **Pre-admission Requirements**

- CHEM 111 - Introduction to Chemistry **Credits:** (4)
- CHEM 111LAB - Introductory Chemistry Laboratory **Credits:** (1)
- **OR** CHEM 181 - General Chemistry I **Credits:** (4)
- CHEM 181LAB - General Chemistry Laboratory I **Credits:** (1)
- **AND**
- CHEM 112 - Introduction to Organic Chemistry **Credits:** (4)
- CHEM 112LAB - Introduction to Organic Chemistry Laboratory **Credits:** (1)
- **OR** CHEM 182 - General Chemistry II **Credits:** (4)
- CHEM 182LAB - General Chemistry Laboratory II **Credits:** (1)
- **AND**
- CHEM 113 - Introduction to Biochemistry **Credits:** (4)
- CHEM 113LAB - Introduction to Biochemistry Laboratory **Credits:** (1)
- **OR** CHEM 183 - General Chemistry III **Credits:** (4)
- CHEM 183LAB - General Chemistry Laboratory III **Credits:** (1)
- **AND**
- PHYS 111 - Introductory Physics I with Laboratory **Credits:** (5)
- **OR** PHYS 121 - Introductory Physics for Life Sciences I **Credits:** (5)

- **OR** PHYS 181 - General Physics I with Laboratory **Credits: (5)**

Pre-admission Total Credits: 20

Required Courses

- BIOL 305 - Human Anatomy and Physiology for Health-Related Majors I **Credits: (5)**
- BIOL 306 - Human Anatomy and Physiology for Health-Related Majors II **Credits: (5)**
- EXSC 350 - Gross Anatomy **Credits: (3)**
- EXSC 350LAB - Gross Anatomy Laboratory **Credits: (2)**
- EXSC 351 - Physiology **Credits: (4)**
- EXSC 351LAB - Physiology Laboratory **Credits: (1)**
- EXSC 353 - Physical and Orthopedic Assessment **Credits: (4)**
- EXSC 370 - Biomechanics **Credits: (5)**
- EXSC 450 - Physiology of Exercise **Credits: (4)**
- EXSC 450LAB - Physiology of Exercise Laboratory **Credits: (1)**
- EXSC 456 - Clinical Physiology **Credits: (5)**
- EXSC 470 - Clinical Biomechanics **Credits: (3)**
- EXSC 493 - Clinical Field Experience **Credits: (1-15)** (minimum of 12 credits)
- EXSC 495B - Practicum: Clinical **Credits: (2)**

Total Required Courses Credits: 56

Choose from the following electives:

- BIOL 322 - Introductory Microbiology **Credits: (5)**
- BIOL 323 - Microbiology **Credits: (5)**
- BIOL 353 - Integrative Anatomy **Credits: (6)**
- EMS 443 - Myocardial Disease and Basic Electrocardiography **Credits: (4)**
- EMS 444 - Twelve-lead Electrocardiography **Credits: (4)**
- EXSC 438 - Therapeutic Exercise **Credits: (3)**
- EXSC 446 - Sports Nutrition **Credits: (3)**
- EXSC 452 - Therapeutic Modalities **Credits: (3)**
- NUTR 433 - Macronutrients **Credits: (3)**
- NUTR 443 - Metabolism and Micronutrients **Credits: (5)**
- PHYS 112 - Introductory Physics II with Laboratory **Credits: (5)**
- PHYS 113 - Introductory Physics III with Laboratory **Credits: (5)**
- PHYS 122 - Introductory Physics for Life Sciences II **Credits: (5)**
- PHYS 123 - Introductory Physics for Life Sciences III **Credits: (5)**
- PHYS 182 - General Physics II with Laboratory **Credits: (5)**
- PHYS 183 - General Physics III with Laboratory **Credits: (5)**
- PSY 313 - Developmental Psychology **Credits: (4)**

- PSY 314 - Human Development and the Learner **Credits: (4)**
- PSY 362 - Introductory Statistics **Credits: (5)**
- PSY 421 - Human Neuroanatomy **Credits: (4)**
- PSY 449 - Abnormal Psychology **Credits: (4)**
- PSY 478 - Behavioral Neuroscience **Credits: (4)**

Total Elective Credits: 24

Total Credits: 100

Department and College Information

Health Sciences Department  
College of Education and Professional Studies

## EMS Paramedicine Major, BS

### Program Director

Keith A. Monosky, PhD, MPM, EMT-P

### Medical Program Director

Jackson Horsley, MD

### Program Coordinator

Vickie Ostrow

### Faculty

Robert Carlson, BA, EMT-P  
Steve Chrisman, MS, EMT-P  
Rich Elliot, MBA, EMT  
Liesl Jones  
Dan Limmer, NREMT-P  
Keith A. Monosky, PhD, MPM, EMT-P  
James Pierce, EMT-P  
Lenny Ugaitafa, BS, EMT-P

The EMS paramedicine major is designed for students who plan to become a certified pre-hospital professional in emergency medical services. The paramedicine major provides the graduate with the requisite skill sets for entry-level competence in advanced life support emergency medical services, as well as superior skills in advanced life support and leadership abilities in emergency medical services.

The delivery format includes classroom lectures, group discussions, laboratory skills training, hospital clinical experience with observations and practice, field internships, educational internships, administrative internships, pre-hospital research, and simulated scenario-based exercises of complex patient condition which will fully prepare the student for occupations in advanced emergency medical services. This nationally-accredited program meets all of the national curriculum and Washington State standards.

In addition to general admissions, all applicants must meet specific entrance criteria (including a current EMT certification) and be approved by the paramedic selection committee before being admitted into the program. Admission to CWU does not assure entry into the paramedicine major.

Advanced Standing is an option for currently certified and

practicing paramedics to earn their Bachelor of Science degree and EMS Paramedicine. This option is made available only for currently certified paramedics that received their education from accredited institutions and that reside in a state that participates in online instruction with Washington state.

Upon acceptance into the Advanced Standing status of the online EMS Paramedicine program, the student shall be awarded up to 44 credits in experiential learning in the major. The explanation of requirements and the substitution of major courses are listed at [www.cwu.edu/health-science/paramedicine](http://www.cwu.edu/health-science/paramedicine).

Completion of the major listed below and other degree requirements leads to the bachelor of science in paramedicine and eligibility to take the National Registry EMTs examination for paramedic certification. For students not seeking a degree, a certification option is available.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge of effective therapeutic techniques in prehospital medicine.
- Demonstrate the ability to use critical and creative thinking to solve problems.
- Have knowledge of research process in prehospital medicine.
- Effectively demonstrate information competence and the ability to use computers and other technology for many purposes.
- Communicate effectively in a variety of formats.

### Required Courses for Entry:

- EXSC 350 - Gross Anatomy **Credits:** (3)
- EXSC 350LAB - Gross Anatomy Laboratory **Credits:** (2)
- EXSC 351 - Physiology **Credits:** (4)
- EXSC 351LAB - Physiology Laboratory **Credits:** (1)
- EMS 440 - Medical Mathematics and Terminology **Credits:** (2)

### Required Courses

- EMS 335 - Paramedicine I **Credits:** (4)
- EMS 335LAB - Advanced Clinical Practice I **Credits:** (2)
- EMS 336 - Paramedicine II **Credits:** (4)
- EMS 336LAB - Advanced Clinical Practice II **Credits:** (2)
- EMS 337 - Paramedicine III **Credits:** (3)
- EMS 337LAB - Advanced Clinical Practice III **Credits:** (2)
- EMS 350 - Paramedicine Instructional Methodologies **Credits:** (2)
- EMS 430 - Problem-Based Learning I **Credits:** (4)
- EMS 431 - Problem-based Learning II **Credits:** (4)
- EMS 441 - General Pharmacology for Paramedics **Credits:** (3)

- EMS 443 - Myocardial Disease and Basic Electrocardiography **Credits:** (4)
- EMS 444 - Twelve-lead Electrocardiography **Credits:** (4)
- EMS 451 - Advanced Trauma Care **Credits:** (3)
- EMS 455 - Introduction to Pathophysiology **Credits:** (3)
- EMS 459 - Emergencies in Pediatric/Geriatric Care **Credits:** (3)
- EMS 460 - Research in EMS I **Credits:** (3)
- EMS 461 - Research in EMS II **Credits:** (3)
- EMS 465 - Educational Methodologies in EMS **Credits:** (3)
- EMS 470 - Current Topics in Emergency Medicine **Credits:** (3)
- EMS 475 - EMS Response to Terrorism **Credits:** (3)
- EMS 480 - Financial Analysis of EMS Systems **Credits:** (3)
- EMS 481 - Quality Improvement and Administration of EMS **Credits:** (3)
- EMS 482 - Systems Analysis of EMS **Credits:** (4)
- EMS 485 - Strategic Planning for EMS **Credits:** (3)
- EMS 488 - Health Policy in EMS **Credits:** (3)
- EMS 489 - Leadership in EMS **Credits:** (3)
- EMS 493A - Paramedicine Internship I **Credits:** (3)
- EMS 493B - Paramedicine Internship II **Credits:** (4)
- EMS 493C - Paramedicine Internship III **Credits:** (5)

Total Credits: 105

### College and Department Information

Health Sciences Department  
College of Education and Professional Studies

## Exercise Science Major, BS

### Program Director

Timothy Burnham, PhD

### Faculty

Timothy Burnham PhD  
Leonardo D'Acquisto, EdD  
James DePaepe, PhD  
Eric Foch, PhD  
Vincent Nethery, PhD  
Kelly Pritchett, PhD, RDN  
Robert Pritchett, PhD  
Karen Roemer, PhD

The Bachelor of Science in Exercise Science prepares students to enter career areas that guide healthy human functioning across the general health to athletic performance spectrum. Potential employment encompasses corporate health-wellness programs, private health-fitness organizations, non-profit/community activity centers, institutional recreation centers, athlete identification and development programs, personal training, and specialty strength and conditioning coaching.



### Grade Requirement

A grade of "C" or higher is required for all courses in major and minor programs.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge of structural components and the interrelationships between these structural components in the human organism
- Demonstrate knowledge of the physiologic processes that govern organism functioning and maintain homeostasis with specific emphasis on humans
- Describe the impact of personal behaviors - lifestyle decisions (e.g.) physical activity and energy balance on human structural and functional integrity.
- Identify, describe, and employ the various components of scientific inquiry including deductive reasoning, the analysis of data and the establishment of defensible conclusions.
- Apply the knowledge and skills developed and honed through the many directed and experiential learning components of the didactic program, to the "real-world" setting.

Required Courses Credits: 68

- BIOL 201 - Human Physiology **Credits:** (5)
- EXSC 254 - Foundations of Fitness **Credits:** (3)
- EXSC 350 - Gross Anatomy **Credits:** (3)
- EXSC 350LAB - Gross Anatomy Laboratory **Credits:** (2)
- EXSC 351 - Physiology **Credits:** (4)
- EXSC 351LAB - Physiology Laboratory **Credits:** (1)
- EXSC 352 - Assessment and Treatment of Athletic Injuries **Credits:** (4)
- EXSC 371 - Movement Analysis **Credits:** (5)
- EXSC 446 - Sports Nutrition **Credits:** (3)
- EXSC 450 - Physiology of Exercise **Credits:** (4)
- EXSC 450LAB - Physiology of Exercise Laboratory **Credits:** (1)
- EXSC 455 - Fitness Assessment and Exercise Prescription **Credits:** (4)
- EXSC 455LAB - Fitness Assessment and Exercise Prescription Laboratory **Credits:** (1)
- EXSC 471 - Sports Biomechanics **Credits:** (3)
- EXSC 480 - Science of Resistance Exercise **Credits:** (4)
- EXSC 490 - Cooperative Education **Credits:** (1-12) (Must be taken for 12 credits)
- EXSC 495A - Practicum: Fitness Centers/Clubs **Credits:** (2)
- **OR** EXSC 495C - Practicum: Management **Credits:** (2)
- EXSC 495D - Practicum: Laboratory Assessment **Credits:** (2)
- NUTR 101 - Introduction to Human Nutrition **Credits:** (5)

Department-Approved Electives Credits: 28

- BUS 401 - Business Boot Camp **Credits:** (1)
- COM 345 - Business and Professional Speaking **Credits:** (4)
- MGT 380 - Organizational Management **Credits:** (5)
- MGT 394 - Legal Considerations in Sport Business **Credits:** (5)
- MGT 395 - Leadership in Business Organizations **Credits:** (5)
- MKT 360 - Principles of Marketing **Credits:** (5)
- MKT 370 - Sports Marketing and Sponsorship **Credits:** (5)
- MKT 371 - Sponsorship and Promotion in Sport Business **Credits:** (5)
- MKT 372 - Revenue Generation and Finance in Sport Business **Credits:** (5)
- NUTR 350 - Weight Management **Credits:** (3)
- PSY 401 - Psychology of Sport **Credits:** (4)

Total Credits: 96

College and Department Information

Health Sciences Department  
College of Education and Professional Studies

## Food Science and Nutrition BS, Dietetics Specialization

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Have knowledge of effective communication techniques through a wide variety of mediums (group presentations, individual counseling and education, media presentations, etc....) (all degrees and specializations)
- Have knowledge from the basic sciences of biology and chemistry and be able to apply them to the nutritional care and education processes. (D, NS)
- Have knowledge of research process. (D, NS)
- Have knowledge of the science of foods, processing on commercial and consumer scales, food safety and sanitation issues, food delivery and production systems, and factors that affect food selection. (D, FN, BASFSM)
- Have the knowledge of the science of nutrition including the assessment of health status, influence of age and physiological state on nutritional needs, nutritional therapy of those in disease or injured states, and the use of dietary supplements and methods of complementary medicine. (ND, NS)
- Have the knowledge of management theories and principals including organizational change theory, human resource management, risk management, quality improvement, information management, and financial management. (D, FN, BASFSM)

Food Science and Nutrition Core

## Program Director

David Gee, PhD

## Faculty

Ethan Bergman, PhD, RDN

David Gee, PhD

Susan Hawk, PhD, RDN

Dana Ogan, MS, RDN, CD

Kelly Pritchett, PhD, RDN, CSSD

Nicole Stendell-Hollis, PhD, RDN

The bachelor of science in food science and nutrition prepares students for employment or advanced study in one of several professions in the broad area of foods and nutrition. To complete degree requirements, students must complete the required core courses listed below. Students must also complete courses listed in their chosen specialization (foods and nutrition, dietetics, nutrition science).

## Admission Requirements

Students wishing to attain full admission to the BS in food science and nutrition major must meet the following requirements:

- Successful completion of NUTR 101, Introduction to Human Nutrition, NUTR 240, Introduction to Foods and NUTR 240LAB, Introduction to Foods Laboratory with a grade of B (3.0) or higher.
- Students must receive a grade of C (2.0) or higher in all of the other major courses.

In addition to the requirements listed above, students wishing to enter any of the food science and nutrition specializations must successfully complete CHEM 111, Introduction to Chemistry, CHEM 111LAB, Chemistry Laboratory or CHEM 181, General Chemistry I and CHEM 181LAB, General Chemistry Laboratory I, and MATH 100C, Intermediate Algebra, or their equivalents, before being admitted to the major. Students must consult with a major advisor for approval of the program specialization.

Students are highly encouraged to complete at least five credits of NUTR 490, Cooperative Education.

## Core Requirements

- NUTR 101 - Introduction to Human Nutrition **Credits: (5)**
- NUTR 240 - Introduction to Foods **Credits: (2)**
- NUTR 240LAB - Introduction to Foods Laboratory **Credits: (2)**
- NUTR 344 - Medical Nutrition Therapy I **Credits: (3)**
- NUTR 345 - Nutrition and the Lifecycle **Credits: (5)**
- NUTR 350 - Weight Management **Credits: (3)**
- NUTR 447 - Community Nutrition **Credits: (3)**

Select either:

- EDCS 312 - Educational Statistics **Credits: (4)**
- **OR** PSY 362 - Introductory Statistics **Credits: (5)**

Total Core Credits: 27-28

## Dietetics Specialization

The dietetics specialization is a program accredited by the Accreditation Council Education in Nutrition and Dietetics (ACEND). In addition to those classes required for the Dietetics Specialization, ANTH 130 and PSY 101 are required to meet the knowledge requirements set forth by ACEND, 120 South Riverside Plaza Suite 2190, Chicago, IL 60606-6995, 800-877-1600, ext. 5400). ACEND is a specialized accrediting body recognized by the Council on Post-Secondary Accreditation and the United States Department of Education. Completion of this program qualifies the student to apply for admission to an ACEND accredited Supervised Practice Experience, also known as a dietetic internship. Following this the student is eligible to sit for the registration examination. Passing the registration exam qualifies the graduate to become a registered dietitian nutritionist (RDN).

## Pre-Specialization Major Requirements

Prior to being admitted into the dietetics specialization, students shall apply to the BS in food science and nutrition major with a specialization in foods and nutrition and must then complete the core requirements plus the following courses:

- BIOL 201 - Human Physiology **Credits: (5)**
- CHEM 111 - Introduction to Chemistry **Credits: (4)**
- **AND** CHEM 111LAB - Introductory Chemistry Laboratory **Credits: (1)**
- **OR** CHEM 181 - General Chemistry I **Credits: (4)**
- **AND** CHEM 181LAB - General Chemistry Laboratory I **Credits: (1)**
- CHEM 112 - Introduction to Organic Chemistry **Credits: (4)**
- CHEM 112LAB - Introduction to Organic Chemistry Laboratory **Credits: (1)**
- CHEM 113 - Introduction to Biochemistry **Credits: (4)**
- CHEM 113LAB - Introduction to Biochemistry Laboratory **Credits: (1)**
- NUTR 343 - Foods and Nutrition Professionalism **Credits: (1)**

Total Pre-Specialization Requirement Credits: 21

## Additional Courses

In addition to successfully completing all of the pre-specialization courses, applicants to this specialization must have CWU/Transfer combined GPA of at least 3.0 at the time of application and a GPA in all of the pre-major classes of 3.0. Students planning on entering the dietetics specialization are encouraged to declare their major in the BS food science and nutrition with a foods and nutrition specialization as early in their studies as possible so that they may be assigned a major advisor and receive proper advising in this field.

- BIOL 220 - Introductory Cell Biology **Credits: (5)**
- BIOL 322 - Introductory Microbiology **Credits: (5)**

- **OR** BIOL 323 - Microbiology **Credits:** (5)
- NUTR 340 - Management of Food Resources **Credits:** (2)
- NUTR 340LAB - Management of Food Resources Laboratory **Credits:** (1)
- NUTR 342 - Quantity Food Production and Service **Credits:** (4)
- NUTR 342LAB - Quantity Food Production and Service Laboratory **Credits:** (1)
- NUTR 347 - Nutrition Education and Counseling **Credits:** (4)
- NUTR 433 - Macronutrients **Credits:** (3)
- NUTR 440 - Experimental Foods **Credits:** (2)
- NUTR 440LAB - Experimental Foods Laboratory **Credits:** (1)
- NUTR 442 - Nutrition Assessment Laboratory **Credits:** (2)
- NUTR 443 - Metabolism and Micronutrients **Credits:** (5)
- NUTR 444 - Medical Nutrition Therapy II **Credits:** (3)
- NUTR 445 - Experimental Food Research **Credits:** (1)
- NUTR 445LAB - Experimental Food Research Laboratory **Credits:** (1)
- NUTR 446 - Sports Nutrition **Credits:** (3)
- NUTR 448 - Food Service Systems Management **Credits:** (4)

Total Additional Course Credits: 47

Total Credits: 95-96

#### Additional Information

Students wishing to apply for admission into an ACEND-accredited dietetic internship must be successfully admitted to the Dietetics Specialization, complete the major requirements plus the following two courses: ANTH 130, Introduction to Cultural Anthropology (5) OR ANTH 357, Medical Anthropology: Cross-Cultural Perspectives on Health and Healing (4), and PSY 101, General Psychology (5). These courses may also meet breadth requirements at Central Washington University.

The requirement for CHEM 111, 111LAB, Introduction to Chemistry and Laboratory, may be met by satisfactorily completing CHEM 181, 181LAB, 182, 182LAB, and 183, 183LAB General Chemistry and Laboratory. The requirement for CHEM 112, 112LAB, Introduction to Organic Chemistry and Laboratory, may be met by satisfactorily completing CHEM 361, 361LAB, 362, and 363 Organic Chemistry and Laboratory. The requirement for CHEM 113, 113LAB, Introduction to Biochemistry, may be met by satisfactorily completing CHEM 431, 431LAB and 432, Biochemistry and Laboratory. The requirement for BIOL 201, Human Physiology, may be met by satisfactorily completing BIOL 355, 356, Human Anatomy and Physiology. Students interested in applying to nursing programs following the completion of this degree should take BIOL 355 and BIOL 356 instead of BIOL 201.

#### College and Department Information

Health Sciences Department  
College of Education and Professional Studies

## Food Science and Nutrition BS, Foods and Nutrition Specialization

#### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Have knowledge of effective communication techniques through a wide variety of mediums (group presentations, individual counseling and education, media presentations, etc....) (all degrees and specializations)
- Have knowledge from the basic sciences of biology and chemistry and be able to apply them to the nutritional care and education processes. (D, NS)
- Have knowledge of research process. (D, NS)
- Have knowledge of the science of foods, processing on commercial and consumer scales, food safety and sanitation issues, food delivery and production systems, and factors that affect food selection. (D, FN, BASFSM)
- Have the knowledge of the science of nutrition including the assessment of health status, influence of age and physiological state on nutritional needs, nutritional therapy of those in disease or injured states, and the use of dietary supplements and methods of complementary medicine. (ND, NS)
- Have the knowledge of management theories and principals including organizational change theory, human resource management, risk management, quality improvement, information management, and financial management. (D, FN, BASFSM)

#### Food Science and Nutrition Core

#### Program Director

David Gee, PhD

#### Faculty

Ethan Bergman, PhD, RDN  
David Gee, PhD  
Susan Hawk, PhD, RDN  
Dana Ogan, MS, RDN, CD  
Kelly Pritchett, PhD, RDN, CSSD  
Nicole Stendell-Hollis, PhD, RDN

The bachelor of science in food science and nutrition prepares students for employment or advanced study in one of several professions in the broad area of foods and nutrition. To complete degree requirements, students must complete the required core courses listed below. Students must also complete courses listed in their chosen specialization (foods and nutrition, dietetics, nutrition science).

## Admission Requirements

Students wishing to attain full admission to the BS in food science and nutrition major must meet the following requirements:

- Successful completion of NUTR 101, Introduction to Human Nutrition, NUTR 240, Introduction to Foods and NUTR 240LAB, Introduction to Foods Laboratory with a grade of B (3.0) or higher.
- Students must receive a grade of C (2.0) or higher in all of the other major courses.

In addition to the requirements listed above, students wishing to enter any of the food science and nutrition specializations must successfully complete CHEM 111, Introduction to Chemistry, CHEM 111LAB, Chemistry Laboratory or CHEM 181, General Chemistry I and CHEM 181LAB, General Chemistry Laboratory I, and MATH 100C, Intermediate Algebra, or their equivalents, before being admitted to the major. Students must consult with a major advisor for approval of the program specialization.

Students are highly encouraged to complete at least five credits of NUTR 490, Cooperative Education.

## Core Requirements

- NUTR 101 - Introduction to Human Nutrition **Credits: (5)**
- NUTR 240 - Introduction to Foods **Credits: (2)**
- NUTR 240LAB - Introduction to Foods Laboratory **Credits: (2)**
- NUTR 344 - Medical Nutrition Therapy I **Credits: (3)**
- NUTR 345 - Nutrition and the Lifecycle **Credits: (5)**
- NUTR 350 - Weight Management **Credits: (3)**
- NUTR 447 - Community Nutrition **Credits: (3)**

Select either:

- EDCS 312 - Educational Statistics **Credits: (4)**
- **OR** PSY 362 - Introductory Statistics **Credits: (5)**

Total Core Credits: 27-28

## Foods and Nutrition Specialization

The foods and nutrition specialization prepares students for a wide variety of careers in the food and nutrition industry including food processing companies (quality assurance and product development positions), food distributors, food brokerage companies, restaurant and institutional food service, pharmaceutical sales, and nutrition positions not requiring being a registered dietitian. It is highly recommended that students discuss possible minors with their academic advisor that would complement this specialization and enhance employment opportunities. Possible minors include food service management, exercise science, community health education, business, and administrative management. Students interested in applying to nursing programs following the completion of this degree are recommended to take BIOL 355 and BIOL 356, Human Anatomy and Physiology, instead of BIOL 201, Human

Physiology and BIOL 220, Introductory Cell Biology, plus BIOL 322, Introductory Microbiology.

## Required Courses

- BIOL 201 - Human Physiology **Credits: (5)**
- CHEM 111 - Introduction to Chemistry **Credits: (4)**
- **AND** CHEM 111LAB - Introductory Chemistry Laboratory **Credits: (1)**
- **OR**
- CHEM 181 - General Chemistry I **Credits: (4)**
- **AND** CHEM 181LAB - General Chemistry Laboratory I **Credits: (1)**
- CHEM 112 - Introduction to Organic Chemistry **Credits: (4)**
- CHEM 112LAB - Introduction to Organic Chemistry Laboratory **Credits: (1)**
- CHEM 113 - Introduction to Biochemistry **Credits: (4)**
- CHEM 113LAB - Introduction to Biochemistry Laboratory **Credits: (1)**
- NUTR 340 - Management of Food Resources **Credits: (2)**
- NUTR 340LAB - Management of Food Resources Laboratory **Credits: (1)**
- NUTR 342 - Quantity Food Production and Service **Credits: (4)**
- NUTR 342LAB - Quantity Food Production and Service Laboratory **Credits: (1)**
- NUTR 343 - Foods and Nutrition Professionalism **Credits: (1)**
- NUTR 347 - Nutrition Education and Counseling **Credits: (4)**
- NUTR 433 - Macronutrients **Credits: (3)**
- NUTR 440 - Experimental Foods **Credits: (2)**
- NUTR 440LAB - Experimental Foods Laboratory **Credits: (1)**
- NUTR 445 - Experimental Food Research **Credits: (1)**
- NUTR 445LAB - Experimental Food Research Laboratory **Credits: (1)**
- NUTR 446 - Sports Nutrition **Credits: (3)**
- NUTR 448 - Food Service Systems Management **Credits: (4)**

Total Required Course Credits: 48

Total Credits: 75-76

## College and Department Information

Health Sciences Department  
College of Education and Professional Studies

# Public Health BS, Population Health Specialization

Population health represents the area of study and practice focusing on the determinants and distribution of health across different groups of individuals. Understanding issues and situations that harm people's potential for health, well-being, and quality of life enables public health professionals to develop effective strategies to improve outcomes. The population health specialization prepares students for graduate study or career work with a variety of populations through diverse course offerings.

## Graduation Requirements

All students must complete all core course work with an average grade of "C" or higher.

## Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Assessing individual /community needs for health education.
- Planning health education strategies, interventions, or programs.
- Implementing health education strategies, interventions, or programs.
- Conducting evaluation/ research related to health education.
- Administering health education strategies, interventions, or programs.
- Serving as a health education resource person.
- Communicating /advocating for health and health education.

## Public Health Core

The public health profession focuses on preventing disease, addressing inequities and developing policies and programs that help communities achieve optimal health and well-being. Our program aims to educate and empower the emerging generation of public health leaders. The Bachelor of Science in Public Health prepares students for graduate work or careers in the field and exposes them to evidence-based research and practice experiences.

## Admission Requirements

To be admitted to the public health program a student must meet with and be signed in by a member of the public health faculty.

## Graduation Requirements

Students seeking the Bachelor of Science in Public Health must earn a C average or higher in all core courses.

## Program Requirements

Public health majors will complete 62 credits of core coursework and select a specialization in either Population Health (90 credits total) or Pre-Nursing (106 credits total). All majors are also required to complete a 5-credit capstone experience which includes one of the following applied tracks: research, internship, or academic service learning. All students will also complete a culminating experience course that fulfills

the general education and program requirements. PUBH 499 (3 credits) will be taken in the final quarter of a student's enrollment. Students may take their capstone and PUBH 499 concurrently.

## Special Requirements (other than departmental)

ENG 101 and ENG 102 must be completed prior to enrollment in PUBH 240.

## Public Health Core Requirements

- PSY 362 - Introductory Statistics **Credits:** (5)
- PUBH 230 - Foundations of Public and Community Health **Credits:** (4)
- PUBH 240 - Writing in the Health Sciences **Credits:** (4)
- PUBH 250 - Introduction to Health Policy and Systems **Credits:** (4)
- PUBH 311 - Cross Cultural Practices for Health and Medicine **Credits:** (4)
- PUBH 317 - Global Health Issues and Solutions **Credits:** (4)
- PUBH 320 - Environmental Health **Credits:** (4)
- PUBH 324 - Infectious and Non-infectious Disease **Credits:** (4)
- PUBH 375 - Theories of Health Behavior **Credits:** (4)
- PUBH 380 - Epidemiology **Credits:** (4)
- PUBH 422 - Community Health Communication and Promotion **Credits:** (4)
- PUBH 445 - Professionalism in Public Health **Credits:** (2)
- PUBH 460 - Public Health Ethics **Credits:** (3)
- PUBH 470 - Public Health Programming **Credits:** (4)
- PUBH 465 - Research Experience in Public Health **Credits:** (5) (Must be taken for 5 credits)
- **OR** PUBH 489 - Academic Service Learning in Public Health **Credits:** (1-12) (Must be taken for 5 credits)
- **OR** PUBH 490 - Cooperative Education **Credits:** (1-12) (Must be taken for 5 credits)
- PUBH 499 - Seminar **Credits:** (1-5) (Must be taken for 3 credits)

Total Core Credits: 62

## Population Health Specialization

Population health represents the area of study and practice focusing on the determinants and distribution of health across different groups of individuals. Understanding issues and situations that harm people's potential for health, well-being, and quality of life enables public health professionals to develop effective strategies to improve outcomes. The population health specialization prepares students for graduate study or career work with a variety of populations through diverse course offerings.

## Department-Approved Specialization Electives

**Students must complete a minimum of 28 credits from the following list of electives:**

(Students may also seek advisor approved electives outside of this list)

Additional field experience credits may be used for electives. Students who take more than one field experience/capstone course or more than the required 5 credits, may apply the additional credits to their electives.

- HED 101 - Essentials for Healthy Living **Credits:** (4)
- HED 210 - Drugs and Health **Credits:** (3)
- HED 387 - Principles of Fitness and Stress Management **Credits:** (3)
- NUTR 101 - Introduction to Human Nutrition **Credits:** (5)
- NUTR 318 - The Politics of Food and Health **Credits:** (3)
- **OR** PUBH 318 - The Politics of Food and Health **Credits:** (3)
- PUBH 209 - Consumer Health **Credits:** (4)
- PUBH 351 - Community Building Strategies for Public Health **Credits:** (4)
- PUBH 370 - Contemporary Issues in Public Health **Credits:** (4) (Variable topic, may be repeated up to 8 credits under a different title.)
- PUBH 376 - Community Food Strategies: Campus Garden **Credits:** (2)
- PUBH 409 - Community Mental Health Issues and Strategies **Credits:** (3)
- PUBH 412 - Aging and Public Health **Credits:** (3)
- PUBH 413 - Health Disparities in Rural and Frontier Communities **Credits:** (3)
- PUBH 420 - Women's Health Issues **Credits:** (4)
- PUBH 424 - Maternal and Child Health **Credits:** (3)
- PUBH 440 - Public Health Communication **Credits:** (3)
- PUBH 448 - Sexual Health **Credits:** (4)
- PUBH 465 - Research Experience in Public Health **Credits:** (5)
- PUBH 475 - Community Health Administration **Credits:** (3)
- PUBH 479 - Senior Seminar in Public Health **Credits:** (1)
- PUBH 480 - Grant Seeking and Administration in Public Health **Credits:** (3)
- PUBH 489 - Academic Service Learning in Public Health **Credits:** (1-12)
- PUBH 490 - Cooperative Education **Credits:** (1-12)

Total Specialization Credits: 28

Total Credits: 90

College and Department Information

Health Sciences Department  
College of Education and Professional Studies

## Public Health BS, Pre-Nursing Specialization

The pre-nursing specialization allows future professionals to enter nursing school with a solid background in public health theory and practice. CWU does not offer a degree program in nursing, but offers prerequisite courses suited for admission to professional nursing programs available across Washington.

**IMPORTANT:** Students **MUST** take responsibility for understanding current requirements of their chosen nursing program before applying to it. It is recommended and expected that students considering nursing careers will contact advisors at nursing programs of interest and ensure their own readiness for admission. Students choosing the pre-nursing specialization should take CHEM 111 and CHEM 111LAB at their earliest opportunity; additionally, students choosing the pre-nursing specialization are advised to choose PSY 101 as a general education fulfillment, given that it is a prerequisite for PSY 313.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Assessing individual /community needs for health education.
- Planning health education strategies, interventions, or programs.
- Implementing health education strategies, interventions, or programs.
- Conducting evaluation/ research related to health education.
- Administering health education strategies, interventions, or programs.
- Serving as a health education resource person.
- Communicating /advocating for health and health education.

### Public Health Core

The public health profession focuses on preventing disease, addressing inequities and developing policies and programs that help communities achieve optimal health and well-being. Our program aims to educate and empower the emerging generation of public health leaders. The Bachelor of Science in Public Health prepares students for graduate work or careers in the field and exposes them to evidence-based research and practice experiences.

### Admission Requirements

To be admitted to the public health program a student must meet with and be signed in by a member of the public health faculty.

### Graduation Requirements

Students seeking the Bachelor of Science in Public Health must earn a C average or higher in all core courses.

### Program Requirements

Public health majors will complete 62 credits of core coursework and select a specialization in either Population Health (90 credits total) or Pre-Nursing (106 credits total). All majors are also required to complete a 5-credit capstone

experience which includes one of the following applied tracks: research, internship, or academic service learning. All students will also complete a culminating experience course that fulfills the general education and program requirements. PUBH 499 (3 credits) will be taken in the final quarter of a student's enrollment. Students may take their capstone and PUBH 499 concurrently.

### Special Requirements (other than departmental)

ENG 101 and ENG 102 must be completed prior to enrollment in PUBH 240.

### Public Health Core Requirements

- PSY 362 - Introductory Statistics **Credits:** (5)
- PUBH 230 - Foundations of Public and Community Health **Credits:** (4)
- PUBH 240 - Writing in the Health Sciences **Credits:** (4)
- PUBH 250 - Introduction to Health Policy and Systems **Credits:** (4)
- PUBH 311 - Cross Cultural Practices for Health and Medicine **Credits:** (4)
- PUBH 317 - Global Health Issues and Solutions **Credits:** (4)
- PUBH 320 - Environmental Health **Credits:** (4)
- PUBH 324 - Infectious and Non-infectious Disease **Credits:** (4)
- PUBH 375 - Theories of Health Behavior **Credits:** (4)
- PUBH 380 - Epidemiology **Credits:** (4)
- PUBH 422 - Community Health Communication and Promotion **Credits:** (4)
- PUBH 445 - Professionalism in Public Health **Credits:** (2)
- PUBH 460 - Public Health Ethics **Credits:** (3)
- PUBH 470 - Public Health Programming **Credits:** (4)
- PUBH 465 - Research Experience in Public Health **Credits:** (5) (Must be taken for 5 credits)
- **OR** PUBH 489 - Academic Service Learning in Public Health **Credits:** (1-12) (Must be taken for 5 credits)
- **OR** PUBH 490 - Cooperative Education **Credits:** (1-12) (Must be taken for 5 credits)
- PUBH 499 - Seminar **Credits:** (1-5) (Must be taken for 3 credits)

Total Core Credits: 62

### Pre-Nursing Specialization

### Specialization Required Courses

- BIOL 220 - Introductory Cell Biology **Credits:** (5)
- BIOL 322 - Introductory Microbiology **Credits:** (5)
- BIOL 305 - Human Anatomy and Physiology for Health-Related Majors I **Credits:** (5)
- **OR** BIOL 355 - Human Anatomy and Physiology I **Credits:** (5)

- BIOL 306 - Human Anatomy and Physiology for Health-Related Majors II **Credits:** (5)
- **OR** BIOL 356 - Human Anatomy and Physiology II **Credits:** (5)
- CHEM 111 - Introduction to Chemistry **Credits:** (4)
- CHEM 111LAB - Introductory Chemistry Laboratory **Credits:** (1)
- CHEM 112 - Introduction to Organic Chemistry **Credits:** (4)
- CHEM 112LAB - Introduction to Organic Chemistry Laboratory **Credits:** (1)
- CHEM 113 - Introduction to Biochemistry **Credits:** (4)
- CHEM 113LAB - Introduction to Biochemistry Laboratory **Credits:** (1)
- PSY 101 - General Psychology **Credits:** (5)
- PSY 313 - Developmental Psychology **Credits:** (4)

Total Required Specialization Credits: 44

Total Credits: 106

### College and Department Information

Health Sciences Department  
College of Education and Professional Studies

## Exercise Science Minor

This minor is designed primarily for those individuals who major in disciplines such as nutrition, biology, physical education, public health, and business. Courses in this minor may also be used to satisfy requirements in other major programs. For information, please contact Tim Burnham, [tim.burnham@cwu.edu](mailto:tim.burnham@cwu.edu).

Required Courses Credits: 20

- EXSC 350 - Gross Anatomy **Credits:** (3)
- EXSC 350LAB - Gross Anatomy Laboratory **Credits:** (2)
- EXSC 351 - Physiology **Credits:** (4)
- EXSC 351LAB - Physiology Laboratory **Credits:** (1)
- EXSC 371 - Movement Analysis **Credits:** (5)
- EXSC 450 - Physiology of Exercise **Credits:** (4)
- EXSC 450LAB - Physiology of Exercise Laboratory **Credits:** (1)

Select from two of the following: Credits: 4-8

- EXSC 446 - Sports Nutrition **Credits:** (3)
- EXSC 455 - Fitness Assessment and Exercise Prescription **Credits:** (4)
- EXSC 455LAB - Fitness Assessment and Exercise Prescription Laboratory **Credits:** (1)
- EXSC 471 - Sports Biomechanics **Credits:** (3)
- PSY 401 - Psychology of Sport **Credits:** (4)

Total Credits: 24-28

#### College and Department Information

Health Sciences Department  
College of Education and Professional Studies

## Food Service Management Minor

This minor is designed primarily for students earning degrees in business administration or in tourism management that will allow them better access to careers in food service management. Courses in this 26- to 27-credit minor may also be used to satisfy requirements in other major programs. This minor may not be used for students earning a BS degree in food science and nutrition or a BAS in food service management.

#### Required Courses Credits: (22)

- NUTR 101 - Introduction to Human Nutrition **Credits: (5)**
- NUTR 240 - Introduction to Foods **Credits: (2)**
- NUTR 340 - Management of Food Resources **Credits: (2)**
- NUTR 342 - Quantity Food Production and Service **Credits: (4)**
- NUTR 448 - Food Service Systems Management **Credits: (4)**
- NUTR 490 - Cooperative Education **Credits: (1-12)**  
(Must be taken for at least 5 credits)

#### Department-Approved Electives Credits: (4-5)

- MGT 380 - Organizational Management **Credits: (5)**
- NUTR 240LAB - Introduction to Foods Laboratory **Credits: (2)**
- NUTR 340LAB - Management of Food Resources Laboratory **Credits: (1)**
- NUTR 342LAB - Quantity Food Production and Service Laboratory **Credits: (1)**
- NUTR 490 - Cooperative Education **Credits: (1-12)**  
(Must be taken for 5 credits)

Total Credits: 26-27

#### College and Department Information

Health Sciences Department  
College of Education and Professional Studies

## Nutrition Minor

This program is designed primarily for those individuals in other majors who desire a more in-depth study of nutrition. This program is intended for students in majors such as exercise science, family studies, physical and health education, and public health. This minor may also be of interest for students in pre-professional programs including pre-medicine, pre-dentistry,

pre-veterinary, and pre-physical therapy. Courses in this minor may also be used to satisfy requirements in other major programs.

Students wishing to attain full admission to the minor must meet the following requirements: Successful completion of NUTR 101 - Introduction to Human Nutrition, NUTR 240 - Introduction to Foods, and NUTR 240LAB- Introduction to Foods Laboratory with a grade of B (3.0) or higher. Students must receive a grade of C (2.0) or higher in all other minor courses.

#### Required Courses

- NUTR 101 - Introduction to Human Nutrition **Credits: (5)**
- NUTR 240 - Introduction to Foods **Credits: (2)**
- NUTR 240LAB - Introduction to Foods Laboratory **Credits: (2)**
- NUTR 340 - Management of Food Resources **Credits: (2)**
- NUTR 340LAB - Management of Food Resources Laboratory **Credits: (1)**
- NUTR 345 - Nutrition and the Lifecycle **Credits: (5)**
- NUTR 350 - Weight Management **Credits: (3)**

#### Department-approved Electives - Credits: (3-5)

- NUTR 436 - Theory and Treatment of Eating Disorders **Credits: (3)**
- NUTR 347 - Nutrition Education and Counseling **Credits: (4)**
- NUTR 446 - Sports Nutrition **Credits: (3)**
- NUTR 447 - Community Nutrition **Credits: (3)**
- NUTR 490 - Cooperative Education **Credits: (1-12)**  
(Must be taken for 5 credits)

Total Credits: 23-25

#### College and Department Information

Health Sciences Department  
College of Education and Professional Studies

## Physical-Rehabilitation Therapy Minor

The minor provides knowledge and skills related to physical-rehabilitative therapies; however, additional course work in specialized programs is required to obtain certification and licensure in order to practice. Students interested in becoming certified and licensed should contact the professional associations of interest for additional information. This minor may be of interest for students in a wide variety of pre-professional healthcare programs. Courses in this minor may also be used to satisfy requirements in other major programs. For information, please contact Vince Nethery, [netheryv@cwu.edu](mailto:netheryv@cwu.edu).



## Grade Requirement

A grade of C or higher is required in all courses in this minor.

### Required Courses

- EXSC 350 - Gross Anatomy **Credits:** (3)
- EXSC 350LAB - Gross Anatomy Laboratory **Credits:** (2)
- EXSC 351 - Physiology **Credits:** (4)
- EXSC 351LAB - Physiology Laboratory **Credits:** (1)
- EXSC 352 - Assessment and Treatment of Athletic Injuries **Credits:** (4)
- EXSC 353 - Physical and Orthopedic Assessment **Credits:** (4)
- EXSC 370 - Biomechanics **Credits:** (5)
- EXSC 438 - Therapeutic Exercise **Credits:** (3)
- EXSC 446 - Sports Nutrition **Credits:** (3)
- EXSC 450 - Physiology of Exercise **Credits:** (4)
- EXSC 450LAB - Physiology of Exercise Laboratory **Credits:** (1)
- EXSC 452 - Therapeutic Modalities **Credits:** (3)
- EXSC 470 - Clinical Biomechanics **Credits:** (3)

Total Credits: 40

### College and Department Information

Health Sciences Department

College of Education and Professional Studies

## Public Health Minor

The minor in public health is an excellent supporting option for individuals interested in the health and human services fields. Students will gain insight into public health settings, approaches, and processes. Students from a wide variety of majors may find a public health minor useful. A public health minor may be particularly well suited for students studying communication, economics, law and justice, nutrition, pre-medicine, psychology, or sociology.

### Required Courses Credits: 16

- PUBH 230 - Foundations of Public and Community Health **Credits:** (4)
- PUBH 250 - Introduction to Health Policy and Systems **Credits:** (4)
- PUBH 311 - Cross Cultural Practices for Health and Medicine **Credits:** (4)
- PUBH 324 - Infectious and Non-infectious Disease **Credits:** (4)

### Department-Approved Electives Credits: 12

Students may choose any 12 credits of advisor approved PUBH credits.

- HED 101 - Essentials for Healthy Living **Credits:** (4)
- HED 210 - Drugs and Health **Credits:** (3)
- HED 387 - Principles of Fitness and Stress Management **Credits:** (3)
- PUBH 209 - Consumer Health **Credits:** (4)
- PUBH 240 - Writing in the Health Sciences **Credits:** (4)
- PUBH 298 - Special Topics **Credits:** (1-6)
- PUBH 299 - Seminar **Credits:** (1-5)
- PUBH 310 - Community Health **Credits:** (3)
- PUBH 317 - Global Health Issues and Solutions **Credits:** (4)
- PUBH 318 - The Politics of Food and Health **Credits:** (3)
- PUBH 320 - Environmental Health **Credits:** (4)
- PUBH 351 - Community Building Strategies for Public Health **Credits:** (4)
- PUBH 370 - Contemporary Issues in Public Health **Credits:** (4)
- PUBH 375 - Theories of Health Behavior **Credits:** (4)
- PUBH 376 - Community Food Strategies: Campus Garden **Credits:** (2)
- PUBH 380 - Epidemiology **Credits:** (4)
- PUBH 396 - Individual Study **Credits:** (1-6)
- PUBH 397 - Honors **Credits:** (1-12)
- PUBH 398 - Special Topics **Credits:** (1-6)
- PUBH 399 - Seminar **Credits:** (1-5)
- PUBH 409 - Community Mental Health Issues and Strategies **Credits:** (3)
- PUBH 412 - Aging and Public Health **Credits:** (3)
- PUBH 413 - Health Disparities in Rural and Frontier Communities **Credits:** (3)
- PUBH 420 - Women's Health Issues **Credits:** (4)
- PUBH 422 - Community Health Communication and Promotion **Credits:** (4)
- PUBH 424 - Maternal and Child Health **Credits:** (3)
- PUBH 440 - Public Health Communication **Credits:** (3)
- PUBH 445 - Professionalism in Public Health **Credits:** (2)
- PUBH 448 - Sexual Health **Credits:** (4)
- PUBH 460 - Public Health Ethics **Credits:** (3)
- PUBH 465 - Research Experience in Public Health **Credits:** (5)
- PUBH 470 - Public Health Programming **Credits:** (4)
- PUBH 471 - Program Planning **Credits:** (4)
- PUBH 472 - Program Implementation and Evaluation **Credits:** (4)
- PUBH 475 - Community Health Administration **Credits:** (3)
- PUBH 479 - Senior Seminar in Public Health **Credits:** (1)
- PUBH 480 - Grant Seeking and Administration in Public Health **Credits:** (3)
- PUBH 490 - Cooperative Education **Credits:** (1-12)
- PUBH 496 - Individual Study **Credits:** (1-6)
- PUBH 497 - Honors **Credits:** (1-12)
- PUBH 498 - Special Topics **Credits:** (1-6)
- PUBH 499 - Seminar **Credits:** (1-5)

Total Credits: 28

## College and Department Information

Health Sciences Department  
College of Education and Professional Studies

# History Department

College of Arts and Humanities

Ellensburg

Language and Literature Bldg., room 100

Mail Stop 7553

509-963-1655

[www.cwu.edu/history](http://www.cwu.edu/history)

See website for how this program may be used for educational and career purposes.

## Faculty and Staff Chair

Roxanne Easley, PhD

## Professors

Roxanne Easley, PhD, Russia, Eastern Europe

Daniel Herman, PhD, U.S. pre-1877, U.S. West, Native American

Jason Knirck, PhD, Ireland, Britain, British Empire

Marilyn Levine, PhD, Modern China

Stephen Moore, PhD, Pacific Northwest, foreign relations, social studies education

Marji Morgan, PhD, 19th century British

## Associate Professors

Jason Dormady, PhD, Modern Mexico and Latin America, U.S. Borderlands

## Assistant Professors

Chong Eun Ahn, PhD, Modern East Asia

Lacy Ferrell, PhD, Africa

## Lecturers

Albert Miller, MA

Kenneth Munsell, MA

John Streepy, MA

## Emeritus Professors

Karen J. Blair, PhD, 20th century U.S., Women

Beverly Heckart, PhD, Germany, Europe

Zoltan Kramar, PhD, Ancient World

Larry Lowther, PhD, Colonial and Revolutionary America

Kent Richards, PhD, American West, Pacific Northwest

## Staff

K. Angie Hill, secretary

## Department Information

The history faculty offers courses leading to bachelor of arts and master of arts.

Students who declare a major in history must register with the department.

## History Honors Program

The Department awards Honors status to qualified history majors. To qualify for the program, students must meet the following requirements:

- A history major (small plan, large plan or History Social Studies Teaching)
- A GPA of 3.5 in history courses and 3.25 overall
- A year of 200- or 300-level coursework in a foreign language OR a credited study abroad trip
- An honors research paper (30-page minimum) on a historical topic. This paper may be started in HIST 481 or another upper division history class and may require additional independent study credits to complete. A committee of three faculty members will judge whether the paper meets departmental standards for honors. A Douglas Honors College thesis with a faculty mentor in the history department will also count for this requirement.

Students who complete the above requirements will graduate with departmental honors. Please contact the department chair for more information.

## Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

## Course Offerings

Frequency of course offering information can be found at the department website: [www.cwu.edu/history](http://www.cwu.edu/history) or by contacting the department directly.

## History Major (Large Plan), BA

(Note: It is recommended that students who plan to enter graduate school should complete two years of a world language at the college level.)

## Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- To identify patterns of historical change.
- Analyze primary and secondary sources, understand their argument and approach, and then compare them with other works.
- Develop critical and analytical skills in written exercises, including a significant research paper.
- Use scholarly historical resources and reference tools of a university library.

## Required Courses

Lower-Division Credits: 20

Select 20 credits from the following:

World Civilization

- HIST 101 - World History to 1500 **Credits:** (5)  
(Western civilization may be substituted)
- HIST 102 - World History: 1500-1815 **Credits:** (5)  
(Western civilization may be substituted)
- HIST 103 - World History Since 1815 **Credits:** (5)  
(Western civilization may be substituted)

#### United States History

- HIST 143 - United States History to 1865 **Credits:** (5)
- HIST 144 - United States History Since 1865 **Credits:** (5)

#### Upper-Division Credits: 54

- HIST 302 - Historical Methods **Credits:** (5) (Students must earn a minimum grade of C as a major requirement)
- HIST 481 - Senior Thesis **Credits:** (4) (Students must earn a minimum grade of C as a major requirement)
- Upper-division United States History **Credits:** (5)
- Upper-division Elective **Credits:** (40)  
The elective credits must include at least 5 credits each from three of the following fields: Africa, Asia, Europe, Latin America, World/Transcontinental

Total Credits: 74

#### College and Department Information

History Department  
College of Arts and Humanities

## History Major (Small Plan), BA

(Note: It is recommended that students who plan to enter graduate school should complete two years of a world language at the college level.)

#### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- To identify patterns of historical change.
- Analyze primary and secondary sources, understand their argument and approach, and then compare them with other works.
- Develop critical and analytical skills in written exercises, including a significant research paper.
- Use scholarly historical resources and reference tools of a university library.

#### Required Courses

Lower-Division Credits: 20

Select 20 credits from the following:

#### World Civilization

- HIST 101 - World History to 1500 **Credits:** (5)  
(Western civilization may be substituted)
- HIST 102 - World History: 1500-1815 **Credits:** (5)  
(Western civilization may be substituted)
- HIST 103 - World History Since 1815 **Credits:** (5)  
(Western civilization may be substituted)

#### United States History

- HIST 143 - United States History to 1865 **Credits:** (5)
- HIST 144 - United States History Since 1865 **Credits:** (5)

#### Upper-Division Credits: 39

- HIST 302 - Historical Methods **Credits:** (5) (Students must earn a minimum grade of C as a major requirement)
- HIST 481 - Senior Thesis **Credits:** (4) (Students must earn a minimum grade of C as a major requirement)
- Upper-division United States History **Credits:** (5)
- Upper-division Elective **Credits:** (25)  
The elective credits must include at least 5 credits each from three of the following fields: Africa, Asia, Europe, Latin America, World/Transcontinental

Total Credits: 59\*

(NOTE: \*Students with fewer than 60 credits must have a minor or another major in order to graduate.)

#### College and Department Information

History Department  
College of Arts and Humanities

## History Social Studies Teaching, BA

This major satisfies the endorsements for history and social studies. This major is designed for students in the secondary Teacher Training Program. Students taking this major are required to apply to the Teacher Certification Program and complete the Professional Education Program requirements offered through the Department of Educational Foundations and Curriculum.

#### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- 1.0 Civics-The candidate has knowledge of our American democracy including: its foundations, principles, perennial issues/tensions, development, and ways for citizens to participate in civic and democratic processes at the local, state, tribal, national, and

international levels. (Washington State Core Competency 1.0 Civics)

- 2.0 Economics-The candidate understands the concepts and tools necessary for an economic way of thinking, the interaction of buyers and sellers in markets, the workings of national economies, and interactions within the global marketplace. (Washington State Core Competency 2.0 Economics)
- 3.0 Geography-The candidate applies and demonstrates knowledge of geography and how geographic features and human cultures interact. (Washington State Core Competency 3.0 Geography)
- 4.0 History-The candidate understands historical thinking as a process of chronological reasoning which includes knowing and examining issues of causality, connections, significance, and context with the goal of developing credible explanations of historical events and developments (including local, state, tribal, national, regional, world) based on reasoned interpretation of evidence. (Washington State Core Competency 4.0 History)
- 5.0 Social Studies Skills--The candidate understands and applies reasoning skills to conduct research, deliberate, form, evaluate, and communicate claims. (Washington State Core Competency 5.0 Social Studies Skills)
- 6.0 Social Studies Pedagogy-The candidate enables students to develop and apply essential social studies concepts and skills (Washington State Core Competency 6.0 Social Studies Pedagogy)

#### Required Courses

- HIST 301 - Pacific Northwest History **Credits:** (5)
- HIST 302 - Historical Methods **Credits:** (5) (Students must earn a minimum grade of C as a major requirement)
- HIST 421 - Methods and Materials in the Social Studies, Secondary **Credits:** (5) (Prior completion of EFC 340 recommended. Students must be admitted to the Teacher Preparation Program prior to enrolling in this course).
- HIST 481 - Senior Thesis **Credits:** (4) (Students must earn a minimum grade of C as a major requirement)
- POSC 210 - American Politics **Credits:** (5)

Select from the following - Credits: 20

- HIST 101 - World History to 1500 **Credits:** (5) (Western civilization may be substituted)
- HIST 102 - World History: 1500-1815 **Credits:** (5) (Western civilization may be substituted)
- HIST 103 - World History Since 1815 **Credits:** (5) (Western civilization may be substituted)
- HIST 143 - United States History to 1865 **Credits:** (5)
- HIST 144 - United States History Since 1865 **Credits:** (5)

Select from the following - Credits: 15

- Upper-division U.S. History **Credits:** (5)
- Upper-division Electives **Credits:** (10)  
The elective credits must include at least 5 credits each from two of the following fields: Africa, Asia, Europe, Latin America, World/Transcontinental.

Select from the following - Credits: 5

- ECON 101 - Economic Issues **Credits:** (5)
- ECON 102 - World Economic Issues **Credits:** (5)
- ECON 201 - Principles of Economics Micro **Credits:** (5)
- ECON 202 - Principles of Economics Macro **Credits:** (5)

Select from the following - Credits: 5

- ANTH 107 - Being Human: Past and Present **Credits:** (5)
- SOC 101 - Social Problems **Credits:** (5)
- SOC 107 - Principles of Sociology **Credits:** (5)

Select from the following - Credits: 4-5

- GEOG 101 - World Regional Geography **Credits:** (5)
- GEOG 107 - Our Dynamic Earth **Credits:** (5)
- GEOG 304 - Economic Geography **Credits:** (5)
- GEOG 308 - Cultural Geography **Credits:** (4)
- GEOG 346 - Political Geography **Credits:** (4)

Select from the following - Credits: 4-5

- GEOG 273 - Geography of Rivers **Credits:** (5)
- GEOG 352 - Geography of North America **Credits:** (4)
- GEOG 355 - Geography of the Pacific Northwest **Credits:** (4)
- GEOG 366 - Geography of the Middle East **Credits:** (4)
- GEOG 368 - Geography of Middle America **Credits:** (4)
- GEOG 370 - Geography of South America **Credits:** (4)
- GEOG 371 - Geography of Europe **Credits:** (4)
- GEOG 372 - Geography of Russia **Credits:** (4)
- GEOG 375 - Geography of Asia **Credits:** (4)

Total Credits: 77-79

Professional Education Program Credits: 50

Professional Education Program

Total Credits: 127-129

College and Department Information

History Department  
College of Arts and Humanities

## History Minor

Required Courses

Select from the following - Credits: 10

World Civilization

Western Civilization may be substituted.

- HIST 101 - World History to 1500 **Credits: (5)**
- HIST 102 - World History: 1500-1815 **Credits: (5)**
- HIST 103 - World History Since 1815 **Credits: (5)**

United States History

- HIST 143 - United States History to 1865 **Credits: (5)**
- HIST 144 - United States History Since 1865 **Credits: (5)**

Upper-division History Electives - Credits: 20

Total Credits: 30

College and Department Information

History Department  
College of Arts and Humanities

## Humanities Program

College of Arts and Humanities  
Ellensburg  
Language and Literature Bldg., room 407

erdmanr@cwu.edu

**Contact Person**  
Ruthi Erdman, MA

**Faculty**  
Marna Carroll  
Paula Collucci  
Ruth Erdman  
Kayla Jeffress  
Kevin Leaverton  
Matthew Martinson  
Shannon Wilson

### Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### Course Offerings

Frequency of course offering information can be found at the department website or by contacting the department directly.

## Individual Studies Program

College of the Sciences  
Ellensburg  
Dean Hall, room 130  
509-963-1866

**Program Director**  
Alena Yastchenko

### Program Information

This academic program provides an opportunity for students to develop, with the assistance of a faculty advisor(s), a unique interdisciplinary program of study. Each program of study must be comprised of a coherent curriculum that supports student's stated professional and education goals. Individual Studies majors may be assigned the BA or BS degree as deemed appropriate. The Individual Studies designation and the title of the major will be noted on the diploma and the student's academic transcript (i.e., BS Individual Studies: Aviation Safety).

### Admission Requirements

Applicants must have completed 60 credit hours of study with a minimum 2.5 cumulative GPA and be in academic good standing. All proposal materials must be submitted to the associate dean of the College of the Sciences at least three quarters prior to anticipated graduation. Proposals are subject to review and approval of an advisory committee which meets quarterly.

### Application Procedures

Students wishing to apply to the Individual Studies major must submit a proposal to include an application form with proposed degree title, a statement of purpose, an explanation of the primary learning goals of the major, a listing of courses comprising the major, and support from a faculty liaison. The course of study should include a minimum of 60 credits including at least two separate subject areas; 30 of the credits must be upper division. The proposal will be developed under the guidance of a faculty member during the required IS 200 - Introduction to Individual Studies course.

### Degree Requirements

**Students must earn a minimum grade of C- in each course counted toward fulfilling major requirements and the overall GPA in the major must be a 2.5.**

### Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### Course Offerings

Frequency of course offering information can be found by contacting the department directly.

# Individual Studies

College of the Sciences  
Ellensburg  
Dean Hall, room 130  
509-963-1866

## Program Information

This academic program provides an opportunity for students to develop, with the assistance of a faculty advisor(s), a unique interdisciplinary program of study. Each program of study must be comprised of a coherent curriculum that supports student's stated professional and education goals. Individual Studies majors may be assigned the BA or BS degree as deemed appropriate. The Individual Studies designation and the title of the major will be noted on the diploma and the student's academic transcript (i.e., BS Individual Studies: Aviation Safety).

## Admission Requirements

Applicants must have completed 60 credit hours of study with a minimum 2.5 cumulative GPA and be in academic good standing. All proposal materials must be submitted to the associate dean of the College of the Sciences at least three quarters prior to anticipated graduation. Proposals are subject to review and approval of an advisory committee which meets quarterly.

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## Degree Requirements

(NOTE: Students seeking a BA degree must complete one-year college/university study or two years high school study of a single world language.)

**Students must earn a minimum grade of C- in each course counted toward fulfilling major requirements and the overall GPA in the major must be a 2.5.**

## Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate their knowledge, comprehension, and synthesis of individual studies concepts through final paper/portfolio evidence.
- Demonstrate their ability to apply a variety of skills as developed from the individual studies major through paper/portfolio evidence.
- Demonstrate the dispositions and attitudes necessary of their individual studies major through paper/portfolio evidence.

## Required Courses

- IS 200 - Introduction to Individual Studies **Credits:** (1)
- IS 487 - End-of-Program Assessment **Credits:** (1)
- No more than 15 credits may overlap with a declared minor, second major, of general education requirements.
- No more than 15 credits may be numbered 490.

## College and Department Information

College of the Sciences

# Information Technology and Administrative Management Department

College of Education and Professional Studies  
Samuelson, second floor, room 206  
Mail Stop 7488  
509-963-2611

[www.cwu.edu/it-management](http://www.cwu.edu/it-management)

See website for how this program may be used for educational and career purposes.

## Faculty and Staff Chair

Robert A. Lupton, PhD

## Professors

Lori A. Braunstein, PhD, administrative management  
Natalie Lupton, PhD, retail management and technology, administrative management  
Robert A. Lupton, PhD, retail management and technology  
Fen Wang, PhD, information technology

## Associate Professors

Terry Alkire, PhD, administrative management, retail management and technology  
Julie Bonner, DB, administrative management, information technology  
Chester Claar, PhD, information technology, cybersecurity  
Jaclyn Krause, PhD, information technology  
Laura Portolese, DBA, administrative management  
Hideki Takei, DBA, administrative management, retail management and technology  
Robert Trumpy, EdD, LMHC, LCSW, administrative management  
Nathan White, PhD, information technology, cybersecurity

## Assistant Professors

Martin Bagaya, PhD, information technology, cybersecurity  
Kurt Kirstein, EdD, administrative management

## Lecturers

Cathy Anderson, PhD, retail management and technology  
 Debbie Angel, MS, administrative management  
 Peter Anthony, EdD, administrative management  
 Joy Bensiger, PhD, information technology  
 Ellen Bjorge, MBA, information technology  
 Andreas Bohman, MS, CISSP, cybersecurity  
 James Brown, MET, information technology  
 Cathy Bushá, JD, information technology  
 Brandi Carter-Harrington, MEd, administrative management  
 David Douglas, MS, administrative management, retail management and technology  
 John Durham, MM, information technology  
 Eric Fleischman, MS, MA, CISSP, cybersecurity  
 Elizabeth Fountain, PhD, administrative management  
 Amanda Goertz, MEd, administrative management  
 Kathey Hatfield, MEd, administrative management  
 Sae Lee, MS, information technology  
 Terry Linkletter, MS, administrative management, information technology  
 Kathy McGee, MS, administrative management  
 Mary Minor, information technology  
 Shannon Panattoni, MEd, information technology  
 Amy Perry, MEd, information technology  
 Susan Rivera, PhD, administrative management  
 Amber Simon, MBA, administrative management  
 Lori Thompson, PhD, administrative management  
 Charles Wahle, MEd, information technology  
 Deborah Wells, MS, cybersecurity, administrative management  
 Luke Williams, MBA, administrative management, retail management and technology

#### Staff

Libby Gibson, secretary supervisor  
 Elizabeth Henry, program manager  
 Dawn McReynolds, online academic counselor  
 Laurie Stehle, director online programs  
 Rachel White, outreach assistant

### Bachelor of Science Information Technology and Administrative Management

#### BS-ITAM Program Overview

The Bachelor of Science in Information Technology and Administrative Management (ITAM) provides a degree path for students with five high demand specializations needed by the modern workforce.

1. Network Administration and Management Specialization
2. Web and Database Administration and Management Specialization
3. Retail Management and Technology Specialization
4. Administrative Management Specialization
5. Cybersecurity Specialization

The ITAM curriculum, designed by subject matter experts with guidance from industry professionals, addresses the current demand for tech-savvy individuals who are also able to effectively lead and motivate teams, manage projects, and integrate technological solutions. Students completing this major will take a core set of courses and select one of the five specialization areas. The BS-ITAM is comprised of two complementing areas creating synergy.

1. All BS-ITAM specializations are complemented by a core foundation of relevant and current human-

centered skills in management, leadership, project management, business communications, financial management, ethics, personal selling, and CRM as well as hard skills in database management, web development, computer networking, and computer applications.

2. The specializations feature advanced study in high demand areas of IT management.

#### BS-ITAM Program Admission Requirements

Students are encouraged to apply for their ITAM major early in their university studies, even as soon as their first quarter. Once enrolled in the ITAM program students will begin working with a knowledgeable ITAM advisor to design their academic course of study at CWU and make sure they are fulfilling all of the requirements for successful degree completion. Application forms are available in the Ellensburg campus department or on the ITAM website. [www.cwu.edu/it-management](http://www.cwu.edu/it-management).

#### BS-ITAM Graduation Requirements

The following requirements apply to students seeking the BS-ITAM degree:

Students must earn a minimum cumulative GPA of 2.3 in the ITAM coursework to be eligible for the degree.

Students must earn a minimum grade of C- in each course.

#### Course Fees

Most ITAM courses that use hardware and software resources are assessed a course fee of \$25 or \$50, depending on the required technology.

#### List of Specializations for the BS-ITAM

Students seeking the BS-ITAM take a common set of core courses of relevant and current human-centered skills in management, leadership, project management, business communications, financial management, ethics, personal selling, and CRM as well as hard skills in database management, web development, computer networking, and computer applications. Additionally, students complete a specialization within the BS-ITAM degree:

1. Network Administration and Management Specialization
2. Web and Database Administration and Management Specialization
3. Retail Management and Technology Specialization
4. Administrative Management Specialization
5. Cybersecurity Specialization

#### Network Administration and Management Specialization

Students in this specialization design, construct, and manage the network infrastructure vital to modern business operations. They can make appropriate recommendations for hardware and software, communicate technical information clearly to a variety of audiences, effectively lead teams, and stay current with emerging trends in a rapidly advancing technological environment. The advanced networking administration and management courses are complemented by a core foundation of relevant and current human-centered skills in management, leadership, project management, business communications, financial management, ethics, professional selling, customer relationship management, as well as hard skills in database management, web development, and computer applications.

Graduates secure positions as network administrators, network analysts, network managers, data communication analysts, network operations analysts, network specialists, network technicians, computer support specialists, and user support specialists.

### **Web and Database Administration and Management Specialization**

Majors in this specialization gain the skills to plan, lead, and manage the digital profiles of modern enterprises. Balancing concerns of visual design, user experience, hardware capabilities, and emerging technological developments, these graduates are ready to stand at the nexus of web development teams and maximize their capacity for creativity, innovation, adaptation, and efficiency. The advanced web and database courses are complemented by a core foundation of relevant and current human-centered skills in management, leadership, project management, business communications, financial management, ethics, professional selling, customer relationship management, as well as hard skills in computer networking and computer applications. Graduates secure positions as web administrators, database administrators, web designers, database developers, web page developers, database managers, and web masters.

### **Retail Management and Technology Specialization**

This specialization trains the entrepreneurs and management professionals who develop and grow organizations across multiple channels. Students learn all sides of the retail environment from business basics to marketing and selling products, customer relationship management, branding, and the nuances of e-commerce. The advanced retail management technology courses are complemented by a core foundation of relevant and current human-centered skills in management, leadership, project management, business communications, financial management, ethics, professional selling, as well as hard skills in database management, web development, computer networking, and computer applications. Graduates pursue careers in retail environments that infuse information technology in areas such as omni channels, management, selling, distribution and logistics, purchasing, operations, merchandising, buying, entrepreneurship, and small business ownership.

### **Administrative Management Specialization**

This specialization develops leaders ready to meet the administrative needs of any organization by combining technical knowledge with skills in leadership and supervision, effective business practices, project management, and communication. Administrative management majors become skilled problem-solvers and innovators, adapting to the changing needs of modern enterprise. The advanced administrative management courses are complemented by a core foundation of relevant and current human-centered skills in business communications, financial management, ethics, professional selling, customer relationship management, as well as hard skills in database management, web development, computer networking, and computer applications. The need for graduates with these skills crosses all types of business including agriculture, construction, finance, and retail, government, manufacturing and non-for-profits.

### **Cybersecurity Specialization**

Students will gain knowledge specific to the detection, protection, and recovery from attacks to an organization's

information assets. Gaining skills in the growing employment area of network security combined with the management and soft-skills classes, graduates achieve a competitive edge in the IT marketplace. The advanced cybersecurity courses are complemented by a core foundation of relevant and current human-centered skills in project management, business communications, financial management, ethics, professional selling, customer relationship management, as well as hard skills in database management, web development, computer networking, and computer applications. Graduates secure careers as a cybersecurity specialist, information security officer, information assurance analyst, information security relationship analyst, cybersecurity analyst, and information technology specialist. The need for cybersecurity experts spans all organizations including: public utility companies, national security agencies, food and water suppliers, financial services, and companies with intellectual property to protect.

### **ITAM Minors or Certificates**

The information technology and administrative management minors and certificates provide recognition for students who complete the specified minor or certificate courses. Such recognition will benefit students in gaining professional employment or advancing in their current professional positions.

Each of our nine minors will complement any major field, helping CWU students stand out from the crowd and be competitive in today's job market. Applied, relevant skill sets develop individuals ready to handle the challenges of modern global industry.

Application forms for minors and certificates can be obtained in the Ellensburg campus department or on the ITAM web site at [www.cwu.edu/it-management](http://www.cwu.edu/it-management).

### **Minors or certificates are available in the following areas:**

- **Administrative Management**
- **Cybersecurity**
- **Digital Forensics and Incident Response (DFIR)**
- **Innovation through IT**
- **Modern IT Applications**
- **Project Management**
- **Retail Management and Technology**
- **Structures of Data Analytics for IT Managers**
- **Web Design and Management**

### **ITAM Minors or Certificates Program Requirement**

A minimum GPA of 2.3 in the minor and certificate courses must be achieved with a minimum grade of C- in each course.

### **Bachelor of Applied Science**

#### **Information Technology and Administrative Management**

Providing students with management, leadership, critical thinking skills is the primary purpose of the BAS-ITAM degree. Students learn the soft-skills to excel in managing people, projects or departments. A curriculum rich in communication and problem-solving skills, the program complements any professional/technical degree with timely and relevant skills to qualify students for leadership roles in their technical area.

#### **BAS-ITAM Program Admission Requirements**

Applicants for the BAS-ITAM must meet the following admission requirements before admittance to the program:



- Completion of an applied or technical degree with at least 40 credits in an applied/technical area from a community college or technical college.
- Minimum GPA of 2.3.
- A world language is not required.

#### **BAS-ITAM Graduation Requirements**

- Minimum overall GPA of 2.3.
- Completion of CWU Basic and Breadth Requirements, except the world language and computing requirements.
- Completion of the BAS-ITAM core requirement courses and one of the BAS-ITAM specialization list of courses with a minimum grade of C- in each course.

#### **List of Specializations for BAS-ITAM program**

Students seeking the BAS-ITAM program take a common set of core courses. Additionally, students entering the BAS-ITAM program must choose a specialization and complete the CWU General Education program. Students choose from three unique specializations:

1. Administrative Management
2. Cybersecurity
3. Information Technology Management

#### **ITAM BAS, Administrative Management Specialization**

Qualify to work in any business environment where leadership and information processing is required. With classes such as Project Management, Customer Relationship Management, Financial Analysis, and Advanced Spreadsheet Applications, you will have the skills to manage in any administrative capacity. Industries like healthcare, manufacturing, education, retail, and even non-profit organizations are asking for employees with this educational background. Any completed professional/technical associate degree will satisfy the admission requirement.

#### **ITAM BAS, Cybersecurity Specialization**

Learn to detect, protect, and recover from attacks to an organization's information assets. Public utility companies, national security agencies, food and water suppliers, financial services, and companies with intellectual property to protect are now hiring experts in this area. The skills to detect and recover from cyber-attacks, coupled with the team leadership, effective communication, and project management skills of the BAS core, will provide a thorough knowledge base for managers and technology leaders concerned with the operation and management of cybersecurity systems. Because of the technical IT skills classes involved in this specialization, a computer-related associate degree is suggested for admission.

#### **ITAM BAS, Information Technology Specialization**

Managing in an IT department or organization requires team leadership, project management, effective communication, and critical thinking skills. Those soft-skills when combined with the hard skills from an associate degree in network security, computer support technology, wireless technology, server support, CAD technology, etc. give students the best opportunity for advancement in their field. With specialization classes directed specifically to management in the IT environment, students have the best opportunity for furthering their careers. Requires a professional/technical associate degree with at least 40 credits in computer-related classes for admission.

#### **Program Outcomes**

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

#### **Course Offerings**

Frequency of course offering information can be found at the department website: [www.cwu.edu/it-management](http://www.cwu.edu/it-management) or by contacting the department directly.

## **ITAM BAS, Administrative Management Specialization**

#### **Program Learner Outcomes**

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge in core IT Management foundation areas.
- Demonstrate the ability to understand the significance of information technology management on individuals, organizations, and society.
- Have the ability to apply basic quantitative tools.
- Have the ability to communicate effectively.
- Demonstrate the ability to manage and lead.
- Apply advance use of current techniques, skills and tools necessary for information technology management.

#### **ITAM-BAS Program and Core Requirements**

Providing students with management, leadership, critical thinking skills is the primary purpose of the ITAM-BAS degree. Students learn the soft-skills to excel in managing people, projects or departments. A curriculum rich in communication and problem-solving skills, the program complements any professional/technical degree with timely and relevant skills to qualify students for leadership roles in their technical area.

#### **ITAM-BAS Program Admission Requirements**

Applicants for the ITAM-BAS must meet the following admission requirements before admittance to the program:

- Completion of an applied or technical degree with at least 40 credits in an applied/technical area from a community college or technical college.
- Minimum GPA of 2.3.
- A world language is not required.

#### **ITAM-BAS Graduation Requirements**

- Minimum overall GPA of 2.3.
- Completion of CWU General Education requirements.
- Completion of the ITAM-BAS core requirement courses and one of the ITAM-BAS specializations lists of courses with a minimum grade of C- in each course.

#### **List of Specializations for ITAM-BAS program**

Students seeking the ITAM-BAS program take a common set of core courses. Additionally, students entering the ITAM-BAS

program must choose a specialization and complete the CWU General Education program. Students choose from four unique specializations:

1. Administrative Management
2. Cybersecurity
3. Information Technology Management
4. Project Management

**Administrative Management Specialization:** Qualify to work in any business environment where leadership and information processing is required. With classes such as Project Management, Customer Relationship Management, Financial Analysis, and Advanced Spreadsheet Applications, you will have the skills to manage in any administrative capacity. Industries like healthcare, manufacturing, education, retail, and even non-profit organizations are asking for employees with this educational background. Any completed professional/technical associate degree will satisfy the admission requirement.

**Cybersecurity Specialization:** Learn to detect, protect, and recover from attacks to an organization's information assets. Public utility companies, national security agencies, food and water suppliers, financial services, and companies with intellectual property to protect are now hiring experts in this area. The skills to detect and recover from cyber-attacks, coupled with the team leadership, effective communication, and project management skills of the BAS core, will provide a thorough knowledge base for managers and technology leaders concerned with the operation and management of cybersecurity systems. Because of the technical IT skills classes involved in this specialization, a computer-related associate degree is suggested for admission.

**Information Technology Specialization:** Managing in an IT department or organization requires team leadership, project management, effective communication, and critical thinking skills. Those soft-skills when combined with the hard skills from an associate degree in network security, computer support technology, wireless technology, server support, CAD technology, etc. give students the best opportunity for advancement in their field. With specialization classes directed specifically to management in the IT environment, students have the best opportunity for furthering their careers. Requires a professional/technical associate degree with at least 40 credits in computer-related classes for admission.

**Project Management Specialization:** Meeting growing industry need for skilled employees capable of leading projects, the this specialization from ITAM provides graduates with an in-depth understanding of the skills and techniques of effective project management. These skills have universal application, spanning every organization from construction firms to non-profits to tech start-ups. For students wishing to earn a double specialization, Project Management will complement any option, particularly Web and Database Administration and Management, Cybersecurity, and Network Administration. The advanced project management courses frame a core foundation of both relevant human-centered soft skills and technical know-how.

#### ITAM-BAS Core Requirements

- ADMG 201 - Introduction to Business **Credits:** (3)
- ADMG 285 - Sustainable Decision-Making **Credits:** (4)

- ADMG 302 - Financial Analysis for Administrative and IT Support **Credits:** (5)
- ADMG 371 - Administrative Management **Credits:** (4)
- ADMG 372 - Leadership and Supervision **Credits:** (4)
- ADMG 374 - Project Management **Credits:** (5)
- ADMG 385 - Business Communications and Report Writing **Credits:** (4)
- RMT 340 - Principles of Selling **Credits:** (4)
- RMT 366 - Customer Relationship Management **Credits:** (4)
- RMT 379 - IT Management Career Planning **Credits:** (1)
- RMT 490 - Cooperative Education **Credits:** (1-12) (Must be taken for 8-10 credits)
- **OR** ADMG 490 - Cooperative Education **Credits:** (1-12) (Must be taken for 8-10 credits)
- **OR** IT 490 - Cooperative Education **Credits:** (1-12) (Must be taken for 8-10 credits)

ITAM-BAS Total Core Credits: 46-48

#### Administration Management Specialization

The Administrative Management Specialization is designed to provide a baccalaureate degree for those with an applied degree from a community college in a timely fashion. It provides administrative and leadership skills for those seeking management positions in any field.

#### Required Courses

- ADMG 373 - Training and Development for Administrative and IT Support **Credits:** (4)
- ADMG 424 - Administrative Management Policy **Credits:** (4)
- ADMG 471 - Leading Change **Credits:** (4)
- IT 202 - Change Ready: Technology Skills for Civic and Community Leaders **Credits:** (4)
- IT 260 - Integrated Information Technology Application Projects **Credits:** (4)
- IT 359 - Advanced Spreadsheet Applications **Credits:** (4)

Total Specialization Credits: 24

Total Credits: 70-72

#### College and Department Information

Information Technology and Administrative Management  
Department  
College of Education and Professional Studies

# ITAM BAS, Cybersecurity Specialization

## Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge in core IT Management foundation areas.
- Demonstrate the ability to understand the significance of information technology management on individuals, organizations, and society.
- Have the ability to apply basic quantitative tools.
- Have the ability to communicate effectively.
- Demonstrate the ability to manage and lead.
- Apply advance use of current techniques, skills and tools necessary for information technology management.

## ITAM-BAS Program and Core Requirements

Providing students with management, leadership, critical thinking skills is the primary purpose of the ITAM-BAS degree. Students learn the soft-skills to excel in managing people, projects or departments. A curriculum rich in communication and problem-solving skills, the program complements any professional/technical degree with timely and relevant skills to qualify students for leadership roles in their technical area.

## ITAM-BAS Program Admission Requirements

Applicants for the ITAM-BAS must meet the following admission requirements before admittance to the program:

- Completion of an applied or technical degree with at least 40 credits in an applied/technical area from a community college or technical college.
- Minimum GPA of 2.3.
- A world language is not required.

## ITAM-BAS Graduation Requirements

- Minimum overall GPA of 2.3.
- Completion of CWU General Education requirements.
- Completion of the ITAM-BAS core requirement courses and one of the ITAM-BAS specializations lists of courses with a minimum grade of C- in each course.

## List of Specializations for ITAM-BAS program

Students seeking the ITAM-BAS program take a common set of core courses. Additionally, students entering the ITAM-BAS program must choose a specialization and complete the CWU General Education program. Students choose from four unique specializations:

1. Administrative Management
2. Cybersecurity
3. Information Technology Management
4. Project Management

**Administrative Management Specialization:** Qualify to work in any business environment where leadership and information

processing is required. With classes such as Project Management, Customer Relationship Management, Financial Analysis, and Advanced Spreadsheet Applications, you will have the skills to manage in any administrative capacity. Industries like healthcare, manufacturing, education, retail, and even non-profit organizations are asking for employees with this educational background. Any completed professional/technical associate degree will satisfy the admission requirement.

**Cybersecurity Specialization:** Learn to detect, protect, and recover from attacks to an organization's information assets. Public utility companies, national security agencies, food and water suppliers, financial services, and companies with intellectual property to protect are now hiring experts in this area. The skills to detect and recover from cyber-attacks, coupled with the team leadership, effective communication, and project management skills of the BAS core, will provide a thorough knowledge base for managers and technology leaders concerned with the operation and management of cybersecurity systems. Because of the technical IT skills classes involved in this specialization, a computer-related associate degree is suggested for admission.

**Information Technology Specialization:** Managing in an IT department or organization requires team leadership, project management, effective communication, and critical thinking skills. Those soft-skills when combined with the hard skills from an associate degree in network security, computer support technology, wireless technology, server support, CAD technology, etc. give students the best opportunity for advancement in their field. With specialization classes directed specifically to management in the IT environment, students have the best opportunity for furthering their careers. Requires a professional/technical associate degree with at least 40 credits in computer-related classes for admission.

**Project Management Specialization:** Meeting growing industry need for skilled employees capable of leading projects, the this specialization from ITAM provides graduates with an in-depth understanding of the skills and techniques of effective project management. These skills have universal application, spanning every organization from construction firms to non-profits to tech start-ups. For students wishing to earn a double specialization, Project Management will complement any option, particularly Web and Database Administration and Management, Cybersecurity, and Network Administration. The advanced project management courses frame a core foundation of both relevant human-centered soft skills and technical know-how.

## ITAM-BAS Core Requirements

- ADMG 201 - Introduction to Business **Credits: (3)**
- ADMG 285 - Sustainable Decision-Making **Credits: (4)**
- ADMG 302 - Financial Analysis for Administrative and IT Support **Credits: (5)**
- ADMG 371 - Administrative Management **Credits: (4)**
- ADMG 372 - Leadership and Supervision **Credits: (4)**
- ADMG 374 - Project Management **Credits: (5)**
- ADMG 385 - Business Communications and Report Writing **Credits: (4)**
- RMT 340 - Principles of Selling **Credits: (4)**

- RMT 366 - Customer Relationship Management **Credits:** (4)
- RMT 379 - IT Management Career Planning **Credits:** (1)
- RMT 490 - Cooperative Education **Credits:** (1-12) (Must be taken for 8-10 credits)
- **OR** ADMG 490 - Cooperative Education **Credits:** (1-12) (Must be taken for 8-10 credits)
- **OR** IT 490 - Cooperative Education **Credits:** (1-12) (Must be taken for 8-10 credits)

ITAM-BAS Total Core Credits: 46-48

### Cybersecurity Specialization

The cybersecurity specialization provides an opportunity for IT professionals to gain knowledge specific to the detection, protection, and recovery from attacks to an organization's information assets. When combined with the leadership/management skills classes in the BAS core, this specialization will provide a thorough knowledge base for managers and technology leaders concerned with the operation and management of cybersecurity systems. This baccalaureate degree requires significant study in general education at the upper-division level. A professional/technical degree in a computer-related discipline is required for admission. Students not meeting the requirement of the degree in a computer-related discipline would need department permission.

### Required Courses

- IT 238 - Introduction to Cyberwarfare **Credits:** (4)
- IT 336 - Digital Forensics **Credits:** (4)
- IT 338 - Cybercrime **Credits:** (4)
- IT 436 - Cyberattack/Defense **Credits:** (4)
- IT 438 - IT Risk Management **Credits:** (4)
- IT 482 - Cybersecurity Capstone **Credits:** (4)

Total Specialization Credits: 24

Total Credits: 71-73

### College and Department Information

Information Technology and Administrative Management  
Department  
College of Education and Professional Studies

## ITAM BAS, Data-driven Innovation for IT Managers Specialization

The bachelor of applied science in data-driven innovation for IT managers specialization combines applied management skills, such as project management and communication, with data analytics to prepare students to work with organizational leaders in their efforts to extract meaning from data. Graduates will be trained in the foundational data skills needed to solve problems

or support new initiatives through the use of analysis and visualization tools.

### ITAM-BAS Program and Core Requirements

Providing students with management, leadership, critical thinking skills is the primary purpose of the ITAM-BAS degree. Students learn the soft-skills to excel in managing people, projects or departments. A curriculum rich in communication and problem-solving skills, the program complements any professional/technical degree with timely and relevant skills to qualify students for leadership roles in their technical area.

### ITAM-BAS Program Admission Requirements

Applicants for the ITAM-BAS must meet the following admission requirements before admittance to the program:

- Completion of an applied or technical degree with at least 40 credits in an applied/technical area from a community college or technical college.
- Minimum GPA of 2.3.
- A world language is not required.

### ITAM-BAS Graduation Requirements

- Minimum overall GPA of 2.3.
- Completion of CWU General Education requirements.
- Completion of the ITAM-BAS core requirement courses and one of the ITAM-BAS specialization lists of courses with a minimum grade of C- in each course.

### List of Specializations for ITAM-BAS program

Students seeking the ITAM-BAS program take a common set of core courses. Additionally, students entering the ITAM-BAS program must choose a specialization and complete the CWU General Education program. Students choose from four unique specializations:

1. Administrative Management
2. Cybersecurity
3. Information Technology Management
4. Project Management

**Administrative Management Specialization:** Qualify to work in any business environment where leadership and information processing is required. With classes such as Project Management, Customer Relationship Management, Financial Analysis, and Advanced Spreadsheet Applications, you will have the skills to manage in any administrative capacity. Industries like healthcare, manufacturing, education, retail, and even non-profit organizations are asking for employees with this educational background. Any completed professional/technical associate degree will satisfy the admission requirement.

**Cybersecurity Specialization:** Learn to detect, protect, and recover from attacks to an organization's information assets. Public utility companies, national security agencies, food and water suppliers, financial services, and companies with intellectual property to protect are now hiring experts in this area. The skills to detect and recover from cyber-attacks, coupled with the team leadership, effective communication, and project management skills of the BAS core, will provide a thorough knowledge base for managers and technology leaders concerned with the operation and management of cybersecurity systems. Because of the technical IT skills classes involved in

this specialization, a computer-related associate degree is suggested for admission.

**Information Technology Specialization:** Managing in an IT department or organization requires team leadership, project management, effective communication, and critical thinking skills. Those soft-skills when combined with the hard skills from an associate degree in network security, computer support technology, wireless technology, server support, CAD technology, etc. give students the best opportunity for advancement in their field. With specialization classes directed specifically to management in the IT environment, students have the best opportunity for furthering their careers. Requires a professional/technical associate degree with at least 40 credits in computer-related classes for admission.

**Project Management Specialization:** Meeting growing industry need for skilled employees capable of leading projects, the this specialization from ITAM provides graduates with an in-depth understanding of the skills and techniques of effective project management. These skills have universal application, spanning every organization from construction firms to non-profits to tech start-ups. For students wishing to earn a double specialization, Project Management will complement any option, particularly Web and Database Administration and Management, Cybersecurity, and Network Administration. The advanced project management courses frame a core foundation of both relevant human-centered soft skills and technical know-how.

#### ITAM-BAS Core Requirements

- ADMG 201 - Introduction to Business **Credits:** (3)
- ADMG 285 - Sustainable Decision-Making **Credits:** (4)
- ADMG 302 - Financial Analysis for Administrative and IT Support **Credits:** (5)
- ADMG 371 - Administrative Management **Credits:** (4)
- ADMG 372 - Leadership and Supervision **Credits:** (4)
- ADMG 374 - Project Management **Credits:** (5)
- ADMG 385 - Business Communications and Report Writing **Credits:** (4)
- RMT 340 - Principles of Selling **Credits:** (4)
- RMT 366 - Customer Relationship Management **Credits:** (4)
- RMT 379 - IT Management Career Planning **Credits:** (1)
- RMT 490 - Cooperative Education **Credits:** (1-12) (Must be taken for 8-10 credits)
- **OR** ADMG 490 - Cooperative Education **Credits:** (1-12) (Must be taken for 8-10 credits)
- **OR** IT 490 - Cooperative Education **Credits:** (1-12) (Must be taken for 8-10 credits)

ITAM-BAS Total Core Credits: 46-48

#### Data-driven Innovation for IT Managers Specialization

#### Required Courses

- IT 101 - Computer Applications **Credits:** (3)
- **OR** IT 202 - Change Ready: Technology Skills for Civic and Community Leaders **Credits:** (4)
- IT 260 - Integrated Information Technology Application Projects **Credits:** (4)
- IT 359 - Advanced Spreadsheet Applications **Credits:** (4)
- IT 363 - Data Mining for IT Managers **Credits:** (4)
- IT 365 - Data Driven Innovation **Credits:** (4)
- IT 425 - Reporting Data and Analytics **Credits:** (4)
- IT 468 - Projects in Database **Credits:** (4)
- IT 469 - Enterprise Database Systems: SQL **Credits:** (4)
- IT 483 - Applied Predictive Analytics for IT Managers **Credits:** (4)

Total Specialization Credits: 35-36

Total Credits: 81-84

#### College and Department Information

Information Technology and Administrative Management Department  
College of Education and Professional Studies

#### Program Learner Outcomes

Visit program outcomes to find out what you can expect to know and do after successful completion of this program.

## ITAM BAS, Information Technology Specialization

#### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge in core IT Management foundation areas.
- Demonstrate the ability to understand the significance of information technology management on individuals, organizations, and society.
- Have the ability to apply basic quantitative tools.
- Have the ability to communicate effectively.
- Demonstrate the ability to manage and lead.
- Apply advance use of current techniques, skills and tools necessary for information technology management.

#### ITAM-BAS Program and Core Requirements

Providing students with management, leadership, critical thinking skills is the primary purpose of the ITAM-BAS degree. Students learn the soft-skills to excel in managing people, projects or departments. A curriculum rich in communication and problem-solving skills, the program complements any professional/technical degree with timely and relevant skills to qualify students for leadership roles in their technical area.

## ITAM-BAS Program Admission Requirements

Applicants for the ITAM-BAS must meet the following admission requirements before admittance to the program:

- Completion of an applied or technical degree with at least 40 credits in an applied/technical area from a community college or technical college.
- Minimum GPA of 2.3.
- A world language is not required.

## ITAM-BAS Graduation Requirements

- Minimum overall GPA of 2.3.
- Completion of CWU General Education requirements.
- Completion of the ITAM-BAS core requirement courses and one of the ITAM-BAS specialization lists of courses with a minimum grade of C- in each course.

## List of Specializations for ITAM-BAS program

Students seeking the ITAM-BAS program take a common set of core courses. Additionally, students entering the ITAM-BAS program must choose a specialization and complete the CWU General Education program. Students choose from four unique specializations:

1. Administrative Management
2. Cybersecurity
3. Information Technology Management
4. Project Management

**Administrative Management Specialization:** Qualify to work in any business environment where leadership and information processing is required. With classes such as Project Management, Customer Relationship Management, Financial Analysis, and Advanced Spreadsheet Applications, you will have the skills to manage in any administrative capacity. Industries like healthcare, manufacturing, education, retail, and even non-profit organizations are asking for employees with this educational background. Any completed professional/technical associate degree will satisfy the admission requirement.

**Cybersecurity Specialization:** Learn to detect, protect, and recover from attacks to an organization's information assets. Public utility companies, national security agencies, food and water suppliers, financial services, and companies with intellectual property to protect are now hiring experts in this area. The skills to detect and recover from cyber-attacks, coupled with the team leadership, effective communication, and project management skills of the BAS core, will provide a thorough knowledge base for managers and technology leaders concerned with the operation and management of cybersecurity systems. Because of the technical IT skills classes involved in this specialization, a computer-related associate degree is suggested for admission.

**Information Technology Specialization:** Managing in an IT department or organization requires team leadership, project management, effective communication, and critical thinking skills. Those soft-skills when combined with the hard skills from an associate degree in network security, computer support technology, wireless technology, server support, CAD technology, etc. give students the best opportunity for advancement in their field. With specialization classes directed specifically to management in the IT environment, students have the best opportunity for furthering their careers. Requires a

professional/technical associate degree with at least 40 credits in computer-related classes for admission.

**Project Management Specialization:** Meeting growing industry need for skilled employees capable of leading projects, this specialization from ITAM provides graduates with an in-depth understanding of the skills and techniques of effective project management. These skills have universal application, spanning every organization from construction firms to non-profits to tech start-ups. For students wishing to earn a double specialization, Project Management will complement any option, particularly Web and Database Administration and Management, Cybersecurity, and Network Administration. The advanced project management courses frame a core foundation of both relevant human-centered soft skills and technical know-how.

## ITAM-BAS Core Requirements

- ADMG 201 - Introduction to Business **Credits: (3)**
- ADMG 285 - Sustainable Decision-Making **Credits: (4)**
- ADMG 302 - Financial Analysis for Administrative and IT Support **Credits: (5)**
- ADMG 371 - Administrative Management **Credits: (4)**
- ADMG 372 - Leadership and Supervision **Credits: (4)**
- ADMG 374 - Project Management **Credits: (5)**
- ADMG 385 - Business Communications and Report Writing **Credits: (4)**
- RMT 340 - Principles of Selling **Credits: (4)**
- RMT 366 - Customer Relationship Management **Credits: (4)**
- RMT 379 - IT Management Career Planning **Credits: (1)**
- RMT 490 - Cooperative Education **Credits: (1-12)** (Must be taken for 8-10 credits)
- **OR** ADMG 490 - Cooperative Education **Credits: (1-12)** (Must be taken for 8-10 credits)
- **OR** IT 490 - Cooperative Education **Credits: (1-12)** (Must be taken for 8-10 credits)

ITAM-BAS Total Core Credits: 46-48

## Information Technology Specialization

The Information Technology Specialization is designed to provide an opportunity for citizens who are information technology professionals with specific technical education to gain a baccalaureate degree in a timely fashion. This baccalaureate degree requires significant study in general education at the upper-division level. This specialization combines human-centered, management skills with IT technical skills - a requirement for those seeking management positions in the IT field.

## Required Courses

- ADMG 471 - Leading Change **Credits: (4)**
- IT 301 - Information Technology Security, Privacy, and Ethics **Credits: (4)**

- IT 376 - Project Management and Information Technology **Credits:** (3)
- IT 461 - Systems Analysis **Credits:** (4)
- IT 481 - Quality Verification and Validation **Credits:** (4)
- IT 486 - Critical Issues in Information Technology **Credits:** (4)

Total Specialization Credits: 23

Total Credits: 69-71

College and Department Information

Information Technology and Administrative Management  
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## ITAM BAS, Project Management Specialization

Students will gain knowledge specific to managing projects. Graduates in this high-demand field of project management will gain skill and knowledge that, when combined with the soft-skills classes, will give you the competitive edge in the marketplace. Project management skills are not specific to any industry and are sought after by many organizations.

Soft Skills

- management and leadership
- project management
- business communications
- financial management
- ethics
- professional selling
- customer relationship management

Hard Skills

- managing projects through all stages of the project management lifecycle
- managing project budgets, schedules, and resources
- managing project risk, quality, and procurement
- developing WBS and reporting project performance
- implementing project management maturity practices

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge in core IT Management foundation areas.
- Demonstrate the ability to understand the significance of information technology management on individuals, organizations, and society.
- Have the ability to apply basic quantitative tools.
- Have the ability to communicate effectively.
- Demonstrate the ability to manage and lead.

- Apply advance use of current techniques, skills and tools necessary for information technology management.

ITAM-BAS Program and Core Requirements

Providing students with management, leadership, critical thinking skills is the primary purpose of the ITAM-BAS degree. Students learn the soft-skills to excel in managing people, projects or departments. A curriculum rich in communication and problem-solving skills, the program complements any professional/technical degree with timely and relevant skills to qualify students for leadership roles in their technical area.

### ITAM-BAS Program Admission Requirements

Applicants for the ITAM-BAS must meet the following admission requirements before admittance to the program:

- Completion of an applied or technical degree with at least 40 credits in an applied/technical area from a community college or technical college.
- Minimum GPA of 2.3.
- A world language is not required.

### ITAM-BAS Graduation Requirements

- Minimum overall GPA of 2.3.
- Completion of CWU General Education requirements.
- Completion of the ITAM-BAS core requirement lists of courses with a minimum grade of C- in each course.

### List of Specializations for ITAM-BAS program

Students seeking the ITAM-BAS program take a common set of core courses. Additionally, students entering the ITAM-BAS program must choose a specialization and complete the CWU General Education program. Students choose from four unique specializations:

1. Administrative Management
2. Cybersecurity
3. Information Technology Management
4. Project Management

**Administrative Management Specialization:** Qualify to work in any business environment where leadership and information processing is required. With classes such as Project Management, Customer Relationship Management, Financial Analysis, and Advanced Spreadsheet Applications, you will have the skills to manage in any administrative capacity. Industries like healthcare, manufacturing, education, retail, and even non-profit organizations are asking for employees with this educational background. Any completed professional/technical associate degree will satisfy the admission requirement.

**Cybersecurity Specialization:** Learn to detect, protect, and recover from attacks to an organization's information assets. Public utility companies, national security agencies, food and water suppliers, financial services, and companies with intellectual property to protect are now hiring experts in this area. The skills to detect and recover from cyber-attacks, coupled with the team leadership, effective communication, and project management skills of the BAS core, will provide a thorough knowledge base for managers and technology leaders

concerned with the operation and management of cybersecurity systems. Because of the technical IT skills classes involved in this specialization, a computer-related associate degree is suggested for admission.

**Information Technology Specialization:** Managing in an IT department or organization requires team leadership, project management, effective communication, and critical thinking skills. Those soft-skills when combined with the hard skills from an associate degree in network security, computer support technology, wireless technology, server support, CAD technology, etc. give students the best opportunity for advancement in their field. With specialization classes directed specifically to management in the IT environment, students have the best opportunity for furthering their careers. Requires a professional/technical associate degree with at least 40 credits in computer-related classes for admission.

**Project Management Specialization:** Meeting growing industry need for skilled employees capable of leading projects, this specialization from ITAM provides graduates with an in-depth understanding of the skills and techniques of effective project management. These skills have universal application, spanning every organization from construction firms to non-profits to tech start-ups. For students wishing to earn a double specialization, Project Management will complement any option, particularly Web and Database Administration and Management, Cybersecurity, and Network Administration. The advanced project management courses frame a core foundation of both relevant human-centered soft skills and technical know-how.

#### ITAM-BAS Core Requirements

- ADMG 201 - Introduction to Business **Credits:** (3)
- ADMG 285 - Sustainable Decision Making **Credits:** (4)
- ADMG 302 - Financial Analysis for Administrative and IT Support **Credits:** (5)
- ADMG 371 - Administrative Management **Credits:** (4)
- ADMG 372 - Leadership and Supervision **Credits:** (4)
- ADMG 374 - Project Management **Credits:** (5)
- ADMG 385 - Business Communications and Report Writing **Credits:** (4)
- RMT 340 - Principles of Selling **Credits:** (4)
- RMT 366 - Customer Relationship Management **Credits:** (4)
- RMT 379 - IT Management Career Planning **Credits:** (1)
- RMT 490 - Cooperative Education **Credits:** (1-12) (Must be taken for 8-10 credits)
- **OR** ADMG 490 - Cooperative Education **Credits:** (1-12) (Must be taken for 8-10 credits)
- **OR** IT 490 - Cooperative Education **Credits:** (1-12) (Must be taken for 8-10 credits)

ITAM-BAS Total Core Credits: 46-48

#### Project Management Specialization

#### Required Courses

- ADMG 474 - Executing Project Management I **Credits:** (4)
- ADMG 475 - Executing Project Management II **Credits:** (4)
- ADMG 476 - Managing Project Uncertainty **Credits:** (4)
- ADMG 477 - Project Performance Reporting **Credits:** (4)
- ADMG 479 - Project Management Maturity **Credits:** (4)

Total Specialization Credits: 20

Total Credits: 66-68

#### College and Department Information

Information Technology and Administrative Management  
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## ITAM BS, Administrative Management Specialization

#### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge in core IT Management foundation areas.
- Demonstrate the ability to understand the significance of information technology management on individuals, organizations, and society.
- Have the ability to apply basic quantitative tools.
- Have the ability to communicate effectively.
- Demonstrate the ability to manage and lead.
- Apply advance use of current techniques, skills and tools necessary for information technology management.

#### ITAM-BS Program and Core Requirements

#### ITAM-BS Program Overview

The Bachelor of Science in Information Technology and Administrative Management (ITAM) provides a degree path for students with six high demand specializations needed by the modern workforce.

1. Administrative Management Specialization
2. Cybersecurity Specialization
3. Network Administration and Management Specialization
4. Project Management Specialization
5. Retail Management and Technology Specialization
6. Web and Database Administration and Management Specialization

The ITAM curriculum, designed by subject matter experts with guidance from industry professionals, addresses the current demand for tech-savvy individuals who are also able to



effectively lead and motivate teams, manage projects, and integrate technological solutions. Students completing this major will take a core set of courses and select one of the six specialization areas. The ITAM-BS is comprised of two complementing areas creating synergy.

1. All ITAM-BS specializations are complemented by a core foundation of relevant and current human-centered skills in management, leadership, project management, business communications, financial management, ethics, personal selling, and CRM as well as hard skills in database management, web development, computer networking, and computer applications.
2. The specializations feature advanced study in high demand areas of IT management.

### ITAM-BS Program Admission Requirements

Students are encouraged to apply for their ITAM major early in their university studies, even as soon as their first quarter. Once enrolled in the ITAM program students will begin working with a knowledgeable ITAM advisor to design their academic course of study at CWU and make sure they are fulfilling all of the requirements for successful degree completion. Application forms are available in the Ellensburg campus department or on the ITAM website. [www.cwu.edu/it-management](http://www.cwu.edu/it-management).

### ITAM-BS Graduation Requirements

The following requirements apply to students seeking the ITAM-BS degree: Students must earn a minimum cumulative GPA of 2.3 in the ITAM coursework to be eligible for the degree. Students must earn a minimum grade of "C-" in each course.

### Course Fees

Most ITAM courses that use hardware and software resources are assessed a course fee of \$25 or \$50, depending on the required technology.

### List of Specializations for the ITAM-BS

Students seeking the ITAM-BS take a common set of core courses of relevant and current human-centered skills in management, leadership, project management, business communications, financial management, ethics, personal selling, and CRM as well as hard skills in database management, web development, computer networking, and computer applications. Additionally, students complete a specialization within the ITAM-BS degree:

1. Administrative Management Specialization
2. Cybersecurity Specialization
3. Network Administration and Management Specialization
4. Project Management Specialization
5. Retail Management and Technology Specialization
6. Web and Database Administration and Management Specialization

### ITAM-BS Core Requirements

- ADMG 201 - Introduction to Business **Credits:** (3)
- ADMG 285 - Sustainable Decision-Making **Credits:** (4)

- ADMG 302 - Financial Analysis for Administrative and IT Support **Credits:** (5)
- ADMG 371 - Administrative Management **Credits:** (4)
- ADMG 372 - Leadership and Supervision **Credits:** (4)
- ADMG 374 - Project Management **Credits:** (5)
- ADMG 385 - Business Communications and Report Writing **Credits:** (4)
- IT 165 - Seeing Through the Data **Credits:** (4)
- IT 202 - Change Ready: Technology Skills for Civic and Community Leaders **Credits:** (4)
- IT 238 - Introduction to Cyberwarfare **Credits:** (4)
- IT 248 - Web Fundamentals **Credits:** (4)
- IT 260 - Integrated Information Technology Application Projects **Credits:** (4)
- IT 301 - Information Technology Security, Privacy, and Ethics **Credits:** (4)
- IT 468 - Projects in Database **Credits:** (4)
- RMT 340 - Principles of Selling **Credits:** (4)
- RMT 366 - Customer Relationship Management **Credits:** (4)
- RMT 379 - IT Management Career Planning **Credits:** (1)
- RMT 490 - Cooperative Education **Credits:** (1-12) (Must be taken for 8-12 credits, typically during the summer quarter.)
- **OR** ADMG 490 - Cooperative Education **Credits:** (1-12)
- **OR** IT 490 - Cooperative Education **Credits:** (1-12)

ITAM-BS Total Core Credits: 74-78

### Administrative Management Specialization

Administrative management specialization students become qualified business professionals prepared to pursue careers that apply a blend of management, administrative, and information technology skills in contemporary administrative and information technology environments. The administrative manager supervises office employees, designs office work systems, maintains internal and external communication systems, and compiles meaningful reports from information processing. Their knowledge of IT tools complemented by the soft skills (emotional intelligence and leadership) qualifies them to seek employment in positions requiring the management of data, projects, people, and organizational change. The need for graduates with these skills crosses all types of business including agriculture, construction, finance, retail, government, manufacturing and not-for-profits.

### Required Courses

- ADMG 373 - Training and Development for Administrative and IT Support **Credits:** (4)
- ADMG 424 - Administrative Management Policy **Credits:** (4)
- ADMG 471 - Leading Change **Credits:** (4)
- IT 359 - Advanced Spreadsheet Applications **Credits:** (4)
- IT 461 - Systems Analysis **Credits:** (4)

Total Specialization Credits: 20

Total Credits: 94-98

College and Department Information

Information Technology and Administrative Management  
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## ITAM BS, Cybersecurity Specialization

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge in core IT Management foundation areas.
- Demonstrate the ability to understand the significance of information technology management on individuals, organizations, and society.
- Have the ability to apply basic quantitative tools.
- Have the ability to communicate effectively.
- Demonstrate the ability to manage and lead.
- Apply advance use of current techniques, skills and tools necessary for information technology management.

ITAM-BS Program and Core Requirements

### ITAM-BS Program Overview

The Bachelor of Science in Information Technology and Administrative Management (ITAM) provides a degree path for students with six high demand specializations needed by the modern workforce.

1. Administrative Management Specialization
2. Cybersecurity Specialization
3. Network Administration and Management Specialization
4. Project Management Specialization
5. Retail Management and Technology Specialization
6. Web and Database Administration and Management Specialization

The ITAM curriculum, designed by subject matter experts with guidance from industry professionals, addresses the current demand for tech-savvy individuals who are also able to effectively lead and motivate teams, manage projects, and integrate technological solutions. Students completing this major will take a core set of courses and select one of the six specialization areas. The ITAM-BS is comprised of two complementing areas creating synergy.

1. All ITAM-BS specializations are complemented by a core foundation of relevant and current human-centered skills in management, leadership, project management, business communications, financial management, ethics, personal selling, and CRM as well as hard skills in database management, web

development, computer networking, and computer applications.

2. The specializations feature advanced study in high demand areas of IT management.

### ITAM-BS Program Admission Requirements

Students are encouraged to apply for their ITAM major early in their university studies, even as soon as their first quarter. Once enrolled in the ITAM program students will begin working with a knowledgeable ITAM advisor to design their academic course of study at CWU and make sure they are fulfilling all of the requirements for successful degree completion. Application forms are available in the Ellensburg campus department or on the ITAM website. [www.cwu.edu/it-management](http://www.cwu.edu/it-management).

### ITAM-BS Graduation Requirements

The following requirements apply to students seeking the ITAM-BS degree: Students must earn a minimum cumulative GPA of 2.3 in the ITAM coursework to be eligible for the degree. Students must earn a minimum grade of "C-" in each course.

### Course Fees

Most ITAM courses that use hardware and software resources are assessed a course fee of \$25 or \$50, depending on the required technology.

### List of Specializations for the ITAM-BS

Students seeking the ITAM-BS take a common set of core courses of relevant and current human-centered skills in management, leadership, project management, business communications, financial management, ethics, personal selling, and CRM as well as hard skills in database management, web development, computer networking, and computer applications. Additionally, students complete a specialization within the ITAM-BS degree:

1. Administrative Management Specialization
2. Cybersecurity Specialization
3. Network Administration and Management Specialization
4. Project Management Specialization
5. Retail Management and Technology Specialization
6. Web and Database Administration and Management Specialization

ITAM-BS Core Requirements

- ADMG 201 - Introduction to Business **Credits: (3)**
- ADMG 285 - Sustainable Decision-Making **Credits: (4)**
- ADMG 302 - Financial Analysis for Administrative and IT Support **Credits: (5)**
- ADMG 371 - Administrative Management **Credits: (4)**
- ADMG 372 - Leadership and Supervision **Credits: (4)**
- ADMG 374 - Project Management **Credits: (5)**
- ADMG 385 - Business Communications and Report Writing **Credits: (4)**
- IT 165 - Seeing Through the Data **Credits: (4)**
- IT 202 - Change Ready: Technology Skills for Civic and Community Leaders **Credits: (4)**

- IT 238 - Introduction to Cyberwarfare **Credits:** (4)
- IT 248 - Web Fundamentals **Credits:** (4)
- IT 260 - Integrated Information Technology Application Projects **Credits:** (4)
- IT 301 - Information Technology Security, Privacy, and Ethics **Credits:** (4)
- IT 468 - Projects in Database **Credits:** (4)
- RMT 340 - Principles of Selling **Credits:** (4)
- RMT 366 - Customer Relationship Management **Credits:** (4)
- RMT 379 - IT Management Career Planning **Credits:** (1)
- RMT 490 - Cooperative Education **Credits:** (1-12) (Must be taken for 8-12 credits, typically during the summer quarter.)
- **OR** ADMG 490 - Cooperative Education **Credits:** (1-12)
- **OR** IT 490 - Cooperative Education **Credits:** (1-12)

ITAM-BS Total Core Credits: 74-78

### Cybersecurity Specialization

IT professionals will gain knowledge specific to the detection, protection, and recovery from attacks to an organization's information assets. You will gain skills in this high-demand field of network security that, when combined with the management/soft skills classes, will give you the competitive edge in the IT marketplace. Public utility companies, national security agencies, food and water suppliers, financial services, and companies with intellectual property to protect are now hiring experts in this area.

### Required Courses

- IT 336 - Digital Forensics **Credits:** (4)
- IT 338 - Cybercrime **Credits:** (4)
- IT 436 - Cyberattack/Defense **Credits:** (4)
- IT 438 - IT Risk Management **Credits:** (4)
- IT 482 - Cybersecurity Capstone **Credits:** (4)

Total Specialization Credits: 20

Total Credits: 94-98

### College and Department Information

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## ITAM BS, Data-driven Innovation for IT Managers Specialization

The bachelor of science in data-driven Innovation for IT managers specialization combines applied management skills,

such as project management and communication, with data analytics to prepare students to work with organizational leaders in their efforts to extract meaning from data. Graduates will be trained in the foundational data skills needed to solve problems or support new initiatives through the use of analysis and visualization tools.

### ITAM-BS Program and Core Requirements

#### ITAM-BS Program Overview

The Bachelor of Science in Information Technology and Administrative Management (ITAM) provides a degree path for students with six high demand specializations needed by the modern workforce.

1. Administrative Management Specialization
2. Cybersecurity Specialization
3. Network Administration and Management Specialization
4. Project Management Specialization
5. Retail Management and Technology Specialization
6. Web and Database Administration and Management Specialization

The ITAM curriculum, designed by subject matter experts with guidance from industry professionals, addresses the current demand for tech-savvy individuals who are also able to effectively lead and motivate teams, manage projects, and integrate technological solutions. Students completing this major will take a core set of courses and select one of the six specialization areas. The ITAM-BS is comprised of two complementing areas creating synergy.

1. All ITAM-BS specializations are complemented by a core foundation of relevant and current human-centered skills in management, leadership, project management, business communications, financial management, ethics, personal selling, and CRM as well as hard skills in database management, web development, computer networking, and computer applications.
2. The specializations feature advanced study in high demand areas of IT management.

#### ITAM-BS Program Admission Requirements

Students are encouraged to apply for their ITAM major early in their university studies, even as soon as their first quarter. Once enrolled in the ITAM program students will begin working with a knowledgeable ITAM advisor to design their academic course of study at CWU and make sure they are fulfilling all of the requirements for successful degree completion. Application forms are available in the Ellensburg campus department or on the ITAM website. [www.cwu.edu/it-management](http://www.cwu.edu/it-management).

#### ITAM-BS Graduation Requirements

The following requirements apply to students seeking the ITAM-BS degree: Students must earn a minimum cumulative GPA of 2.3 in the ITAM coursework to be eligible for the degree. Students must earn a minimum grade of "C-" in each course.

#### Course Fees

Most ITAM courses that use hardware and software resources

are assessed a course fee of \$25 or \$50, depending on the required technology.

### List of Specializations for the ITAM-BS

Students seeking the ITAM-BS take a common set of core courses of relevant and current human-centered skills in management, leadership, project management, business communications, financial management, ethics, personal selling, and CRM as well as hard skills in database management, web development, computer networking, and computer applications. Additionally, students complete a specialization within the ITAM-BS degree:

1. Administrative Management Specialization
2. Cybersecurity Specialization
3. Network Administration and Management Specialization
4. Project Management Specialization
5. Retail Management and Technology Specialization
6. Web and Database Administration and Management Specialization

### ITAM-BS Core Requirements

- ADMG 201 - Introduction to Business **Credits:** (3)
- ADMG 285 - Sustainable Decision-Making **Credits:** (4)
- ADMG 302 - Financial Analysis for Administrative and IT Support **Credits:** (5)
- ADMG 371 - Administrative Management **Credits:** (4)
- ADMG 372 - Leadership and Supervision **Credits:** (4)
- ADMG 374 - Project Management **Credits:** (5)
- ADMG 385 - Business Communications and Report Writing **Credits:** (4)
- IT 165 - Seeing Through the Data **Credits:** (4)
- IT 202 - Change Ready: Technology Skills for Civic and Community Leaders **Credits:** (4)
- IT 238 - Introduction to Cyberwarfare **Credits:** (4)
- IT 248 - Web Fundamentals **Credits:** (4)
- IT 260 - Integrated Information Technology Application Projects **Credits:** (4)
- IT 301 - Information Technology Security, Privacy, and Ethics **Credits:** (4)
- IT 468 - Projects in Database **Credits:** (4)
- RMT 340 - Principles of Selling **Credits:** (4)
- RMT 366 - Customer Relationship Management **Credits:** (4)
- RMT 379 - IT Management Career Planning **Credits:** (1)
- RMT 490 - Cooperative Education **Credits:** (1-12) (Must be taken for 8-12 credits, typically during the summer quarter.)
- **OR** ADMG 490 - Cooperative Education **Credits:** (1-12)
- **OR** IT 490 - Cooperative Education **Credits:** (1-12)

ITAM-BS Total Core Credits: 74-78

Data-driven Innovation for IT Managers Specialization

### Required Courses

- IT 359 - Advanced Spreadsheet Applications **Credits:** (4)
- IT 363 - Data Mining for IT Managers **Credits:** (4)
- IT 365 - Data Driven Innovation **Credits:** (4)
- IT 425 - Reporting Data and Analytics **Credits:** (4)
- IT 469 - Enterprise Database Systems: SQL **Credits:** (4)
- IT 483 - Applied Predictive Analytics for IT Managers **Credits:** (4)

Total Specialization Credits: 24

Total Credits: 98-102

College and Department Information

Information Technology and Administrative Management  
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## ITAM BS, Network Administration and Management Specialization

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge in core IT Management foundation areas.
- Demonstrate the ability to understand the significance of information technology management on individuals, organizations, and society.
- Have the ability to apply basic quantitative tools.
- Have the ability to communicate effectively.
- Demonstrate the ability to manage and lead.
- Apply advance use of current techniques, skills and tools necessary for information technology management.

ITAM-BS Program and Core Requirements

### ITAM-BS Program Overview

The Bachelor of Science in Information Technology and Administrative Management (ITAM) provides a degree path for students with six high demand specializations needed by the modern workforce.

1. Administrative Management Specialization
2. Cybersecurity Specialization
3. Network Administration and Management Specialization
4. Project Management Specialization
5. Retail Management and Technology Specialization

## 6. Web and Database Administration and Management Specialization

The ITAM curriculum, designed by subject matter experts with guidance from industry professionals, addresses the current demand for tech-savvy individuals who are also able to effectively lead and motivate teams, manage projects, and integrate technological solutions. Students completing this major will take a core set of courses and select one of the six specialization areas. The ITAM-BS is comprised of two complementing areas creating synergy.

1. All ITAM-BS specializations are complemented by a core foundation of relevant and current human-centered skills in management, leadership, project management, business communications, financial management, ethics, personal selling, and CRM as well as hard skills in database management, web development, computer networking, and computer applications.
2. The specializations feature advanced study in high demand areas of IT management.

### ITAM-BS Program Admission Requirements

Students are encouraged to apply for their ITAM major early in their university studies, even as soon as their first quarter. Once enrolled in the ITAM program students will begin working with a knowledgeable ITAM advisor to design their academic course of study at CWU and make sure they are fulfilling all of the requirements for successful degree completion. Application forms are available in the Ellensburg campus department or on the ITAM website. [www.cwu.edu/it-management](http://www.cwu.edu/it-management).

### ITAM-BS Graduation Requirements

The following requirements apply to students seeking the ITAM-BS degree: Students must earn a minimum cumulative GPA of 2.3 in the ITAM coursework to be eligible for the degree. Students must earn a minimum grade of "C-" in each course.

### Course Fees

Most ITAM courses that use hardware and software resources are assessed a course fee of \$25 or \$50, depending on the required technology.

### List of Specializations for the ITAM-BS

Students seeking the ITAM-BS take a common set of core courses of relevant and current human-centered skills in management, leadership, project management, business communications, financial management, ethics, personal selling, and CRM as well as hard skills in database management, web development, computer networking, and computer applications. Additionally, students complete a specialization within the ITAM-BS degree:

1. Administrative Management Specialization
2. Cybersecurity Specialization
3. Network Administration and Management Specialization
4. Project Management Specialization
5. Retail Management and Technology Specialization
6. Web and Database Administration and Management Specialization

## ITAM-BS Core Requirements

- ADMG 201 - Introduction to Business **Credits: (3)**
- ADMG 285 - Sustainable Decision Making **Credits: (4)**
- ADMG 302 - Financial Analysis for Administrative and IT Support **Credits: (5)**
- ADMG 371 - Administrative Management **Credits: (4)**
- ADMG 372 - Leadership and Supervision **Credits: (4)**
- ADMG 374 - Project Management **Credits: (5)**
- ADMG 385 - Business Communications and Report Writing **Credits: (4)**
- IT 165 - Seeing Through the Data **Credits: (4)**
- IT 202 - Change Ready: Technology Skills for Civic and Community Leaders **Credits: (4)**
- IT 238 - Introduction to Cyberwarfare **Credits: (4)**
- IT 248 - Web Fundamentals **Credits: (4)**
- IT 260 - Integrated Information Technology Application Projects **Credits: (4)**
- IT 301 - Information Technology Security, Privacy, and Ethics **Credits: (4)**
- IT 468 - Projects in Database **Credits: (4)**
- RMT 340 - Principles of Selling **Credits: (4)**
- RMT 366 - Customer Relationship Management **Credits: (4)**
- RMT 379 - IT Management Career Planning **Credits: (1)**
- RMT 490 - Cooperative Education **Credits: (1-12)** (Must be taken for 8-12 credits, typically during the summer quarter.)
- **OR** ADMG 490 - Cooperative Education **Credits: (1-12)**
- **OR** IT 490 - Cooperative Education **Credits: (1-12)**

ITAM-BS Total Core Credits: 74-78

## Network Administration and Management Specialization

Network administration and management specialization students become qualified business professionals prepared to pursue careers that apply a wide variety of network administration skills. These qualifications are complemented by business communications and human-centered skills. Graduates of the network administration and management specialization secure positions as network administrators, network analysts, network managers, data communication analysts, network operations analysts, network specialists, network technicians, PC support specialists, PC network engineers, and user support specialists.

### Required Courses

- IT 362 - Wireless Communications **Credits: (4)**
- IT 456 - Advanced Computer Network Management **Credits: (4)**
- IT 459 - Workstation Administration **Credits: (4)**
- IT 463 - Computer Network Management **Credits: (4)**
- IT 466 - Open Source Server Management **Credits: (4)**

- IT 467 - Network Security **Credits:** (4)
- IT 487 - Networking Capstone **Credits:** (4)

Total Specialization Credits: 28

Total Credits: 102-106

College and Department Information

Information Technology and Administrative Management  
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College of Education and Professional Studies

## ITAM BS, Project Management Specialization

Students will gain knowledge specific to managing projects. Graduates in this high-demand field of project management will gain skill and knowledge that, when combined with the soft-skills classes, will give you the competitive edge in the marketplace. Project management skills are not specific to any industry and are sought after by many organizations.

Soft Skills

- management and leadership
- project management
- business communications
- financial management
- ethics
- professional selling
- customer relationship management

Hard Skills

- managing projects through all stages or the project management lifecycle
- managing project budgets, schedules, and resources
- managing project risk, quality, and procurement
- developing WBS and reporting project performance
- implementing project management maturity practices

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge in core IT Management foundation areas.
- Demonstrate the ability to understand the significance of information technology management on individuals, organizations, and society.
- Have the ability to apply basic quantitative tools.
- Have the ability to communicate effectively.
- Demonstrate the ability to manage and lead.
- Apply advance use of current techniques, skills and tools necessary for information technology management.

ITAM-BS Program and Core Requirements

## ITAM-BS Program Overview

The Bachelor of Science in Information Technology and Administrative Management (ITAM) provides a degree path for students with six high demand specializations needed by the modern workforce.

1. Administrative Management Specialization
2. Cybersecurity Specialization
3. Network Administration and Management Specialization
4. Project Management Specialization
5. Retail Management and Technology Specialization
6. Web and Database Administration and Management Specialization

The ITAM curriculum, designed by subject matter experts with guidance from industry professionals, addresses the current demand for tech-savvy individuals who are also able to effectively lead and motivate teams, manage projects, and integrate technological solutions. Students completing this major will take a core set of courses and select one of the six specialization areas. The ITAM-BS is comprised of two complementing areas creating synergy.

1. All ITAM-BS specializations are complemented by a core foundation of relevant and current human-centered skills in management, leadership, project management, business communications, financial management, ethics, personal selling, and CRM as well as hard skills in database management, web development, computer networking, and computer applications.
2. The specializations feature advanced study in high demand areas of IT management.

### ITAM-BS Program Admission Requirements

Students are encouraged to apply for their ITAM major early in their university studies, even as soon as their first quarter. Once enrolled in the ITAM program students will begin working with a knowledgeable ITAM advisor to design their academic course of study at CWU and make sure they are fulfilling all of the requirements for successful degree completion. Application forms are available in the Ellensburg campus department or on the ITAM website. [www.cwu.edu/it-management](http://www.cwu.edu/it-management).

### ITAM-BS Graduation Requirements

The following requirements apply to students seeking the ITAM-BS degree: Students must earn a minimum cumulative GPA of 2.3 in the ITAM coursework to be eligible for the degree. Students must earn a minimum grade of "C-" in each course.

### Course Fees

Most ITAM courses that use hardware and software resources are assessed a course fee of \$25 or \$50, depending on the required technology.

### List of Specializations for the ITAM-BS

Students seeking the ITAM-BS take a common set of core courses of relevant and current human-centered skills in management, leadership, project management, business communications, financial management, ethics, personal selling, and CRM as well as hard skills in database management, web development, computer networking, and computer applications.

Additionally, students complete a specialization within the ITAM-BS degree:

1. Administrative Management Specialization
2. Cybersecurity Specialization
3. Network Administration and Management Specialization
4. Project Management Specialization
5. Retail Management and Technology Specialization
6. Web and Database Administration and Management Specialization

#### ITAM-BS Core Requirements

- ADMG 201 - Introduction to Business **Credits:** (3)
- ADMG 285 - Sustainable Decision-Making **Credits:** (4)
- ADMG 302 - Financial Analysis for Administrative and IT Support **Credits:** (5)
- ADMG 371 - Administrative Management **Credits:** (4)
- ADMG 372 - Leadership and Supervision **Credits:** (4)
- ADMG 374 - Project Management **Credits:** (5)
- ADMG 385 - Business Communications and Report Writing **Credits:** (4)
- IT 165 - Seeing Through the Data **Credits:** (4)
- IT 202 - Change Ready: Technology Skills for Civic and Community Leaders **Credits:** (4)
- IT 238 - Introduction to Cyberwarfare **Credits:** (4)
- IT 248 - Web Fundamentals **Credits:** (4)
- IT 260 - Integrated Information Technology Application Projects **Credits:** (4)
- IT 301 - Information Technology Security, Privacy, and Ethics **Credits:** (4)
- IT 468 - Projects in Database **Credits:** (4)
- RMT 340 - Principles of Selling **Credits:** (4)
- RMT 366 - Customer Relationship Management **Credits:** (4)
- RMT 379 - IT Management Career Planning **Credits:** (1)
- RMT 490 - Cooperative Education **Credits:** (1-12) (Must be taken for 8-12 credits, typically during the summer quarter.)
- **OR** ADMG 490 - Cooperative Education **Credits:** (1-12)
- **OR** IT 490 - Cooperative Education **Credits:** (1-12)

ITAM-BS Total Core Credits: 74-78

#### Project Management Specialization

#### Required Courses

- ADMG 474 - Executing Project Management I **Credits:** (4)
- ADMG 475 - Executing Project Management II **Credits:** (4)
- ADMG 476 - Managing Project Uncertainty **Credits:** (4)

- ADMG 477 - Project Performance Reporting **Credits:** (4)
- ADMG 479 - Project Management Maturity **Credits:** (4)

Total Specialization Credits: 20

Total Credits: 94-98

#### College and Department Information

Information Technology and Administrative Management  
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## ITAM BS, Retail Management and Technology Specialization

#### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge in core IT Management foundation areas.
- Demonstrate the ability to understand the significance of information technology management on individuals, organizations, and society.
- Have the ability to apply basic quantitative tools.
- Have the ability to communicate effectively.
- Demonstrate the ability to manage and lead.
- Apply advance use of current techniques, skills and tools necessary for information technology management.

#### ITAM-BS Program and Core Requirements

#### ITAM-BS Program Overview

The Bachelor of Science in Information Technology and Administrative Management (ITAM) provides a degree path for students with six high demand specializations needed by the modern workforce.

1. Administrative Management Specialization
2. Cybersecurity Specialization
3. Network Administration and Management Specialization
4. Project Management Specialization
5. Retail Management and Technology Specialization
6. Web and Database Administration and Management Specialization

The ITAM curriculum, designed by subject matter experts with guidance from industry professionals, addresses the current demand for tech-savvy individuals who are also able to effectively lead and motivate teams, manage projects, and integrate technological solutions. Students completing this major will take a core set of courses and select one of the six specialization areas. The ITAM-BS is comprised of two complementing areas creating synergy.

1. All ITAM-BS specializations are complemented by a core foundation of relevant and current human-centered skills in management, leadership, project management, business communications, financial management, ethics, personal selling, and CRM as well as hard skills in database management, web development, computer networking, and computer applications.
2. The specializations feature advanced study in high demand areas of IT management.

### ITAM-BS Program Admission Requirements

Students are encouraged to apply for their ITAM major early in their university studies, even as soon as their first quarter. Once enrolled in the ITAM program students will begin working with a knowledgeable ITAM advisor to design their academic course of study at CWU and make sure they are fulfilling all of the requirements for successful degree completion. Application forms are available in the Ellensburg campus department or on the ITAM website. [www.cwu.edu/it-management](http://www.cwu.edu/it-management).

### ITAM-BS Graduation Requirements

The following requirements apply to students seeking the ITAM-BS degree: Students must earn a minimum cumulative GPA of 2.3 in the ITAM coursework to be eligible for the degree. Students must earn a minimum grade of "C-" in each course.

### Course Fees

Most ITAM courses that use hardware and software resources are assessed a course fee of \$25 or \$50, depending on the required technology.

### List of Specializations for the ITAM-BS

Students seeking the ITAM-BS take a common set of core courses of relevant and current human-centered skills in management, leadership, project management, business communications, financial management, ethics, personal selling, and CRM as well as hard skills in database management, web development, computer networking, and computer applications. Additionally, students complete a specialization within the ITAM-BS degree:

1. Administrative Management Specialization
2. Cybersecurity Specialization
3. Network Administration and Management Specialization
4. Project Management Specialization
5. Retail Management and Technology Specialization
6. Web and Database Administration and Management Specialization

### ITAM-BS Core Requirements

- ADMG 201 - Introduction to Business **Credits:** (3)
- ADMG 285 - Sustainable Decision-Making **Credits:** (4)
- ADMG 302 - Financial Analysis for Administrative and IT Support **Credits:** (5)
- ADMG 371 - Administrative Management **Credits:** (4)
- ADMG 372 - Leadership and Supervision **Credits:** (4)

- ADMG 374 - Project Management **Credits:** (5)
- ADMG 385 - Business Communications and Report Writing **Credits:** (4)
- IT 165 - Seeing Through the Data **Credits:** (4)
- IT 202 - Change Ready: Technology Skills for Civic and Community Leaders **Credits:** (4)
- IT 238 - Introduction to Cyberwarfare **Credits:** (4)
- IT 248 - Web Fundamentals **Credits:** (4)
- IT 260 - Integrated Information Technology Application Projects **Credits:** (4)
- IT 301 - Information Technology Security, Privacy, and Ethics **Credits:** (4)
- IT 468 - Projects in Database **Credits:** (4)
- RMT 340 - Principles of Selling **Credits:** (4)
- RMT 366 - Customer Relationship Management **Credits:** (4)
- RMT 379 - IT Management Career Planning **Credits:** (1)
- RMT 490 - Cooperative Education **Credits:** (1-12) (Must be taken for 8-12 credits, typically during the summer quarter.)
- **OR** ADMG 490 - Cooperative Education **Credits:** (1-12)
- **OR** IT 490 - Cooperative Education **Credits:** (1-12)

ITAM-BS Total Core Credits: 74-78

### Retail Management and Technology Specialization

Retail management and technology specialization students become qualified business professionals prepared to pursue careers in retail environments that infuse information technology in areas such as e-commerce, management, selling, purchasing, operations, and merchandising. These qualifications are complemented by business communications and human-centered skills. Graduates of the retail management and technology specialization secure careers in store operations, store management, IT and e-commerce, sales, distribution and logistics, merchandise buying, and planning and entrepreneurship.

### Required Courses

- RMT 330 - Principles of Retailing **Credits:** (4)
- RMT 335 - Retail Information Technology **Credits:** (4)
- RMT 345 - Sustainable Retailing **Credits:** (4)
- RMT 350 - Omni Channel Retailing **Credits:** (4)
- RMT 467 - Retail Management **Credits:** (4)
- RMT 485 - International Retailing **Credits:** (4)

Total Specialization Credits: 24

Total Credits: 98-102

### College and Department Information



# ITAM BS, Web and Database Administration and Management Specialization

## Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge in core IT Management foundation areas.
- Demonstrate the ability to understand the significance of information technology management on individuals, organizations, and society.
- Have the ability to apply basic quantitative tools.
- Have the ability to communicate effectively.
- Demonstrate the ability to manage and lead.
- Apply advanced use of current techniques, skills and tools necessary for information technology management.

## ITAM-BS Program and Core Requirements

### ITAM-BS Program Overview

The Bachelor of Science in Information Technology and Administrative Management (ITAM) provides a degree path for students with six high demand specializations needed by the modern workforce.

1. Administrative Management Specialization
2. Cybersecurity Specialization
3. Network Administration and Management Specialization
4. Project Management Specialization
5. Retail Management and Technology Specialization
6. Web and Database Administration and Management Specialization

The ITAM curriculum, designed by subject matter experts with guidance from industry professionals, addresses the current demand for tech-savvy individuals who are also able to effectively lead and motivate teams, manage projects, and integrate technological solutions. Students completing this major will take a core set of courses and select one of the six specialization areas. The ITAM-BS is comprised of two complementing areas creating synergy.

1. All ITAM-BS specializations are complemented by a core foundation of relevant and current human-centered skills in management, leadership, project management, business communications, financial management, ethics, personal selling, and CRM as well as hard skills in database management, web development, computer networking, and computer applications.
2. The specializations feature advanced study in high demand areas of IT management.

## ITAM-BS Program Admission Requirements

Students are encouraged to apply for their ITAM major early in their university studies, even as soon as their first quarter. Once enrolled in the ITAM program students will begin working with a knowledgeable ITAM advisor to design their academic course of study at CWU and make sure they are fulfilling all of the requirements for successful degree completion. Application forms are available in the Ellensburg campus department or on the ITAM website. [www.cwu.edu/it-management](http://www.cwu.edu/it-management).

## ITAM-BS Graduation Requirements

The following requirements apply to students seeking the ITAM-BS degree: Students must earn a minimum cumulative GPA of 2.3 in the ITAM coursework to be eligible for the degree. Students must earn a minimum grade of "C-" in each course.

## Course Fees

Most ITAM courses that use hardware and software resources are assessed a course fee of \$25 or \$50, depending on the required technology.

## List of Specializations for the ITAM-BS

Students seeking the ITAM-BS take a common set of core courses of relevant and current human-centered skills in management, leadership, project management, business communications, financial management, ethics, personal selling, and CRM as well as hard skills in database management, web development, computer networking, and computer applications. Additionally, students complete a specialization within the ITAM-BS degree:

1. Administrative Management Specialization
2. Cybersecurity Specialization
3. Network Administration and Management Specialization
4. Project Management Specialization
5. Retail Management and Technology Specialization
6. Web and Database Administration and Management Specialization

## ITAM-BS Core Requirements

- ADMG 201 - Introduction to Business **Credits: (3)**
- ADMG 285 - Sustainable Decision-Making **Credits: (4)**
- ADMG 302 - Financial Analysis for Administrative and IT Support **Credits: (5)**
- ADMG 371 - Administrative Management **Credits: (4)**
- ADMG 372 - Leadership and Supervision **Credits: (4)**
- ADMG 374 - Project Management **Credits: (5)**
- ADMG 385 - Business Communications and Report Writing **Credits: (4)**
- IT 165 - Seeing Through the Data **Credits: (4)**
- IT 202 - Change Ready: Technology Skills for Civic and Community Leaders **Credits: (4)**
- IT 238 - Introduction to Cyberwarfare **Credits: (4)**
- IT 248 - Web Fundamentals **Credits: (4)**

- IT 260 - Integrated Information Technology Application Projects **Credits:** (4)
- IT 301 - Information Technology Security, Privacy, and Ethics **Credits:** (4)
- IT 468 - Projects in Database **Credits:** (4)
- RMT 340 - Principles of Selling **Credits:** (4)
- RMT 366 - Customer Relationship Management **Credits:** (4)
- RMT 379 - IT Management Career Planning **Credits:** (1)
- RMT 490 - Cooperative Education **Credits:** (1-12) (Must be taken for 8-12 credits, typically during the summer quarter.)
- **OR** ADMG 490 - Cooperative Education **Credits:** (1-12)
- **OR** IT 490 - Cooperative Education **Credits:** (1-12)

ITAM-BS Total Core Credits: 74-78

Web and Database Administration and Management Specialization

Web and database administration and management specialization students become qualified business professionals prepared to pursue careers that apply a wide variety of Web and database skills. These qualifications are complemented by business communications and human-centered skills. Graduates of the Web and database administration and management specialization secure positions as Web administrators, database administrators, Web designers, database developers, Web page developers, database managers and web masters.

Required Courses

- IT 312 - Advanced Application of Web Tools **Credits:** (4)
- IT 322 - Innovative Design in Web **Credits:** (4)
- IT 376 - Project Management and Information Technology **Credits:** (3)
- IT 381 - Web Apps for M-Commerce **Credits:** (4)
- IT 426 - Application of Web Languages **Credits:** (4)
- IT 470 - Database and the Web Capstone **Credits:** (4)

Total Specialization Credits: 23

Total Credits: 97-101

College and Department Information

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## Administrative Management Minor or Certificate

### ITAM Minors or Certificates

The information technology and administrative management

minors and certificates provide recognition for students who complete the specified minor or certificate courses. Such recognition will benefit students in gaining professional employment or advancing in their current professional positions.

Each of our nine minors will complement any major field, helping CWU students stand out from the crowd and be competitive in today's job market. Applied, relevant skill sets develop individuals ready to handle the challenges of modern global industry.

Application forms for minors and certificates can be obtained in the Ellensburg campus department or on the ITAM web site at [www.cwu.edu/it-management](http://www.cwu.edu/it-management).

**Minors or certificates are available in the following areas:**

- **Administrative Management**
- **Cybersecurity**
- **Digital Forensics and Incident Response (DFIR)**
- **Innovation through IT**
- **Modern IT Applications**
- **Project Management**
- **Retail Management and Technology**
- **Structures of Data Analytics for IT Managers**
- **Web Design and Management**

### Program Requirement

A minimum GPA of 2.3 in the minor and certificate courses must be achieved with a minimum grade of C- in each course.

Required Courses

- ADMG 201 - Introduction to Business **Credits:** (3)
- ADMG 371 - Administrative Management **Credits:** (4)
- ADMG 372 - Leadership and Supervision **Credits:** (4)
- ADMG 374 - Project Management **Credits:** (5)
- ADMG 385 - Business Communications and Report Writing **Credits:** (4)
- ADMG 471 - Leading Change **Credits:** (4)

Total Credits: 24

College and Department Information

Information Technology and Administrative Management Department  
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## Cybersecurity Minor or Certificate

Students fulfilling the requirements for an ITAM program degree specialization can earn a minor in Cybersecurity.

### ITAM Minors or Certificates

The information technology and administrative management minors and certificates provide recognition for students who complete the specified minor or certificate courses. Such

recognition will benefit students in gaining professional employment or advancing in their current professional positions.

Each of our nine minors will complement any major field, helping CWU students stand out from the crowd and be competitive in today's job market. Applied, relevant skill sets develop individuals ready to handle the challenges of modern global industry.

Application forms for minors and certificates can be obtained in the Ellensburg campus department or on the ITAM web site at [www.cwu.edu/it-management](http://www.cwu.edu/it-management).

#### Minors or certificates are available in the following areas:

- **Administrative Management**
- **Cybersecurity**
- **Digital Forensics and Incident Response (DFIR)**
- **Innovation through IT**
- **Modern IT Applications**
- **Project Management**
- **Retail Management and Technology**
- **Structures of Data Analytics for IT Managers**
- **Web Design and Management**

#### Program Requirement

A minimum GPA of 2.3 in the minor and certificate courses must be achieved with a minimum grade of C- in each course.

#### Required Courses

- IT 238 - Introduction to Cyberwarfare **Credits: (4)**
- IT 336 - Digital Forensics **Credits: (4)**
- IT 338 - Cybercrime **Credits: (4)**
- IT 436 - Cyberattack/Defense **Credits: (4)**
- IT 438 - IT Risk Management **Credits: (4)**

Total Credits: 20

#### College and Department Information

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## Digital Forensics and Incident Response (DFIR) Minor or Certificate

Students will learn techniques in digital forensics and incident response along with security testing and computer system diagnostics. Students will also gain knowledge specific to standard computer operating systems, networks and hardware as well as security software and document-creation applications.

#### ITAM Minors or Certificates

The information technology and administrative management minors and certificates provide recognition for students who complete the specified minor or certificate courses. Such recognition will benefit students in gaining professional

employment or advancing in their current professional positions.

Each of our nine minors will complement any major field, helping CWU students stand out from the crowd and be competitive in today's job market. Applied, relevant skill sets develop individuals ready to handle the challenges of modern global industry.

Application forms for minors and certificates can be obtained in the Ellensburg campus department or on the ITAM web site at [www.cwu.edu/it-management](http://www.cwu.edu/it-management).

#### Minors or certificates are available in the following areas:

- **Administrative Management**
- **Cybersecurity**
- **Digital Forensics and Incident Response (DFIR)**
- **Innovation through IT**
- **Modern IT Applications**
- **Project Management**
- **Retail Management and Technology**
- **Structures of Data Analytics for IT Managers**
- **Web Design and Management**

#### Program Requirement

A minimum GPA of 2.3 in the minor and certificate courses must be achieved with a minimum grade of C- in each course.

#### Required Courses

- IT 238 - Introduction to Cyberwarfare **Credits: (4)**
- IT 336 - Digital Forensics **Credits: (4)**
- IT 370 - The Command Line Interface and Cybersecurity **Credits: (4)**
- IT 436 - Cyberattack/Defense **Credits: (4)**
- IT 437 - Mobile and Cloud Forensics **Credits: (4)**

Total Credits: 20

#### College and Department Information

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## Innovation through IT Minor or Certificate

#### ITAM Minors or Certificates

The information technology and administrative management minors and certificates provide recognition for students who complete the specified minor or certificate courses. Such recognition will benefit students in gaining professional employment or advancing in their current professional positions.

Each of our nine minors will complement any major field, helping CWU students stand out from the crowd and be competitive in today's job market. Applied, relevant skill sets develop individuals ready to handle the challenges of modern global industry.

Application forms for minors and certificates can be obtained in the Ellensburg campus department or on the ITAM web site at [www.cwu.edu/it-management](http://www.cwu.edu/it-management).

**Minors or certificates are available in the following areas:**

- **Administrative Management**
- **Cybersecurity**
- **Digital Forensics and Incident Response (DFIR)**
- **Innovation through IT**
- **Modern IT Applications**
- **Project Management**
- **Retail Management and Technology**
- **Structures of Data Analytics for IT Managers**
- **Web Design and Management**

#### **Program Requirement**

A minimum GPA of 2.3 in the minor and certificate courses must be achieved with a minimum grade of C- in each course.

Required Courses

- ADMG 374 - Project Management **Credits: (5)**
- IT 165 - Seeing Through the Data **Credits: (4)**
- IT 202 - Change Ready: Technology Skills for Civic and Community Leaders **Credits: (4)**
- IT 248 - Web Fundamentals **Credits: (4)**
- IT 301 - Information Technology Security, Privacy, and Ethics **Credits: (4)**
- IT 461 - Systems Analysis **Credits: (4)**

Total Credits: 25

College and Department Information

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## **Modern IT Applications Minor or Certificate**

#### **ITAM Minors or Certificates**

The information technology and administrative management minors and certificates provide recognition for students who complete the specified minor or certificate courses. Such recognition will benefit students in gaining professional employment or advancing in their current professional positions.

Each of our nine minors will complement any major field, helping CWU students stand out from the crowd and be competitive in today's job market. Applied, relevant skill sets develop individuals ready to handle the challenges of modern global industry.

Application forms for minors and certificates can be obtained in the Ellensburg campus department or on the ITAM web site at [www.cwu.edu/it-management](http://www.cwu.edu/it-management).

**Minors or certificates are available in the following areas:**

- **Administrative Management**
- **Cybersecurity**
- **Digital Forensics and Incident Response (DFIR)**
- **Innovation through IT**
- **Modern IT Applications**
- **Project Management**
- **Retail Management and Technology**
- **Structures of Data Analytics for IT Managers**
- **Web Design and Management**

#### **Program Requirement**

A minimum GPA of 2.3 in the minor and certificate courses must be achieved with a minimum grade of C- in each course.

Required Courses

- IT 111 - Your Digital Footprint and the Web **Credits: (4)**
- IT 202 - Change Ready: Technology Skills for Civic and Community Leaders **Credits: (4)**
- IT 248 - Web Fundamentals **Credits: (4)**
- IT 260 - Integrated Information Technology Application Projects **Credits: (4)**
- IT 359 - Advanced Spreadsheet Applications **Credits: (4)**
- IT 468 - Projects in Database **Credits: (4)**

Total Credits: 24

College and Department Information

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## **Project Management Minor or Certificate**

Students will gain knowledge specific to managing projects. Students will gain skills in this high-demand field of project management that, when combined with the soft-skills classes, will give students the competitive edge in the marketplace. Project management skills are not specific to any industry and are sought after by many organizations.

#### **ITAM Minors or Certificates**

The information technology and administrative management minors and certificates provide recognition for students who complete the specified minor or certificate courses. Such recognition will benefit students in gaining professional employment or advancing in their current professional positions.

Each of our nine minors will complement any major field, helping CWU students stand out from the crowd and be competitive in today's job market. Applied, relevant skill sets develop individuals ready to handle the challenges of modern global industry.

Application forms for minors and certificates can be obtained in the Ellensburg campus department or on the ITAM web site at [www.cwu.edu/it-management](http://www.cwu.edu/it-management).

**Minors or certificates are available in the following areas:**

- **Administrative Management**
- **Cybersecurity**
- **Digital Forensics and Incident Response (DFIR)**
- **Innovation through IT**
- **Modern IT Applications**
- **Project Management**
- **Retail Management and Technology**
- **Structures of Data Analytics for IT Managers**
- **Web Design and Management**

#### **Program Requirement**

A minimum GPA of 2.3 in the minor and certificate courses must be achieved with a minimum grade of C- in each course.

Required Courses

- ADMG 372 - Leadership and Supervision **Credits: (4)**
- ADMG 374 - Project Management **Credits: (5)**
- ADMG 385 - Business Communications and Report Writing **Credits: (4)**
- ADMG 474 - Executing Project Management I **Credits: (4)**
- ADMG 475 - Executing Project Management II **Credits: (4)**

Total Credits: 21

College and Department Information

Information Technology and Administrative Management  
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## **Retail Management and Technology Minor or Certificate**

### **ITAM Minors or Certificates**

The information technology and administrative management minors and certificates provide recognition for students who complete the specified minor or certificate courses. Such recognition will benefit students in gaining professional employment or advancing in their current professional positions.

Each of our nine minors will complement any major field, helping CWU students stand out from the crowd and be competitive in today's job market. Applied, relevant skill sets develop individuals ready to handle the challenges of modern global industry.

Application forms for minors and certificates can be obtained in the Ellensburg campus department or on the ITAM web site at [www.cwu.edu/it-management](http://www.cwu.edu/it-management).

**Minors or certificates are available in the following areas:**

- **Administrative Management**
- **Cybersecurity**
- **Digital Forensics and Incident Response (DFIR)**
- **Innovation through IT**
- **Modern IT Applications**
- **Project Management**
- **Retail Management and Technology**
- **Structures of Data Analytics for IT Managers**
- **Web Design and Management**

#### **Program Requirement**

A minimum GPA of 2.3 in the minor and certificate courses must be achieved with a minimum grade of C- in each course.

Required Courses

- ADMG 201 - Introduction to Business **Credits: (3)**
- RMT 330 - Principles of Retailing **Credits: (4)**
- RMT 335 - Retail Information Technology **Credits: (4)**
- RMT 340 - Principles of Selling **Credits: (4)**
- RMT 350 - Omni Channel Retailing **Credits: (4)**
- RMT 467 - Retail Management **Credits: (4)**

Total Credits: 23

College and Department Information

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## **Structures of Data Analytics for IT Managers Minor or Certificate**

Students will gain knowledge about structural data and analytics in the IT industry that when combined with their ITAM specialization will prepare them for careers as information technology professionals with an emphasis in the ability to gather, organize, and analyze information data to make strategic decisions. Data analytics skills are not specific to any industry and are sought after by many organizations.

### **ITAM Minors or Certificates**

The information technology and administrative management minors and certificates provide recognition for students who complete the specified minor or certificate courses. Such recognition will benefit students in gaining professional employment or advancing in their current professional positions.

Each of our nine minors will complement any major field, helping CWU students stand out from the crowd and be competitive in today's job market. Applied, relevant skill sets develop individuals ready to handle the challenges of modern global industry.

Application forms for minors and certificates can be obtained in

the Ellensburg campus department or on the ITAM web site at [www.cwu.edu/it-management](http://www.cwu.edu/it-management).

**Minors or certificates are available in the following areas:**

- **Administrative Management**
- **Cybersecurity**
- **Digital Forensics and Incident Response (DFIR)**
- **Innovation through IT**
- **Modern IT Applications**
- **Project Management**
- **Retail Management and Technology**
- **Structures of Data Analytics for IT Managers**
- **Web Design and Management**

#### **Program Requirement**

A minimum GPA of 2.3 in the minor and certificate courses must be achieved with a minimum grade of C- in each course.

Required Courses

- IT 258 - Spreadsheet Applications **Credits: (3)**
- **OR** IT 260 - Integrated Information Technology Application Projects **Credits: (4)**
- IT 359 - Advanced Spreadsheet Applications **Credits: (4)**
- IT 363 - Data Mining for IT Managers **Credits: (4)**
- IT 365 - Data Driven Innovation **Credits: (4)**
- IT 425 - Reporting Data and Analytics **Credits: (4)**

Total Credits: 23-25

College and Department Information

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Department  
College of Education and Professional Studies

## **Web Design and Management Minor or Certificate**

#### **ITAM Minors or Certificates**

The information technology and administrative management minors and certificates provide recognition for students who complete the specified minor or certificate courses. Such recognition will benefit students in gaining professional employment or advancing in their current professional positions.

Each of our nine minors will complement any major field, helping CWU students stand out from the crowd and be competitive in today's job market. Applied, relevant skill sets develop individuals ready to handle the challenges of modern global industry.

Application forms for minors and certificates can be obtained in the Ellensburg campus department or on the ITAM web site at [www.cwu.edu/it-management](http://www.cwu.edu/it-management).

**Minors or certificates are available in the following areas:**

- **Administrative Management**
- **Cybersecurity**
- **Digital Forensics and Incident Response (DFIR)**
- **Innovation through IT**
- **Modern IT Applications**
- **Project Management**
- **Retail Management and Technology**
- **Structures of Data Analytics for IT Managers**
- **Web Design and Management**

#### **Program Requirement**

A minimum GPA of 2.3 in the minor and certificate courses must be achieved with a minimum grade of C- in each course.

Required Courses

- IT 248 - Web Fundamentals **Credits: (4)**
- IT 301 - Information Technology Security, Privacy, and Ethics **Credits: (4)**
- IT 312 - Advanced Application of Web Tools **Credits: (4)**
- IT 322 - Innovative Design in Web **Credits: (4)**
- IT 381 - Web Apps for M-Commerce **Credits: (4)**
- IT 426 - Application of Web Languages **Credits: (4)**

Total Credits: 24

College and Department Information

Information Technology and Administrative Management  
Department  
College of Education and Professional Studies

## **Institute for Integrated Energy Studies**

College of the Sciences  
Ellensburg  
Discovery Hall, room 111A  
509-963-2008  
E-mail: [Elvin.Delgado@cwu.edu](mailto:Elvin.Delgado@cwu.edu)  
E-mail: [Danielle.Plamer@cwu.edu](mailto:Danielle.Plamer@cwu.edu)  
[www.cwu.edu/energy](http://www.cwu.edu/energy)

#### **Program Director**

Elvin Delgado, PhD

#### **Staff**

Danielle Palmer, senior secretary

#### **Program Information**

The geopolitical conflicts over energy resources during the last decades have transformed the current energy landscapes at regional, national and global scales. These shifts in energy landscapes have made the management of energy resources more complex, the development of energy policy more important and controversial, and the innovation of energy technology front-page news. Whether it is finding new traditional sources of energy (e.g., oil, coal and natural gas) or

developing alternative courses of energy (e.g., wind, solar, hydro power, geothermal) we need to understand that the world is so embedded in conventional sources of energy that policies and decisions regarding alternative sources of energy depend greatly on what happens in the fossil fuel market.

An interdisciplinary and integrated understanding of energy resources is integral to finding comprehensive solutions to the management of energy systems in today's rapidly changing world. A broad range of human, environmental, political, economic, and technological factors are at work shaping the future of current energy landscapes, and it is the mission of the Institute of Integrated Energy Studies (I2ES) to prepare students to be active participants in that emerging future. In doing so, the I2ES emphasizes critical thinking and applied approaches to analysis, while providing graduates with the skills necessary to deal with energy issues at scales ranging from local to global.

The bachelor of science in Integrated Energy Management (IEM) take these factors in consideration and provides students with an interdisciplinary education experience that includes the integration of both traditional fossil fuel-based and greener alternative energy. Students enrolled in the IEM degree program will be able to choose from three specializations: (1) integrated energy policy; (2) integrated energy business; and (3) integrated power systems. Courses in the BS in IEM introduce students to energy systems and resources, while at the same time providing a comprehensive understanding for the social, political, economic and environmental processes that shape energy systems. We emphasize field learning experience and an integrative approach to energy management. Majors in IEM hone their written, verbal, and analytical communication skills as part of their interdisciplinary education. Students also learn from and collaborate with faculty members supporting the Institute for Integrated Energy Studies.

Select students will have the opportunity to engage in a credit-bearing business-hosted extended (up to six months) cooperative education/apprenticeships with participating businesses. This applied learning experience happens in a student's junior or senior year and allows for the student to: (1) put in practice what they have learned in the classroom; (2) receive credit towards their degree; and (3) receive specialized training from a company that they may work for after graduation.

No other university in the state offers this particular type of interdisciplinary education in response to current and future professional work place needs. Upon graduation, majors in IEM will be qualified to work in a wide range of careers, including: energy policy, energy management services, inspection field technician, contact specialists, supply chain management of energy technologies, energy business, utility locator supervisor, energy plant manager, energy forecasting, and employment in private, public and non-for-profit organizations at local, state, and federal government agencies.

#### **Admission Requirements**

Applications are accepted throughout the academic year. Admission to the program is based upon a review of completed prerequisite courses and application materials. Please see the program application at [www.cwu.edu/energy](http://www.cwu.edu/energy).

A student must have a 2.25 minimum GPA in all coursework taken previous to application for admission.

Admission to any course requires a grade of C or higher in each

prerequisite listed. Students who do not meet the prerequisite grade requirement will be dropped from the course.

A student is expected to complete each course used to fulfill a degree program requirement with a grade of C or higher. Students must complete all CWU foundation and core requirements prior to beginning 400-level coursework.

#### **Program Outcomes**

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

#### **Course Offerings**

Frequency of course offering information can be found at the department website: [www.cwu.edu/energy](http://www.cwu.edu/energy) or by contacting the department directly.

## **Integrated Energy Management BS, Integrated Energy Business Specialization**

Integrated Energy Management, BS Core

#### **Program Information**

The geopolitical conflicts over energy resources during the last decades have transformed the current energy landscapes at regional, national and global scales. These shifts in energy landscapes have made the management of energy resources more complex, the development of energy policy more important and controversial, and the innovation of energy technology front-page news. Whether it is finding new traditional sources of energy (e.g., oil, coal and natural gas) or developing alternative courses of energy (e.g., wind, solar, hydro power, geothermal) we need to understand that the world is so embedded in conventional sources of energy that policies and decisions regarding alternative sources of energy depend greatly on what happens in the fossil fuel market.

An interdisciplinary and integrated understanding of energy resources is integral to finding comprehensive solutions to the management of energy systems in today's rapidly changing world. A broad range of human, environmental, political, economic, and technological factors are at work shaping the future of current energy landscapes, and it is the mission of the Institute of Integrated Energy Studies (I2ES) to prepare students to be active participants in that emerging future. In doing so, the I2ES emphasizes critical thinking and applied approaches to analysis, while providing graduates with the skills necessary to deal with energy issues at scales ranging from local to global.

The bachelor of science in Integrated Energy Management (IEM) take these factors in consideration and provides students with an interdisciplinary education experience that includes the integration of both traditional fossil fuel-based and greener alternative energy. Students enrolled in the IEM degree program will be able to choose from three specializations: (1) integrated energy policy; (2) integrated energy business; and (3) integrated power systems. Courses in the BS in IEM introduce students to energy systems and resources, while at the same time providing a comprehensive understanding for the social, political, economic and environmental processes that shape energy

systems. We emphasize field learning experience and an integrative approach to energy management. Majors in IEM hone their written, verbal, and analytical communication skills as part of their interdisciplinary education. Students also learn from and collaborate with faculty members supporting the Institute for Integrated Energy Studies.

Select students will have the opportunity to engage in a credit-bearing business-hosted extended (up to six months) cooperative education/apprenticeships with participating businesses. This applied learning experience happens in a student's junior or senior year, and allows for the student to: (1) put in practice what they have learned in the classroom; (2) receive credit towards their degree; and (3) receive specialized training from a company that they may work for after graduation.

No other university in the state offers this particular type of interdisciplinary education in response to current and future professional work place needs. Upon graduation, majors in IEM will be qualified to work in a wide range of careers, including: energy policy, energy management services, inspection field technician, contact specialists, supply chain management of energy technologies, energy business, utility locator supervisor, energy plant manager, energy forecasting, and employment in private, public and non-for-profit organizations at local, state, and federal government agencies.

#### Admission Requirements

Applications are accepted throughout the academic year. Admission to the program is based upon a review of completed prerequisite courses and application materials. Please see the program application at [www.cwu.edu/energy](http://www.cwu.edu/energy).

A student must have a 2.25 minimum GPA in all coursework taken previous to application for admission.

Admission to any course requires a grade of C- or higher in each prerequisite listed. Students who do not meet the prerequisite grade requirement will be dropped from the course.

A student is expected to complete each course used to fulfill a degree program requirement with a grade of C- or higher. Students must complete all CWU foundation and core requirements prior to beginning 400-level coursework.

#### Additional

Students graduate from Central Washington University and earn a *Bachelor of Science in Integrated Energy Management* making them experts of integrated energy in the global economy.

Foundational Courses Credits: 29

- ECON 201 - Principles of Economics Micro **Credits:** (5)
- GEOG 107 - Our Dynamic Earth **Credits:** (5)
- GEOG 250 - Resource Exploitation and Conservation **Credits:** (4)
- IEM 103 - Introduction to Energy and Science Inquiry **Credits:** (5)

#### Select one from the following for 5 credits:

- ECON 130 - Foundations for Business Analytics **Credits:** (5)
- MATH 130 - Finite Mathematics **Credits:** (5)

#### Select one from the following for 5 credits:

- MATH 153 - Pre-Calculus Mathematics I **Credits:** (5)
- MATH 154 - Pre-Calculus Mathematics II **Credits:** (5)
- MATH 170 - Intuitive Calculus **Credits:** (5)
- MATH 172 - Calculus I **Credits:** (5)

Core Courses Credits: 39-40

- ECON 463 - Energy Economics **Credits:** (5)
- GEOG 301 - Introduction to GIS and Maps **Credits:** (4)
- GEOG 442 - Alternative Energy **Credits:** (5)
- IEM 301 - Energy Management **Credits:** (5)
- IEM 302 - Energy, Environment, and Climate Change **Credits:** (4)
- IEM 330 - Geopolitics of Fossil Fuels **Credits:** (5)
- IEM 489 - Integrated Energy Management Capstone **Credits:** (2)

#### Select one of the following Method courses for 5 credits:

- BUS 221 - Introductory Business Statistics **Credits:** (5)
- MATH 211 - Statistical Concepts and Methods **Credits:** (5)
- PSY 362 - Introductory Statistics **Credits:** (5)

#### Select one of the following Communication courses for 4-5 credits:

- ADMG 385 - Business Communications and Report Writing **Credits:** (4)
- COM 345 - Business and Professional Speaking **Credits:** (4)
- ENG 310 - Technical Writing **Credits:** (4)

Total Core Credits: 68-69

Integrated Energy Business Specialization

Integrated Energy Business specializes in training students in the areas of marketing, supply chain logistics, and economics as it relates to energy production distribution and consumption.

Required Courses Credits: 20

- ACCT 301 - Accounting Skills for Non-Accounting Majors **Credits:** (5)
- MGT 380 - Organizational Management **Credits:** (5)
- MKT 360 - Principles of Marketing **Credits:** (5)
- SCM 310 - Supply Chain Management **Credits:** (5)

Department-Approved Electives Credits: 15

Select 15 credits from the following OR, with approval, IEM 290 and IEM 490:

#### Choose two of the following:



- ECON 310 - International Economics **Credits:** (5)
  - ECON 330 - Money and Banking **Credits:** (5)
  - ECON 352 - Managerial Economics **Credits:** (5)
  - ECON 355 - Economics of Labor **Credits:** (5)
  - SCM 420 - Lean/Six Sigma Processes **Credits:** (5)
  - SCM 425 - Procurement and Supply Management **Credits:** (5)
  - SCM 435 - Supply Chain Operations **Credits:** (5)
  - SCM 475 - Global Trade and Supply Chain Management **Credits:** (5)
- Choose one from the following:**
- MGT 477 - Global Leadership and Culture **Credits:** (5)
  - MKT 364 - Marketing Promotion Management **Credits:** (5)
  - MKT 365 - International Marketing **Credits:** (5)
- OR*
- IEM 290 - Cooperative Education **Credits:** (1-10)
  - IEM 490 - Cooperative Education **Credits:** (1-12)

Specialization Total Credits: 35

Total Credits: 103-104

College and Department Information

Institute for Integrated Energy Studies  
College of the Sciences

#### **Program Outcomes**

Visit program outcomes to find out what you can expect to know and do after successful completion of this program.

## **Integrated Energy Management BS, Integrated Energy Policy Specialization**

Integrated Energy Management, BS Core

#### **Program Information**

The geopolitical conflicts over energy resources during the last decades have transformed the current energy landscapes at regional, national and global scales. These shifts in energy landscapes have made the management of energy resources more complex, the development of energy policy more important and controversial, and the innovation of energy technology front-page news. Whether it is finding new traditional sources of energy (e.g., oil, coal and natural gas) or developing alternative sources of energy (e.g., wind, solar, hydro power, geothermal) we need to understand that the world is so embedded in conventional sources of energy that policies and decisions regarding alternative sources of energy depend greatly on what happens in the fossil fuel market.

An interdisciplinary and integrated understanding of energy resources is integral to finding comprehensive solutions to the management of energy systems in today's rapidly changing world. A broad range of human, environmental, political,

economic, and technological factors are at work shaping the future of current energy landscapes, and it is the mission of the Institute of Integrated Energy Studies (I2ES) to prepare students to be active participants in that emerging future. In doing so, the I2ES emphasizes critical thinking and applied approaches to analysis, while providing graduates with the skills necessary to deal with energy issues at scales ranging from local to global.

The bachelor of science in Integrated Energy Management (IEM) take these factors in consideration and provides students with an interdisciplinary education experience that includes the integration of both traditional fossil fuel-based and greener alternative energy. Students enrolled in the IEM degree program will be able to choose from three specializations: (1) integrated energy policy; (2) integrated energy business; and (3) integrated power systems. Courses in the BS in IEM introduce students to energy systems and resources, while at the same time providing a comprehensive understanding for the social, political, economic and environmental processes that shape energy systems. We emphasize field learning experience and an integrative approach to energy management. Majors in IEM hone their written, verbal, and analytical communication skills as part of their interdisciplinary education. Students also learn from and collaborate with faculty members supporting the Institute for Integrated Energy Studies.

Select students will have the opportunity to engage in a credit-bearing business-hosted extended (up to six months) cooperative education/apprenticeships with participating businesses. This applied learning experience happens in a student's junior or senior year, and allows for the student to: (1) put in practice what they have learned in the classroom; (2) receive credit towards their degree; and (3) receive specialized training from a company that they may work for after graduation.

No other university in the state offers this particular type of interdisciplinary education in response to current and future professional work place needs. Upon graduation, majors in IEM will be qualifies to work in a wide range of careers, including: energy policy, energy management services, inspection field technician, contact specialists, supply chain management of energy technologies, energy business, utility locator supervisor, energy plant manager, energy forecasting, and employment in private, public and non-for-profit organizations at local, state, and federal government agencies.

#### **Admission Requirements**

Applications are accepted throughout the academic year. Admission to the program is based upon a review of completed prerequisite courses and application materials. Please see the program application at [www.cwu.edu/energy](http://www.cwu.edu/energy).

A student must have a 2.25 minimum GPA in all coursework taken previous to application for admission.

Admission to any course requires a grade of C- or higher in each prerequisite listed. Students who do not meet the prerequisite grade requirement will be dropped from the course.

A student is expected to complete each course used to fulfill a degree program requirement with a grade of C- or higher. Students must complete all CWU foundation and core requirements prior to beginning 400-level coursework.

#### **Additional**

Students graduate from Central Washington University and earn

a Bachelor of Science in Integrated Energy Management making them experts of integrated energy in the global economy.

Foundational Courses Credits: 29

- ECON 201 - Principles of Economics Micro **Credits:** (5)
- GEOG 107 - Our Dynamic Earth **Credits:** (5)
- GEOG 250 - Resource Exploitation and Conservation **Credits:** (4)
- IEM 103 - Introduction to Energy and Science Inquiry **Credits:** (5)

**Select one from the following for 5 credits:**

- ECON 130 - Foundations for Business Analytics **Credits:** (5)
- MATH 130 - Finite Mathematics **Credits:** (5)

**Select one from the following for 5 credits:**

- MATH 153 - Pre-Calculus Mathematics I **Credits:** (5)
- MATH 154 - Pre-Calculus Mathematics II **Credits:** (5)
- MATH 170 - Intuitive Calculus **Credits:** (5)
- MATH 172 - Calculus I **Credits:** (5)

Core Courses Credits: 39-40

- ECON 463 - Energy Economics **Credits:** (5)
- GEOG 301 - Introduction to GIS and Maps **Credits:** (4)
- GEOG 442 - Alternative Energy **Credits:** (5)
- IEM 301 - Energy Management **Credits:** (5)
- IEM 302 - Energy, Environment, and Climate Change **Credits:** (4)
- IEM 330 - Geopolitics of Fossil Fuels **Credits:** (5)
- IEM 489 - Integrated Energy Management Capstone **Credits:** (2)

**Select one of the following Method courses for 5 credits:**

- BUS 221 - Introductory Business Statistics **Credits:** (5)
- MATH 211 - Statistical Concepts and Methods **Credits:** (5)
- PSY 362 - Introductory Statistics **Credits:** (5)

**Select one of the following Communication courses for 4-5 credits:**

- ADMG 385 - Business Communications and Report Writing **Credits:** (4)
- COM 345 - Business and Professional Speaking **Credits:** (4)
- ENG 310 - Technical Writing **Credits:** (4)

Total Core Credits: 68-69

Integrated Energy Policy Specialization

Integrated Energy Policy specializes in training students in Geographic Information Systems (GIS), planning, and policy analysis as it relates to energy production, distribution and consumption with particular attention to the environment.

Required Courses Credits: 18

- ECON 462 - Environmental and Resource Economics **Credits:** (5)
- GEOG 443 - Energy Policy **Credits:** (5)
- GEOG 445 - Environmental Law **Credits:** (5)
- POSC 325 - Introduction to Public Policy **Credits:** (3)

Department-Approved Electives Credits: 18-20

Select from the following:

- BUS 241 - Legal Environment of Business **Credits:** (5)
- BUS 441 - Advanced Business Law **Credits:** (5)
- ECON 325 - Introduction to Forecasting **Credits:** (5)
- ECON 332 - Public Finance **Credits:** (5)
- ECON 401 - Intermediate Microeconomic Analysis **Credits:** (5)
- ECON 424 - Introduction to Econometrics **Credits:** (5)
- ECON 426 - Economic Research **Credits:** (5)
- GEOG 303 - GIS and Data Management **Credits:** (5)
- GEOG 305 - Introduction to Land Use Planning **Credits:** (5)
- GEOG 306 - Transportation Geography and Planning **Credits:** (4)
- GEOG 330 - Airphoto Interpretation **Credits:** (5)
- GEOG 404 - GIS Analysis **Credits:** (5)
- GEOG 405 - Advanced Topics in Land Use Planning **Credits:** (3)
- GEOG 409 - Quantitative Methods in Geography **Credits:** (5)
- GEOG 417 - Advanced GIS **Credits:** (4)
- GEOG 430 - Remote Sensing **Credits:** (5)
- **OR** GEOL 430 - Remote Sensing **Credits:** (5)
- GEOG 440 - Ecology and Culture **Credits:** (4)
- GEOL 210 - Introduction to Geologic Field Methods **Credits:** (4)
- GEOL 382 - Earth Resources and Pollution **Credits:** (4)
- GEOL 434 - Petroleum Geology **Credits:** (5)
- IEM 290 - Cooperative Education **Credits:** (1-10)
- IEM 398 - Special Topics **Credits:** (1-6)
- IEM 399 - Seminar **Credits:** (1-5)
- IEM 490 - Cooperative Education **Credits:** (1-12)
- IEM 496 - Individual Study **Credits:** (1-6)
- IEM 498 - Special Topics **Credits:** (1-6)
- POSC 350 - Introduction to Public Law **Credits:** (5)

Total Specialization Credits: 36-38

Total Credits: 104-107

College and Department Information

Institute for Integrated Energy Studies  
College of the Sciences

### Program Outcomes

Visit program outcomes to find out what you can expect to know and do after successful completion of this program.

## Integrated Energy Management BS, Integrated Power Systems Specialization

Integrated Energy Management, BS Core

### Program Information

The geopolitical conflicts over energy resources during the last decades have transformed the current energy landscapes at regional, national and global scales. These shifts in energy landscapes have made the management of energy resources more complex, the development of energy policy more important and controversial, and the innovation of energy technology front-page news. Whether it is finding new traditional sources of energy (e.g., oil, coal and natural gas) or developing alternative sources of energy (e.g., wind, solar, hydro power, geothermal) we need to understand that the world is so embedded in conventional sources of energy that policies and decisions regarding alternative sources of energy depend greatly on what happens in the fossil fuel market.

An interdisciplinary and integrated understanding of energy resources is integral to finding comprehensive solutions to the management of energy systems in today's rapidly changing world. A broad range of human, environmental, political, economic, and technological factors are at work shaping the future of current energy landscapes, and it is the mission of the Institute of Integrated Energy Studies (I2ES) to prepare students to be active participants in that emerging future. In doing so, the I2ES emphasizes critical thinking and applied approaches to analysis, while providing graduates with the skills necessary to deal with energy issues at scales ranging from local to global.

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Select students will have the opportunity to engage in a credit-bearing business-hosted extended (up to six months) cooperative

education/apprenticeships with participating businesses. This applied learning experience happens in a student's junior or senior year, and allows for the student to: (1) put in practice what they have learned in the classroom; (2) receive credit towards their degree; and (3) receive specialized training from a company that they may work for after graduation.

No other university in the state offers this particular type of interdisciplinary education in response to current and future professional work place needs. Upon graduation, majors in IEM will be qualified to work in a wide range of careers, including: energy policy, energy management services, inspection field technician, contact specialists, supply chain management of energy technologies, energy business, utility locator supervisor, energy plant manager, energy forecasting, and employment in private, public and non-for-profit organizations at local, state, and federal government agencies.

### Admission Requirements

Applications are accepted throughout the academic year. Admission to the program is based upon a review of completed prerequisite courses and application materials. Please see the program application at [www.cwu.edu/energy](http://www.cwu.edu/energy).

A student must have a 2.25 minimum GPA in all coursework taken previous to application for admission.

Admission to any course requires a grade of C- or higher in each prerequisite listed. Students who do not meet the prerequisite grade requirement will be dropped from the course.

A student is expected to complete each course used to fulfill a degree program requirement with a grade of C- or higher. Students must complete all CWU foundation and core requirements prior to beginning 400-level coursework.

### Additional

Students graduate from Central Washington University and earn a *Bachelor of Science in Integrated Energy Management* making them experts of integrated energy in the global economy.

Foundational Courses Credits: 29

- ECON 201 - Principles of Economics Micro **Credits:** (5)
- GEOG 107 - Our Dynamic Earth **Credits:** (5)
- GEOG 250 - Resource Exploitation and Conservation **Credits:** (4)
- IEM 103 - Introduction to Energy and Science Inquiry **Credits:** (5)

#### Select one from the following for 5 credits:

- ECON 130 - Foundations for Business Analytics **Credits:** (5)
- MATH 130 - Finite Mathematics **Credits:** (5)

#### Select one from the following for 5 credits:

- MATH 153 - Pre-Calculus Mathematics I **Credits:** (5)
- MATH 154 - Pre-Calculus Mathematics II **Credits:** (5)
- MATH 170 - Intuitive Calculus **Credits:** (5)
- MATH 172 - Calculus I **Credits:** (5)

Core Courses Credits: 39-40

- ECON 463 - Energy Economics **Credits:** (5)
- GEOG 301 - Introduction to GIS and Maps **Credits:** (4)
- GEOG 442 - Alternative Energy **Credits:** (5)
- IEM 301 - Energy Management **Credits:** (5)
- IEM 302 - Energy, Environment, and Climate Change **Credits:** (4)
- IEM 330 - Geopolitics of Fossil Fuels **Credits:** (5)
- IEM 489 - Integrated Energy Management Capstone **Credits:** (2)

**Select one of the following Method courses for 5 credits:**

- BUS 221 - Introductory Business Statistics **Credits:** (5)
- MATH 211 - Statistical Concepts and Methods **Credits:** (5)
- PSY 362 - Introductory Statistics **Credits:** (5)

**Select one of the following Communication courses for 4-5 credits:**

- ADMG 385 - Business Communications and Report Writing **Credits:** (4)
- COM 345 - Business and Professional Speaking **Credits:** (4)
- ENG 310 - Technical Writing **Credits:** (4)

Total Core Credits: 68-69

Integrated Power Systems Specialization

Power Systems provides courses that train students in topics related to energy technologies, physical understandings of power systems, and the environmental implications of energy production, distribution, and consumption.

Required Courses Credits: 17-18

- ETSC 101 - Modern Technology and Energy **Credits:** (5)
- ETSC 160 - Computer-Aided Design and Drafting **Credits:** (4)
- **OR** ETSC 161 - Architectural Computer Aided Design **Credits:** (3)
- ETSC 301 - Engineering Project Cost Analysis **Credits:** (4)
- PHYS 106 - Physics Inquiry **Credits:** (5)

Department-Approved Electives Credits: 18-20

Select from the following:

- CMGT 245 - Light Commercial Construction **Credits:** (5)
- CMGT 265 - Construction Documents **Credits:** (3)

- CMGT 320 - Electrical Systems **Credits:** (3)
- CMGT 452 - LEED in Sustainable Construction **Credits:** (4)
- EET 221 - Basic Electricity **Credits:** (3)
- EET 332 - Electrical Machines **Credits:** (4)
- EET 426 - Advanced Electrical Network **Credits:** (4)
- EET 433 - Transmission and Distribution of Electrical Power **Credits:** (4)
- ETSC 380 - Quality Control **Credits:** (4)
- ETSC 455 - Engineering Project Management **Credits:** (4)
- ETSC 385 - Product Design and Development **Credits:** (4)
- ETSC 389 - Technical Presentations **Credits:** (3)
- IEM 290 - Cooperative Education **Credits:** (1-10)
- IEM 490 - Cooperative Education **Credits:** (1-12)
- IT 258 - Spreadsheet Applications **Credits:** (3)
- SHM 301 - Fundamentals of Safety and Health Management **Credits:** (3)
- SHM 325 - General Industry Safety and Health **Credits:** (3)
- SHM 351 - Incident Analysis **Credits:** (3)
- SHM 353 - Risk and Insurance **Credits:** (4)
- SHM 377 - Hazardous Materials Management **Credits:** (4)
- SHM 477 - Environmental Management **Credits:** (4)

Specialization Total Credits: 35-38

Total Credits: 103-107

College and Department Information

Institute for Integrated Energy Studies  
College of the Sciences

**Program Outcomes**

Visit program outcomes to find out what you can expect to know and do after successful completion of this program.

## Interdisciplinary Studies: Social Sciences Program

College of the Sciences  
Ellensburg  
Dean Hall, room 130  
Mail Stop 7519  
509-963-1804

[www.cwu.edu/interdisciplinary-studies-socialsciences](http://www.cwu.edu/interdisciplinary-studies-socialsciences)

See website for how this program may be used for educational and career purposes.

**Program Academic Coordinator**

Alena Yastchenko

### Program Directors

Trieu Doan, Lynnwood  
Nicole Dunn, online program  
Cynthia Engel, Des Moines/Pierce County  
Kevin Feeney, online program  
Alena Yastchenko, Ellensburg/Yakima/Wenatchee/Moses Lake

### Program Information

Interdisciplinary studies-social sciences major is for students whose primary interest in the social sciences requires interdisciplinary programs and course selections which are not possible within single academic programs or established curricula. Program offers students an opportunity to devise an approved, coherent program of study with an academic advisor fulfilling academic or career goals and includes prerequisites consistent with the 300- 400-level major coursework. Since the program is a student-designed, interdisciplinary major, course selections will vary. Students in the interdisciplinary studies major must take courses in at least three disciplines within the major.

### Admission Requirement

Applicants must have completed 60 credit hours of study with a minimum 2.25 cumulative GPA and be in academic good standing for admission.

### Additional Degree Requirements

Application to the program must be completed at least three quarters prior to anticipated graduation. Students must earn a minimum grade of C- in each course in an approved interdisciplinary studies major plan and achieve a minimum 2.25 GPA in the major. Courses in a student's minor or second major may not be included in the interdisciplinary studies major plan without advisor's consent. Students will enroll in IDS 489 no earlier than 2 quarters following successful completion of IDS 289.

### Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### Course Offerings

Frequency of course offering information can be found at the department website: [www.cwu.edu/interdisciplinary-studies-socialsciences](http://www.cwu.edu/interdisciplinary-studies-socialsciences) or by contacting the department directly.

## Interdisciplinary Studies-Social Sciences, BS

### Program Information

Interdisciplinary studies-social sciences major is for students whose primary interest in the social sciences requires interdisciplinary programs and course selections which are not possible within single academic programs or established curricula. Program offers students an opportunity to devise an approved, coherent program of study with an academic advisor fulfilling academic or career goals and includes prerequisites consistent with the 300- 400-level major coursework. Since the program is a student-designed, interdisciplinary major, course selections will vary. Students in the interdisciplinary studies major must take courses in at least three disciplines within the major.

### Admission Requirement

Applicants must have completed 60 credit hours of study with a minimum 2.25 cumulative GPA and be in academic good standing for admission.

### Additional Degree Requirements

Application to the program must be completed at least three quarters prior to anticipated graduation. Students must earn a minimum grade of C- in each course in an approved interdisciplinary studies major plan and achieve a minimum 2.25 GPA in the major. Courses in a student's minor or second major may not be included in the interdisciplinary studies major plan without advisor's consent. Students will enroll in IDS 489 no earlier than 2 quarters following successful completion of IDS 289.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge of the range of perspectives and conventions associated with their course of study, emphasizing the interdisciplinary nature of their program by integrating and applying knowledge across experience and disciplines.
- Demonstrate the ability to craft effective written material relevant to one or more specific learning objectives included in their approved plan of study.
- Analyze facts, concepts, theories, and processes associated with the disciplines under study.
- Report satisfaction with their overall degree program experience.

### Interdisciplinary Studies-Social Sciences 62-Credit Major

#### Required Courses

- 52-53 credits must be taken from the list of courses approved for the social science major. Students in the interdisciplinary studies-social sciences major must take courses in at least three disciplines within the major and no more than 10 credits of lower division coursework may be included. No more than 15 credits may be numbered 490.
- IDS 289 - Introduction to the Major **Credits:** (1)
- IDS 389 - Academic and Career Exploration **Credits:** (3)
- IDS 489 - Senior Portfolio Project **Credits:** (1)

#### Research Methods in the Social Sciences (4-5) Credits

Choose one of the following approved courses:

- ANTH 444 - Ethnographic Field Methods **Credits:** (4)
- LAJ 400 - Research Methods in Criminal Justice **Credits:** (4)
- PSY 300 - Research Methods in Psychology **Credits:** (5)
- SOC 363 - Methods of Social Research **Credits:** (5) or as approved by program director.

Total Credits: 62

## Interdisciplinary Studies-Social Sciences 47-Credit Major

### Required Courses

- 37-38 credits must be taken from the list of courses approved for the social sciences major. Students in the interdisciplinary studies - social sciences major must take courses in at least three disciplines within the major and no more than 10 credits of lower division coursework may be included. No more than 10 credits may be numbered 490.
- In addition, a 47-credit major must complete either a traditional departmental minor or a second major.
- IDS 289 - Introduction to the Major **Credits:** (1)
- IDS 389 - Academic and Career Exploration **Credits:** (3)
- IDS 489 - Senior Portfolio Project **Credits:** (1)

### Research Methods in the Social Sciences (4-5) Credits

Choose one of the following approved courses:

- ANTH 444 - Ethnographic Field Methods **Credits:** (4)
- LAJ 400 - Research Methods in Criminal Justice **Credits:** (4)
- PSY 300 - Research Methods in Psychology **Credits:** (5)
- SOC 363 - Methods of Social Research **Credits:** (5) or as approved by program director.

Total Credits: 47

### Courses Approved for the Interdisciplinary Studies-Social Sciences Major

American Indian Studies (all courses)  
Anthropology (all courses)  
Economics (all courses)  
Environmental Studies (all courses)  
Ethnic Studies (all courses)  
Geography (all courses)  
Health Education (approved courses)  
HED 210  
HED 387  
History (all courses)  
Interdisciplinary Studies - Social Sciences (all courses)  
Law and Justice (all courses)  
Library Science  
LIS 345 - Library Research Methods  
Political Science (all courses)  
Psychology (all courses)

### Public Health (approved courses)

PUBH 209  
  
PUBH 310  
  
PUBH 317  
  
PUBH 351

PUBH 470

PUBH 471

PUBH 472

Sociology (all courses)  
University 309  
Women's and Gender Studies (all courses)

### College and Department Information

Interdisciplinary Studies: Social Sciences Program  
College of the Sciences

### Program Outcomes

Visit program outcomes to find out what you can expect to know and do after successful completion of this program.

## International Studies and Programs

International Studies  
Ellensburg  
International Center, room 101  
Mail Stop 7408  
509-963-3612  
Fax 509-963-1558  
[www.cwu.edu/international-programs](http://www.cwu.edu/international-programs)

See website for how these programs may be used for educational and career purposes.

### Executive Director, Office of International Studies and Programs

Ediz Kaykayoglu, MS

### Associate Director, Office of International Studies and Programs

Nicki Kukar, MEd

### Staff

Cheri Lince, administrative assistant  
Raymond (Ray) Wells, office assistant  
Stacy Soderstrom, international student recruiter  
Rachel Gordon, project manager  
Roslyn (Roz) Moes, international student advisor  
Kathy Gallentine, international student advisor  
Alexander Radi, SEVIS coordinator  
Partick Smith, fiscal specialist II  
Anna Miller, program coordinator

### Program Information

The Office of International Studies and Programs (OISP) coordinates all internationally related activities on campus. This includes maintaining institutional linkages, facilitating faculty exchanges, recruiting international students, providing study abroad/exchange, and academic advising for both international students and American students, promoting English language acquisition through the Asia University America Program (AUAP), and the University English as a Second Language program (UESL), and collaborating with the academic deans and departments in support of the overall internationalization of

the university curriculum.

OISP provides a variety of services to all segments of the university in order to meet the diverse needs of CWU's students, faculty, international students, research scholars, and professors. The following services are offered through the OISP: study abroad/exchange advising (SAEP), advising to international students, English language training through the UESL program, and a unique English language and cultural learning experience for Japanese students from Asia University in Japan through AUAP.

### **Institutional Linkages**

Central and the Office of International Studies and Programs (OISP) maintain active inter-institutional and organizational relationships with the following universities: Anhui University, China; Gunma Prefectural Women's University, Japan; Herzen State Pedagogical University, Russia; University of Pecs, Hungary; various countries in the International Student Exchange Program; Mexico; Kyoto University of Foreign Studies, Japan; Beijing Jiaotong University, China; Queensland University of Technology, Australia; Charles Darwin University, Australia; Griffith University, Australia; Macquarie University, Australia; University of Shimane, Japan; Shimane Women's Junior College, Japan; Takushoku University, Japan; University of Hull, United Kingdom; Universidad Austral de Chile, Chile; Pukyong National University, Korea; Kyundong University, Korea; Ewha Women's University, Korea; various countries in the AHA International; Beijing University, China; Universidad Anahuac del Sur, Mexico; Universite de Pau et des Pays de l'Adour, France; College Consortium for International Studies, various countries; American Institute for Foreign Studies, various countries; Centro de Investigaciones en Medio Ambiente y Salud (CIMAS), Ecuador; University of Washington Cadiz Program, Spain; Universidad Autonoma de Guadalajara, Mexico; Asia University, Japan; American Pacific University, Vietnam and Napier University, Scotland.

Active student and faculty exchange opportunities exist between CWU and these institutions.

### **International Students and Scholars**

International students and scholars receive academic advising, advocacy, and immigration regulations and procedures assistance through OISP. Support services are available to all international students including those here for language training in the UESL department, to take part in an academic year exchange, or to obtain a bachelor or master's degree, in International, and Area Studies.

### **International and Area Studies**

CWU offers Chinese, French, German, Japanese, Russian, and Spanish language courses. Students studying a language are encouraged to have international experience in order to learn more about the cultural context of the language. Regular degree programs are offered in world languages with specializations in Chinese, French, German, Japanese, Russian, and Spanish. The world language broad area major may include studying abroad in a country where the target language is taken.

Students can internationalize their undergraduate education by completing a major or minor in Asia Studies and/or Latino and Latin American Studies Program. There is also a minor in International Studies. These programs of study are

interdisciplinary and incorporate courses in anthropology, art, economics, geography, history, languages, philosophy, and political science. Other area-focused courses are also available throughout the academic year.

### **Program Outcomes**

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### **Course Offerings**

Frequency of course offering information can be found at the department website: [www.cwu.edu/international-programs](http://www.cwu.edu/international-programs) or by contacting the department directly.

## **Asia University America Program (AUAP)**

International Studies  
Ellensburg  
International Center, room 101

509-963-1373  
Fax 509-963-1371  
[www.cwu.edu/international-programs/auap](http://www.cwu.edu/international-programs/auap)

See website for how these programs may be used for educational and career purposes.

### **Program Director**

Nicki Kukar, MEd

### **Lecturers**

Andrew Cottonwood MA, curriculum coordinator, American and Japanese history  
Rose Romfo, MA, English literature  
Sylvia Shriner, MA, TESL  
Nicole Rehorst, MA

### **Staff**

Casey Hendrix, secretary senior  
Mark Werdin, MA, English literature, student services coordinator

### **Program Information**

The Asia University America Program (AUAP) is a study abroad program for freshman and sophomore students from Asia University in Tokyo, Japan. Two groups of students come to CWU each year for five months. The program is presently ongoing at two other universities in the northwest: WWU and EWU. AUAP provides students from Asia University the opportunity to improve their English skills and experience university life in the U.S. Students attend 18 hours of AUAP classes per week following the required curriculum from Asia University.

### **International Study Courses**

INTL courses are offered only in university-approved study abroad/exchange programs. Courses may be offered and repeated for credit under different titles.

College and Department Information

International Studies and Programs

## Study Abroad and Exchange Programs (SAEP)

International Studies and Programs  
Ellensburg  
International Center, room 101  
509-963-3622

[www.cwu.edu/international-programs](http://www.cwu.edu/international-programs)

See website for how this program may be used for educational and career purposes.

### Associate Director

Steven Cook, MA

### Staff

Matthew Zielsdorf, senior education abroad advisor  
Roberta Lowe, secretary senior

### Program Information

Education Abroad provides students the opportunities to combine academic and cultural learning and, in so doing, challenge previous knowledge and assumptions, gain new perspectives on their field of study, access classes or materials unavailable at CWU and gain skills necessary in the 21<sup>st</sup> century workplace. Multiple recent studies have shown US employers place a high value on intercultural skills and cultural competency.

Programs are available in a variety of majors, destinations, durations and types, including internships and service-learning in addition to more traditional study programs. See the office website or come to our office for more information.

Study Abroad and Exchange Programs offers more than 150 international programs in 50 countries and over 170 exchange locations within the U.S. International internships are also available. Programs range in length from 10 days to one year. Programs grant academic credit that can be applied to major, minor, or breadth requirements with departmental approval. World language proficiency is not required and many programs offer coursework in English.

### SAEP Standards

- Minimum GPA 2.5 or higher; 2.0 for international internships.
- Minimum sophomore standing for most programs; freshman standing for some faculty-led programs.
- Must be in good academic and disciplinary standing.
- Program-specific eligibility criteria are available on the SAEP website at [www.cwu.edu/international-programs/saep](http://www.cwu.edu/international-programs/saep).

### Financial Obligations

Exempt from CWU tuition. Program-specific fees apply. For more information, see the SAEP website at [www.cwu.edu/international-programs/saep](http://www.cwu.edu/international-programs/saep).

Most types of financial aid apply toward program costs. Aid may be increased if necessary depending on student aid eligibility.

College and Department Information

International Studies and Programs

## University English as a Second Language Program (UESL)

International Studies  
Ellensburg  
International Center, room 168

509-963-1376

[www.cwu.edu/international-programs](http://www.cwu.edu/international-programs)

See website for how these programs may be used for educational and career purposes.

### Program Director

Matt Britschgi, MA

### Senior Lecturers

Matt Britschgi, MA  
Meiqi He, MA  
James Pitts, MA  
Carl Rosser, PhD,

### Lecturers

Cami Bello, MA  
Reka Britschgi, MA, MS  
Sarah Norton, MA

### Staff

Kindra Martin, secretary senior

### Program Information

The UESL Program consists of a year-round intensive English program and short-term special programs. The year-round program focuses on language instruction and academic preparation for international students. Conditional undergraduate admission to CWU is an option through the UESL program. The program provides practical training for English department graduate students and an opportunity for American students to be conversation partners. Short-term special programs can be arranged for specific groups.

College and Department Information

International Studies and Programs

## International Studies Minor

The international studies minor program goals are to provide a structured interdisciplinary opportunity for students to develop the analytical skills necessary to understand and evaluate the contemporary international system; to facilitate research and creative activities that focus on international issues; to provide opportunities to directly engage in meaningful cross-national interactions; and to encourage the apprehension of the fundamental commonalities as well as rich diversities that characterize the modern world system.

Required Courses



- ECON 102 - World Economic Issues **Credits:** (5)
- GEOG 101 - World Regional Geography **Credits:** (5)
- POSC 270 - International Relations **Credits:** (5)

#### International Studies Courses

- INTL 110-465 - International Studies **Credits:** (3)

Electives Credits: 18

Students must complete at least four of the following courses with no more than two from any one department:

- ANTH 130 - Cultural Worlds **Credits:** (5)
- ANTH 356 - Gender Roles in Cross-cultural Perspective **Credits:** (4)
- ANTH 446 - Anthropology of Globalization **Credits:** (4)
- COM 302 - Intercultural Communication **Credits:** (4)
- ECON 310 - International Economics **Credits:** (5)
- ENG 360 - Cinema Studies IV: Survey of World Cinema **Credits:** (5)
- GEOG 304 - Economic Geography **Credits:** (5)
- MGT 384 - Introduction to International Business **Credits:** (5)
- POSC 372 - Politics of Globalization **Credits:** (5)
- POSC 373 - International Politics of the Pacific Rim **Credits:** (5)
- POSC 375 - The Middle East and International Politics **Credits:** (5)
- POSC 378 - International Political Economy **Credits:** (5)
- POSC 470 - Contemporary Issues in International Relations **Credits:** (3-5)
- PUBH 317 - Global Health Issues and Solutions **Credits:** (4)
- SOC 326 - Social Demography **Credits:** (5)
- SOC 371 - Globalization **Credits:** (5)
- WGSS 498 - Special Topics **Credits:** (1-6)
- WLC 311 - Popular Cultures of the World **Credits:** (5)

#### Other Electives

- INTL 198-498 - Special Topics **Credits:** (1-6)
- INTL 290/490 - Cooperative Education **Credits:** (1-6)

Total Credits: 36

#### College and Department Information

##### International Studies and Programs

# Latino and Latin American Studies Program

College of Arts and Humanities  
Ellensburg  
Hebeler Hall, room 202  
509-963-1853  
[www.cwu.edu/latino-latin-american](http://www.cwu.edu/latino-latin-american)

#### Director

Daniel Beck, PhD

#### Faculty

Daniel Beck, PhD, biology  
Xavier Cavazos, MFA, English  
Joan Cawley-Crane, art  
Bobby Cummings, PhD, English  
Elvin Delgado, PhD, geography  
Jason Dormady, PhD, history  
Susana Flores, PhD, education  
Cesar Garcia, PhD, communications  
Gilberto Garcia, PhD, political science  
Steve Hackenberger, PhD, anthropology  
Koushik Ghosh, PhD, economics  
Eric Mayer, PhD, Spanish, world languages  
Stella Moreno, PhD, Spanish, world languages  
Nelson Pichardo, PhD, sociology  
Sterling Quinn, PhD, geography  
Rodrigo Rentería-Valencia, PhD, anthropology  
Craig Revels, PhD, geography  
Chris Schedler, PhD, English  
Stefanie Wickstrom, PhD, political science

#### Staff

Vickie Winegar, administrative assistant

#### Program Information

The Latino and Latin American Studies Program (LLAS) seeks to engage CWU students, faculty, staff, and local communities in a study of Latino and Latin American experiences, peoples, and cultures. The LLAS minor provides students with broad, interdisciplinary training in the economic, social, political, and cultural realities of Latino and Latin American peoples. The minor will be extremely valuable for those pursuing careers in business, government, social work, law and justice, and teaching that require engagement with Latino communities in the United States, as well as for those who wish to travel and work in Latin America. Moreover, the Latino and Latin American Studies minor may also serve as preparation for graduate study in multiple academic or professional fields.

#### Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

#### Course Offerings

Frequency of course offering information can be found at the department website: [www.cwu.edu/latino-latin-american](http://www.cwu.edu/latino-latin-american) or by contacting the department directly.

# Latino and Latin American Studies Minor

## General Program Information

The Latino and Latin American Studies Program (LLAS) seeks to engage CWU students, faculty, staff, and local communities in a study of Latino and Latin American experiences, peoples, and cultures. The LLAS minor provides students with broad, interdisciplinary training in the economic, social, political, and cultural realities of Latino and Latin American peoples. The minor will be extremely valuable for those pursuing careers in business, government, social work, law and justice, and teaching that require engagement with Latino communities in the United States, as well as for those who wish to travel and work in Latin America. Moreover, the Latino and Latin American Studies minor may also serve as preparation for graduate study in multiple academic or professional fields.

## Requirements for minors in Latino and Latin American Studies

- Prerequisite: Spanish, Portuguese, or French language equivalent to the end of the first year (153).
- An average GPA of 2.0 is required in all program courses.

Required Course Credits: 5

- LLAS 102 - An Introduction to Latino and Latin American Studies **Credits: (5)**
- **OR** LLAS 103 - Survey of Latin American Studies **Credits: (5)**

Department-Approved Electives Credits: 20

A total of 20 approved elective credits in at least three different disciplines at the 300 level or above is required from the below list. Courses taken through CWU exchange or study-abroad programs in a Latin American university may be applied for minor program credit. Courses that do not appear on the approved list but contain significant Latino and Latin American content may be used for minor program credit, upon approval of the LLAS director(s).

List of Approved CWU Courses (By Department/Program)

### (a) Anthropology

- ANTH 346 - Cultures of Latin America and the Caribbean **Credits: (4)**

### (b) Economics

- ECON 101 - Economic Issues **Credits: (5)**
- ECON 102 - World Economic Issues **Credits: (5)**
- ECON 201 - Principles of Economics Micro **Credits: (5)**

### (c) English

- ENG 331 - Latina/o Literature **Credits: (5)**

### (d) Geography

- GEOG 368 - Geography of Middle America **Credits: (4)**
- GEOG 370 - Geography of South America **Credits: (4)**

### (e) History

- HIST 321 - Latin America Through Film, Art, and Music **Credits: (5)**
- HIST 328 - Modern Latin America **Credits: (5)**
- HIST 329 - The Tropics and the Modern World **Credits: (5)**
- HIST 385 - Aztec, Inca, Maya: Empire and City in the New World **Credits: (5)**
- HIST 386 - The Latin American Colonies **Credits: (5)**
- HIST 460 - Religion in Latin America **Credits: (5)**
- HIST 488 - Mexico in the Modern Era **Credits: (5)**

### (f) Latino and Latin American Studies

- LLAS 102 - An Introduction to Latino and Latin American Studies **Credits: (5)**
- LLAS 103 - Survey of Latin American Studies **Credits: (5)**
- LLAS 301 - Urban Society in Latin America **Credits: (5)**
- LLAS 388 - Mexican Cultural Studies **Credits: (5)**
- LLAS 398 - Special Topics **Credits: (1-6)**
- LLAS 496 - Individual Study **Credits: (1-6)**

### (g) Political Science

- POSC 316 - Latinos and the U.S. Political System **Credits: (5)**
- POSC 343 - The Politics of the U.S. Mexico Border **Credits: (5)**
- POSC 361 - Latin American Politics **Credits: (5)**

### (h) Spanish

- SPAN 301 - Introduction to Spanish and Latin American Literature **Credits: (5)**
- SPAN 310 - Hispanic Civilizations and Cultures **Credits: (5)**
- SPAN 446 - Hispanic Cinema **Credits: (5)**
- SPAN 456 - The Spanish and Latin American Short Story **Credits: (5)**
- SPAN 467 - Spanish and Latin American Literature and Film **Credits: (5)**
- SPAN 380 - Contemporary Hispanic Literature and Cultures (Put on reserve 9/16/18) **Credits: (5)**

- SPAN 381 - Hispanic and U.S. Latino Literatures and Cultures **Credits:** (5)
- SPAN 447 - Framing Latin American Cinema **Credits:** (5)
- SPAN 449 - Spanish Golden Age Literature **Credits:** (5)

(i) World Languages

- WLC 311 - Popular Cultures of the World **Credits:** (5)

Total Credits: 25

College and Department Information

Latino and Latin American Studies Program  
College of Arts and Humanities

## Latin American Business Certificate

The certificate in Latin American Business prepares students for working within an emerging economy orientated toward Latin American. It combines an overview of the nuances of the regional economy with an introduction to Latin American's cultural and historical development. Topics will include an introduction to Latin American culture and philosophy, corporate-government relations, twentieth-century history, regional development, and business strategies. It can be supplemented with study abroad opportunities and language study (French, Spanish, Portuguese).

There are two tracks: one for College of Business majors and one for non-business majors.

Required Courses Credits: 14

- COM 471 - Corporate Communication in Latin America **Credits:** (4) (No prerequisites required for the Latin American Business Certificate)
- ECON 101 - Economic Issues **Credits:** (5)
- **OR** ECON 102 - World Economic Issues **Credits:** (5)
- **OR** ECON 201 - Principles of Economics Micro **Credits:** (5)
- LLAS 102 - An Introduction to Latino and Latin American Studies **Credits:** (5) (online)

Track for Business Majors Credits: 8-10

Choose two of the following courses:

- HIST 321 - Latin America Through Film, Art, and Music **Credits:** (5)
- **OR** HIST 328 - Modern Latin America **Credits:** (5)  
**OR**

- GEOG 368 - Geography of Middle America **Credits:** (4)
- **OR** GEOG 370 - Geography of South America **Credits:** (4)
- **OR** SPAN 310 - Hispanic Civilizations and Cultures **Credits:** (5)

Track for Non-Business Majors Credits: 10

Choose two of the following courses:

- MGT 380 - Organizational Management **Credits:** (5)
- MKT 360 - Principles of Marketing **Credits:** (5)
- HRM 381 - Management of Human Resources **Credits:** (5)

Total Credits: 22-24

College and Department Information

Latino and Latin American Studies Program  
College of Arts and Humanities

## Law and Justice Department

College of the Sciences  
Ellensburg  
Farrell Hall, room 309  
CWU-Des Moines (D)  
CWU-Lynnwood (L)  
Mail Stop 7580  
509-963-3208  
Fax: 509-963-3205

[www.cwu.edu/law](http://www.cwu.edu/law)

See website for how these programs may be used for educational and career purposes.

### Faculty and Staff Chair

Paul Knepper, PhD

### Professors

Paul Knepper, PhD, theoretical criminology, history of crime, crime prevention  
Rodrigo Murataya, PhD, criminal investigation, police-community relations, police personnel administration  
Krystal Noga-Styron, JD, criminal law, crime and the media  
Charles Reasons, PhD, LLB, criminology, criminal justice, law, comparative justice

### Associate Professors

Teresa Francis, JD, LLM, criminal law, correctional law  
Cody Stoddard, PhD, policing, courts, criminological theory, quantitative methods

### Assistant Professors

Veronica Cano, PhD, research methods, community and social

justice, juvenile justice

Roger Schaefer, PhD, corrections, research methods, criminal justice policy

#### Senior Lecturer

Robert Wes Clogston, MS, law enforcement, comparative criminal justice, police personnel administration

#### Lecturers

Saul Chacon, MA, corrections, policing

R. Shaffer Claridge, JD, civil practice, courts and trails, legal writing, legal research

Robert Moore, MA, corrections, correctional counseling

#### Staff

Dalton Neiffer, BA, internship coordinator

Emily Veitia, MS, secretary supervisor

#### Department Standards

##### Admission to the major and to the minor

- Grade requirement: overall grade point average of 2.25 or higher. The department chair may admit a limited number of students with grade point averages below 2.25 under extenuating circumstances.
- Students applying to the major must submit a major application form.
- The law and justice department reserves the right to modify these requirements in special cases or as the needs of the department change.

##### Exit Requirements

A minimum grade of C- must be earned in all courses used to fulfill the requirements of the major and of the minor.

(NOTE: for all 400-level LAJ courses, student must have completed either a DTA or ENG 101 and 102, MATH 101 or 153 or 154 or 164 or 170 or 172, MATH 102 or MATH 130 or PHIL 201 or CS 105 (basic skills in these categories.)

##### Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

##### Course Offerings

Frequency of course offering information can be found at the department website: [www.cwu.edu/law](http://www.cwu.edu/law) or by contacting the department directly.

## Law and Justice Major, BA

##### Admission to the Major and to the Minor

- Grade requirement: overall grade point average of 2.25 or higher. The department chair may admit a limited number of students with grade point averages below 2.25 under extenuating circumstances.
- Students applying to the major must submit a major application form.
- The law and justice department reserves the right to modify these requirements in special cases or as the needs of the department change.

##### Exit Requirements

A minimum grade of C- must be earned in all courses used to fulfill the requirements of the major and of the minor.

##### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate Communication Skills
- Demonstrate the ability to apply scientific research methods and reasoning to the study of crime and justice
- Demonstrate the ability to apply legal research methods and reasoning to the study of crime and justice
- Demonstrate an understanding of the historical development and current operations of the principal components of the criminal justice system
- Substantive and Procedural Law
- Criminological Theory
- Demonstrate an understanding of ethical issues in criminal justice
- Conflict Management
- Information Access
- Exhibit professionally appropriate behavior
- Benefit from the study of law and justice either by entering a career related to the student's course of study, graduate school, or law school

##### Required Courses Credits: 32

- LAJ 300 - Administration of Criminal Justice **Credits:** (4)
- LAJ 302 - Criminal Procedure **Credits:** (4)
- LAJ 313 - Introduction to Criminal Law **Credits:** (4)
- LAJ 400 - Research Methods in Criminal Justice **Credits:** (4)
- LAJ 401 - Ethics, Diversity, and Conflict in Criminal Justice **Credits:** (4)
- LAJ 420 - Community and Social Justice **Credits:** (4)
- LAJ 451 - Crime in America **Credits:** (4)
- LAJ 489 - Senior Seminar in Law and Justice **Credits:** (4)

##### Department-Approved Electives Credits: 28

Select seven (7) upper-division CWU LAJ courses (other than 490, 492, 495, or 496).

- LAJ 303 - Legal Research **Credits:** (4)
- LAJ 311 - Family Law **Credits:** (4)
- LAJ 316 - Introduction to Paralegal Studies **Credits:** (4)
- LAJ 317 - Introduction to Civil Practice **Credits:** (4)
- LAJ 318 - Introduction to Forensics **Credits:** (4)
- LAJ 324 - Correctional Law **Credits:** (4)
- LAJ 326 - Correctional Counseling **Credits:** (4)
- LAJ 327 - Community Corrections **Credits:** (4)
- LAJ 331 - Investigation **Credits:** (4)
- LAJ 332 - Police Community Relations **Credits:** (4)

- LAJ 333 - Police Personnel Administration **Credits:** (4)
- LAJ 334 - Issues in Policing **Credits:** (4)
- LAJ 342 - Juvenile Justice Process **Credits:** (4)
- LAJ 350 - Criminal Justice and the Media **Credits:** (4)
- LAJ 351 - Preparing for a Law Enforcement Career **Credits:** (4)
- LAJ 353 - Great American Trials **Credits:** (4)
- LAJ 396 - Individual Study **Credits:** (1-6)
- LAJ 397 - Honors **Credits:** (1-12)
- LAJ 398 - Special Topics **Credits:** (1-6)
- LAJ 399 - Seminar **Credits:** (1-5)
- LAJ 402 - African Americans and the Constitution **Credits:** (4)
- LAJ 403 - Sexual Minorities, the Law, and Justice **Credits:** (4)
- LAJ 410 - Legal Writing **Credits:** (4)
- LAJ 426 - Advanced Correctional Counseling **Credits:** (4)
- LAJ 440 - Basic Mediation **Credits:** (4)
- LAJ 450 - Report Writing **Credits:** (4)
- LAJ 453 - Domestic Violence Issues **Credits:** (4)
- LAJ 455 - Comparative Criminal Justice Systems **Credits:** (4)
- LAJ 459 - Current Issues **Credits:** (4)
- LAJ 489 - Senior Seminar in Law and Justice **Credits:** (4)
- LAJ 493 - Field Experience **Credits:** (1-12)
- LAJ 499 - Field Experience Seminar **Credits:** (1-5)

Total Credits: 60

College and Department Information

Law and Justice Department  
College of the Sciences

## Law and Justice Minor

### Admission to the Major and to the Minor

- Grade requirement: overall grade point average of 2.25 or higher. The department chair may admit a limited number of students with grade point averages below 2.25 under extenuating circumstances.
- Students applying to the major must submit a major application form.
- The law and justice department reserves the right to modify these requirements in special cases or as the needs of the department change.

### Exit Requirements

A minimum grade of C- must be earned in all courses used to fulfill the requirements of the major and of the minor.

(NOTE: Students seeking a B.A. degree must complete one year college/university study or two years high school study of a single world language.)

Required Courses Credits: 12-13

Select three (3) LAJ courses from the LAJ core requirements.

- LAJ 300 - Administration of Criminal Justice **Credits:** (4)
- LAJ 302 - Criminal Procedure **Credits:** (4)
- LAJ 303 - Legal Research **Credits:** (4)
- LAJ 313 - Introduction to Criminal Law **Credits:** (4)
- LAJ 400 - Research Methods in Criminal Justice **Credits:** (4)
- LAJ 401 - Ethics, Diversity, and Conflict in Criminal Justice **Credits:** (4)
- LAJ 420 - Community and Social Justice **Credits:** (4)
- LAJ 451 - Crime in America **Credits:** (4)

LAJ Electives Credits: 12

Select three (3) upper-division CWU LAJ courses (other than 490, 492, 495, or 496).

Total Credits: 24-25

College and Department Information

Law and Justice Department  
College of the Sciences

## Library Science Program

Library  
Ellensburg  
James E. Brooks Library, room 206  
Mail Stop 7548  
509-963-1021  
Fax 509-963-3684  
www.lib.cwu.edu

See website for how these programs may be used for educational and career purposes.

### Faculty and Administration, Deans and Chair

Bonnie MacEwan, MA; interim dean of libraries  
Ginny N. Blackson, MLIS; interim associate dean of libraries  
Julia Stringfellow, MLIS, MA American history, archives; department chair, university archivist

### Professors

Ping Fu, MLIS, MS computer science, MA East Asian studies; head of library technology services  
Gerard P. Hogan, MLibr; head of reference, engagement, and instruction  
Julia Stringfellow, MLIS, MA American history; head of archives  
Mary J. Wise, MLS, MEd; head of music library

### Associate Professor

Ginny N. Blackson, MLIS; head of collection development  
Elizabeth Brown, MLIS; instruction coordinator

### Assistant Professors

Julie Carmen, MLS; research and grants  
Aimée Quinn, MLIS; head of government publications  
Maureen Rust, MLIS; student engagement and community outreach  
Maura Valentino, MLA; head of digital initiatives  
Lauren Wittick, MLIS; user experience and assessment

#### Senior Lecturer

Geri L. Hopkins, MLS; instructional design

#### Lecturers

Maurice (Marty) Blackson, MA special education; archives  
Sabrina Juhl, MLIS; cataloging, reference, and instruction  
Mattias Olshausen, MLIS, MA history; research and instruction

#### Program Information

At all times, students at Central have access to the library's 1.3 million books, films, government documents, and maps in print, microfiche, microfilm, and online electronic formats. The main library and two branch libraries at the University Centers at Des Moines and Lynnwood maintain subscriptions to over 20,000 newspapers, magazines, and journals in print and online full-text electronic formats, as well as audio recordings in CD, LP, and cassette formats and videos in DVD and VHS formats. The libraries participate in the resource-sharing service with the Orbis Cascade Alliance that provides our students with access to more than 25 million information items. The libraries' OneSearch make this available to students from any networked computer, whether on or off campus.

#### Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

#### Course Offerings

Frequency of course offering information can be found at the department website: [www.lib.cwu.edu](http://www.lib.cwu.edu) or by contacting the department directly.

## Library and Information Science Minor

The minor in library and information science is designed to provide students with an understanding of the methods and means of gathering, organizing, and disseminating information. The minor is appropriate for any students who wish to gain a greater understanding of the field of library and information science. This program does not qualify participants for a Washington State Library Media (P-12) endorsement.

#### Graduation Requirements

All students in the minor will be required to complete 20 credit hours in the core curriculum. Students may choose courses within the remaining curriculum areas depending on their specific interests. Students must maintain a 2.0 GPA in the program courses.

Required Courses Credits: 20

- LIS 110 - Research Fundamentals **Credits: (1)**
- LIS 201 - Foundations of Library and Information Science **Credits: (3)**

- LIS 245 - Research Methods in the Digital Age **Credits: (4)**
- LIS 310 - Information Literacy and User Services **Credits: (3)**
- LIS 314 - Technology in Library and Information Science **Credits: (3)**
- LIS 414 - Organization of Knowledge **Credits: (3)**
- LIS 490 - Library and Information Science Internship **Credits: (1-12)** (Must be taken for 3 credits)

Management Courses Credits: 3-4

Select one of the following courses:

- ANTH 362 - Museum Curation and Management **Credits: (4)**
- LIS 412 - Library Management and Leadership **Credits: (3)**

Collection Management Credits: 3

Select one of the following courses:

- LIS 410 - Collection Development **Credits: (3)**
- LIS 411 - Introduction to Archives **Credits: (3)**

Reader Content Advisory Credits: 3-5

Select one of the following courses:

- EDLM 436 - Survey of Children's and Young Adult Literature **Credits: (3)**
- ENG 247 - Multicultural Literature **Credits: (5)**
- ENG 302 - Poetry and Poetics **Credits: (5)**
- ENG 330 - African American Literature **Credits: (5)**
- ENG 331 - Latina/o Literature **Credits: (5)**
- ENG 332 - American Indian Literature **Credits: (5)**
- ENG 333 - Asian American Literature **Credits: (5)**
- ENG 334 - American Indian Oral and Nonfiction Literature **Credits: (5)**
- ENG 347 - Global Perspectives in Literature **Credits: (5)**
- LIS 291 - Workshop **Credits: (1-6)**
- **OR** LIS 391 - Workshop **Credits: (1-6)**
- LIS 298 - Special Topic **Credits: (1-6)**
- **OR** LIS 398 - Special Topic **Credits: (1-6)**
- **OR** LIS 498 - Special Topic **Credits: (1-6)**
- LIS 299 - Seminar **Credits: (1-5)**
- **OR** LIS 399 - Seminar **Credits: (1-5)**
- Any History Course at the 300 to 500 level **Credits: (3-5)**

Total Credits: 29-32

College and Department Information

Library Science Program

# Library and Information Science Certificate

The certificate in library and information science is designed to provide students with an understanding of the methods and means of gathering, organizing, and disseminating information. The certificate is appropriate for any students who wish to gain a greater understanding of the field of library and information science without completing an undergraduate minor and or non-matriculated students already employed as a library paraprofessional.

## Graduation Requirements

All students in the certificate program will be required to complete 8 credit hours in the core curriculum. Students may choose four courses within the remaining curriculum areas depending on their specific interests.

Required Courses Credits: 8

- LIS 110 - Research Fundamentals **Credits:** (1)
- LIS 201 - Foundations of Library and Information Science **Credits:** (3)
- LIS 245 - Research Methods in the Digital Age **Credits:** (4)

Department-Approved Electives Credits: 12

Select four of the following:

- LIS 298 - Special Topic **Credits:** (1-6)
- LIS 310 - Information Literacy and User Services **Credits:** (3)
- LIS 314 - Technology in Library and Information Science **Credits:** (3)
- LIS 398 - Special Topic **Credits:** (1-6)
- LIS 410 - Collection Development **Credits:** (3)
- LIS 411 - Introduction to Archives **Credits:** (3)
- LIS 412 - Library Management and Leadership **Credits:** (3)
- LIS 414 - Organization of Knowledge **Credits:** (3)
- LIS 498 - Special Topic **Credits:** (1-6)

Total Credits: 20

College and Department Information

Library Science Program

# Management Department

College of Business  
Ellensburg (E)  
Shaw-Smyser Hall, room 329  
CWU-Des Moines (D)  
CWU-Lynnwood (L)  
Mail Stop 7485  
509-963-3339  
Fax: 509-963-2875  
www.cwu.edu/management

See the website for how this program could be used for educational and career purposes.

## Faculty and Staff

### Chair

William Provaznik, PhD

### Professors

James Avey, PhD, management (E)  
Peter J. Boyle, PhD, marketing (L)  
Kathryn Martel, PhD, management (E)  
Mark Pritchard, PhD, marketing (E)  
Jeffrey L. Stinson, PhD, marketing (E)

### Associate Professors

Wendy Cook, PhD, management (D)  
Nancy Graber Pigeon, JD, business law (E)  
Erica Holley, PhD, management (L)  
Sayantani Mukherjee, PhD, management (L)  
William Provaznik, PhD, management, Institute for Innovation and Entrepreneurship Director (E)  
Todd Weber, PhD, management (E)  
Theresa (Terry) Wilson, PhD, marketing (E)  
Keke (CoCo) Wu, PhD, management (E)

### Assistant Professors

Claudia Dumitrescu, PhD, marketing (D)  
Timothy Hargrave, PhD, management (L)

### Staff

Maxine Lennon, secretary senior

## Bachelor of Science in Business Administration Program

The Department of Finance and SCM and the Department of Management jointly support the bachelor of science in business administration and business minor. The department offers coursework leading to the bachelor of science in business administration (BSBA) degree. In addition to the university general education requirements, the BSBA major is comprised of three principal components:

Foundation courses that provide foundation knowledge and skills needed for further study in business

Business core courses that build on the foundation group and focus on decision making in the main functional areas of business

Specialization courses that allow for advanced study in one of the functional areas.

Students select a 25-credit specialization within the BSBA program in one of seven areas: finance, general business, human resource management, leadership and management, marketing management, personal financial planning or supply chain management.

### **Program Goals for BSBA**

The departments have identified overall educational outcomes related to knowledge, values, and skills for all BSBA graduates. Following are the outcomes for the bachelor of science in business administration (BSBA) programs:

1. Knowledge-based educational Outcomes. Upon completion of the BSBA program, students should:
  - Have a working knowledge of business administration that will aid them in private, government, or non-profit careers and/or prepare them for additional study
2. Values-based educational outcomes. Upon completion of the BSBA program, students should:
  - Comprehend ethical issues and be able to apply an ethical decision-making framework to business decisions
3. Skills-based educational outcomes. Upon completion of the BSBA program., students should:
  - Function effectively when in teams both as a leader and as a member
  - Demonstrate effective oral communication skills
  - Demonstrate effective written communication skills
  - Apply quantitative and qualitative critical thinking skills to develop, access, and use information to analyze business problems and propose feasible solutions

### **Transfer Credits and Prior Learning Assessment**

Equivalent lower-division (100-200 level) courses may be transferred toward meeting the pre-admission requirements. Upper-division (300- to 400-level) courses may also be transferred toward meeting the business core and specialization requirements, but only with the approval of the department chair and the college dean (or designee).

### **Repeat Policy**

Business administration courses may be repeated only once.

### **Additional BSBA Graduation Requirements**

The following special rules apply to students seeking the BSBA major:

- Students must earn a minimum cumulative GPA of 2.25 in the 99- to 100-credit in-the-major coursework to be eligible for a degree. In addition, the department requires a minimum GPA of 2.25 in the 59- to 60-credit upper-division component of the in-the-major total.
- Transfer students must complete at least 40 credits at CWU to be eligible for the BSBA degree, including MGT 489. Additionally, students seeking a Human Resource Management specialization must complete HRM 486 at CWU and students seeking a Marketing specialization must complete MKT 470 at CWU.
- The BSBA program requires a single specialization of at least 25 credits. Occasionally a student requests a

second specialization. To be eligible for a second specialization, a minimum of 20 unique credits must be completed. Unique in this sense means the credits have not been used as part of any other BSBA specialization.

### **College of Business Admission Requirements**

For information on admission requirements, please go to: College of Business.

### **Program Outcomes**

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### **Course Offerings**

Frequency of course offering information can be found at the department website: [www.cwu.edu/management](http://www.cwu.edu/management) or by contacting the department directly.

## **Business Administration BS (BSBA), General Business Specialization**

The General Business Specialization provides flexibility for students preferring to customize their own program. Building on the general business core shared by the BSBA program, student may add select courses in fulfillment of requirements to complete the program.

### **Undergraduate Business Program Learning Goals:**

The departments have identified overall educational outcomes related to knowledge, values, and skills for all BSBA graduates. Following are the outcomes for the bachelor of science in business administration (BSBA) programs. Graduates of this program will be able to demonstrate:

1. Foundation knowledge and skill in the fundamental business disciplines.
2. Effective communication in written and oral business presentations.
3. Comprehension and application of ethical principles in business decisions.
4. Problems solving ability using integrative and critical assessment of business information and appropriate technical tools.
5. Career readiness through participation in Career Center events, self-assessment, club activities, internships and other professional engagement.
6. Competency in their specialized field of study.

### **Graduation Requirements**

The following special rules apply to students seeking the BSBA major:

- Students must earn a minimum cumulative GPA of 2.25 in-the-major coursework to be eligible for a degree. In addition, the department requires a



minimum GPA of 2.25 in the upper-division component of the in-the-major total.

- Transfer students must complete at least 40 College of Business credits at CWU to be eligible for the BSBA degree, including MGT 489. Additionally, students seeking a Human Resource Management specialization must complete HRM 486 at CWU and students seeking a Marketing specialization must complete MKT 470 at CWU.
- The BSBA program requires a single specialization of at least 25 credits. Occasionally a student requests a second specialization. To be eligible for a second specialization, a minimum of 20 unique credits must be completed. Unique in this sense means the credits have not been used as part of any other BSBA specialization.

#### Program Requirements

Twenty-five upper division elective credits are required including at least 20 credits from business (BUS), finance (FIN), human resource management (HRM), management (MGT), marketing (MKT), management information systems (MIS), or supply chain management (SCM) courses. The remaining five credits may be accounting (ACCT) or economics (ECON). The student is limited to 10 credits from any one prefix. No more than 5 credits of the specialization may be internship, practicum, independent study, or directed research.

#### Repeat Policy

Business administration courses may be repeated only once.

#### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Develop foundation knowledge and skills in Management, Marketing, Human Resource Management, and Business Law, Finance and Supply Chain Management.
- Demonstrate competency in specialized field of study (e.g., human resource management, supply chain management, leadership and management, finance, marketing).
- Create and deliver effective oral presentations.
- Students written communication skills meet professional and industry standards.
- Comprehend ethical issues in business and demonstrate an ability to make ethical decisions.
- Integrate and critically assess business information to make strategic decisions.
- Work effectively in small and large teams.

#### Business Foundation Courses

- ACCT 251 - Financial Accounting **Credits: (5)**
- ACCT 252 - Managerial Accounting **Credits: (5)**
- BUS 102 - Business Computer Skills **Credits: (5)**
- BUS 110 - Professional Development 1 **Credits: (1)**
- BUS 221 - Introductory Business Statistics **Credits: (5)**
- BUS 241 - Legal Environment of Business **Credits: (5)**

- ECON 201 - Principles of Economics Micro **Credits: (5)**  
Select one from the following: 5 credits
- ECON 130 - Foundations for Business Analytics **Credits: (5)**
- MATH 130 - Finite Mathematics **Credits: (5)**
- MATH 170 - Intuitive Calculus **Credits: (5)**

Select one from the following: 5 credits

- MATH 153 - Pre-Calculus Mathematics I **Credits: (5)**
- MATH 154 - Pre-Calculus Mathematics II **Credits: (5)**
- MATH 170 - Intuitive Calculus **Credits: (5)** (May only be used once in the program)
- MATH 172 - Calculus I **Credits: (5)**
- MATH 173 - Calculus II **Credits: (5)**

Foundation Total Credits: 41

#### Business Core Courses

- BUS 301 - Contemporary Approaches to Personal and Professional Development **Credits: (3)**
- **OR** MGT 200 - Essential Skills for Business Professionals **Credits: (5)**
- BUS 310 - Professional Development 2 **Credits: (1)**
- COM 301 - Public Speaking for Business and Organizations **Credits: (2)**
- ECON 202 - Principles of Economics Macro **Credits: (5)**
- ENG 311 - Business Writing **Credits: (3)**
- FIN 370 - Introductory Financial Management **Credits: (5)**
- MGT 382 - Principles of Management **Credits: (5)**
- MIS 320 - Business Process Analysis and Systems **Credits: (5)**
- **OR** MIS 386 - Management Information Systems **Credits: (5)**
- MKT 362 - Essential Marketing Concepts **Credits: (5)**
- SCM 310 - Supply Chain Management **Credits: (5)**

Business Core Total Credits: 39-41

#### General Business Specialization Courses

This specialization is intended for the student who wishes to tailor a "unique" set of specialization courses to his or her needs or for the student who desires a broad-based "generalist" track within the business administration major. Twenty-five upper division elective credits are required including at least 20 credits from business (BUS), finance (FIN), human resource management (HRM), management (MGT), marketing (MKT), management information systems (MIS), or supply chain management (SCM) courses. The remaining five credits may be accounting (ACCT) or economics (ECON). The student is limited to 10 credits from any one prefix. No more than 5 credits of the specialization may be internship, practicum, independent study, or directed research.

Total Specialization Credits: 25

College of Business Capstone

- BUS 489 - AACSB Assessment **Credits:** (2)
- MGT 489 - Strategic Management **Credits:** (5)

Capstone Total Credits: 7

Total Credits: 112-114

College and Department Information

Management Department  
College of Business

### College of Business Admission Requirements

For information on admission requirements, please go to:  
College of Business.

## Business Administration BS (BSBA), Human Resource Management Specialization

### Advisors:

James Avey, PhD  
Wendy Cook, PhD  
Nancy Graber Pigeon, JD  
Erica Holley, PhD  
Todd Weber, PhD

Students pursuing the HRM specialization will deal with fundamental organizational processes that must be developed and managed for continuous improvement by both HR specialists and by all managers in general. Thus, the study of HR takes on a dual emphasis. First, by pursuing an HR specialization, students will be thoroughly trained to focus decision-making as it pertains to the acquisition, utilization, development and retention of employees. Alternatively, the study of HRM is also applicable as a strong supplement to other specializations or majors.

### Undergraduate Business Program Learning Goals:

The departments have identified overall educational outcomes related to knowledge, values, and skills for all BSBA graduates. Following are the outcomes for the bachelor of science in business administration (BSBA) programs. Graduates of this program will be able to demonstrate:

1. Foundation knowledge and skill in the fundamental business disciplines.
2. Effective communication in written and oral business presentations.
3. Comprehension and application of ethical principles in business decisions.

4. Problems solving ability using integrative and critical assessment of business information and appropriate technical tools.

5. Career readiness through participation in Career Center events, self-assessment, club activities, internships and other professional engagement.

6. Competency in their specialized field of study.

### Graduation Requirements

The following special rules apply to students seeking the BSBA major:

- Students must earn a minimum cumulative GPA of 2.25 in-the-major coursework to be eligible for a degree. In addition, the department requires a minimum GPA of 2.25 in the upper-division component of the in-the-major total.
- Transfer students must complete at least 40 College of Business credits at CWU to be eligible for the BSBA degree, including MGT 489. Additionally, students seeking a Human Resource Management specialization must complete HRM 486 at CWU and students seeking a Marketing specialization must complete MKT 470 at CWU.
- The BSBA program requires a single specialization of at least 25 credits. Occasionally a student requests a second specialization. To be eligible for a second specialization, a minimum of 20 unique credits must be completed. Unique in this sense means the credits have not been used as part of any other BSBA specialization.

### Repeat Policy

Business administration courses may be repeated only once.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Develop foundation knowledge and skills in Management, Marketing, Human Resource Management, and Business Law, Finance and Supply Chain Management.
- Demonstrate competency in specialized field of study (e.g., human resource management, supply chain management, leadership and management, finance, marketing).
- Create and deliver effective oral presentations.
- Students written communication skills meet professional and industry standards.
- Comprehend ethical issues in business and demonstrate an ability to make ethical decisions.
- Integrate and critically assess business information to make strategic decisions.
- Work effectively in small and large teams.

### Business Foundation Courses

- ACCT 251 - Financial Accounting **Credits:** (5)
- ACCT 252 - Managerial Accounting **Credits:** (5)
- BUS 102 - Business Computer Skills **Credits:** (5)
- BUS 110 - Professional Development 1 **Credits:** (1)

- BUS 221 - Introductory Business Statistics **Credits:** (5)
- BUS 241 - Legal Environment of Business **Credits:** (5)
- ECON 201 - Principles of Economics Micro **Credits:** (5)  
Select one from the following: 5 credits
- ECON 130 - Foundations for Business Analytics **Credits:** (5)
- MATH 130 - Finite Mathematics **Credits:** (5)
- MATH 170 - Intuitive Calculus **Credits:** (5)

Select one from the following: 5 credits

- MATH 153 - Pre-Calculus Mathematics I **Credits:** (5)
- MATH 154 - Pre-Calculus Mathematics II **Credits:** (5)
- MATH 170 - Intuitive Calculus **Credits:** (5) (May only be used once in the program)
- MATH 172 - Calculus I **Credits:** (5)
- MATH 173 - Calculus II **Credits:** (5)

Foundation Total Credits: 41

Business Core Courses

- BUS 301 - Contemporary Approaches to Personal and Professional Development **Credits:** (3)
- **OR** MGT 200 - Essential Skills for Business Professionals **Credits:** (5)
- BUS 310 - Professional Development 2 **Credits:** (1)
- COM 301 - Public Speaking for Business and Organizations **Credits:** (2)
- ECON 202 - Principles of Economics Macro **Credits:** (5)
- ENG 311 - Business Writing **Credits:** (3)
- FIN 370 - Introductory Financial Management **Credits:** (5)
- MGT 382 - Principles of Management **Credits:** (5)
- MIS 320 - Business Process Analysis and Systems **Credits:** (5)
- **OR** MIS 386 - Management Information Systems **Credits:** (5)
- MKT 362 - Essential Marketing Concepts **Credits:** (5)
- SCM 310 - Supply Chain Management **Credits:** (5)

Business Core Total Credits: 39-41

Human Resource Management Specialization Courses

Required Courses

- HRM 381 - Management of Human Resources **Credits:** (5)
- HRM 486 - Problems in Human Resource Management **Credits:** (5)

Select 15 credits from the following:

- BUS 490 - Cooperative Education **Credits:** (1-12) (Must be taken for 5 credits)
- ECON 355 - Economics of Labor **Credits:** (5)
- HRM 442 - Training and Development **Credits:** (5)
- HRM 445 - Organizational Staffing **Credits:** (5)
- HRM 479 - Employee Relations **Credits:** (5)
- HRM 488 - Compensation Policy and Administration **Credits:** (5)
- MGT 386 - Principles of Organizational Behavior **Credits:** (5)

Total Specialization Credits: 25

College of Business Capstone

- BUS 489 - AACSB Assessment **Credits:** (2)
- MGT 489 - Strategic Management **Credits:** (5)

Capstone Total Credits: 7

Total Credits: 112-114

College and Department Information

Management Department  
College of Business

#### College of Business Admission Requirements

For information on admission requirements, please go to: College of Business.

## Business Administration BS (BSBA), Leadership and Management Specialization

#### Advisors:

James Avey, PhD  
Wendy Cook, PhD  
Erica Holley, PhD  
William Provaznik, PhD  
Todd Weber, PhD  
Keke Wu, PhD

The leadership and management specialization emphasizes building the skills, insights and knowledge that professionals need to succeed in a business context. Students will improve their ability to manage themselves as well as influence others as they learn to identify valuable goals and work to reach them. Courses will feature relevant concepts and theories and present opportunities to deploy this knowledge in practical situations to build a solid foundation of leadership and management ability. The program is designed to give students a portfolio of established and cutting-edge principles to draw from over their career.

#### Program Goals for BSBA

The departments have identified overall educational outcomes related to knowledge, values, and skills for all BSBA graduates. Following are the outcomes for the bachelor of science in

business administration (BSBA) programs:

1. Knowledge-based educational outcomes. Upon completion of the BSBA program, students should:

- Have a working knowledge of business administration that will aid them in private, government, or non-profit careers and/or prepare them for additional study

2. Values-based educational outcomes. Upon completion of the BSBA program, students should:

- Comprehend ethical issues and be able to apply an ethical decision-making framework to business decisions

3. Skills-based educational outcomes. Upon completion of the BSBA program, students should:

- Function effectively when in teams both as a leader and as a member
- Demonstrate effective oral communication skills
- Demonstrate effective written communication skills
- Apply quantitative and qualitative critical thinking skills to develop, access, and use information to analyze business problems and propose feasible solutions

#### **Additional BSBA Graduation Requirements**

The following special rules apply to students seeking the BSBA major:

- Students must earn a minimum cumulative GPA of 2.25 in the 99- to 100-credit in-the-major coursework to be eligible for a degree. In addition, the department requires a minimum GPA of 2.25 in the 59- to 60-credit upper-division component of the in-the-major total.
- Transfer students must complete at least 40 College of Business credits at CWU to be eligible for the BSBA degree, including MGT 489. Additionally, students seeking a Human Resource Management specialization must complete HRM 486 at CWU and students seeking a Marketing specialization must complete MKT 470 at CWU.
- The BSBA program requires a single specialization of at least 25 credits. Occasionally a student requests a second specialization. To be eligible for a second specialization, a minimum of 20 unique credits must be completed. Unique in this sense means the credits have not been used as part of any other BSBA specialization.

#### **Repeat Policy**

Business administration courses may be repeated only once.

#### **Program Learner Outcomes**

Upon successful completion of this program, students will be able to:

- Develop foundation knowledge and skills in Management, Marketing, Human Resource Management, and Business Law, Finance and Supply Chain Management.
- Demonstrate competency in specialized field of study (e.g., human resource management, supply chain

management, leadership and management, finance, marketing).

- Create and deliver effective oral presentations.
- Students written communication skills meet professional and industry standards.
- Comprehend ethical issues in business and demonstrate an ability to make ethical decisions.
- Integrate and critically assess business information to make strategic decisions.
- Work effectively in small and large teams.

#### **Business Foundation Courses**

- ACCT 251 - Financial Accounting **Credits: (5)**
- ACCT 252 - Managerial Accounting **Credits: (5)**
- BUS 102 - Business Computer Skills **Credits: (5)**
- BUS 110 - Professional Development 1 **Credits: (1)**
- BUS 221 - Introductory Business Statistics **Credits: (5)**
- BUS 241 - Legal Environment of Business **Credits: (5)**
- ECON 201 - Principles of Economics Micro **Credits: (5)**  
Select one from the following: 5 credits
- ECON 130 - Foundations for Business Analytics **Credits: (5)**
- MATH 130 - Finite Mathematics **Credits: (5)**
- MATH 170 - Intuitive Calculus **Credits: (5)**

Select one from the following: 5 credits

- MATH 153 - Pre-Calculus Mathematics I **Credits: (5)**
- MATH 154 - Pre-Calculus Mathematics II **Credits: (5)**
- MATH 170 - Intuitive Calculus **Credits: (5)** (May only be used once in the program)
- MATH 172 - Calculus I **Credits: (5)**
- MATH 173 - Calculus II **Credits: (5)**

Foundation Total Credits: 41

#### **Business Core Courses**

- BUS 301 - Contemporary Approaches to Personal and Professional Development **Credits: (3)**
- **OR** MGT 200 - Essential Skills for Business Professionals **Credits: (5)**
- BUS 310 - Professional Development 2 **Credits: (1)**
- COM 301 - Public Speaking for Business and Organizations **Credits: (2)**
- ECON 202 - Principles of Economics Macro **Credits: (5)**
- ENG 311 - Business Writing **Credits: (3)**
- FIN 370 - Introductory Financial Management **Credits: (5)**
- MGT 382 - Principles of Management **Credits: (5)**
- MIS 320 - Business Process Analysis and Systems **Credits: (5)**

- **OR** MIS 386 - Management Information Systems **Credits:** (5)
- MKT 362 - Essential Marketing Concepts **Credits:** (5)
- SCM 310 - Supply Chain Management **Credits:** (5)

Business Core Total Credits: 39-41

Leadership and Management Specialization Courses

Required Courses

- MGT 386 - Principles of Organizational Behavior **Credits:** (5)
- MGT 395 - Leadership in Business Organizations **Credits:** (5)
- MGT 478 - Leadership Capstone **Credits:** (5)
- MGT 483 - Decision Making and Organizational Change **Credits:** (5)

Select 5 credits from the following:

- ACCT 460 - Auditing **Credits:** (5)
- BUS 490 - Cooperative Education **Credits:** (1-12)  
(Must be taken for 5 credits)
- FIN 474 - Personal Financial Planning **Credits:** (5)
- MGT 389 - Business and Society **Credits:** (5)
- MGT 477 - Global Leadership and Culture **Credits:** (5)
- MGT 482 - Advanced Organizational Behavior **Credits:** (5)
- MGT 484 - International Management (Put on reserve 9/16/18) **Credits:** (5)
- MGT 487 - Entrepreneurism and Small Business Management **Credits:** (5)
- MKT 468 - Consumer Behavior **Credits:** (5)
- SCM 425 - Procurement and Supply Management **Credits:** (5)

Total Specialization Credits: 25

College of Business Capstone

- BUS 489 - AACSB Assessment **Credits:** (2)
- MGT 489 - Strategic Management **Credits:** (5)

Capstone Total Credits: 7

Total Credits: 112-114

College and Department Information

Management Department  
College of Business

### College of Business Admission Requirements

For information on admission requirements, please go to:  
College of Business.

## Business Administration BS (BSBA), Marketing Management Specialization

### Advisors:

Peter Boyle, PhD (L)  
Claudia Dumestricu, PhD (D)  
Sayantani Mukherjee, PhD (L)  
Mark Pritchard, PhD (E)  
Theresa Wilson, PhD (E)

The marketing curriculum provides background for careers in sales, advertising, marketing management, research, analysis, and retail management. Marketing topics include researching and analyzing consumers, market demand, pricing, product distribution, and development, and communication in order to develop marketing strategies and policies. Students must earn a C or higher in all required marketing management specialization courses.

### Undergraduate Business Program Learning Goals:

The departments have identified overall educational outcomes related to knowledge, values, and skills for all BSBA graduates. Following are the outcomes for the bachelor of science in business administration (BSBA) programs. Graduates of this program will be able to demonstrate:

1. Foundation knowledge and skill in the fundamental business disciplines.
2. Effective communication in written and oral business presentations.
3. Comprehension and application of ethical principles in business decisions.
4. Problems solving ability using integrative and critical assessment of business information and appropriate technical tools.
5. Career readiness through participation in Career Center events, self-assessment, club activities, internships and other professional engagement.
6. Competency in their specialized field of study.

### Graduation Requirements

The following special rules apply to students seeking the BSBA major:

- Students must earn a minimum cumulative GPA of 2.25 in-the-major coursework to be eligible for a degree. In addition, the department requires a minimum GPA of 2.25 in the upper-division component of the in-the-major total.
- Transfer students must complete at least 40 College of Business credits at CWU to be eligible for the BSBA degree, including MGT 489. Additionally, students seeking a Human Resource Management specialization must complete HRM 486 at CWU and students seeking a Marketing specialization must complete MKT 470 at CWU.

- The BSBA program requires a single specialization of at least 25 credits. Occasionally a student requests a second specialization. To be eligible for a second specialization, a minimum of 20 unique credits must be completed. Unique in this sense means the credits have not been used as part of any other BSBA specialization.

#### Repeat Policy

Business administration courses may be repeated only once.

#### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Develop foundation knowledge and skills in Management, Marketing, Human Resource Management, and Business Law, Finance and Supply Chain Management.
- Demonstrate competency in specialized field of study (e.g., human resource management, supply chain management, leadership and management, finance, marketing).
- Create and deliver effective oral presentations.
- Students written communication skills meet professional and industry standards.
- Comprehend ethical issues in business and demonstrate an ability to make ethical decisions.
- Integrate and critically assess business information to make strategic decisions.
- Work effectively in small and large teams.

#### Business Foundation Courses

- ACCT 251 - Financial Accounting **Credits: (5)**
  - ACCT 252 - Managerial Accounting **Credits: (5)**
  - BUS 102 - Business Computer Skills **Credits: (5)**
  - BUS 110 - Professional Development 1 **Credits: (1)**
  - BUS 221 - Introductory Business Statistics **Credits: (5)**
  - BUS 241 - Legal Environment of Business **Credits: (5)**
  - ECON 201 - Principles of Economics Micro **Credits: (5)**
- Select one from the following: 5 credits
- ECON 130 - Foundations for Business Analytics **Credits: (5)**
  - MATH 130 - Finite Mathematics **Credits: (5)**
  - MATH 170 - Intuitive Calculus **Credits: (5)**

Select one from the following: 5 credits

- MATH 153 - Pre-Calculus Mathematics I **Credits: (5)**
- MATH 154 - Pre-Calculus Mathematics II **Credits: (5)**
- MATH 170 - Intuitive Calculus **Credits: (5)** (May only be used once in the program)
- MATH 172 - Calculus I **Credits: (5)**
- MATH 173 - Calculus II **Credits: (5)**

Foundation Total Credits: 41

#### Business Core Courses

- BUS 301 - Contemporary Approaches to Personal and Professional Development **Credits: (3)**
- **OR** MGT 200 - Essential Skills for Business Professionals **Credits: (5)**
- BUS 310 - Professional Development 2 **Credits: (1)**
- COM 301 - Public Speaking for Business and Organizations **Credits: (2)**
- ECON 202 - Principles of Economics Macro **Credits: (5)**
- ENG 311 - Business Writing **Credits: (3)**
- FIN 370 - Introductory Financial Management **Credits: (5)**
- MGT 382 - Principles of Management **Credits: (5)**
- MIS 320 - Business Process Analysis and Systems **Credits: (5)**
- **OR** MIS 386 - Management Information Systems **Credits: (5)**
- MKT 362 - Essential Marketing Concepts **Credits: (5)**
- SCM 310 - Supply Chain Management **Credits: (5)**

Business Core Total Credits: 39-41

#### Marketing Management Specialization Courses

#### Required Courses

- MKT 468 - Consumer Behavior **Credits: (5)**
- MKT 469 - Market Research **Credits: (5)**
- MKT 470 - Marketing Problems and Policy **Credits: (5)**

Select a minimum of 10 credits from the following:

- BUS 490 - Cooperative Education **Credits: (1-12)** (May be taken for 1-6 credits)
- ECON 310 - International Economics **Credits: (5)**
- MKT 364 - Marketing Promotion Management **Credits: (5)**
- MKT 365 - International Marketing **Credits: (5)**
- MKT 370 - Sports Marketing and Sponsorship **Credits: (5)**
- MKT 371 - Sponsorship and Promotion in Sport Business **Credits: (5)**
- MKT 372 - Revenue Generation and Finance in Sport Business **Credits: (5)**
- MKT 376 - Foundations of Digital Marketing **Credits: (5)**
- MKT 476 - Advanced Digital Marketing **Credits: (5)**

Total Specialization Credits: 25

#### College of Business Capstone

- BUS 489 - AACSB Assessment **Credits: (2)**
- MGT 489 - Strategic Management **Credits: (5)**

Capstone Total Credits: 7

Total Credits: 112-114

College and Department Information

Management Department  
College of Business

### College of Business Admission Requirements

For information on admission requirements, please go to:  
College of Business.

## Business Minor (MGT)

The business minor provides students with an introduction to several key areas of business administration. Business minors are only available to students with declared majors. Declaration forms with instructions, are available online and, in department and center offices. Students must earn a cumulative grade point average of 2.25 in courses allowed in fulfilling the business administration minor requirements.

Business Minor Core

Required Courses

- ACCT 252 - Managerial Accounting **Credits: (5)**
- **OR** ACCT 301 - Accounting Skills for Non-Accounting Majors **Credits: (5)**
- BUS 241 - Legal Environment of Business **Credits: (5)**
- BUS 374 - Personal Investments **Credits: (5)**
- **OR** ECON 201 - Principles of Economics Micro **Credits: (5)**
- HRM 381 - Management of Human Resources **Credits: (5)**
- MKT 360 - Principles of Marketing **Credits: (5)**
- MGT 380 - Organizational Management **Credits: (5)**

Total Credits: 30

College and Department Information

Management Department  
College of Business

### College of Business Admission Requirements

For information on admission requirements, please go to:  
College of Business.

## Entrepreneurship Minor

This program would focus on helping students develop the skills, perspectives and relationships that make for a successful entrepreneur. This program would play to the strengths of the university by complementing the offerings of departments across the university and the needs of students who are

interested in fields where self-employment is a valuable option or where successful employment involves entrepreneurial capabilities.

Admission Requirements

This minor is open to business and non-business CWU students.

### Graduation Requirements

To complete program, students will start a business or non-profit organization. Starting a business/non-profit involves registering it as a legal entity and making a sale for that organization. Students are encouraged to start their venture in partnership with others to fulfill start up requirement. Students may pursue their venture alone in fulfillment of requirements with instructor permission.

Core Requirements Credits: 19

- MGT 200 - Essential Skills for Business Professionals **Credits: (5)**
- ENTP 287 - Applied Product Development **Credits: (5)**
- ENTP 288 - Intellectual Property and Prototype Development for Products and Services **Credits: (3)**
- ENTP 289 - Business Plan Development **Credits: (3)**
- ENTP 488 - Plunge Class **Credits: (3)**

Required Courses Credits: 10

- ACCT 251 - Financial Accounting **Credits: (5)**
- **OR** ACCT 252 - Managerial Accounting **Credits: (5)**
- **OR** ACCT 301 - Accounting Skills for Non-Accounting Majors **Credits: (5)**
- MKT 360 - Principles of Marketing **Credits: (5)**
- **OR** MKT 362 - Essential Marketing Concepts **Credits: (5)**

Total Credits: 29

College and Department Information

Management Department  
College of Business

### College of Business Admission Requirements

For information on admission requirements, please go to:  
College of Business.

## Human Resource Management Minor

The human resource management minor is designed to augment the student's undergraduate degree with a focused examination of the role of human resources in business operations. Students will explore the application of training and development, staffing and employee relations, and test development issues as they apply specifically to the role of human resource managers. Students will take a sampling of courses offered as a part of the

College of Business' Human Resource Specialization, as well as business-relevant, organizational psychology courses. The human resource management minor will provide curriculum to prepare students for a career in human resource management as generalists, specialists and managers.

Required Courses Credits: 9

- HRM 381 - Management of Human Resources **Credits: (5)**
- PSY 456 - Industrial and Organizational Psychology **Credits: (4)**

Department-Approved Electives Courses Credits: 14-15

- HRM 442 - Training and Development **Credits: (5)**
- HRM 445 - Organizational Staffing **Credits: (5)**
- HRM 479 - Employee Relations **Credits: (5)**
- MGT 386 - Principles of Organizational Behavior **Credits: (5)**
- PSY 444 - Tests and Measurements **Credits: (4)**

Total Credits: 23-24

College and Department Information

Management Department  
College of Business

#### **College of Business Admission Requirements**

For information on admission requirements, please go to: College of Business.

## **Sport Business Minor**

The sport business minor is designed to augment the student's undergraduate degree with a focused examination of the sport business industry. Students will explore the application of marketing, management, law, finance and other business principles as they apply specifically to the sport industry. The sport certificate will provide curriculum to prepare students for a career in corporate, professional, intercollegiate or amateur sport organizations.

Students must achieve a C- or higher in all courses to earn the Sport Business Minor.

Required Courses Credits: 15

- MGT 380 - Organizational Management **Credits: (5)**
- **OR** MGT 382 - Principles of Management **Credits: (5)**
- MKT 360 - Principles of Marketing **Credits: (5)**
- **OR** MKT 362 - Essential Marketing Concepts **Credits: (5)**
- MKT 370 - Sports Marketing and Sponsorship **Credits: (5)**

Department-Approved Electives Credits: 15-16

Choose a minimum of 15 credits from the following:

- BUS 401 - Business Boot Camp **Credits: (1)**
- MGT 394 - Legal Considerations in Sport Business **Credits: (5)**
- MGT 395 - Leadership in Business Organizations **Credits: (5)**
- MKT 371 - Sponsorship and Promotion in Sport Business **Credits: (5)**
- MKT 372 - Revenue Generation and Finance in Sport Business **Credits: (5)**

Total Credits: 30-31

College and Department Information

Management Department  
College of Business

#### **College of Business Admission Requirements**

For information on admission requirements, please go to: College of Business.

#### **Program Outcomes**

Visit program outcomes to find out what you can expect to know and do after successful completion of this program.

## **Sport Business Certificate**

The sport business certificate is designed to augment the student's College of Business degree with a focused examination of the sport business industry. Students will explore the application of marketing, management, law, finance, and other business principles as they apply specifically to the sport industry. The sport certificate will provide curriculum to prepare students for a career in corporate, professional, intercollegiate or amateur sport organizations.

#### **Grade Requirement**

Students must achieve a C- or higher in all courses to earn the sport business certificate.

Required Courses Credits: 15

- MGT 380 - Organizational Management **Credits: (5)**
- **OR** MGT 382 - Principles of Management **Credits: (5)**
- MKT 360 - Principles of Marketing **Credits: (5)**
- **OR** MKT 362 - Essential Marketing Concepts **Credits: (5)**
- MKT 370 - Sports Marketing and Sponsorship **Credits: (5)**

Department-Approved Electives Credits: 15-16

Choose a minimum of 15 credits from the following:

- MGT 394 - Legal Considerations in Sport Business **Credits: (5)**



- MGT 395 - Leadership in Business Organizations **Credits: (5)**
- MKT 371 - Sponsorship and Promotion in Sport Business **Credits: (5)**
- MKT 372 - Revenue Generation and Finance in Sport Business **Credits: (5)**
- BUS 401 - Business Boot Camp **Credits: (1)**

Total Credits: 30-31

College and Department Information

Management Department  
College of Business

#### College of Business Admission Requirements

For information on admission requirements, please go to: College of Business.

#### Program Outcomes

Visit program outcomes to find out what you can expect to know and do after successful completion of this program.

# Mathematics Department

College of the Sciences  
Ellensburg  
Samuelson, room 208  
Mail Stop 7424  
509-963-2103  
Fax: 509-963-3226  
www.cwu.edu/math

See website for how these programs may be used for educational and career purposes.

#### Faculty and Staff

##### Associate Chair

Janet Shiver, PhD

##### Professors

Christine Black, PhD, mathematics education (Westside)  
James Bisgard, PhD, analysis  
Stuart F. Boersma, PhD, differential geometry, general relativity  
Yvonne Chueh, PhD, actuarial science, statistics  
Timothy Englund, PhD, group theory, representation theory, statistics  
James D. Harper, PhD, harmonic analysis  
Dominic Klyve, PhD, computational number theory, history of mathematics, statistics  
Scott M. Lewis, PhD, mathematics education, history of mathematics  
Aaron Montgomery, PhD, topology, algebra  
Mark Oursland, EdD, mathematics education

##### Associate Professors

Jonathan Fassett, PhD, topology, dynamical systems  
Emilie Hancock, PhD, mathematics education  
Jean Marie Linhart, PhD, applied mathematics  
Janet Shiver, PhD, mathematics education

Kathryn Temple, PhD, actuarial science, probability

##### Assistant Professors

Peter Klosterman, PhD, mathematics education  
Sooie-Hoe Loke, PhD, mathematics  
Brandy Wieggers, PhD, applied mathematics

##### Senior Lecturers

Molly Andaya, MAT, mathematics  
Tim Brown, MAT, mathematics  
Jim Miller, MAT, mathematics  
Stephen (Steve) Stein, PhD, educational administration  
Richard Trudgeon, MA, administration and curriculum

##### Lecturers

Jamie Fife, MAT, mathematics  
Brent Hancock, PhD, mathematics education  
Mathew Pruis, PhD., advance data analytics and data science  
Tyler Suronen, MS, mathematics  
Drewcilla Walter, MS, mathematics

##### Staff

Brenda Bland, secretary senior

##### Department Information

Mathematics is an expanding and evolving body of knowledge as well as a way of perceiving, formulating, and solving problems in many disciplines. The subject is a constant interplay between the worlds of thought and application. The student of mathematics will find worthy challenges and the subsequent rewards in meeting them.

The general student will find preparatory courses in pre-calculus mathematics and traditional mathematics courses such as calculus, linear algebra, geometry, abstract algebra, and analysis. Also, more specialized courses in discrete mathematics, number theory, and the history of mathematics are offered. Special needs of computer science majors, elementary education majors, and general education requirements are also met by courses in the mathematics department.

For those desiring concentrated work in mathematics, the mathematics department offers four programs leading to bachelor's degrees. A bachelor of arts or bachelor of science in mathematics prepares the student as a mathematician for industry or graduate work. A bachelor of arts in secondary teaching prepares the student to teach at the junior, middle, or high school levels. A bachelor of science in mathematics with an actuarial science specialization prepares the student to work as an actuary or in applied statistics. A mathematics minor and a secondary teaching minor are also available.

One graduate degree is offered: the master of arts for teachers. This is described in the graduate section of the catalog.

All programs (major, minor, including electives) must be on file and approved by the department at least one academic year preceding graduation.

##### Admission and Placement Notes

1. Enrollment in MATH 100C, MATH 101, MATH 102, MATH 130, and MATH 164 requires a satisfactory score on one of the following tests: SAT, ACT, COMPASS Test, or the Intermediate Assessment Test. The scores on the SAT or ACT tests must have been

achieved within the last three years before math placement. The student with insufficient test scores is encouraged to enroll in developmental classes. For more information drop by the Math Center in Hertz Hall, room 101 or call 509-963-1834.

2. Students who wish to enroll in pre-calculus (MATH 153 or MATH 154) or calculus (MATH 170 or MATH 172) and who have not had the necessary prerequisite course at a college or university must take the mathematics placement test. Students will be placed in accordance with their results on this test as determined by the mathematics department. Students may be placed into pre-calculus I (MATH 153) if they received a B or higher in a one-year high school calculus course. See the mathematics department for more details.
3. Admission to any mathematics course having prerequisites requires either a suitable math placement test score or a grade of 2.0 or higher in each listed prerequisite to that course.

### **Admission Requirements for Mathematics Teaching Secondary Program**

Admission to the mathematics teaching secondary major or certificate program is selective. A cumulative grade point average of 2.50 is required in the pre-admission courses listed below. Further, students must successfully complete MATH 272 and MATH 265 by spring quarter of the academic year of their acceptance into the program. A completed application must include the standard major application form and a mathematics-advisor-approved graduation plan.

Students planning to major or take the certificate in secondary mathematics teaching must first take MATH 172, MATH 173, MATH 265, and MATH 272; be accepted as a mathematics education major or accepted into the certificate program; and be preliminarily accepted into the Professional Education Program to enroll in MATH 299E, Orientation Seminar: Secondary Mathematics, fall quarter.

Students interested in the Secondary Mathematics Teaching Program need to meet with a mathematics education advisor during their first quarter at CWU. Students taking this major are required to complete the Professional Education Program with the exception of EFC 315, EFC 330, EFC 340, EFC 350, and EFC 416 (37 total credits required).

### **Pre-admission Requirements**

Applicants for admission into the Secondary Mathematics Teaching Program:

1. Must have completed English and Math basic skills courses or have completed an AA degree.
2. Must have completed MATH 272 and MATH 265, with a grade of C or higher, before enrolling MATH 299E.
3. Must be preliminarily accepted into the Professional Education Program.

### **Admission Requirements for Mathematics Major and Minor**

Admission to any major in the mathematics department will be considered after the first two quarters of calculus are taken (MATH 172 and MATH 173). Transfer students with the calculus background will generally take and successfully complete (2.0 or higher) 10 hours of math beyond calculus to be admitted to a major. Application forms are available from the

mathematics department office. Students must meet with an advisor in the mathematics department before being considered for major or minor. In addition, students must earn a minimum grade of C in any course that fulfills a major or minor requirement.

### **Program Outcomes**

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### **Course Offerings**

Frequency of course offering information can be found at the department website: [www.cwu.edu/math](http://www.cwu.edu/math) or by contacting the department directly.

## **Mathematics: Middle-Level Education, BA**

This major partially satisfies the criteria for a teaching endorsement in Middle Level Mathematics (4-9), qualifying students to teach mathematics at the middle school or junior high levels. Students are encouraged to seek a second major or minor in an approved area. The coursework provides experiences in mathematics content and pedagogy. The major addresses the recommendations from the Mathematical Association of America, the American Mathematical Society, and the Washington State competencies for middle level math teachers.

This major requires completion of all Teacher Certification and Professional Education Program requirements. The STEM Teaching Program (44 credits) serves as an alternative to the Professional Education Program. Students must be admitted to an approved teacher preparation program and have successfully completed Math 130 and Math 154 prior to acceptance into this major. Students who successfully complete the Mathematics: Middle Level Education, BA and an approved teacher preparation program are eligible to apply for Washington State teacher certification. Teacher certification candidates must receive a C grade or higher in all major and minor courses, have a GPA of at least 3.0 for either the last 45 graded quarter credits or overall CWU/transfer cumulative, and meet all Washington State teacher certification requirements. See the middle level mathematics teaching advisor as soon as possible to develop a course of study.

### **Admission Requirements**

Admission to the middle level mathematics major will be considered after all prerequisites are met. Students must have a GPA of 3.0 or higher and must have earned a C or higher in any course taken in the MLM major and an approved teacher education program including prerequisite courses.

### **Graduation Requirements**

Students must complete all courses in the major and an approved Teacher Certification and Professional Education Program which may be the STEM Teaching Program with a C or higher and must maintain a GPA of 3.0 or higher.

### **Program Requirements**

Students must complete all courses in the major and an approved teacher preparation program with a C or higher and must maintain a GPA of 3.0 or higher.

Prerequisites Credits: 10

Students must complete Math 130 and Math 154 before being admitted to the major. Students with appropriate placement scores may test out of the classes.

- MATH 130 - Finite Mathematics **Credits:** (5)
- MATH 154 - Pre-Calculus Mathematics II **Credits:** (5)

Required Courses Credits: 41

- MATH 164 - Foundations of Arithmetic **Credits:** (5)
- MATH 170 - Intuitive Calculus **Credits:** (5)
- MATH 211 - Statistical Concepts and Methods **Credits:** (5)
- MATH 226 - Mathematics for Teachers: Geometry and Measurement **Credits:** (4)
- MATH 232 - Discrete Modeling for Middle-level Teachers **Credits:** (4)
- MATH 306 - Middle-level Mathematics Standards Review **Credits:** (2)
- MATH 316 - Mathematics for Teachers: Proportional Reasoning and Algebra **Credits:** (4)
- MATH 405 - Probability and Statistics for Teachers **Credits:** (4)
- MATH 406 - Algebra for Teachers **Credits:** (4)
- MATH 456 - Geometry for Teachers **Credits:** (4)

Total Credits: 51

STEM Teaching Program Credits: 44-50 (or Professional Education Program)

STEM Teaching Program  
Professional Education Program

Total Credits: 95-101

College and Department Information

Mathematics Department  
College of the Sciences

### Program Outcomes

Visit program outcomes to find out what you can expect to know and do after successful completion of this program.

## Mathematics: Secondary Education, BA

This major is the most efficient pathway for students seeking teaching endorsement in secondary mathematics.

### Admission Requirements for BS Mathematics Majors, Mathematics Minor and BA Mathematics: Secondary Education

Admission to any of the above majors in the mathematics

department will be considered after the first two quarters of calculus are taken (MATH 172 and MATH 173). Students with credit for MATH 173 should contact the Mathematics Department to meet with a faculty advisor. Application forms are available from the mathematics department office. Students must meet with a mathematics faculty advisor before being considered for the mathematics majors or minor. Students must earn a minimum grade of C in any course that fulfills a major or minor requirement.

### Additional Requirements for Mathematics: Secondary Education

The Mathematics: Secondary Education BA, Mathematics (Small Plan) BS, or Applied Mathematics BS Majors partially satisfy the criteria for teaching endorsement in Mathematics (5-12), qualifying students to teach mathematics at the high school, middle, or junior high levels. Students who successfully complete one of these three majors with the listed elective restrictions and the STEM Teaching Program (an alternative to the Professional Education Program) are eligible to apply for Washington State teacher certification. Teacher certification candidates must receive a C grade or higher in all major and STEM Teaching Program courses, have a GPA of at least 3.0 for either the last 45 graded quarter credits or overall CWU/transfer cumulative, and meet all Washington State teacher certification requirements. See the secondary mathematics teaching advisor as soon as possible to develop a course of study.

### Graduation Requirements

Students must earn an C or higher in each course in the major.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Explain the concepts and applications of elementary functions.
- Explain the concepts of calculus to model dynamic change.
- Explain the concepts, methods, and applications of logic and discrete models.
- Apply and explain the concepts, methods, and applications of algebra systems.
- Apply and explain the concepts, methods, and applications of Euclidean and Non-Euclidean geometry using inductive and deductive approaches.
- Plan, teach, and assess lessons concerning topics presented in Student Learning Outcomes 1-5 using their understanding of mathematics, learning theory, and pedagogy.
- Use appropriate technology to investigate and represent concepts, methods, and applications of mathematical problems. Graduates can use appropriate technology to teach and assess student understanding of mathematical concepts.
- Use the principles of mathematical thinking to solve and prove mathematical problems.
- Plan, teach, and assess lessons involving mathematical thinking using their understanding of mathematics, learning theory, and pedagogy.
- Apply and explain the historical and cultural development of each branch of mathematics to the discovery of important mathematical ideas.

## Required Courses

- MATH 172 - Calculus I **Credits:** (5)
- MATH 173 - Calculus II **Credits:** (5)
- MATH 260 - Sets and Logic **Credits:** (5)
- MATH 265 - Linear Algebra I **Credits:** (4)
- MATH 272 - Multivariable Calculus I **Credits:** (5)
- MATH 273 - Multivariable Calculus II **Credits:** (5)
- MATH 314 - Probability and Statistics **Credits:** (5)
- MATH 332 - Discrete Models **Credits:** (4)
- MATH 355 - College Geometry I **Credits:** (4)
- MATH 360 - Algebraic Structures I **Credits:** (3)
- MATH 361 - Algebraic Structures II **Credits:** (3)
- MATH 376 - Differential Equations I **Credits:** (3)
- MATH 410A - Advanced Statistical Methods I **Credits:** (4)
- MATH 430 - Introduction to Theory of Numbers **Credits:** (3)
- MATH 455 - College Geometry II **Credits:** (3)

Total Credits: 61

STEM Teaching Program Credits: 44-50 (or Professional Education Program)

STEM Teaching Program  
Professional Education Program

Total Credits: 105-111

College and Department Information

Mathematics Department  
College of the Sciences

## Actuarial Science Major, BS

An actuary is a business professional who uses specialized skills from probability, statistics and economics to define, analyze, and solve financial and social problems. Actuaries create and manage insurance programs that reduce the adverse financial impact of both expected and unexpected events, such as illnesses, accidents, death, or catastrophes. In addition, actuaries design healthcare and pension plans, making sure there are sufficient resources to pay health and retirement benefits while charging participants a fair price. Actuaries are also in demand in the growing enterprise risk management field, helping companies analyze and hedge risks.

The bachelor of science in actuarial science is listed below and is designed to prepare a student in both the mathematics and business areas necessary for success in the rigorous but rewarding actuarial profession.

### Admission Requirements

Completion of MATH 172 and MATH 173 with grades of C or higher.

## Graduation Requirements

All courses in the major must be completed with grades of C or higher.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Use statistical methods to analyze and model time-independent and time-series data
- Use statistical methods and credibility theory to analyze and model insurance loss data.
- Formulate actuarial problems in mathematics, probabilistic and statistical terms.
- Apply common probability distributions to actuarial applications.
- Apply concepts of differential and integral calculus to actuarial problems.
- Employ simulation techniques to analyze and solve dynamic and complex stochastic and mathematical models
- Use programming languages such as C++, S, or Visual Basic
- Communicate results and solutions of mathematical, statistical, and actuarial problems in writing using every day and mathematical language.
- Communicate mathematical and statistical solutions orally, using both every day and mathematical language.

## Required Courses

- ACCT 251 - Financial Accounting **Credits:** (5)
- **OR** ACCT 301 - Accounting Skills for Non-Accounting Majors **Credits:** (5) (ACCT 301 recommended.)
- CS 105 - The Logical Basis of Computing **Credits:** (4)
- **OR** CS 110 - Programming Fundamentals I **Credits:** (4)
- CS 367 - Advanced Visual Basic Programming **Credits:** (4)
- ECON 201 - Principles of Economics Micro **Credits:** (5)
- ECON 202 - Principles of Economics Macro **Credits:** (5)
- FIN 370 - Introductory Financial Management **Credits:** (5)
- FIN 475 - Investments **Credits:** (5)
- MATH 172 - Calculus I **Credits:** (5)
- MATH 173 - Calculus II **Credits:** (5)
- MATH 211 - Statistical Concepts and Methods **Credits:** (5)
- **OR** MATH 314 - Probability and Statistics **Credits:** (5)
- MATH 265 - Linear Algebra I **Credits:** (4)
- MATH 272 - Multivariable Calculus I **Credits:** (5)
- MATH 273 - Multivariable Calculus II **Credits:** (5)
- MATH 410A - Advanced Statistical Methods I **Credits:** (4)

- MATH 410B - Advanced Statistical Methods II **Credits:** (4)
- MATH 411A - Probability Theory **Credits:** (4)
- MATH 411B - Mathematical Statistics I **Credits:** (3)
- MATH 411C - Mathematical Statistics II **Credits:** (3)
- MATH 418A - Financial Mathematics I **Credits:** (4)
- MATH 418B - Financial Mathematics II **Credits:** (4)
- MATH 418C - Financial Mathematics III **Credits:** (4)
- MATH 489A - Actuarial Senior Seminar: Predictive Analytics and Actuarial Modeling **Credits:** (3)

Select one of the following sequences - Credits: 11

#### Short-Term Actuarial Mathematics

- MATH 417A - Short-Term Actuarial Mathematics I **Credits:** (4)
  - MATH 417B - Short-Term Actuarial Mathematics II **Credits:** (4)
  - MATH 417C - Short-Term Actuarial Mathematics III **Credits:** (3)
- OR**

#### Long-Term Actuarial Mathematics

- MATH 419A - Long-Term Actuarial Mathematics I **Credits:** (4)
- MATH 419B - Long-Term Actuarial Mathematics II **Credits:** (4)
- MATH 419C - Long-Term Actuarial Mathematics III **Credits:** (3)

Total Credits: 106

#### College and Department Information

Mathematics Department  
College of the Sciences

## Applied Mathematics Major, BS

The applied mathematics major is intended primarily for students interested in applications of mathematics to other disciplines.

#### Admission Requirements for Mathematics Major and Minor

Admission to any major in the mathematics department will be considered after the first two quarters of calculus are taken (MATH 172 and MATH 173). Transfer students with the calculus background will generally take and successfully complete (2.0 or higher) 10 hours of math beyond calculus to be admitted to a major. Application forms are available from the mathematics department office. Students must meet with an advisor in the mathematics department before being considered for major or minor. In addition, students must earn a minimum grade of C in any course that fulfills a major or minor requirement.

#### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Use differential and integral calculus as well as sequences and series to solve problems.
- Use concepts of vector subspaces of  $\mathbb{R}^n$  and  $\mathbb{R}^{n \times m}$  to solve problems.
- Write proofs using contrapositive, contradiction, cases, and mathematical induction.
- Know standard applications of calculus, linear algebra, and statistics.
- Apply their understanding of mathematics to fields outside of mathematics.
- Describe the differences between the following types of mathematics: discrete/continuous, algebraic/geometric, pure/applied, deterministic/stochastic.
- Communicate mathematical ideas through writing.
- Communicate mathematical ideas orally.

Required Courses Credits: 70

- MATH 172 - Calculus I **Credits:** (5)
- MATH 173 - Calculus II **Credits:** (5)
- MATH 260 - Sets and Logic **Credits:** (5)
- MATH 265 - Linear Algebra I **Credits:** (4)
- MATH 272 - Multivariable Calculus I **Credits:** (5)
- MATH 273 - Multivariable Calculus II **Credits:** (5)
- MATH 299S - Seminar - Math Major Orientation **Credits:** (4)
- MATH 314 - Probability and Statistics **Credits:** (5)
- MATH 365 - Linear Algebra II **Credits:** (4)
- MATH 371 - Advanced Calculus **Credits:** (4)
- MATH 376 - Differential Equations I **Credits:** (3)
- MATH 377 - Differential Equations II **Credits:** (3)
- MATH 475 - Mathematical Modeling **Credits:** (4)
- MATH 476 - Numerical Methods and Analysis I **Credits:** (4)
- MATH 477 - Numerical Methods and Analysis II **Credits:** (4)
- MATH 499S - Senior Seminar **Credits:** (2)  
Choose one of the following two options:
- MATH 335 - Combinatorics and Graph Theory **Credits:** (4)
- MATH 351 - Point Set Topology **Credits:** (4)

Department-Approved Electives Credits: 6

Mathematics department-approved electives numbered 300 or higher including courses from departments that apply mathematics (such as biology, chemistry, computer science, economics, engineering, finance, geological science, mathematics or physics).

Additional courses may be approved as electives by the department on a case-by-case basis.

- BIOL 413 - Advanced Biostatistics **Credits:** (5)
- CHEM 332 - Quantitative Analysis **Credits:** (3)

- CHEM 381 - Physical Chemistry (Thermodynamics) **Credits: (5)**
- CHEM 382 - Physical Chemistry (Quantum Chemistry) **Credits: (3)**
- CHEM 383 - Physical Chemistry (Quantum, Statistical Mechanics) III **Credits: (4)**
- CHEM 452 - Instrumental Analysis Lecture **Credits: (3)**
- CS 428 - Introduction to Graph Algorithms **Credits: (4)**
- CS 430 - Cybersecurity **Credits: (4)**
- CS 457 - Computational Intelligence and Machine Learning **Credits: (4)**
- CS 471 - Optimization **Credits: (4)**
- CS 473 - Parallel Computing **Credits: (4)**
- CS 528 Advanced Data Structures and Algorithms **Credits: (4)**
- CS 529 Advanced Algorithms for Scientific Computing **Credits: (4)**
- ECON 325 - Introduction to Forecasting **Credits: (5)**
- GEOL 484 - Geochronology **Credits: (5)**
- MATH 337 - Cryptological Mathematics **Credits: (5)**
- MATH 407 - Mathematics Honors Seminar - Upper-level **Credits: (1)** (No more than 2 credits in MATH 407 may be applied.)
- MATH 410A - Advanced Statistical Methods I **Credits: (4)**
- MATH 410B - Advanced Statistical Methods II **Credits: (4)**
- MATH 471 - Advanced Analysis I **Credits: (4)**
- MATH 472 - Advanced Analysis II **Credits: (4)**
- PHYS 361 - Computational Physics **Credits: (4)**

Total Credits: 76

College and Department Information

Mathematics Department  
College of the Sciences

## Mathematics Major, BS (Large Plan)

### Admission Requirements for Mathematics Major and Minor

Admission to any major in the mathematics department will be considered after the first two quarters of calculus are taken (MATH 172 and MATH 173). Transfer students with the calculus background will generally take and successfully complete (2.0 or higher) 10 hours of math beyond calculus to be admitted to a major. Application forms are available from the mathematics department office. Students must meet with an advisor in the mathematics department before being considered for major or minor. In addition, students must earn a minimum grade of C in any course that fulfills a major or minor requirement.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Use differential and integral calculus as well as sequences and series to solve problems.
- Use concepts of vector subspaces of  $\mathbb{R}^n$  and  $\mathbb{R}^{n \times m}$  to solve problems.
- Write proofs using contrapositive, contradiction, cases, and mathematical induction.
- Know standard applications of calculus, linear algebra, and statistics.
- Apply their understanding of mathematics to fields outside of mathematics.
- Describe the differences between the following types of mathematics: discrete/continuous, algebraic/geometric, pure/applied, deterministic/stochastic.
- Communicate mathematical ideas through writing.
- Communicate mathematical ideas orally.

### Required Courses

- MATH 172 - Calculus I **Credits: (5)**
- MATH 173 - Calculus II **Credits: (5)**
- MATH 260 - Sets and Logic **Credits: (5)**
- MATH 265 - Linear Algebra I **Credits: (4)**
- MATH 272 - Multivariable Calculus I **Credits: (5)**
- MATH 273 - Multivariable Calculus II **Credits: (5)**
- MATH 299S - Seminar - Math Major Orientation **Credits: (4)**
- MATH 314 - Probability and Statistics **Credits: (5)**
- MATH 335 - Combinatorics and Graph Theory **Credits: (4)**
- MATH 351 - Point Set Topology **Credits: (4)**
- MATH 365 - Linear Algebra II **Credits: (4)**
- MATH 371 - Advanced Calculus **Credits: (4)**
- MATH 376 - Differential Equations I **Credits: (3)**
- MATH 377 - Differential Equations II **Credits: (3)**
- MATH 461 - Abstract Algebra I **Credits: (4)**
- MATH 462 - Abstract Algebra II **Credits: (4)**
- MATH 471 - Advanced Analysis I **Credits: (4)**
- MATH 472 - Advanced Analysis II **Credits: (4)**
- MATH 499S - Senior Seminar **Credits: (2)**

Department-Approved Math Electives Credits: 20

- MATH 207 - Mathematics Honors Seminar - Lower Level **Credits: (1)**
- MATH 320 - History of Mathematics **Credits: (3)**
- MATH 337 - Cryptological Mathematics **Credits: (5)**
- MATH 372 - Complex Analysis (Put on Reserve 9/16/16.) **Credits: (5)**
- MATH 398 - Special Topics **Credits: (1-6)**
- or any 400-level MATH course (excluding MATH 405, 406, 486, 490, 491, 499E). At most 4 credits total can be from MATH 207 and 407.

Total Credits: 98

College and Department Information

## Mathematics Major, BS (Small Plan)

The small plan major is intended primarily for students completing a double major.

### Admission Requirements for Mathematics Major and Minor

Admission to any major in the mathematics department will be considered after the first two quarters of calculus are taken (MATH 172 and MATH 173). Transfer students with the calculus background will generally take and successfully complete (2.0 or higher) 10 hours of math beyond calculus to be admitted to a major. Application forms are available from the mathematics department office. Students must meet with an advisor in the mathematics department before being considered for major or minor. In addition, students must earn a minimum grade of C in any course that fulfills a major or minor requirement.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Use differential and integral calculus as well as sequences and series to solve problems.
- Use concepts of vector subspaces of  $\mathbb{R}^n$  and  $\mathbb{R}^{n \times m}$  to solve problems.
- Write proofs using contrapositive, contradiction, cases, and mathematical induction.
- Know standard applications of calculus, linear algebra, and statistics.
- Apply their understanding of mathematics to fields outside of mathematics.
- Describe the differences between the following types of mathematics: discrete/continuous, algebraic/geometric, pure/applied, deterministic/stochastic.
- Communicate mathematical ideas through writing.
- Communicate mathematical ideas orally.

### Required Courses

- MATH 172 - Calculus I **Credits:** (5)
- MATH 173 - Calculus II **Credits:** (5)
- MATH 260 - Sets and Logic **Credits:** (5)
- MATH 265 - Linear Algebra I **Credits:** (4)
- MATH 272 - Multivariable Calculus I **Credits:** (5)
- MATH 273 - Multivariable Calculus II **Credits:** (5)
- MATH 299S - Seminar - Math Major Orientation **Credits:** (4)
- MATH 335 - Combinatorics and Graph Theory **Credits:** (4)
- MATH 351 - Point Set Topology **Credits:** (4)
- MATH 365 - Linear Algebra II **Credits:** (4)
- MATH 371 - Advanced Calculus **Credits:** (4)
- MATH 499S - Senior Seminar **Credits:** (2)

### At least two courses from the following - Credits: 8

- MATH 461 - Abstract Algebra I **Credits:** (4)
- MATH 462 - Abstract Algebra II **Credits:** (4)
- MATH 471 - Advanced Analysis I **Credits:** (4)
- MATH 472 - Advanced Analysis II **Credits:** (4)

### Department-Approved Math Electives Credits: 8

- MATH 207 - Mathematics Honors Seminar - Lower Level **Credits:** (1)
- MATH 320 - History of Mathematics **Credits:** (3)
- MATH 337 - Cryptological Mathematics **Credits:** (5)
- MATH 372 - Complex Analysis (Put on Reserve 9/16/16.) **Credits:** (5)
- MATH 376 - Differential Equations I **Credits:** (3)
- MATH 377 - Differential Equations II **Credits:** (3)
- MATH 398 - Special Topics **Credits:** (1-6)
- or any 400-level MATH course (excluding MATH 405, 406, 486, 490, 491, 499S). At most 4 credits total can be from MATH 207 and 407.

### Applications of Math Electives Credits: 6

Math department-approved electives in Application oriented courses, numbered 300 or higher (could be in Math, Physics, Econ, Finance, Chemistry, Biology)

Total Credits: 73

### College and Department Information

Mathematics Department  
College of the Sciences

## Mathematics Minor

### Program Requirements

Students must earn a minimum grade of C in any course that fulfills a major or minor requirement.

### Required Courses Credits: 10

- MATH 172 - Calculus I **Credits:** (5)
- MATH 173 - Calculus II **Credits:** (5)

### Department-Approved Electives Credits: 12

- At least 12 credits of electives in mathematics, which MUST include at least one of MATH 260 or MATH 265. **Credits:** (12)
- MATH 211 - Statistical Concepts and Methods **Credits:** (5)
- MATH 260 - Sets and Logic **Credits:** (5)
- MATH 265 - Linear Algebra I **Credits:** (4)
- MATH 272 - Multivariable Calculus I **Credits:** (5)
- MATH 273 - Multivariable Calculus II **Credits:** (5)

- MATH 314 - Probability and Statistics **Credits:** (5)
  - MATH 330 - Discrete Mathematics **Credits:** (5)
  - MATH 335 - Combinatorics and Graph Theory **Credits:** (4)
  - MATH 351 - Point Set Topology **Credits:** (4)
  - MATH 376 - Differential Equations I **Credits:** (3)
- Other MATH courses, numbered 200 or higher, may be used to satisfy the elective requirements, subject to approval of the mathematics department.

Total Credits: 22

College and Department Information

Mathematics Department  
College of the Sciences

## McNair Scholars Program

Undergraduate Studies and Research  
Ellensburg  
Language and Literature Building, room 103  
Mail Stop 7516  
509-963-2869

[www.cwu.edu/mcnair-scholars](http://www.cwu.edu/mcnair-scholars)

See website for how these programs may be used for educational and career purposes

### Director

Pamela Nevar

### Staff

Lucinda Carnell, faculty coordinator  
LeAnna Chard, office assistant  
Kayla-Ann Hemmings, graduate assistant  
Eunice Perez, office assistant

### Program Information

The Ronald E. McNair Scholars Program at CWU is funded by a grant from the Department of Education under the TRIO Programs.

This is an academically rigorous program, not a scholarship. The program is designed to provide underrepresented (low-income and first-generation, and/or ethnic minority) students with the training and opportunity to prepare for and successfully apply to graduate school programs. To this end, admitted scholars are required to complete graduate school preparation seminars. The goal of the program is for scholars to attain their doctorates and teach at universities.

A cornerstone of this program is the linking of scholars with faculty mentors. Students are expected to complete a summer research internship under the supervision of a research mentor. Scholars also have the option of a teaching internship during one academic quarter and/or pursuing a leadership development track during their second year as a McNair Scholar.

CWU students are encouraged to apply to the McNair Scholars Program as sophomores or juniors and are selected on the basis

of their academic excellence, career objectives and faculty recommendations.

### Admission Requirements

Students must meet the following eligibility requirements:

- Be a U.S. citizen or permanent resident;
- Be a low-income student who is also a first-generation college student; or must be a member of a group that is underrepresented in graduate education (African American, American Indian/Alaskan Native, Hispanic/Latino, or Native Hawaiian/Pacific Islander);
- Be currently enrolled as an undergraduate in a degree program at CWU
- Must have completed 90 quarter credits by the time you begin the McNair Scholars Program
- Must have at least one year remaining before graduation
- Must have a minimum cumulative GPA of 2.9 and a major GPA of at least 3.1
- Must express a desire to attain a PhD

Complete an application, complete with form, two letters of recommendation, and a personal statement. Application materials and deadlines are available on the program website.

### Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### Course Offerings

Frequency of course offering information can be found at the department website: [www.cwu.edu/mcnair-scholars](http://www.cwu.edu/mcnair-scholars) or by contacting the department directly.

## Military Science Department

(Army Reserve Officers' Training Corps)

College of Education and Professional Studies  
Ellensburg  
Lind Hall, rooms 207 and 220  
Mail Stop 7569  
509-963-3518  
Fax 509-963-3588  
[www.cwu.edu/army](http://www.cwu.edu/army)  
See website for how these programs may be used for educational and career purposes.

### Faculty and Staff

#### Chair

LTC Bonnie S. Kovatch, MA

#### Professor

LTC Bonnie S. Kovatch, Adjutant General's Corps, MA, law and diplomacy

#### Assistant Professors

CPT Dustin M. Johnston, finance corps, BA, business



administration

CPT Trey A. Botten, Infantry, MS curriculum and instruction  
Michael A. Musard, MEd, occupational training and development

#### **Lecturer**

MSG Osvaldo Simon, infantry

#### **Staff**

Kevin I. Bannister, GS, supply technician  
David M. Mirro, GS, human resource technician  
Andrew J. Van Den Hoek, recruitment operations officer  
Sigrid R. Welker, secretary senior

#### **Department Information**

The Department of Military Science's courses are designed to prepare scholars, athletes, and junior leaders for commissioning in the U.S. Army. Students who complete the Military Science Program and meet commissioning requirements will be eligible for a commission as a second lieutenant in the U.S. Army, Army Reserve, or Army National Guard. The on-campus instructional program is designed to fit into the regular academic schedule of the university and is taught by Army professors and instructors.

The academic program consists of military science, leadership labs, and off-campus summer training. Academic studies include courses in basic military tactics, principles of leadership, officership, communication, personnel and logistics management, staff management procedures, physical conditioning, land navigation, and military law. Various training activities are scheduled each quarter to further familiarize the student with the ROTC Program.

Textbooks and uniform items are furnished through the Department of Military Science. The MSL 100 and MSL 200 classes are open to any student to explore their military interests and are non-contractual. Advancement to MSL 300 and MSL 400 courses to complete a minor in military science is by permission only.

Upon completion of the military science core (OPTION 1, 2, or 3; see below) requirements, leadership development and assessment course, and receipt of a bachelor's degree, students seeking an officer commission are able to select full-time employment (active Army) or part-time employment through the Army National Guard or the Army Reserve.

Additional information concerning the Military Science Program may be obtained by writing: Central Washington University, Military Science, Lind Hall, 400 E. University Way, Ellensburg, Washington 98926-7569, stopping by the military science department in Lind Hall, room 220, calling 509-963-3518, or by visiting the military science website at [www.cwu.edu/~roo/](http://www.cwu.edu/~roo/).

**Post Bachelor's Degree Fellowships:** Graduating seniors may compete for several fully-funded Army graduate fellowships.

**Transfer Students:** Students transferring from other institutions, including community colleges considering entrance in the Military Science Program must make an appointment for a departmental interview for candidacy and scholarships.

**Graduate Students:** Graduate students interested in obtaining a commission as a second lieutenant should contact the Department of Military Science in Peterson Hall for academic

planning and application.

**Veterans:** Veterans are encouraged to contact one of the military science academic advisors for information and outline of benefits available while participating in the ROTC program.

**Scholarships:** ROTC scholarships pay tuition and required fees. They're awarded on merit-academic achievements, extracurricular activities, and personal interviews. Four-, three- and two-year scholarships are available each academic year to qualified students. Applications can be obtained from the military science department.

**Stipends:** All fully contracted cadets receive a stipend (\$300 freshman, \$350 sophomore, \$450 junior, \$500 senior) for each academic month plus an allowance for books and other educational items. Non-scholarship students can receive the stipend as a contracted cadet during their last two years.

**Special Training Opportunities:** Summer training opportunities are through the Department of the Army Schools. The available schools include: airborne (parachute) training, air assault training, Northern Warfare School, and special forces. Additionally, Cadet Troop Leadership Training (CTLT) is also available to all cadets who have completed the military science minor core, been accepted in the military science minor, completed the MSL 301, 302, and 303 courses of study, and the leader development and assessment course. CTLT provides leadership experience in an active Army unit for two weeks prior to returning for the senior year of college study. CTLT is available in the U.S., Europe, and the Pacific Rim. Specialized training opportunities are by permission only.

#### **Prerequisites for Advancement to the Military Science Minor**

1. Admission into the MSL minor will be based upon an overall grade point average (GPA) of 2.5.
2. The department chair may admit a limited number of students with GPAs under 2.5.
3. Students seeking the military science minor must complete all application requirements prior to declaring military science as a minor.
4. Complete the core requirements with a GPA of 3.0 or higher.
5. The Department of Military Science reserves the right to modify these requirements in special cases.

#### **Program Outcomes**

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

#### **Course Offerings**

Frequency of course offering information can be found at the department website: [www.cwu.edu/army](http://www.cwu.edu/army) or by contacting the department directly.

## **Military Science Minor**

Participation in this minor is contingent upon completion of the ROTC core (Option 1, 2 or 3) listed above and acceptance as a contracted student in the advanced course in the Army ROTC program. Application may be made at the military science department, Peterson Hall.

## Military Science Minor Core

### Option 1

No military obligation is incurred under Option 1 or Option 3.

#### Required Courses

- MSL 101 - Foundations of Officership **Credits:** (1)
- MSL 102 - Basic Leadership **Credits:** (2)
- MSL 103 - Advanced Leadership **Credits:** (2)
- MSL 201 - Individual Leadership Studies **Credits:** (2)
- MSL 202 - Leadership and Teamwork **Credits:** (2)
- MSL 211 - Land Navigation **Credits:** (2)

Military Science Core Total Credits: 11

### Option 2

#### Required Courses

- Select 3 credits from the list of approved electives **Credits:** (3)
- MSL 292 - Leader's Training Course, Internship **Credits:** (8) (This course can be taken as non-credit)

Military Science Core Total Credits: 11

### Option 3

No military obligation is incurred under Option 1 or Option 3.

Verification of completion of prior military service initial entry program. This option is by permission only. See department for further information.

#### Required Courses

- HIST 314 - Military History of the United States **Credits:** (5)
- MSL 301 - Leadership and Problem-Solving **Credits:** (3)
- MSL 302 - Leadership and Ethics **Credits:** (3)
- MSL 303 - Leadership and Small Group Tactics **Credits:** (3)
- MSL 401 - Leadership and Management **Credits:** (4)
- MSL 402 - Officership **Credits:** (4)
- MSL 403 - Officership II **Credits:** (2)

Select from the following - Credits: 2-5

- CS (Computer Science), Any Course **Credits:** (4-5)
- IT 101 - Computer Applications **Credits:** (3)

Total Credits: 26-29

College and Department Information

Military Science Department  
College of Education and Professional Studies

# Music Department

College of Arts and Humanities

Ellensburg

Jerilyn S. McIntyre Music Building

Mail Stop 7458

509-963-1216

Fax: 509-963-1239

[www.cwu.edu/music](http://www.cwu.edu/music)

See website for how these programs may be used for educational and career purposes.

## Faculty and Staff Chair

Todd Shiver, DMA

## Interim Associate Chair

Bret Smith, PhD

## Professors

Joseph Brooks, MM, clarinet, saxophone, woodwind methods

Chris Bruya, MM, jazz studies

Nikolas Caoile, DMA, orchestra, conducting

Mark Goodenberger, MM, percussion

John Harbaugh, MME, trumpet, jazz studies

Mark Lane, MM, music education, band

Daniel Lipori, DMA, music history, bassoon, double reed methods

Carrie Rehkopf-Michel, MM, violin, chamber music, Kairos Chamber Ensemble

John Michel, MM, cello, chamber music, pedagogy, Kairos Chamber Ensemble

Hal Ott, DM, flute, literature

John F. Pickett, DM, piano, literature, pedagogy

Vijay Singh, MAT, jazz studies, choir, voice

Jeffrey Snedeker, DMA, French horn, music history

Gary Weidenaar, DMA, choir, conducting, music education

## Associate Professors

Gayla Blaisdell, PhD, voice, opera

Martin Kennedy, DMA, theory, composition

John Neurohr, DMA, trombone, brass pedagogy, brass literature

Bret Smith, PhD, music education, string pedagogy

## Assistant Professors

Paul Bain, MM, bands, music education, conducting

Lewis Norfleet, MM, bands, music education, conducting

Mark Samples, PhD, musicology, general education

Melissa Schiel, DMA, voice, pedagogy

## Lecturers

Tor Blaisdell, MM, voice, opera, history of rock

Scott Erickson, DMA, oboe, theory

Teresa Harbaugh, MM, class piano

Aaron Hirsch, MM, orchestra, conducting

Anna Jensen, MM, string bass

David McLemore, MM, tuba, euphonium, history of jazz

Adam Pelandini, MM, saxophone, theory, chamber music

Scott Peterson, DMA, wildcat chorus

Barbara Pickett, MM, piano, class piano

Michelle Rahn, DMA, viola, chamber music  
Maria Roditeleva-Wibe, PhD, theory, world music  
Leslie Schneider, MM, music education  
Emelie Spencer, MM, voice, theory  
Norm Wallen, MM, theory

#### **Staff**

Marcie Brown, program assistant  
Allen Larsen, hall manager, audio technician, web manager  
Teresa Larsen, secretary supervisor  
Shannon Martin, fiscal specialist  
Kirsten Neurohr, advisor/recruiter  
Harry Whitaker, piano technician

#### **Mission**

The Department of Music is a community of artists, scholars, and educators dedicated to achieving the highest standards of musical knowledge, performance, and teaching. The department is committed to preparing students for careers in music, providing the opportunity to become literate, skilled, knowledgeable, and confident music educators, performers, and practitioners, able to influence and enrich the musical lives of the communities in which they serve. The department provides opportunities for the general student to study music as an essential part of a liberal arts education and engage in artistic experiences, serve as a leader for K-12 music education, and provides opportunities for the general public to experience music performances of the highest quality in a broad range of styles and genres.

#### **Vision**

The Department of Music will be recognized and respected for its challenging curriculum and supportive environment, for the excellence of its student, ensemble and faculty performances in a broad range of styles and genres, and for the fulfillment of its motto: "Where teaching is a performing art."

#### **Core Values**

As a community of practicing musicians and scholars, we believe that the department's mission is best realized when we:

- Hold each student's greatest good as our primary concern
- Provide models of the highest ethical and moral standards
- Deem outstanding teaching to be the most important attribute of the faculty
- Implement a rigorous curriculum in each degree program
- Regard each degree program as equally valid, with no program intrinsically superior to any other
- Create an intellectually and emotionally safe environment in which students can learn, develop and mature
- Respect and embrace diversity in all its forms
- Respond creatively and thoughtfully to the inevitable changes of the fluid society in which we live

#### **Accreditation**

The department is an institutional member of the National Association of Schools of Music (NASM).

#### **Admission Requirements**

All entering students who plan to pursue either a major or minor in the music department must audition for acceptance into the

program before a faculty committee. See the department's website for audition information.

#### **Common Exit Requirements**

All music majors must pass a keyboard proficiency exam as a graduation requirement. Music education majors will not be scheduled for student teaching until this proficiency is completed.

#### **Standards**

All music majors must earn a grade of C or higher in each music course required for their respective degree.

Music education majors must meet the standards for acceptance into the Teacher Certification Program.

#### **Required Participation:**

1. All entering music majors with no previous college music theory credits must pass an online exam in music fundamentals as a prerequisite for MUS 144, the first quarter of the theory sequence (fee required).
2. All entering music majors with college credits in music theory must take an in-house diagnostic theory exam, which will be given during the transfer student orientation sessions and before the fall quarter begins. Credit for previous college theory courses may be given based on the results of this exam. Details about both exams can be found on the department website.

#### **Graduation Requirements**

1. All music majors must pass the required piano proficiency exam. MUS 154A (Piano Class III) must be retaken until this requirement is fulfilled.
2. All music majors must attend four (4) convocations and an average of eight (8) recitals/concerts for each quarter, (Fall, Winter, and Spring) that they are in residence.

#### **Departmental Honors**

Consult the department website for information about the departmental honors program.

#### **Certification Programs**

Students enrolled in music education degree programs will be concurrently enrolled in the Teacher Certification Program through the College of Education and Professional Studies, and upon completion of all requirements will be recommended to Washington's Office of the Superintendent of Public Instruction (OSPI) for the Residency Teacher Certificate with endorsement in K-12 Choral, General, and/or Instrumental Music. The department also offers post-baccalaureate students the opportunity to earn teaching certification in these three endorsement areas. To enter the post-baccalaureate certification program, a baccalaureate degree in music is required. Candidates must be fully admitted to the Teacher Certification Program and be admitted by the Department of Music after application and transcript review. Recommendation for certification requires completion of all courses listed in the CWU curricular requirements for the Bachelor of Music: Music Education specialization with a "C" grade or above. Consultation with the faculty music education specialist and department advisor is mandatory for students entering the post-baccalaureate program.

#### **Department Fees**

All fees are billed to students' accounts.

- \$15 fee for each MUS 154 (Class Instruction) course (all sections except B and H).
- \$125 fee for 1 credit and \$250 fee for 2 credits each quarter of enrollment in MUS 164, 264, or 364 (Individual applied instruction).
- \$250 fee each quarter of enrollment in MUS 464 (Individual applied instruction).
- \$125 fee for 2 credits and \$250 fee for 4 credits each quarter of enrollment in MUS 564 and 664 (Individual applied instruction).
- \$125 fee each quarter of enrollment in X71 (Secondary applied instruction).
- \$40 fee each quarter for students enrolled in Vocal Jazz I
- \$50 fee for each scheduled student recital
- \$15 fee for each MUS 252, 253, and 254 (Class Instrumental Methods) course
- \$5 annual locker fee (Optional if you choose to get a locker)
- \$5 fee for students enrolled in Percussion Ensemble
- \$25 university tech fee covers use of electronic equipment used in all music courses. Part-time students enrolled in theory, class piano, composition, or electronic music courses will be assessed this fee.

#### **Applied Music (Individual Lessons)**

Student advancement through performance levels (164-464) is determined by jury examination. This is done at the end of the quarter when a level change is attempted. Students studying at the 364 level must present a one-half recital as a graduation requirement. Students studying at the 464 level must present at least a full recital as a graduation requirement. See the Undergraduate Handbook for policies regarding applied music study. The handbook is available on the department website at [www.cwu.edu/~music](http://www.cwu.edu/~music). Applied music requirements differ according to the degree.

#### **Large Ensemble Participation**

Participation in performance ensembles is an essential part of the music major experience. Rehearsing and performing as part of a band, orchestra, or choir provides many benefits. It develops musical listening and performing skills, expands knowledge of repertoire, including contemporary and traditional works, provides the opportunity to learn the style characteristics of historical periods and elements of musical structures, and promotes cohesiveness in the musical community.

- Students must be enrolled in a large ensemble connected to their major applied area every quarter they are enrolled in lessons in that applied area.
- This concurrent enrollment requirement must be maintained until the credit requirement in either area has been met. Enrollment in the other area must continue until its credit requirement is met.
- If a student is enrolled in more than one large ensemble in a quarter, only one large ensemble enrollment will be considered as meeting this requirement. Additional large ensemble enrollments will be treated as elective credits.

When circumstances justify not being in a large ensemble, a large ensemble participation waiver form must be submitted to the department chair for approval. These forms are available in the music department office and must be signed by the applied

instructor, large ensemble director, and music department advisor.

Once ensemble credit requirements are met, students are encouraged to continue in these groups for the sake of their own pedagogical and performing experiences, as well as leadership opportunities.

Only the following are designated as large ensembles: Wind Ensemble, MUS 266/466; Choir, MUS 267/467; Chamber Choir, MUS 268/468; Symphonic Winds MUS 269/469; Orchestra, MUS 277/477; Marching and Concert Band, MUS 287/487 (fall quarter only); Symphonic Band, MUS 288/488. Enrollment in either Women's Choir (MUS 211/411) or Men's Choir (MUS 228/428) can be substituted for enrollment in a choral large ensemble for a maximum of three quarters.

#### **Bachelor of Music - Composition Major**

Bachelor of music in composition is intended for students whose primary interest is in composition and for those who intend to pursue graduate work in music theory or composition. Audition requirement: Submit 2 or 3 short contrasting compositions and demonstrate proficiency on a primary instrument. (Formal declaration of a major in composition cannot occur until the end of the first-year theory sequence 146 and 146A with the grade of at least a B- in all theory courses. Students must also, complete MUS 120, and have instructor.) Transfer students may bypass MUS 120 with permission based upon composition knowledge, submissions, and a successful audition on their primary instrument. It will normally take transfer students three years to complete the degree requirements.

#### **Bachelor of Music - Music Education with Specializations**

All students majoring in music education will work with the department Advising Specialist and faculty music education specialist during the program. At the end of the sophomore year, students will meet individually with members of the music education faculty to review academic status and progress toward program completion. All music education majors must pass the required piano proficiency examination prior to endorsement for student teaching. Students in this major must apply for admission into the Teacher Certification Program housed in the College of Education and Professional Studies. This is typically done at the beginning of the student's second year. Transfer students should apply prior to or during their first quarter on campus. Students are required to complete the Professional Education Program requirements offered through the College of Education and Professional Studies.

#### **Music Courses**

Performance activities are designated by the following code:

- A. Piano
- B. Voice
- C. Strings
- D. Woodwinds
- E. Brass
- G. Percussion

#### **Program Outcomes**

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

#### **Course Offerings**

Frequency of course offering information can be found at the

department website: [www.cwu.edu/music](http://www.cwu.edu/music) or by contacting the department directly.

## Music Major, BA

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- MUS1 (Music Theory) demonstrate music theory knowledge and aural skills sufficient to analyze and interpret a substantial body of music literature.
- MUS2 (Music History, Culture, and Literature) demonstrate historical and contemporary knowledge of genres, styles, artists, and works within Western and non-Western music, and the research skills to enhance that knowledge.
- MUS3 (Individual Applied Music) interpret, prepare, and perform a variety of musical works on a primary instrument or voice sufficient to the requirements of their major.
- MUS4 (Collaborative Applied Music) interpret, prepare, and perform a variety of musical works through collaboration in musical ensembles sufficient to the requirements of their major.
- MUS5 (Specialized Music Study) exhibit competencies specific to their major, including advanced performance skills, pedagogical skills, composition and improvisation skills, and/or the competencies for teacher certification.
- MUS6 (Musical Disposition) engage as active participants in the musical community of the university and region through event attendance, performance, teaching, creative and/or service activity.

### BA Music Core Requirements

#### Music Theory - Credits: 21

Students must pass an online fundamental exam with 75% (\$10 fee) or take and pass (75%) an online fundamental course (\$99 fee) to enroll in MUS144. Students must take a placement exam to waive any of the following courses. Concurrent enrollment of the following is required: (MUS 144, 144A, 152A), (MUS 145, 145A, 153A), and (MUS 146, 146A, 154A). A grade of C or better is required in both the written and aural components to continue in the theory sequence.

- MUS 144 - Theory 1 **Credits:** (3)
- MUS 144A - Aural Skills 1 **Credits:** (1)
- MUS 145 - Theory 2 **Credits:** (3)
- MUS 145A - Aural Skills 2 **Credits:** (1)
- MUS 146 - Theory 3 **Credits:** (3)
- MUS 146A - Aural Skills 3 **Credits:** (1)
- MUS 244 - Theory 4 **Credits:** (3)
- MUS 245 - Theory 5 **Credits:** (3)
- MUS 246 - Theory 6 **Credits:** (3)

#### Class Piano - Credits: 3

A waiver of this requirement can be obtained by demonstrating sufficient keyboard skills to designated piano faculty members.

- MUS 152A - Class Piano I **Credits:** (1)
- MUS 153A - Class Piano II **Credits:** (1)
- MUS 154A - Class Piano III **Credits:** (1)

#### Music History - Credits: 11

- MUS 359 - Survey of Music in Cross-cultural Perspectives **Credits:** (2)
- MUS 372 - Music History 1 **Credits:** (3)
- MUS 373 - Music History 2 **Credits:** (3)
- MUS 374 - Music History 3 **Credits:** (3)

#### Total Core Credits: 35

#### Required Courses

#### Ensembles - Credits: 12

- Large Ensemble (minimum) **Credits:** (12) Only the following are designated as large ensembles: MUS 267-467 (choir), MUS 268-468 (chamber choir), MUS 266-466 (wind ensemble), MUS 277-477 (orchestra), MUS 287-487 (marching and concert band-fall quarter only), and MUS 288-488 (symphonic band).

#### Applied Music - Credits: 9-12

- Individual Instruction - (MUS 164, 264, and 364) - **Credits:** (9-12) (NOTE: at least one credit of 364 must be completed on primary instrument)

#### Upper-division Music Theory - Credits: 3

- MUS 340 - Form and Analysis **Credits:** (3)

#### Conducting - Credits: 3

- MUS 341 - Conducting I **Credits:** (3)

#### Upper-division Music History - Credits: 3

#### Choose one:

- MUS 356 - Jazz Styles **Credits:** (3)
- MUS 382 - Survey of Chamber Music **Credits:** (3)
- MUS 384 - Survey of Choral Music **Credits:** (3)
- MUS 385 - Survey of Opera **Credits:** (3)
- MUS 386 - Survey of 20th-century Music **Credits:** (3)

#### Additional Courses - Credits: 2-5

- MUS 495 - Senior Project **Credits:** (2)
- Music Electives **Credits:** (0-3)

Total Credits: 70

## College and Department Information

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# Music Composition Major, BM

Bachelor of music in composition is intended for students whose primary interest is in composition and for those who intend to pursue graduate work in music theory or composition. Audition requirement: Submit 2 or 3 short contrasting compositions and demonstrate proficiency on a primary instrument. (Formal declaration of a major in composition cannot occur until the end of the first-year theory sequence 146 and 146A with the grade of at least a B- in all theory courses, completion of MUS 120, and permission of instructor.) Transfer students may bypass MUS 120 with permission based upon composition knowledge, submissions, and sufficient audition on primary instrument. It will normally take transfer students three years to complete the degree requirements. UNIV 101 for music major - Gen Ed. requirement (not in degree program).

### Program Requirement

All music majors must earn a grade of C or higher in each music course required for their respective degree.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- MUS1 (Music Theory) demonstrate music theory knowledge and aural skills sufficient to analyze and interpret a substantial body of music literature.
- MUS2 (Music History, Culture, and Literature) demonstrate historical and contemporary knowledge of genres, styles, artists, and works within Western and non-Western music, and the research skills to enhance that knowledge.
- MUS3 (Individual Applied Music) interpret, prepare, and perform a variety of musical works on a primary instrument or voice sufficient to the requirements of their major.
- MUS4 (Collaborative Applied Music) interpret, prepare, and perform a variety of musical works through collaboration in musical ensembles sufficient to the requirements of their major.
- MUS5 (Specialized Music Study) exhibit competencies specific to their major, including advanced performance skills, pedagogical skills, composition and improvisation skills, and/or the competencies for teacher certification.
- MUS6 (Musical Disposition) engage as active participants in the musical community of the university and region through event attendance, performance, teaching, creative and/or service activity.

### BM Composition Core Requirements

Music Theory - Credits: (21)

Students must pass an online fundamental exam with 75% (\$10 fee) or take and pass (75%) an online fundamental course (\$99 fee) to enroll in MUS 144. Students must take a placement exam to waive any of the following courses. Concurrent enrollment of the following is required: (MUS 144, 144A, 152A), (MUS 145, 145A, 153A) and (MUS 146, 146A, 154A). A grade of C or better is required in both the written and aural components to continue in the theory sequence.

- MUS 144 - Theory 1 **Credits:** (3)
- MUS 144A - Aural Skills 1 **Credits:** (1)
- MUS 145 - Theory 2 **Credits:** (3)
- MUS 145A - Aural Skills 2 **Credits:** (1)
- MUS 146 - Theory 3 **Credits:** (3)
- MUS 146A - Aural Skills 3 **Credits:** (1)
- MUS 244 - Theory 4 **Credits:** (3)
- MUS 245 - Theory 5 **Credits:** (3)
- MUS 246 - Theory 6 **Credits:** (3)

Class Piano - Credits: (3)

A waiver of this requirement can be obtained by demonstrating sufficient keyboard skills to designated piano faculty members.

- MUS 152A - Class Piano I **Credits:** (1)
- MUS 153A - Class Piano II **Credits:** (1)
- MUS 154A - Class Piano III **Credits:** (1)

Ensemble - Credits: (20)

Large Ensembles Credits (14-16)

Only the following are designated as large ensembles: Wind Ensemble, MUS 266/466; Choir, MUS 267/467; Chamber Choir, MUS 268/468; Symphonic Winds MUS 269/469; Orchestra, MUS 277/477; Marching and Concert Band, MUS 287/487 (fall quarter only); Concert Symphonic Band, MUS 288/488. Enrollment in either Women's Choir (MUS 211/411) or Men's Choir (MUS 228/428) can be substituted for enrollment in a choral large ensemble for a maximum of three quarters.

Chamber Ensembles (4-6)

Applied Music - Credits: (13)

- Individual Instruction **Credits:** (12) - MUS 164, 264, and 364 (at least 2 credits of 364 are required)
- MUS 300 - Recital Performance **Credits:** (1) (Must be concurrently enrolled in 364)

Upper-division Music Theory - Credits: (21)

- MUS 340 - Form and Analysis **Credits:** (3)
- MUS 343 - Counterpoint I **Credits:** (3)
- MUS 422 - Orchestration **Credits:** (3)
- MUS 423 - Advanced Orchestration **Credits:** (3)
- MUS 440 - Analytical Techniques II **Credits:** (3)
- MUS 485 - Choral Arranging **Credits:** (3)
- MUS 486 - Jazz Band Arranging **Credits:** (3)

Conducting - Credits: (6)

- MUS 341 - Conducting I **Credits:** (3)
- MUS 342 - Conducting II **Credits:** (3)

Music History - Credits: (11)

- MUS 359 - Survey of Music in Cross-cultural Perspectives **Credits:** (2)
- MUS 372 - Music History 1 **Credits:** (3)
- MUS 373 - Music History 2 **Credits:** (3)
- MUS 374 - Music History 3 **Credits:** (3)

Total Core Credits: 95

Required Courses

Music Composition - Credits: (24)

- MUS 120 - Composition 1 **Credits:** (3)
- MUS 220 - Composition 2 **Credits:** (2) (Must be taken for 6 credits)
- MUS 320 - Composition 3 **Credits:** (2) (Must be taken for 6 credits)
- MUS 420 - Composition 4 **Credits:** (3) (Must be taken for 9 credits) (Full Composition Recital Required to complete MUS 420)

Secondary Applied Area (Keyboard) - Credits: (4)

- MUS 171A - Secondary Applied Area Piano **Credits:** (1) (Must be taken for 3 credits) (If piano is major applied area then select another area of study)
- MUS 255 - Jazz Harmony and Keyboard **Credits:** (1)

Additional Courses - Credits: (5)

- Music Electives **Credits:** (2)
- MUS 347 - Electronic Music Composition **Credits:** (3)

Total Required Course Credits: 33

Total Credits: 128

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## Music Education Major BM, Broad Area Specialization

Choral Music, General Music, and Instrumental Music  
Endorsements

**Students taking this major must apply and be fully admitted to the Teacher Certification Program through the College of Education and Professional Studies. In addition to the degree requirements of the Bachelor of Music: Music Education Major, students must also successfully complete the Professional Education Program housed in the School of Education.**

All students majoring in music education will be reviewed and counseled by the Music Education Committee at the end of the sophomore year. The purpose of these reviews is to assist the student in developing all the skills necessary to be an effective music educator.

In order to receive departmental approval to student teach, the student must receive a satisfactory evaluation in all areas of music study. All music education majors must pass the required piano proficiency examination prior to application for student teaching.

This major satisfies the requirements for the Washington Residency Teacher Certificate with endorsements in Choral Music (K-12), General Music (K-12), and Instrumental Music (K-12) as established by the Office of the Superintendent of Public Instruction (OSPI). To qualify for student teaching, the following courses must be completed: MUS 323, MUS 325, MUS 329, MUS 341, and MUS 342. Students completing the program requirements (including passing the edTPA during student teaching and the WEST-E in each endorsement area) will be recommended to OSPI for certification.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- MUS1 (Music Theory) demonstrate music theory knowledge and aural skills sufficient to analyze and interpret a substantial body of music literature.
- MUS2 (Music History, Culture, and Literature) demonstrate historical and contemporary knowledge of genres, styles, artists, and works within Western and non-Western music, and the research skills to enhance that knowledge.
- MUS3 (Individual Applied Music) interpret, prepare, and perform a variety of musical works on a primary instrument or voice sufficient to the requirements of their major.
- MUS4 (Collaborative Applied Music) interpret, prepare, and perform a variety of musical works through collaboration in musical ensembles sufficient to the requirements of their major.
- MUS5 (Specialized Music Study) exhibit competencies specific to their major, including advanced performance skills, pedagogical skills, composition and improvisation skills, and/or the competencies for teacher certification.
- MUS6 (Musical Disposition) engage as active participants in the musical community of the university and region through event attendance, performance, teaching, creative and/or service activity.

Music Education, BM, Core Requirements

Choral Music, General Music, and Instrumental Music Endorsements

**Students taking this major must apply and be fully admitted to the Teacher Certification Program through the College of Education and Professional Studies. In addition to the degree requirements of the Bachelor of Music: Music Education Major, students must also successfully complete the Professional Education Program housed in the School of Education.**

All students majoring in music education will be reviewed and counseled by the Music Education Committee at the end of the sophomore year. The purpose of these reviews is to assist the student in developing all the skills necessary to be an effective music educator.

In order to receive departmental approval to student teach, the student must receive a satisfactory evaluation in all areas of music study. All music education majors must pass the required piano proficiency examination prior to application for student teaching.

This major satisfies the requirements for the Washington Residency Teacher Certificate with endorsements in Choral Music (K-12), General Music (K-12), and Instrumental Music (K-12) as established by the Office of the Superintendent of Public Instruction (OSPI). To qualify for student teaching, the following courses must be completed: MUS 323, MUS 325, MUS 329, MUS 341, and MUS 342. Students completing the program requirements (including passing the edTPA during student teaching and the WEST-E in each endorsement area) will be recommended to OSPI for certification.

### Program Requirement

All music majors must earn a grade of C or higher in each music course required for their respective degree.

Music Theory - Credits: 21

Students must pass an online fundamental exam with 75% (\$10 fee) or take and pass (75%) an online fundamental course (\$99 fee) to enroll in MUS144. Students must take a placement exam to waive any of the following courses. Concurrent enrollment of the following is required: (MUS 144, 144A, 152A), (MUS 145, 145A, 153A), and (MUS 146, 146A, 154A). A grade of C or better is required in both the written and aural components to continue in the theory sequence.

- MUS 144 - Theory 1 **Credits:** (3)
- MUS 144A - Aural Skills 1 **Credits:** (1)
- MUS 145 - Theory 2 **Credits:** (3)
- MUS 145A - Aural Skills 2 **Credits:** (1)
- MUS 146 - Theory 3 **Credits:** (3)
- MUS 146A - Aural Skills 3 **Credits:** (1)
- MUS 244 - Theory 4 **Credits:** (3)
- MUS 245 - Theory 5 **Credits:** (3)
- MUS 246 - Theory 6 **Credits:** (3)

Class Piano - Credits: 3

A waiver of this requirement can be obtained by demonstrating sufficient keyboard skills to designated piano faculty members.

- MUS 152A - Class Piano I **Credits:** (1)
- MUS 153A - Class Piano II **Credits:** (1)
- MUS 154A - Class Piano III **Credits:** (1)

Ensembles - Credits: 22

- Only the following are designated as large ensembles: Wind Ensemble, MUS 266/466; Choir, MUS 267/467; Chamber Choir, MUS 268/468; Symphonic Winds MUS 269/469; Orchestra, MUS 277/477; Marching and Concert Band, MUS 287/487 (fall quarter only); Symphonic Band, MUS 288/488. Enrollment in either Women's Choir (MUS 211/411) or Men's Choir (MUS 228/428) can be substituted for enrollment in a choral large ensemble for a maximum of three quarters.

Applied Music - Credits: 11

- Individual Instruction - Credits (11) MUS 164, 264, and 364 (at least 2 credits of 364 are required)
- MUS 300 - Recital Performance **Credits:** (1) (Must be concurrently enrolled in 364)

Conducting - Credits: 6

- MUS 341 - Conducting I **Credits:** (3)
- MUS 342 - Conducting II **Credits:** (3)

Music History - Credits: 11

- MUS 359 - Survey of Music in Cross-cultural Perspectives **Credits:** (2)
- MUS 372 - Music History 1 **Credits:** (3)
- MUS 373 - Music History 2 **Credits:** (3)
- MUS 374 - Music History 3 **Credits:** (3)

Total Core Credits: 75

Required Courses Credits: 19

- Music Elective - **Credits:** (1)
- MUS 171 - Secondary Applied Area (Individual Instruction) **Credits:** (1) (Must be voice for non-voice primary applied area or instrumental for voice primary applied area)
- MUS 253C - Class Instrumental Methods Strings I **Credits:** (1)
- MUS 253D - Class Instrumental Methods Woodwinds I **Credits:** (1)
- MUS 253E - Class Instrumental Methods Brass I **Credits:** (1)
- MUS 253G - Class Instrumental Methods Percussion I **Credits:** (1)
- MUS 254B - Class Vocal Methods **Credits:** (1)
- MUS 254C - Class Instrumental Methods Strings II **Credits:** (1)



- MUS 254D - Class Instrumental Methods Woodwinds II **Credits:** (1)
- MUS 254E - Class Instrumental Methods Brass II **Credits:** (1)
- MUS 323 - Choral Music Education **Credits:** (3)
- MUS 325 - Instrumental Music Education **Credits:** (3)
- MUS 329 - General Music Methods **Credits:** (3)

Upper-Division Music Theory Credits: 3

Choose one course from the following:

- MUS 340 - Form and Analysis **Credits:** (3)
- MUS 422 - Orchestration **Credits:** (3)
- MUS 484 - Instrumental Arranging **Credits:** (3)
- MUS 485 - Choral Arranging **Credits:** (3)
- MUS 486 - Jazz Band Arranging **Credits:** (3)

Broad Area Total Credits: 97

Professional Education Program Credits: 50

Professional Education Program

Total Credits: 147

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## Music Education Major BM, Choral Music Specialization

Choral Music and General Music Endorsements

**Students taking this major must apply and be fully admitted to the Teacher Certification Program through the College of Education and Professional Studies. In addition to the degree requirements of the Bachelor of Music: Music Education Major, students must also successfully complete the Professional Education Program housed in the School of Education.**

All students majoring in music education will be reviewed and counseled by the Music Education Committee at the end of the sophomore year. The purpose of these reviews is to assist the student in developing all the skills necessary to be an effective music educator.

In order to receive departmental approval to student teach, the student must receive a satisfactory evaluation in all areas of music study. All music education majors must pass the required piano proficiency examination prior to application for student teaching.

This major satisfies the requirements for the Washington Residency Teacher Certificate with endorsements in Choral

Music (K-12) and General Music (K-12) as established by the Office of the Superintendent of Public Instruction (OSPI). To qualify for student teaching, the following courses must be completed: MUS 323, MUS 329, MUS 341, and MUS 342. Students completing the program requirements (including passing the edTPA during student teaching and the WEST-E in each endorsement area) will be recommended to OSPI for certification.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- MUS1 (Music Theory) demonstrate music theory knowledge and aural skills sufficient to analyze and interpret a substantial body of music literature.
- MUS2 (Music History, Culture, and Literature) demonstrate historical and contemporary knowledge of genres, styles, artists, and works within Western and non-Western music, and the research skills to enhance that knowledge.
- MUS3 (Individual Applied Music) interpret, prepare, and perform a variety of musical works on a primary instrument or voice sufficient to the requirements of their major.
- MUS4 (Collaborative Applied Music) interpret, prepare, and perform a variety of musical works through collaboration in musical ensembles sufficient to the requirements of their major.
- MUS5 (Specialized Music Study) exhibit competencies specific to their major, including advanced performance skills, pedagogical skills, composition and improvisation skills, and/or the competencies for teacher certification.
- MUS6 (Musical Disposition) engage as active participants in the musical community of the university and region through event attendance, performance, teaching, creative and/or service activity.

Music Education, BM, Core Requirements

Choral Music, General Music, and Instrumental Music Endorsements

**Students taking this major must apply and be fully admitted to the Teacher Certification Program through the College of Education and Professional Studies. In addition to the degree requirements of the Bachelor of Music: Music Education Major, students must also successfully complete the Professional Education Program housed in the School of Education.**

All students majoring in music education will be reviewed and counseled by the Music Education Committee at the end of the sophomore year. The purpose of these reviews is to assist the student in developing all the skills necessary to be an effective music educator.

In order to receive departmental approval to student teach, the student must receive a satisfactory evaluation in all areas of music study. All music education majors must pass the required piano proficiency examination prior to application for student teaching.

This major satisfies the requirements for the Washington Residency Teacher Certificate with endorsements in Choral Music (K-12), General Music (K-12), and Instrumental Music (K-12) as established by the Office of the Superintendent of Public Instruction (OSPI). To qualify for student teaching, the following courses must be completed: MUS 323, MUS 325, MUS 329, MUS 341, and MUS 342. Students completing the program requirements (including passing the edTPA during student teaching and the WEST-E in each endorsement area) will be recommended to OSPI for certification.

### Program Requirement

All music majors must earn a grade of C or higher in each music course required for their respective degree.

Music Theory - Credits: 21

Students must pass an online fundamental exam with 75% (\$10 fee) or take and pass (75%) an online fundamental course (\$99 fee) to enroll in MUS144. Students must take a placement exam to waive any of the following courses. Concurrent enrollment of the following is required: (MUS 144, 144A, 152A), (MUS 145, 145A, 153A), and (MUS 146, 146A, 154A). A grade of C or better is required in both the written and aural components to continue in the theory sequence.

- MUS 144 - Theory 1 **Credits:** (3)
- MUS 144A - Aural Skills 1 **Credits:** (1)
- MUS 145 - Theory 2 **Credits:** (3)
- MUS 145A - Aural Skills 2 **Credits:** (1)
- MUS 146 - Theory 3 **Credits:** (3)
- MUS 146A - Aural Skills 3 **Credits:** (1)
- MUS 244 - Theory 4 **Credits:** (3)
- MUS 245 - Theory 5 **Credits:** (3)
- MUS 246 - Theory 6 **Credits:** (3)

Class Piano - Credits: 3

A waiver of this requirement can be obtained by demonstrating sufficient keyboard skills to designated piano faculty members.

- MUS 152A - Class Piano I **Credits:** (1)
- MUS 153A - Class Piano II **Credits:** (1)
- MUS 154A - Class Piano III **Credits:** (1)

Ensembles - Credits: 22

- Only the following are designated as large ensembles: Wind Ensemble, MUS 266/466; Choir, MUS 267/467; Chamber Choir, MUS 268/468; Symphonic Winds MUS 269/469; Orchestra, MUS 277/477; Marching and Concert Band, MUS 287/487 (fall quarter only); Symphonic Band, MUS 288/488. Enrollment in either Women's Choir (MUS 211/411) or Men's Choir (MUS 228/428) can be substituted for enrollment in a choral large ensemble for a maximum of three quarters.

Applied Music - Credits: 11

- Individual Instruction - Credits (11) MUS 164, 264, and 364 (at least 2 credits of 364 are required)
- MUS 300 - Recital Performance **Credits:** (1) (Must be concurrently enrolled in 364)

Conducting - Credits: 6

- MUS 341 - Conducting I **Credits:** (3)
- MUS 342 - Conducting II **Credits:** (3)

Music History - Credits: 11

- MUS 359 - Survey of Music in Cross-cultural Perspectives **Credits:** (2)
- MUS 372 - Music History 1 **Credits:** (3)
- MUS 373 - Music History 2 **Credits:** (3)
- MUS 374 - Music History 3 **Credits:** (3)

Total Core Credits: 75

Required Courses Credits: 13

- MUS 240 - Diction in Singers I (Intro to IPA, Italian, Latin, English) **Credits:** (2)
- MUS 241 - Diction for Singers 2 (Advanced IPA and German) **Credits:** (2)
- **OR** MUS 242 - Diction for Singers 3 (Advanced IPA and French) **Credits:** (2)
- MUS 323 - Choral Music Education **Credits:** (3)
- MUS 329 - General Music Methods **Credits:** (3)
- MUS 425B - Pedagogy, Vocal **Credits:** (3)

Upper-Division Music Theory Credits: 3

Choose one course from the following:

- MUS 340 - Form and Analysis **Credits:** (3)
- MUS 422 - Orchestration **Credits:** (3)
- MUS 485 - Choral Arranging **Credits:** (3)

Choral Music Total Credits: 91

Professional Education Program Credits: 50

Professional Education Program

Total Credits: 141

College and Department Information

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# Music Education Major BM, Instrumental Music Specialization

Instrumental Music and General Music Endorsements

**Students taking this major must apply and be fully admitted to the Teacher Certification Program through the College of Education and Professional Studies. In addition to the degree requirements of the Bachelor of Music: Music Education Major, students must also successfully complete the Professional Education Program housed in the School of Education.**

All students majoring in music education will be reviewed and counseled by the Music Education Committee at the end of the sophomore year. The purpose of these reviews is to assist the student in developing all the skills necessary to be an effective music educator.

In order to receive departmental approval to student teach, the student must receive a satisfactory evaluation in all areas of music study. All music education majors must pass the required piano proficiency examination prior to application for student teaching.

This major satisfies the requirements for the Washington Residency Teacher Certificate with endorsements in Instrumental Music (K-12) and General Music (K-12) as established by the Office of the Superintendent of Public Instruction (OSPI). To qualify for student teaching, the following courses must be completed: MUS 325, MUS 329, MUS 341, and MUS 342. Students completing the program requirements (including passing the edTPA during student teaching and the WEST-E in each endorsement area) will be recommended to OSPI for certification.

## Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- MUS1 (Music Theory) demonstrate music theory knowledge and aural skills sufficient to analyze and interpret a substantial body of music literature.
- MUS2 (Music History, Culture, and Literature) demonstrate historical and contemporary knowledge of genres, styles, artists, and works within Western and non-Western music, and the research skills to enhance that knowledge.
- MUS3 (Individual Applied Music) interpret, prepare, and perform a variety of musical works on a primary instrument or voice sufficient to the requirements of their major.
- MUS4 (Collaborative Applied Music) interpret, prepare, and perform a variety of musical works through collaboration in musical ensembles sufficient to the requirements of their major.
- MUS5 (Specialized Music Study) exhibit competencies specific to their major, including advanced performance skills, pedagogical skills, composition and improvisation skills, and/or the competencies for teacher certification.

- MUS6 (Musical Disposition) engage as active participants in the musical community of the university and region through event attendance, performance, teaching, creative and/or service activity.

Music Education, BM, Core Requirements

Choral Music, General Music, and Instrumental Music Endorsements

**Students taking this major must apply and be fully admitted to the Teacher Certification Program through the College of Education and Professional Studies. In addition to the degree requirements of the Bachelor of Music: Music Education Major, students must also successfully complete the Professional Education Program housed in the School of Education.**

All students majoring in music education will be reviewed and counseled by the Music Education Committee at the end of the sophomore year. The purpose of these reviews is to assist the student in developing all the skills necessary to be an effective music educator.

In order to receive departmental approval to student teach, the student must receive a satisfactory evaluation in all areas of music study. All music education majors must pass the required piano proficiency examination prior to application for student teaching.

This major satisfies the requirements for the Washington Residency Teacher Certificate with endorsements in Choral Music (K-12), General Music (K-12), and Instrumental Music (K-12) as established by the Office of the Superintendent of Public Instruction (OSPI). To qualify for student teaching, the following courses must be completed: MUS 323, MUS 325, MUS 329, MUS 341, and MUS 342. Students completing the program requirements (including passing the edTPA during student teaching and the WEST-E in each endorsement area) will be recommended to OSPI for certification.

## Program Requirement

All music majors must earn a grade of C or higher in each music course required for their respective degree.

Music Theory - Credits: 21

Students must pass an online fundamental exam with 75% (\$10 fee) or take and pass (75%) an online fundamental course (\$99 fee) to enroll in MUS144. Students must take a placement exam to waive any of the following courses. Concurrent enrollment of the following is required: (MUS 144, 144A, 152A), (MUS 145, 145A, 153A), and (MUS 146, 146A, 154A). A grade of C or better is required in both the written and aural components to continue in the theory sequence.

- MUS 144 - Theory 1 **Credits:** (3)
- MUS 144A - Aural Skills 1 **Credits:** (1)
- MUS 145 - Theory 2 **Credits:** (3)
- MUS 145A - Aural Skills 2 **Credits:** (1)
- MUS 146 - Theory 3 **Credits:** (3)
- MUS 146A - Aural Skills 3 **Credits:** (1)
- MUS 244 - Theory 4 **Credits:** (3)

- MUS 245 - Theory 5 **Credits:** (3)
- MUS 246 - Theory 6 **Credits:** (3)

Class Piano - Credits: 3

A waiver of this requirement can be obtained by demonstrating sufficient keyboard skills to designated piano faculty members.

- MUS 152A - Class Piano I **Credits:** (1)
- MUS 153A - Class Piano II **Credits:** (1)
- MUS 154A - Class Piano III **Credits:** (1)

Ensembles - Credits: 22

- Only the following are designated as large ensembles: Wind Ensemble, MUS 266/466; Choir, MUS 267/467; Chamber Choir, MUS 268/468; Symphonic Winds MUS 269/469; Orchestra, MUS 277/477; Marching and Concert Band, MUS 287/487 (fall quarter only); Symphonic Band, MUS 288/488. Enrollment in either Women's Choir (MUS 211/411) or Men's Choir (MUS 228/428) can be substituted for enrollment in a choral large ensemble for a maximum of three quarters.

Applied Music - Credits: 11

- Individual Instruction - Credits (11) MUS 164, 264, and 364 (at least 2 credits of 364 are required)
- MUS 300 - Recital Performance **Credits:** (1) (Must be concurrently enrolled in 364)

Conducting - Credits: 6

- MUS 341 - Conducting I **Credits:** (3)
- MUS 342 - Conducting II **Credits:** (3)

Music History - Credits: 11

- MUS 359 - Survey of Music in Cross-cultural Perspectives **Credits:** (2)
- MUS 372 - Music History 1 **Credits:** (3)
- MUS 373 - Music History 2 **Credits:** (3)
- MUS 374 - Music History 3 **Credits:** (3)

Total Core Credits: 75

Required Courses Credits: 14

- MUS 253C - Class Instrumental Methods Strings I **Credits:** (1)
- MUS 253D - Class Instrumental Methods Woodwinds I **Credits:** (1)
- MUS 253E - Class Instrumental Methods Brass I **Credits:** (1)
- MUS 253G - Class Instrumental Methods Percussion I **Credits:** (1)
- MUS 254B - Class Vocal Methods **Credits:** (1)

- MUS 254C - Class Instrumental Methods Strings II **Credits:** (1)
- MUS 254D - Class Instrumental Methods Woodwinds II **Credits:** (1)
- MUS 254E - Class Instrumental Methods Brass II **Credits:** (1)
- MUS 325 - Instrumental Music Education **Credits:** (3)
- MUS 329 - General Music Methods **Credits:** (3)

Upper-Division Music Theory Credits: 3

Choose one course from the following:

- MUS 340 - Form and Analysis **Credits:** (3)
- MUS 422 - Orchestration **Credits:** (3)
- MUS 484 - Instrumental Arranging **Credits:** (3)
- MUS 486 - Jazz Band Arranging **Credits:** (3)

Instrumental Music Total Credits: 92

Professional Education Program Credits: 50

Professional Education Program

Total Credits: 142

College and Department Information

Music Department  
College of Arts and Humanities

## Music Performance Major BM, Keyboard Specialization

Student advancement through performance levels (164-464) is determined by jury examination.

### Program Requirements

All music majors must earn a grade of C or higher in each music course required for their respective degree.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- MUS1 (Music Theory) demonstrate music theory knowledge and aural skills sufficient to analyze and interpret a substantial body of music literature.
- MUS2 (Music History, Culture, and Literature) demonstrate historical and contemporary knowledge of genres, styles, artists, and works within Western and non-Western music, and the research skills to enhance that knowledge.
- MUS3 (Individual Applied Music) interpret, prepare, and perform a variety of musical works on a primary instrument or voice sufficient to the requirements of their major.

- MUS4 (Collaborative Applied Music) interpret, prepare, and perform a variety of musical works through collaboration in musical ensembles sufficient to the requirements of their major.
- MUS5 (Specialized Music Study) exhibit competencies specific to their major, including advanced performance skills, pedagogical skills, composition and improvisation skills, and/or the competencies for teacher certification.
- MUS6 (Musical Disposition) engage as active participants in the musical community of the university and region through event attendance, performance, teaching, creative and/or service activity.

#### BM Performance Core Requirements

#### Music Theory - Credits: 21

Students must pass an online fundamental exam with 75% (\$10 fee) or take and pass (75%) an online fundamental course (\$99 fee) to enroll in MUS144. Students must take a placement exam to waive any of the following courses. Concurrent enrollment of the following is required: (MUS 144, 144A, 152A), (MUS 145, 145A, 153A), and (MUS 146, 146A, 154A). A grade of C or better is required in both the written and aural components to continue in the theory sequence.

- MUS 144 - Theory 1 **Credits:** (3)
- MUS 144A - Aural Skills 1 **Credits:** (1)
- MUS 145 - Theory 2 **Credits:** (3)
- MUS 145A - Aural Skills 2 **Credits:** (1)
- MUS 146 - Theory 3 **Credits:** (3)
- MUS 146A - Aural Skills 3 **Credits:** (1)
- MUS 244 - Theory 4 **Credits:** (3)
- MUS 245 - Theory 5 **Credits:** (3)
- MUS 246 - Theory 6 **Credits:** (3)

#### Class Piano - Credits: 3

A waiver of this requirement can be obtained by demonstrating sufficient keyboard skills to designated piano faculty members.

- MUS 152A - Class Piano I **Credits:** (1)
- MUS 153A - Class Piano II **Credits:** (1)
- MUS 154A - Class Piano III **Credits:** (1)

#### Applied Music - Credits: 29

- Individual Instruction - (MUS 164, 264, and 364) **Credits:** (18)
- MUS 300 - Recital Performance **Credits:** (1) (Must be concurrently enrolled in 364)
- MUS 400 - Recital Performance **Credits:** (1) (Must be concurrently enrolled in 464)
- MUS 464 - Major Applied Area (Individual Instruction) **Credits:** (3) (Must be taken for 9 credits)

#### Upper-division Music Theory - Credits: 3

- MUS 340 - Form and Analysis **Credits:** (3)

#### Conducting - Credits: 6

- MUS 341 - Conducting I **Credits:** (3)
- MUS 342 - Conducting II **Credits:** (3)

#### Music History - Credits: 11

- MUS 359 - Survey of Music in Cross-cultural Perspectives **Credits:** (2)
- MUS 372 - Music History 1 **Credits:** (3)
- MUS 373 - Music History 2 **Credits:** (3)
- MUS 374 - Music History 3 **Credits:** (3)

#### Total Core Credits: 73

#### Required Courses

#### Ensembles - Credits: 21

- Large Ensembles Credits: (6-12) Only the following are designated as large ensembles: Wind Ensemble, MUS 266/466; Choir, MUS 267/467; Chamber Choir, MUS 268/468; Symphonic Winds MUS 269/469; Orchestra, MUS 277/477; Marching and Concert Band, MUS 287/487 (fall quarter only); Symphonic Band, MUS 288/488. Enrollment in either Women's Choir (MUS 211/411) or Men's Choir (MUS 228/428) can be substituted for enrollment in a choral large ensemble for a maximum of three quarters.

(NOTE: All ensemble courses have 200-level and 400-level numbers. The 200-level numbers are freshmen and sophomores, the 400-level numbers are used by juniors and seniors.)

#### Chamber Ensembles Credits: (9-15)

#### Upper-division Music Theory - Credits: 6

- MUS 343 - Counterpoint I **Credits:** (3)
- MUS 422 - Orchestration **Credits:** (3)

#### Additional Courses - Credits: 21

- Music Electives - **Credits:** (7)
- MUS 292 - Accompanying Practicum **Credits:** (1-3) (Must be taken for 4 credits)
- MUS 425A - Pedagogy (Studio Piano) **Credits:** (3)
- MUS 426A - Literature (Studio Piano) **Credits:** (3)
- MUS 492 - Accompanying Practicum **Credits:** (1-3) (Must be taken for 4 credits)

#### Total Credits: 118

#### College and Department Information

## Music Performance Major BM, Percussion/Wind/String Specialization

Student advancement through performance levels (164-464) is determined by jury examination.

### Program Requirements

All music majors must earn a grade of C or higher in each music course required for their respective degree.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- MUS1 (Music Theory) demonstrate music theory knowledge and aural skills sufficient to analyze and interpret a substantial body of music literature.
- MUS2 (Music History, Culture, and Literature) demonstrate historical and contemporary knowledge of genres, styles, artists, and works within Western and non-Western music, and the research skills to enhance that knowledge.
- MUS3 (Individual Applied Music) interpret, prepare, and perform a variety of musical works on a primary instrument or voice sufficient to the requirements of their major.
- MUS4 (Collaborative Applied Music) interpret, prepare, and perform a variety of musical works through collaboration in musical ensembles sufficient to the requirements of their major.
- MUS5 (Specialized Music Study) exhibit competencies specific to their major, including advanced performance skills, pedagogical skills, composition and improvisation skills, and/or the competencies for teacher certification.
- MUS6 (Musical Disposition) engage as active participants in the musical community of the university and region through event attendance, performance, teaching, creative and/or service activity.

### BM Performance Core Requirements

#### Music Theory - Credits: 21

Students must pass an online fundamental exam with 75% (\$10 fee) or take and pass (75%) an online fundamental course (\$99 fee) to enroll in MUS144. Students must take a placement exam to waive any of the following courses. Concurrent enrollment of the following is required: (MUS 144, 144A, 152A), (MUS 145, 145A, 153A), and (MUS 146, 146A, 154A). A grade of C or better is required in both the written and aural components to continue in the theory sequence.

- MUS 144 - Theory 1 **Credits: (3)**
- MUS 144A - Aural Skills 1 **Credits: (1)**
- MUS 145 - Theory 2 **Credits: (3)**

- MUS 145A - Aural Skills 2 **Credits: (1)**
- MUS 146 - Theory 3 **Credits: (3)**
- MUS 146A - Aural Skills 3 **Credits: (1)**
- MUS 244 - Theory 4 **Credits: (3)**
- MUS 245 - Theory 5 **Credits: (3)**
- MUS 246 - Theory 6 **Credits: (3)**

#### Class Piano - Credits: 3

A waiver of this requirement can be obtained by demonstrating sufficient keyboard skills to designated piano faculty members.

- MUS 152A - Class Piano I **Credits: (1)**
- MUS 153A - Class Piano II **Credits: (1)**
- MUS 154A - Class Piano III **Credits: (1)**

#### Applied Music - Credits: 29

- Individual Instruction - (MUS 164, 264, and 364) **Credits: (18)**
- MUS 300 - Recital Performance **Credits: (1)** (Must be concurrently enrolled in 364)
- MUS 400 - Recital Performance **Credits: (1)** (Must be concurrently enrolled in 464)
- MUS 464 - Major Applied Area (Individual Instruction) **Credits: (3)** (Must be taken for 9 credits)

#### Upper-division Music Theory - Credits: 3

- MUS 340 - Form and Analysis **Credits: (3)**

#### Conducting - Credits: 6

- MUS 341 - Conducting I **Credits: (3)**
- MUS 342 - Conducting II **Credits: (3)**

#### Music History - Credits: 11

- MUS 359 - Survey of Music in Cross-cultural Perspectives **Credits: (2)**
- MUS 372 - Music History 1 **Credits: (3)**
- MUS 373 - Music History 2 **Credits: (3)**
- MUS 374 - Music History 3 **Credits: (3)**

#### Total Core Credits: 73

#### Required Courses

#### Upper-division Music Theory - Credits: 3

- MUS 422 - Orchestration **Credits: (3)**

#### Additional Courses Credits: 12

- Music Electives - **Credits: (6)**

- MUS 425 - Pedagogy (Studio) **Credits:** (3) C, D, E, or G, Pedagogy (Studio)  
(G) In appropriate performance area: C=string, D=woodwinds, E=brass, G=percussion.
- MUS 426 - Literature (Studio) **Credits:** (3) C, D, E, or G, Literature (Studio)  
In appropriate performance area: C=string, D=woodwinds, E=brass, G=percussion.

Ensembles - Credits: 30

- Large Ensemble Credits: (20-24) Only the following are designated as large ensembles: Wind Ensemble, MUS 266/466; Choir, MUS 267/467; Chamber Choir, MUS 268/468; Symphonic Winds MUS 269/469; Orchestra, MUS 277/477; Marching and Concert Band, MUS 287/487 (fall quarter only); Symphonic Band, MUS 288/488. Enrollment in either Women's Choir (MUS 211/411) or Men's Choir (MUS 228/428) can be substituted for enrollment in a choral large ensemble for a maximum of three quarters.

Chamber Ensemble Credits: (6-10)

Total Credits: 118

College and Department Information

Music Department  
College of Arts and Humanities

## Music Performance Major BM, Vocal Specialization

Student advancement through performance levels (164-464) is determined by jury examination. Prior to completion of the bachelor's degree, vocal performance majors must:

1. Demonstrate the ability to translate musical texts in French and German
2. Demonstrate competency in French or German equal to the successful completion of French 153 or German 153.

### Program Requirements

All music majors must earn a grade of C or higher in each music course required for their respective degree.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- MUS1 (Music Theory) demonstrate music theory knowledge and aural skills sufficient to analyze and interpret a substantial body of music literature.
- MUS2 (Music History, Culture, and Literature) demonstrate historical and contemporary knowledge of genres, styles, artists, and works within Western and non-Western music, and the research skills to enhance that knowledge.
- MUS3 (Individual Applied Music) interpret, prepare, and perform a variety of musical works on a primary

instrument or voice sufficient to the requirements of their major.

- MUS4 (Collaborative Applied Music) interpret, prepare, and perform a variety of musical works through collaboration in musical ensembles sufficient to the requirements of their major.
- MUS5 (Specialized Music Study) exhibit competencies specific to their major, including advanced performance skills, pedagogical skills, composition and improvisation skills, and/or the competencies for teacher certification.
- MUS6 (Musical Disposition) engage as active participants in the musical community of the university and region through event attendance, performance, teaching, creative and/or service activity.

BM Performance Core Requirements

Music Theory - Credits: 21

Students must pass an online fundamental exam with 75% (\$10 fee) or take and pass (75%) an online fundamental course (\$99 fee) to enroll in MUS144. Students must take a placement exam to waive any of the following courses. Concurrent enrollment of the following is required: (MUS 144, 144A, 152A), (MUS 145, 145A, 153A), and (MUS 146, 146A, 154A). A grade of C or better is required in both the written and aural components to continue in the theory sequence.

- MUS 144 - Theory 1 **Credits:** (3)
- MUS 144A - Aural Skills 1 **Credits:** (1)
- MUS 145 - Theory 2 **Credits:** (3)
- MUS 145A - Aural Skills 2 **Credits:** (1)
- MUS 146 - Theory 3 **Credits:** (3)
- MUS 146A - Aural Skills 3 **Credits:** (1)
- MUS 244 - Theory 4 **Credits:** (3)
- MUS 245 - Theory 5 **Credits:** (3)
- MUS 246 - Theory 6 **Credits:** (3)

Class Piano - Credits: 3

A waiver of this requirement can be obtained by demonstrating sufficient keyboard skills to designated piano faculty members.

- MUS 152A - Class Piano I **Credits:** (1)
- MUS 153A - Class Piano II **Credits:** (1)
- MUS 154A - Class Piano III **Credits:** (1)

Applied Music - Credits: 29

- Individual Instruction - (MUS 164, 264, and 364) **Credits:** (18)
- MUS 300 - Recital Performance **Credits:** (1) (Must be concurrently enrolled in 364)
- MUS 400 - Recital Performance **Credits:** (1) (Must be concurrently enrolled in 464)
- MUS 464 - Major Applied Area (Individual Instruction) **Credits:** (3) (Must be taken for 9 credits)

Upper-division Music Theory - Credits: 3

- MUS 340 - Form and Analysis **Credits:** (3)

Conducting - Credits: 6

- MUS 341 - Conducting I **Credits:** (3)
- MUS 342 - Conducting II **Credits:** (3)

Music History - Credits: 11

- MUS 359 - Survey of Music in Cross-cultural Perspectives **Credits:** (2)
- MUS 372 - Music History 1 **Credits:** (3)
- MUS 373 - Music History 2 **Credits:** (3)
- MUS 374 - Music History 3 **Credits:** (3)

Total Core Credits: 73

Additional Required Courses

Ensemble - Credits: 30

- Large Ensemble Credits: (20-24) Only the following are designated as large ensembles: Wind Ensemble, MUS 266/466; Choir, MUS 267/467; Chamber Choir, MUS 268/468; Symphonic Winds MUS 269/469; Orchestra, MUS 277/477; Marching and Concert Band, MUS 287/487 (fall quarter only); Symphonic Band, MUS 288/488. Enrollment in either Women's Choir (MUS 211/411) or Men's Choir (MUS 228/428) can be substituted for enrollment in a choral large ensemble for a maximum of three quarters.
- Chamber Ensemble Credits: (6-10)

Additional Courses - Credits: 13-17

- Music electives - **Credits:** (1-2)
- MUS 240 - Diction in Singers I (Intro to IPA, Italian, Latin, English) **Credits:** (2)
- MUS 241 - Diction for Singers 2 (Advanced IPA and German) **Credits:** (2)
- MUS 242 - Diction for Singers 3 (Advanced IPA and French) **Credits:** (2)
- MUS 425B - Pedagogy, Vocal **Credits:** (3)
- MUS 426 - Literature (Studio) **Credits:** (3)
- MUS 462 - Opera Production **Credits:** (1-3)

Total Credits: 116-120

College and Department Information

Music Department  
College of Arts and Humanities

## Music Minor

Required Courses

Ensembles - Credits: 6

- Large ensemble or chamber ensemble - **Credits:** (6)

Applied Music - Credits: 3

- Individual Instruction - (MUS 164 or MUS 264) - **Credits:** (3)

Class Piano - Credits: 3

A waiver of this requirement can be obtained by demonstrating sufficient keyboard skills to designated piano faculty members.

- MUS 152A - Class Piano I **Credits:** (1)
- MUS 153A - Class Piano II **Credits:** (1)
- MUS 154A - Class Piano III **Credits:** (1)

Music Theory - Credits: 12

Students must pass an online fundamental exam with 75% (\$10 fee) or take and pass (75%) an online fundamental course (\$99 fee) to enroll in MUS144. Students must take a placement exam to waive any of the following courses. Concurrent enrollment of the following is required: (MUS 144, 144A, 152A), (MUS 145, 145A, 153A), and (MUS 146, 146A, 154A). A grade of C or higher is required in both the written and aural components to continue in the theory sequence.

- MUS 144 - Theory 1 **Credits:** (3)
- MUS 144A - Aural Skills 1 **Credits:** (1)
- MUS 145 - Theory 2 **Credits:** (3)
- MUS 145A - Aural Skills 2 **Credits:** (1)
- MUS 146 - Theory 3 **Credits:** (3)
- MUS 146A - Aural Skills 3 **Credits:** (1)

Additional Required Courses - Credits: 2-3

- MUS 359 - Survey of Music in Cross-cultural Perspectives **Credits:** (2)
- **OR** MUS 379 - Philosophy of Music (On reserve as of 9/16/15) **Credits:** (3)

Music Electives - Credits: 6

Total Credits: 32-33

College and Department Information

Music Department  
College of Arts and Humanities

## Non-profit Organization Management Minor (MUS)

(See catalog under communication department for details)



The minor in non-profit organization management is an interdisciplinary minor designed to provide an understanding of the organization, financing and management issues in non-profit organizations. It is designed to complement majors in artistic, advocacy and educational endeavors. The minor provides practical, hands-on skills as well as discussion of the issues facing non-profit organizations.

Total Credits: 30

College and Department Information

Music Department  
College of Arts and Humanities

## Jazz Studies Certificate

The jazz studies certificate is designed to provide a secondary focus to the existing music degrees with emphasis in jazz performance, jazz improvisation, jazz harmony, jazz composition and arranging, and jazz history or jazz pedagogy. Students in the certificate program will usually be with instrumentalists (drum set, bass, vibes, piano, guitar, saxophone, trombone, and trumpet) or vocalists and will participate in both large and small jazz ensembles, and other coursework as outlined below.

Required Courses

- MUS 210 - Vocal Jazz Choir **Credits:** (1) (These two courses must be taken for a total of 6 credits)
- **AND** MUS 410 - Vocal Jazz Choir **Credits:** (1)  
**OR**
- MUS 232 - Big Band **Credits:** (1) (These two courses must be taken for a total of 6 credits)
- **AND** MUS 432 - Big Band **Credits:** (1)
- MUS 218 - Jazz Combo **Credits:** (1) (These two courses must be taken for a total of 6 credits)
- **AND** MUS 418 - Jazz Combo **Credits:** (1)
- MUS 255 - Jazz Harmony and Keyboard **Credits:** (1)

Improvisation Sequence - Credits: 3

- MUS 353 - Jazz Improvisation I **Credits:** (1)
- MUS 354 - Jazz Improvisation II **Credits:** (1)
- MUS 355 - Jazz Improvisation III **Credits:** (1)

Choose one from the following - Credits: 3

- MUS 357 - Jazz Composition and Arranging **Credits:** (3)
- MUS 485 - Choral Arranging **Credits:** (3)
- MUS 486 - Jazz Band Arranging **Credits:** (3)

Choose one from the following - Credits: 3

- MUS 356 - Jazz Styles **Credits:** (3)
- MUS 424 - Jazz Pedagogy **Credits:** (3)

Total Credits: 22

College and Department Information

Music Department  
College of Arts and Humanities

## Philosophy and Religious Studies Department

College of Arts and Humanities  
Ellensburg  
Language and Literature Bldg., room 337  
Mail Stop 7555  
509-963-1818  
[www.cwu.edu/philosophy](http://www.cwu.edu/philosophy)

See website for how these programs may be used for educational and career purposes.

### Faculty and Staff

#### Chair

Jeffrey Dippmann, PhD

#### Professors

Matthew Altman, PhD, Kant, ethics and applied ethics, 19th century philosophy, social and political philosophy, philosophy of law, philosophy of art  
Gary Bartlett, PhD, philosophy of mind, philosophy of science, cognitive science, epistemology  
Cynthia Coe, PhD, 20th century continental philosophy, feminist philosophy, 19th century philosophy, critical race theory  
Jeffrey Dippmann, PhD, world religions, Chinese Buddhism, Daoism

#### Associate Professor

Michael Goerger, PhD, ethical theory, ancient Greco-Roman philosophy, applied ethics, social and political philosophy  
Lily Vuong, PhD, early Judaism, early Christianity, New Testament apocrypha, feminist theory

#### Senior Lecturer

Karen Turcotte, MA, philosophy and world religions, women/gender and religion, philosophy of humor

#### Lecturers

Clayton Bohnet, PhD, continental philosophy, critical thinking, philosophy of art  
Michael Hundley, PhD, world religions, ancient religious, Hebrew Bible  
Lauren Nuckols, PhD, ethics, pragmatism, environmental philosophy  
David Schwan, PhD, critical thinking, philosophy of emotion, moral psychology

## Staff

Lynn Thompson, secretary senior

## Department Information

The original meaning of the word philosophy is "the love of wisdom." Philosophy therefore represents an ongoing process of critical and speculative inquiry into questions representing people's deepest concerns, such as the meaning of existence, the nature of reality, and the grounds of human conduct. Religious studies is a path of inquiry into the nature of religion, its pervasive role in human life, and its contribution to understanding human existence. The program is comparative in nature but complemented by a philosophical component focused on religion and unique electives designed to accommodate student interests.

Students may choose either a 50- or 60-credit major. In order to graduate, a student who completes the 50-credit major must also have a minor or second major in another discipline. A student who completes the 60-credit major is not required to have a minor or second major.

## Maximum Credit Overlap

No more than 10 credits of coursework counting toward any of the department's major or minor programs may also be counted toward one of the department's other programs.

## Departmental Honors in Philosophy and Religious Studies

The honors program in Philosophy and Religious Studies recognizes the exceptional scholarship of qualified students in either the Philosophy or the Religious Studies major. To qualify, students must have completed at least 25 credits in their major and have a minimum GPA of 3.0 overall and 3.5 in their major coursework.

In addition to their normal coursework, students seeking departmental honors must take one additional upper division course in their program, complete a superior thesis (PHIL 497 or RELS 497: Honors Thesis) to be evaluated by a second reader from the departmental faculty, and make an oral presentation. Students graduating with honors will have that accomplishment recorded on their transcripts.

## Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

## Course Offerings

Frequency of course offering information can be found at the department website: [www.cwu.edu/philosophy](http://www.cwu.edu/philosophy) or by contacting the department directly.

# Philosophy Major, BA (50 or 60 credits)

## Philosophy Major, BA (50 or 60 credits)

Students may choose either a 50-credit major or a 60-credit major. In order to graduate, a student who completes the 50-credit major must also have a minor or second major in another discipline. A student who completes the 60-credit major is not required to have a minor or second major.

## Departmental Honors in Philosophy

The honors program in Philosophy recognizes the exceptional scholarship of qualified students in the Philosophy major. To qualify, students must have completed at least 25 credits in their major and have a minimum GPA of 3.0 overall and 3.5 in their major coursework.

In addition to their normal coursework, students seeking departmental honors must take one additional upper division course in their program, complete a superior thesis (PHIL 497: Honors Thesis) to be evaluated by a second reader from the departmental faculty, and make an oral presentation. Students graduating with honors will have that accomplishment recorded on their transcripts.

## Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate an understanding of the major ideas within philosophical/religious traditions.
- Demonstrate the ability to advance and support a thesis, as well as analyze and critically evaluate the beliefs and practices of others.
- Think pluralistically and flexibly, consider new ideas and critically reflect on them, and embrace perplexity.
- Examine multiple approaches to ethics and recognize their application - for example, by examining the implications of those approaches for specific moral problems, comparing different positions, or identifying their historical and cultural context.

Required Courses Credits: 30

### Select either:

- PHIL 150 - Critical Thinking **Credits: (5)**
- **OR** PHIL 307 - Introduction to Formal Logic **Credits: (5)**
- PHIL 352 - Greek and Roman Philosophy **Credits: (5)**
- PHIL 353 - Early Modern Philosophy **Credits: (5)**
- PHIL 354 - Kant and Nineteenth-Century Philosophy **Credits: (5)**
- PHIL 488 - Junior Seminar **Credits: (5)**
- PHIL 494 - Undergraduate Thesis Preparation **Credits: (2)**

### Select either:

- PHIL 495 - Undergraduate Thesis **Credits: (3)**
- **OR** PHIL 497 - Honors Thesis **Credits: (3)**

Select one course from the following value-based courses - Credits: 5

- PHIL 302 - Ethical Theory **Credits: (5)**
- PHIL 304 - Business Ethics **Credits: (5)**
- PHIL 306 - Environmental Ethics **Credits: (5)**
- PHIL 308 - Medical Ethics **Credits: (5)**
- PHIL 347 - Philosophy of Law **Credits: (5)**
- PHIL 348 - Social and Political Philosophy **Credits: (5)**

- PHIL 403 - Philosophy of Art **Credits: (5)**
- PHIL 465 - Advanced Ethics **Credits: (5)**

Select one course from the following contemporary analytic and continental philosophy courses - Credits: 5

- PHIL 358 - Existentialism **Credits: (5)**
- PHIL 359 - Contemporary European Philosophy **Credits: (5)**
- PHIL 361 - Theory of Knowledge **Credits: (5)**
- PHIL 364 - Philosophy of Mind **Credits: (5)**
- PHIL 380 - Philosophy of Science **Credits: (5)**

Select one course from the following diversity courses - Credits: 5

- PHIL 325 - Women and Philosophy **Credits: (5)**
- PHIL 345 - Chinese Philosophy **Credits: (5)**
- PHIL 357 - Philosophy of Race **Credits: (5)**
- RELS 403 - Buddhist Thought and Practice **Credits: (5)**

Department-approved Electives Credits: 5-15

Any PHIL courses (at most 5 credits at the 100- or 200-level).

Total Credits: 50 or 60

College and Department Information

Philosophy and Religious Studies Department  
College of Arts and Humanities

## Religious Studies Major, BA (50 or 60 credits)

The Religious Studies major is a path of inquiry into the nature of religion, its pervasive role in human life, and its contribution to understanding human existence. The program is comparative in nature but complemented by a philosophical component focused on religion and unique electives designed to accommodate student interests. Students may choose either a 50- or 60-credit major. In order to graduate, a student who completes the 50-credit major must also have a minor or second major in another discipline. A student who completes the 60-credit major is not required to have a minor or second major.

### Departmental Honors in Philosophy and Religious Studies

The honors program in Philosophy and Religious Studies recognizes the exceptional scholarship of qualified students in either the Philosophy or Religious Studies major. To qualify, students must have completed at least 25 credits in their major and have a minimum GPA of 3.0 overall and 3.5 in their major coursework.

In addition to their normal coursework, students seeking departmental honors must take one additional upper division course in their program, complete a superior thesis (RELS 497:

Honors Thesis) to be evaluated by a second reader from the departmental faculty, and make an oral presentation. Students graduating with honors will have that accomplishment recorded on their transcripts.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate an understanding of the major ideas within philosophical/religious traditions.
- Demonstrate the ability to advance and support a thesis, as well as analyze and critically evaluate the beliefs and practices of others.
- Think pluralistically and flexibly, consider new ideas and critically reflect on them, and embrace perplexity.
- Examine multiple approaches to ethics and recognize their application - for example, by examining the implications of those approaches for specific moral problems, comparing different positions, or identifying their historical and cultural context.

Required Courses Credits: 35

- RELS 101 - World Religions **Credits: (5)**
- RELS 102 - Food, Sex, and the Other: Everyday Religion and Morality **Credits: (5)**
- **OR** RELS 103 - World Mythologies **Credits: (5)**
- PHIL 352 - Greek and Roman Philosophy **Credits: (5)**
- **OR** RELS 403 - Buddhist Thought and Practice **Credits: (5)**
- RELS 376 - Contemporary Religious Thought **Credits: (5)**
- RELS 494 - Undergraduate Thesis Preparation **Credits: (2)**
- RELS 495 - Undergraduate Thesis **Credits: (3)**
- **OR** RELS 497 - Honors Thesis **Credits: (3)**

### Select One - Eastern Tradition

- PHIL 345 - Chinese Philosophy **Credits: (5)**
- RELS 351 - Religions of China and Japan **Credits: (5)**
- RELS 352 - Religions of India **Credits: (5)**
- RELS 401 - The Daoist Tradition **Credits: (5)**

### Select One - Western Tradition

- RELS 353 - Judaism **Credits: (5)**
- RELS 354 - Christianity **Credits: (5)**
- RELS 355 - Islam **Credits: (5)**
- RELS 413 - Varieties of Early Christianity **Credits: (5)**

Department-approved Electives Credits: 15-25

Any upper-division RELS courses. Select upper-division PHIL courses or upper-division courses related to religion in other disciplines by approval. Small majors (50 credits) require 15 elective credits; large majors (60) require 25 elective credits.

Total Credits: 50 or 60

## College and Department Information

Philosophy and Religious Studies Department  
College of Arts and Humanities

# Ethics Minor

A minor in ethics enables students to develop a strong sense of moral responsibility and critical skills for moral reflection. It consists of required courses in global ethics or current ethical issues, coursework in philosophical ethics, as well as interdisciplinary electives. It also includes a capstone project to help students develop their ethical ability and awareness through service learning, a research or creative project. Such a minor can be combined with, and serve as enrichment to, any major program. As a result of completing the minor, students will be able to:

- Identify and implement major moral theories from diverse traditions
- Demonstrate an understanding of the cultural and historical embeddedness of ethical theories
- Evaluate moral issues from a plurality of perspectives
- Develop a capacity for critical moral reasoning
- Analyze and evaluate the effectiveness of given moral theories in dealing with contemporary ethical problems
- Learn to account for one's conduct within a larger community
- Develop a sensitivity to the central moral issues in a given discipline and the capacity to act in a morally responsible manner

Required Courses Credits: (7)

- PHIL 104 - Moral Controversies **Credits:** (5)
- PHIL 485 - Capstone Project **Credits:** (2)

Courses in Philosophical Ethics Credits: (10)

Choose two courses from the following:

- PHIL 302 - Ethical Theory **Credits:** (5)
- PHIL 304 - Business Ethics **Credits:** (5)
- PHIL 306 - Environmental Ethics **Credits:** (5)
- PHIL 308 - Medical Ethics **Credits:** (5)
- PHIL 465 - Advanced Ethics **Credits:** (5)

Electives Credits: (8-10)

No more than 5 credits can be taken from one discipline.

- COM 202 - The First Amendment: Rights and Responsibilities **Credits:** (5)
- COM 333 - Communication Ethics **Credits:** (4) (for COM majors only)
- IT 301 - Information Technology Security, Privacy, and Ethics **Credits:** (4)

- LAJ 401 - Ethics, Diversity, and Conflict in Criminal Justice **Credits:** (4) (For LAJ majors only)
- MSL 302 - Leadership and Ethics **Credits:** (3) (For military science majors only)
- PHIL 325 - Women and Philosophy **Credits:** (5)
- PHIL 345 - Chinese Philosophy **Credits:** (5)
- PHIL 357 - Philosophy of Race **Credits:** (5)
- PHIL 309 - Ethics through Film (Put on reserve 9/16/17) **Credits:** (5)
- POSC 452 - The Constitution and Human Rights **Credits:** (5)
- POSC 475 - International Human Rights **Credits:** (5)
- RELS 353 - Judaism **Credits:** (5)
- RELS 354 - Christianity **Credits:** (5)
- RELS 355 - Islam **Credits:** (5)
- RELS 376 - Contemporary Religious Thought **Credits:** (5)
- RELS 401 - The Daoist Tradition **Credits:** (5)
- RELS 403 - Buddhist Thought and Practice **Credits:** (5)
- SOC 320 - Death and Dying **Credits:** (5)
- SOC 354 - Minority Experience **Credits:** (5)  
OR other ethics-related courses as approved by minor advisor.  
Special topics courses, cooperative education credit, and independent study courses may also count towards elective credit.

Total Credits: 25-27

## College and Department Information

Philosophy and Religious Studies Department  
College of Arts and Humanities

# Philosophy Minor

Required Courses

- Any 100- or 200-level PHIL Course **Credits:** (5)  
**Select either:**
- PHIL 150 - Critical Thinking **Credits:** (5)
- **OR** PHIL 307 - Introduction to Formal Logic **Credits:** (5)

Department-Approved Electives Credits: 10-18

Select from PHIL courses; at least 10 credits at 300 level or above.

Total Credits: 20-28

## College and Department Information

Philosophy and Religious Studies Department  
College of Arts and Humanities

## Religious Studies Minor

### Required Courses

- RELS 101 - World Religions **Credits:** (5)

### Select from the following - Credits: 5

- PHIL 305 - Philosophy of Religion **Credits:** (5)
- RELS 102 - Food, Sex, and the Other: Everyday Religion and Morality **Credits:** (5)

### Select from the following - Credits: 5

- RELS 351 - Religions of China and Japan **Credits:** (5)
- RELS 352 - Religions of India **Credits:** (5)
- RELS 353 - Judaism **Credits:** (5)
- RELS 354 - Christianity **Credits:** (5)
- RELS 355 - Islam **Credits:** (5)

### Select Either - Credits: 5

- RELS Upper Division Electives  
**OR**  
PHIL courses cannot be used here if used to fulfill requirements for the major or minor in Philosophy.
- PHIL 305 - Philosophy of Religion **Credits:** (5)
- PHIL 378 - Philosophy of Love **Credits:** (5)

Total Credits: 20

### College and Department Information

Philosophy and Religious Studies Department  
College of Arts and Humanities

## Physical Education, School Health, and Movement Studies Department

College of Education and Professional Studies  
School of Education  
Ellensburg  
Dorothy Purser Hall, room 101  
Mail Stop 7572  
509-963-1911  
Fax: 509-963-1848  
[www.cwu.edu/peshms](http://www.cwu.edu/peshms)

See website for how these programs may be used for educational and career purposes.

### Faculty and Staff Chair

Heidi Henschel Pellett, EdD

### Professors

Heidi Henschel Pellett, EdD, physical education, pedagogy  
Kirk Mathias, EdD, physical education, pedagogy  
Rob Perkins, EdD, recreation, sport management

### Associate Professors

Mark Perez, PhD, school health, pedagogy  
P. Stefan Ward, PhD, physical education, pedagogy  
Rory Weishaar, EdD, athletic administration  
Therese Young, MA, dance

### Assistant Professors

Judy Beard, PhD, school health, pedagogy  
Brian McGladrey, PhD, CSCS, athletic administration  
Gabrielle McNeillie, MFA, dance  
Tanjian Liang, PhD, physical education, pedagogy  
David Rolfe, EdD, recreation, sport management

### Lecturer

Edward Callahan Jr., MS, RN, NDTR, CSCS, activity program

### Staff

Marni Fox, program support supervisor I  
Rafael Gomez-Vilchis, sport equipment manager  
Debbie Nethery, pool manager

### Department Information

The mission of the Department of Physical Education, School Health, and Movement Studies is to promote health and active lifestyles. The vision of the Department is to create highly recognized and respected academic programs in which students gain the knowledge, skills, and dispositions to be successful in their profession. This mission and vision and the following core values help to guide program decisions within the department:

- Professional environment based on ethical behavior, respect, and integrity
- Quality of life through health promotion, healthy communities, and active lifestyles
- Student focused learning environment based on respect, relevance, and rigor
- Social justice and diversity

Proudly, graduates of each major program in the department are highly qualified to enter careers in physical education and school health or public health.

### Departmental Programs

Physical Education and School Health (PESH) Major  
Physical Education - Coaching Minor  
Physical Education - Dance Minor  
Physical Education - Dance: Teaching Minor  
Physical Education - Activity Program

### Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### Course Offerings

Frequency of course offering information can be found at the

department website: [www.cwu.edu/peshms](http://www.cwu.edu/peshms) or by contacting the department directly.

## Dance Major, BA

Students may apply to the major during fall, winter, or spring term. Students planning to enter this major will experience a comprehensive dance education with opportunities for cultural enrichment, choreography, performance and teaching in a variety of genres. Students can pair this major with a variety of minors to enhance their marketability. The following additional requirements also apply.

### Admission Requirements

- A number of classes in the major are offered on a rotating basis every other year. Consequently, students must work with their advisor in planning their schedule of course work in order to progress to completion of the major in 4 years.
- All students applying to the major must successfully complete 6 credits in any of the required core courses, including one technique class, before admission to the Dance major.
- All students upon admittance to the program will attend a technique placement class to determine their class level.

For more information visit our Department web site: [www.cwu.edu/dance/](http://www.cwu.edu/dance/)

### Graduation Requirements

Completion of Major requirements with a GPA 3.0 or higher.

All students completing this program are required to demonstrate knowledge, skills, and professional dispositions through a Capstone project before completion of the major.

Students must receive a letter grade of C or higher for all courses in the major and students who receive less than a C grade in any class that is a prerequisite for others will not be permitted to continue in the major.

### Program Requirements

All Dance major candidates must have a minimum of 3 credits in Dance Performance in order to complete the major.

All Dance major candidates must attend one professional conference in their field of study while pursuing the major.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate technical competency in a dance genre.
- Define the concepts and academic language of dance.
- Demonstrate dispositions for successful employment in the field of Dance.
- Create an online portfolio as a Capstone project demonstrating their expertise in teaching, choreography and performance.

Required Courses Credits: 61

- DNCE 101 - Modern Technique I **Credits:** (2)
- DNCE 102 - Modern Technique I **Credits:** (2)
- DNCE 103 - Modern Technique I **Credits:** (2)
- DNCE 104 - Ballet Technique I **Credits:** (2)
- DNCE 105 - Ballet Technique I **Credits:** (2)
- DNCE 106 - Ballet Technique I **Credits:** (2)
- DNCE 112 - Dance Performance **Credits:** (1) (Must be taken for 3 credits.)
- DNCE 161 - Cultural History of Dance **Credits:** (4)
- DNCE 201 - Modern Technique II **Credits:** (2)
- DNCE 202 - Modern Technique II **Credits:** (2)
- DNCE 203 - Modern Technique II **Credits:** (2)
- DNCE 204 - Ballet Technique II **Credits:** (2)
- DNCE 205 - Ballet Technique II **Credits:** (2)
- DNCE 206 - Ballet Technique II **Credits:** (2)
- DNCE 212 - Dance Performance **Credits:** (2)
- DNCE 300 - Dance Composition **Credits:** (3)
- DNCE 311 - Music for Dance - Rhythms and Resources **Credits:** (3)
- DNCE 315 - Teaching Methods: Modern and Ballet Dance **Credits:** (4)
- DNCE 360 - Dance Injury Prevention **Credits:** (3)
- DNCE 385 - Principles of Functional Alignment for Dance **Credits:** (4)
- DNCE 401 - Choreography **Credits:** (4)
- DNCE 402 - Dance Production **Credits:** (4)
- DNCE 420 - Capstone Project **Credits:** (3)

Department-Approved Electives Credits: 8

- DNCE 121 - Tap Dance I **Credits:** (1)
- DNCE 122 - Tap Dance II **Credits:** (1)
- DNCE 130 - American Style Ballroom Dance I **Credits:** (1)
- DNCE 131 - American Style Ballroom Dance II **Credits:** (1)
- DNCE 132 - American Style Ballroom Dance III **Credits:** (1)
- DNCE 133 - International Standard Ballroom Dance I **Credits:** (1)
- DNCE 134 - International Standard Ballroom Dance II **Credits:** (1)
- DNCE 135 - International Standard Ballroom Dance III **Credits:** (1)
- DNCE 136 - International Latin Ballroom Dance I **Credits:** (1)
- DNCE 137 - International Latin Ballroom Dance II **Credits:** (1)
- DNCE 138 - International Latin Ballroom Dance III **Credits:** (1)
- DNCE 141 - Jazz Dance I **Credits:** (1)
- DNCE 142 - Jazz Dance II **Credits:** (1)
- DNCE 143 - Jazz Dance III **Credits:** (1)
- DNCE 155 - Pointe and Variations **Credits:** (1)
- DNCE 156 - Partnering **Credits:** (1)
- DNCE 304 - Ballet Technique III **Credits:** (2)
- DNCE 305 - Ballet Technique III **Credits:** (2)
- DNCE 306 - Ballet Technique III **Credits:** (2)

- DNCE 309 - Teaching Methods: Recreational Dance **Credits:** (3)
- DNCE 314 - Dance for Children **Credits:** (3)
- DNCE 495 - Practicum **Credits:** (1-4)
- PEF 153 - Mat Pilates **Credits:** (1)

Total Credits: 69

#### College and Department Information

Physical Education, School Health, and Movement Studies  
Department  
College of Education and Professional Studies

#### Program Outcomes

Visit program outcomes to find out what you can expect to know and do after successful completion of this program.

## Physical Education and School Health Major, BS

#### Program Director

Stefan Ward, PhD, physical education, pedagogy

#### Program Advisors

Judy Beard, PhD, school health, pedagogy  
Heidi Henschel Pellett, EdD, physical education, pedagogy  
Tanjian Liang, PhD, physical education, pedagogy  
Kirk Mathias, EdD, physical education, pedagogy  
Mark Perez, EdD, health education, pedagogy  
Stefan Ward, PhD, physical education, pedagogy

#### Admission Description and Requirements

This major is designed for students interested in teaching physical education and school health education for grades K-12. Students will receive experiences in physical education and health education content, pedagogy, movement applications, and practicums in the major. Students taking this major for teaching are required to apply to the Teacher Certification Program and complete the Professional Education Program requirements offered through the Department of Curriculum, Supervision, and Educational Leadership. The following additional requirements also apply:

- Classes in this major are organized over six consecutive quarters and must be taken in sequence.
- Students must receive a letter grade of "C" or higher for all courses in the major. Students who receive less than a "C" grade in any class that is a prerequisite for others will not be permitted to continue in the major until they have done so.
- Students must have a 2.85 GPA in their last 45 credits to be fully admitted into the PESH program.
- All students completing this program are required to demonstrate knowledge, skills, and dispositions in their classes portfolio prior to student teaching.
- Students may also graduate with a non-teaching BS degree in physical education and school health.
- Professional dress requirements apply to many classes in this major and in placements in school settings.

Students must comply with these requirements to participate in the program.

See the Department of Physical Education, School Health, and Movement Studies website for more information:

<http://www.cwu.edu/peshms/>

For the major application procedure, contact the Physical Education and School Health Program Coordinator.

#### Graduation Requirements

Students must have a 2.85 cumulative GPA for entry into the PESH major. Students must earn a grade of C or higher in each one of their required PESH classes.

#### Program Requirements

Students must have a 2.85 cumulative GPA for entry into the PESH major. Students must earn a grade of C or higher in each one of their required PESH classes.

#### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate best practices of effective teaching in physical education and school health.
- Create an interdisciplinary curriculum unit plan that is aligned with the state and national standards for physical education and school health.
- Possess an organized comprehensive health portfolio or file system that will contain health content information, resource links, and lesson ideas critical to teaching health in the elementary.
- Demonstrate knowledge of a variety of content and progressions in physical education and school health.
- Pass the WEST E proficiency test.
- Pass the cut off score of the TPA.
- Demonstrate professional dispositions in a practicum learning experience.
- Demonstrate using appropriate writing elements in a variety of assignments.

#### Required Courses

- EXSC 350 - Gross Anatomy **Credits:** (3)
- EXSC 350LAB - Gross Anatomy Laboratory **Credits:** (2)
- HED 210 - Drugs and Health **Credits:** (3)
- HED 387 - Principles of Fitness and Stress Management **Credits:** (3)
- HED 422 - Methods for Health Promotion **Credits:** (4)
- PESH 431 - Principles of Sexual Health Education **Credits:** (3)
- NUTR 101 - Introduction to Human Nutrition **Credits:** (5)
- DNCE 309 - Teaching Methods: Recreational Dance **Credits:** (3)
- PESH 280 - Foundations of Physical Education and School Health **Credits:** (4)
- PESH 300 - Comprehensive School Health Education **Credits:** (3)

- PESH 326 - Human Diseases **Credits:** (3)
- PESH 336 - Practicum 1 **Credits:** (3)
- PESH 341 - Characteristics of Effective Physical Education Teaching **Credits:** (3)
- PESH 342 - Developmental Movement **Credits:** (4)
- PESH 343 - Pedagogical Application of Teaching Styles and Systematic Reflection **Credits:** (3)
- PESH 344 - Applications of Technology in Teaching Fitness and Physical Activity **Credits:** (3)
- PESH 345 - School Health Curriculum **Credits:** (3)
- PESH 348 - Tactics and Skills of Striking and Net/Wall Games **Credits:** (3)
- PESH 350 - Utilizing Tactics and Skills for Invasion Games **Credits:** (3)
- PESH 356 - Teaching Lifelong Physical Activity Pursuits **Credits:** (3)
- PESH 358 - Applications of Resistance, Core, and Cardiovascular Training **Credits:** (3)
- PESH 437 - Practicum 2 **Credits:** (3)
- PESH 438 - Practicum 3 **Credits:** (3)
- PESH 439 - Practicum 4 **Credits:** (3)
- PESH 445 - Curriculum Development and Assessment in Physical Education **Credits:** (3)
- PESH 447 - Inclusive Strategies and Activities for Diverse Learners **Credits:** (3)
- PESH 458 - Diagnosis and Analysis of Human Movement **Credits:** (3)

Total Credits: 85

Professional Education Program Credits: 50

Professional Education Program

Total Credits: 135

College and Department Information

Physical Education, School Health, and Movement Studies  
Department  
College of Education and Professional Studies

## Sport Management BS, Recreation Management Specialization

The Recreation Management specialization prepares students for entry-level supervisory and managerial positions with municipal parks and recreation departments, non-profit agencies such as YMCAs and Boys and Girls Clubs, armed forces recreation, university recreation and intramural sports, camping and outdoor recreation. In addition, entrepreneurial skills are developed for those interested in starting their own business. The Recreation Specialization prepares students for positions in one of the top industries in Washington State and the Nation. Career opportunities are numerous.

Students must maintain a 2.75 (on a scale of 4.0) as a minimum cumulative grade point average (GPA) in the Recreation Management coursework and achieve a minimum grade of "C" in each of the courses.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge of the concepts of management and leadership, and describe the various skills, roles, and functions of sport managers.
- Explain the cultural traditions, social values, and psycho-social experiences related to sport.
- Analyze moral and ethical issues related to sport, and develop a personal philosophy regarding social responsibility and moral commitment in the sport setting.
- Explain principles of financial management, risk management, and human resource management in sport.
- Explain public relations strategies related to the sport industry, and synthesize course material into a promotional plan for a sport organization.
- Demonstrate information literacy through use of written, oral, and group communication skills.
- Demonstrate the ability to assume responsibility in various professional settings, and work effectively with diverse groups and organizations.

Sport Management, BS

### Program Director

Brian McGladrey, Ph.D., CSCS

### Program Description

The major in Sport Management is designed for students interested in pursuing a career in the sports industry. The sports industry in the U.S. now generates revenues that exceed \$200 billion annually. Accordingly, the number and type of career opportunities associated with sport continues to grow. Classroom learning, combined with experiential learning gained through practicums and internships, will allow students who earn a Bachelor of Science in Sport Management to position themselves for success in entry-level positions in a variety of sport-related occupations.

Examples of potential careers in sport management include:

- Collegiate Coaching = coaching, recruiting, summer camps
- Interscholastic Coaching = coaching
- Youth Coaching/Leadership = coaching, league director
- Professional Sports Teams = ticket sales, marketing,
- Collegiate Athletics = athletics director, public relations, compliance
- City/Community Recreation = administration, league director, promotions
- Athletic Facilities = management, membership marketing/sales
- Collegiate Recreation = management, student services, facilities



## Sport Management Emphasis Areas

Students choosing to major in Sport Management will complete a "core" of coursework, and choose to specialize in one of the following emphasis areas:

- Sport Coaching
- Sport Business
- Physical Activity Programming

### Admission Requirements

Students must complete SPM 101-Contemporary Sport Management before applying to the program. For the major application procedure, contact the Sport Management Program Director.

### Graduation Requirements

Students must maintain a 2.75 (on a scale of 4.0) as a minimum cumulative grade point average (GPA) in the major's coursework.

### Program Requirements

Students must choose one from three Sport Management specializations: (1) Sport Coaching; (2) Sport Business; or (3) Physical Activity Programming. A minimum grade of "C" is required in each of the major's courses.

### Required Core Courses

- ACCT 301 - Accounting Skills for Non-Accounting Majors **Credits:** (5)
- PE 448 - Coaching and Competitive Ethics **Credits:** (3)
- PE 453 - Psychological and Sociological Foundations of Coaching **Credits:** (3)
- SPM 101 - Contemporary Sport Management **Credits:** (3)
- SPM 315 - Legal Liability and Risk Management in Sport **Credits:** (3)
- SPM 355 - Public Relations and Promotions in Sport **Credits:** (3)
- SPM 365 - Sports Facilities and Events Management **Credits:** (3)
- SPM 465 - Global Perspectives in Sport **Credits:** (3)
- SPM 490 - Sport Management Internship **Credits:** (1-12) (Must be taken for 6 credits.)
- SPM 492 - Practicum in Sport Management **Credits:** (3)

Total Core Credits: 35

### Recreation Management Specialization

#### Required Courses

- REC 321 - Leadership in Human Development **Credits:** (4)
- REC 322 - Recreation Programming and Activities **Credits:** (3)
- REC 300 - Challenge Course Leadership **Credits:** (4)
- REC 333 - Outdoor Adventures in Public Lands **Credits:** (4)

- REC 382 - Community Recreation **Credits:** (3)
- HTE 430 - Grants, Sponsorship, and Fundraising for HTE **Credits:** (5)
- REC 487 - Outdoor Recreation Issues **Credits:** (3)
- REC 488 - Recreation Management **Credits:** (4)
- HTE 492 - Senior Practicum **Credits:** (1-12)  
Choose one from the following:
- REC 340 - Introduction to Adventure Programming **Credits:** (3)
- REC 431 - Recreation Administration of Retreats and Camps **Credits:** (3)

Total Specialization Credits: 35

Total Credits: 70

### College and Department Information

Physical Education, School Health, and Movement Studies  
Department  
College of Education and Professional Studies

### Program Outcomes

Visit program outcomes to find out what you can expect to know and do after successful completion of this program.

## Sport Management BS, Sport Business Specialization

The specialization in Sport Business is one of three options for completing requirements for the Sport Management major. Students who choose to specialize in Sport Business typically enter the sports industry in entry-level positions.

Students must maintain a 2.75 (on a scale of 4.0) as a minimum cumulative grade point average (GPA) in the Sport Business coursework and achieve a minimum grade of "C" in each of the courses.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge of the concepts of management and leadership, and describe the various skills, roles, and functions of sport managers.
- Explain the cultural traditions, social values, and psycho-social experiences related to sport.
- Analyze moral and ethical issues related to sport, and develop a personal philosophy regarding social responsibility and moral commitment in the sport setting.
- Explain principles of financial management, risk management, and human resource management in sport.
- Explain public relations strategies related to the sport industry, and synthesize course material into a promotional plan for a sport organization.
- Demonstrate information literacy through use of written, oral, and group communication skills.

- Demonstrate the ability to assume responsibility in various professional settings, and work effectively with diverse groups and organizations.

Sport Management, BS

### Program Director

Brian McGladrey, Ph.D., CSCS

### Program Description

The major in Sport Management is designed for students interested in pursuing a career in the sports industry. The sports industry in the U.S. now generates revenues that exceed \$200 billion annually. Accordingly, the number and type of career opportunities associated with sport continues to grow. Classroom learning, combined with experiential learning gained through practicums and internships, will allow students who earn a Bachelor of Science in Sport Management to position themselves for success in entry-level positions in a variety of sport-related occupations.

Examples of potential careers in sport management include:

- Collegiate Coaching = coaching, recruiting, summer camps
- Interscholastic Coaching = coaching
- Youth Coaching/Leadership = coaching, league director
- Professional Sports Teams = ticket sales, marketing,
- Collegiate Athletics = athletics director, public relations, compliance
- City/Community Recreation = administration, league director, promotions
- Athletic Facilities = management, membership marketing/sales
- Collegiate Recreation = management, student services, facilities

### Sport Management Emphasis Areas

Students choosing to major in Sport Management will complete a "core" of coursework, and choose to specialize in one of the following emphasis areas:

- Sport Coaching
- Sport Business
- Physical Activity Programming

### Admission Requirements

Students must complete SPM 101-Contemporary Sport Management before applying to the program. For the major application procedure, contact the Sport Management Program Director.

### Graduation Requirements

Students must maintain a 2.75 (on a scale of 4.0) as a minimum cumulative grade point average (GPA) in the major's coursework.

### Program Requirements

Students must choose one from three Sport Management specializations: (1) Sport Coaching; (2) Sport Business; or (3) Physical Activity Programming. A minimum grade of "C" is required in each of the major's courses.

### Required Core Courses

- ACCT 301 - Accounting Skills for Non-Accounting Majors **Credits:** (5)
- PE 448 - Coaching and Competitive Ethics **Credits:** (3)
- PE 453 - Psychological and Sociological Foundations of Coaching **Credits:** (3)
- SPM 101 - Contemporary Sport Management **Credits:** (3)
- SPM 315 - Legal Liability and Risk Management in Sport **Credits:** (3)
- SPM 355 - Public Relations and Promotions in Sport **Credits:** (3)
- SPM 365 - Sports Facilities and Events Management **Credits:** (3)
- SPM 465 - Global Perspectives in Sport **Credits:** (3)
- SPM 490 - Sport Management Internship **Credits:** (1-12) (Must be taken for 6 credits.)
- SPM 492 - Practicum in Sport Management **Credits:** (3)

Total Core Credits: 35

### Sport Business Specialization

Required Courses Credits: 15

- MGT 380 - Organizational Management **Credits:** (5)
- MKT 360 - Principles of Marketing **Credits:** (5)
- MKT 370 - Sports Marketing and Sponsorship **Credits:** (5)

Department-Approved Electives Credits: 15

Select from the following:

- BUS 401 - Business Boot Camp **Credits:** (1)
- MGT 394 - Legal Considerations in Sport Business **Credits:** (5)
- MGT 395 - Leadership in Business Organizations **Credits:** (5)
- MKT 371 - Sponsorship and Promotion in Sport Business **Credits:** (5)
- MKT 372 - Revenue Generation and Finance in Sport Business **Credits:** (5)

Total Specialization Credits: 30

Total Credits: 65

### College and Department Information

Physical Education, School Health, and Movement Studies  
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### Program Outcomes

Visit program outcomes to find out what you can expect to know and do after successful completion of this program.

## Sport Management BS, Sport Coaching Specialization

The specialization in Sport Coaching is one of three options for completing requirements for the Sport Management major. Students who choose to specialize in Sport Coaching typically enter the coaching field at the youth, interscholastic, or collegiate levels, either in paid or volunteer positions.

Students must maintain a 2.75 (on a scale of 4.0) as a minimum cumulative grade point average (GPA) in the Sport Coaching coursework and achieve a minimum grade of "C" in each of the courses.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate knowledge of the concepts of management and leadership, and describe the various skills, roles, and functions of sport managers.
- Explain the cultural traditions, social values, and psycho-social experiences related to sport.
- Analyze moral and ethical issues related to sport, and develop a personal philosophy regarding social responsibility and moral commitment in the sport setting.
- Explain principles of financial management, risk management, and human resource management in sport.
- Explain public relations strategies related to the sport industry, and synthesize course material into a promotional plan for a sport organization.
- Demonstrate information literacy through use of written, oral, and group communication skills.
- Demonstrate the ability to assume responsibility in various professional settings, and work effectively with diverse groups and organizations.

Sport Management, BS

### Program Director

Brian McGladrey, Ph.D., CSCS

### Program Description

The major in Sport Management is designed for students interested in pursuing a career in the sports industry. The sports industry in the U.S. now generates revenues that exceed \$200 billion annually. Accordingly, the number and type of career opportunities associated with sport continues to grow. Classroom learning, combined with experiential learning gained through practicums and internships, will allow students who earn a Bachelor of Science in Sport Management to position themselves for success in entry-level positions in a variety of sport-related occupations.

Examples of potential careers in sport management include:

- Collegiate Coaching = coaching, recruiting, summer camps
- Interscholastic Coaching = coaching
- Youth Coaching/Leadership = coaching, league director
- Professional Sports Teams = ticket sales, marketing,
- Collegiate Athletics = athletics director, public relations, compliance
- City/Community Recreation = administration, league director, promotions
- Athletic Facilities = management, membership marketing/sales
- Collegiate Recreation = management, student services, facilities

### Sport Management Emphasis Areas

Students choosing to major in Sport Management will complete a "core" of coursework, and choose to specialize in one of the following emphasis areas:

- Sport Coaching
- Sport Business
- Physical Activity Programming

### Admission Requirements

Students must complete SPM 101-Contemporary Sport Management before applying to the program. For the major application procedure, contact the Sport Management Program Director.

### Graduation Requirements

Students must maintain a 2.75 (on a scale of 4.0) as a minimum cumulative grade point average (GPA) in the major's coursework.

### Program Requirements

Students must choose one from three Sport Management specializations: (1) Sport Coaching; (2) Sport Business; or (3) Physical Activity Programming. A minimum grade of "C" is required in each of the major's courses.

### Required Core Courses

- ACCT 301 - Accounting Skills for Non-Accounting Majors **Credits:** (5)
- PE 448 - Coaching and Competitive Ethics **Credits:** (3)
- PE 453 - Psychological and Sociological Foundations of Coaching **Credits:** (3)
- SPM 101 - Contemporary Sport Management **Credits:** (3)
- SPM 315 - Legal Liability and Risk Management in Sport **Credits:** (3)
- SPM 355 - Public Relations and Promotions in Sport **Credits:** (3)
- SPM 365 - Sports Facilities and Events Management **Credits:** (3)
- SPM 465 - Global Perspectives in Sport **Credits:** (3)
- SPM 490 - Sport Management Internship **Credits:** (1-12) (Must be taken for 6 credits.)
- SPM 492 - Practicum in Sport Management **Credits:** (3)

Total Core Credits: 35

Sport Coaching Specialization

Required Courses Credits: 18

- HED 205 - Drugs and Sport **Credits:** (3)
- PE 346 - Administration of Athletes **Credits:** (3)
- PE 365 - Foundations of Coaching **Credits:** (3)
- PE 495 - Field Work in Sport Coaching **Credits:** (3)
- PESH 358 - Applications of Resistance, Core, and Cardiovascular Training **Credits:** (3)
- PESH 458 - Diagnosis and Analysis of Human Movement **Credits:** (3)

Department-Approved Electives Credits: 9

Select from the following:

- HPE 443 - Sex, Drugs and Going Pro: Issues in Professional Sports **Credits:** (3)
- HPE 444 - The Promise and Pitfalls in Interscholastic Athletic Programs **Credits:** (3)
- HPE 445 - The Good, Bad and Ugly of Intercollegiate Sports **Credits:** (3)
- PE 321 - Football Coaching **Credits:** (3)
- PE 323 - Basketball Coaching **Credits:** (3)
- PE 325 - Baseball Coaching **Credits:** (3)
- PE 326 - Theory of Coaching Soccer **Credits:** (3)
- PE 330 - Volleyball Coach **Credits:** (3)

Total Specialization Credits: 27

Total Credits: 62

College and Department Information

Physical Education, School Health, and Movement Studies  
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### Program Outcomes

Visit program outcomes to find out what you can expect to know and do after successful completion of this program.

## Dance Performance Minor (PESHMS)

Dance Performance Minor

### Program Director

Therese Young

The dance performance minor is an interdisciplinary minor administered jointly by the dance and theatre arts faculty designed for students who wish to broaden their academic background and receive a well-rounded dance education, thus preparing them in the area of dance performance in a wide

variety of settings. Students will develop competencies in choreography, rhythmic concepts, and dance production.

### Program Requirements

Minimum of one-year participation in DNCE 112 Dance Performance (Orchesis Dance Company). By audition.

Required Courses Credits: 28-29

- DNCE 101 - Modern Technique I **Credits:** (2)
- DNCE 102 - Modern Technique I **Credits:** (2)
- DNCE 103 - Modern Technique I **Credits:** (2)
- DNCE 112 - Dance Performance **Credits:** (1)
- DNCE 161 - Cultural History of Dance **Credits:** (4)
- DNCE 204 - Ballet Technique II **Credits:** (2)
- DNCE 205 - Ballet Technique II **Credits:** (2)
- DNCE 206 - Ballet Technique II **Credits:** (2)
- DNCE 212 - Dance Performance **Credits:** (2)
- DNCE 300 - Dance Composition **Credits:** (3)
- DNCE 311 - Music for Dance - Rhythms and Resources **Credits:** (3)
- **OR** TH 215 - Music Fundamentals I **Credits:** (3)
- DNCE 402 - Dance Production **Credits:** (4)
- **OR** TH 301 - Production Application **Credits:** (3)

Department-Approved Electives Credits: 10

Choose any of the following for a minimum of 10 credits: Only one credit courses may be repeated.

- DNCE 121 - Tap Dance I **Credits:** (1)
- DNCE 122 - Tap Dance II **Credits:** (1)
- DNCE 130 - American Style Ballroom Dance I **Credits:** (1)
- DNCE 131 - American Style Ballroom Dance II **Credits:** (1)
- DNCE 132 - American Style Ballroom Dance III **Credits:** (1)
- DNCE 133 - International Standard Ballroom Dance I **Credits:** (1)
- DNCE 134 - International Standard Ballroom Dance II **Credits:** (1)
- DNCE 135 - International Standard Ballroom Dance III **Credits:** (1)
- DNCE 136 - International Latin Ballroom Dance I **Credits:** (1)
- DNCE 137 - International Latin Ballroom Dance II **Credits:** (1)
- DNCE 138 - International Latin Ballroom Dance III **Credits:** (1)
- DNCE 141 - Jazz Dance I **Credits:** (1)
- DNCE 142 - Jazz Dance II **Credits:** (1)
- DNCE 143 - Jazz Dance III **Credits:** (1)
- DNCE 155 - Pointe and Variations **Credits:** (1)
- DNCE 156 - Partnering **Credits:** (1)
- DNCE 201 - Modern Technique II **Credits:** (2)
- DNCE 202 - Modern Technique II **Credits:** (2)
- DNCE 203 - Modern Technique II **Credits:** (2)
- DNCE 304 - Ballet Technique III **Credits:** (2)

- DNCE 305 - Ballet Technique III **Credits:** (2)
- DNCE 306 - Ballet Technique III **Credits:** (2)
- DNCE 401 - Choreography **Credits:** (4)
- PEF 153 - Mat Pilates **Credits:** (1)
- TH 252 - Stage Dance **Credits:** (1)
- TH 352 - Stage Dance II **Credits:** (2)

Total Credits: 38-39

College and Department Information

Physical Education, School Health, and Movement Studies  
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College of Education and Professional Studies

## Physical Activity and Recreation Programming Minor (PESHMS)

Physical Activity and Recreation Programming Minor Core

### Program Directors

Heidi Henschel Pellett, EdD, physical education and school health  
Barbara Masberg, PhD, recreation and tourism

### Program Advisors

Debra D'Acquisto, MA, physical activity  
Robert Perkins, EdD, recreation and tourism

This interdisciplinary physical activity and recreation programming minor is designed for students who want to instruct and direct activities in various settings, such as, parks and recreation, nonprofit organizations, cruise lines, resorts, and other active lifestyle organizations.

### Admission Requirements

Applications are accepted throughout the academic year. To be admitted to the minor, all students must have a cumulative grade point average of a 2.75. For the application procedure, contact a program director in Physical Education and School Health or Recreation and Tourism to complete a specific application form. All courses in the minor require a grade of a C or higher.

Required Courses

- HTE 484 - Hospitality Law, Negotiation, and Risk Management **Credits:** (5)
- PESH 341 - Characteristics of Effective Physical Education Teaching **Credits:** (3)
- PESH 343 - Pedagogical Application of Teaching Styles and Systematic Reflection **Credits:** (3)
- PESH 356 - Teaching Lifelong Physical Activity Pursuits **Credits:** (3)
- PESH 456 - Facilitating and Leading Adventure Activities in the Schools **Credits:** (2)

Select from one of the following Credits: (3)

- REC 322 - Recreation Programming and Activities **Credits:** (3)
- **OR** Choose three (3) Physical Activity Courses from the following categories:  
**PEID (1), PEF (1), PEAQ (1) PETS (1), PED (1)**

Select from one of the following Credits: (3-4)

- PESH 330 - Positive Youth Development in Physical Activity **Credits:** (3)
- REC 321 - Leadership in Human Development **Credits:** (4)

Select from one of the following Credits: (2-4)

- REC 300 - Challenge Course Leadership **Credits:** (4)
- REC 431 - Recreation Administration of Retreats and Camps **Credits:** (3)
- RTE 293 - Outdoor Leadership Training **Credits:** (2)
- REC 360 - Outdoor Survival **Credits:** (3)

Select from one the following Credits: (3-5)

- REC 381 - Recreational Sports Management **Credits:** (3)
- REC 382 - Community Recreation **Credits:** (3)
- REC 487 - Outdoor Recreation Issues **Credits:** (3)

Choose certifications totaling Credits: (3)

- EMS 245 - Advanced First Aid and Emergency Response **Credits:** (3)
- PE 115 - Beginning Climbing **Credits:** (1)
- PE 116 - Intermediate Climbing **Credits:** (1)
- PE 220 - Climbing Wall Instructor **Credits:** (2)
- PEAQ 221 - Lifeguard Training **Credits:** (3)
- PEAQ 320 - Water Safety Instructor **Credits:** (3)

Total Credits: 30-35

College and Department Information

Physical Education, School Health, and Movement Studies  
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College of Education and Professional Studies

## Physical Education - Dance Minor

### Program Director

Therese Young, MA

The dance minor is designed for students who wish to broaden their academic background and receive a well-rounded dance education, thus preparing them to teach dance and/or dance activities in a wide variety of settings.

### Program Requirement

Minimum of one-year active membership in Orchesis Dance Company. Membership (by audition). See the department web page for audition information at [www.cwu.edu/dance](http://www.cwu.edu/dance).

### Required Courses

- DNCE 101 - Modern Technique I **Credits:** (2)
- DNCE 102 - Modern Technique I **Credits:** (2)
- DNCE 103 - Modern Technique I **Credits:** (2)
- DNCE 104 - Ballet Technique I **Credits:** (2)
- DNCE 105 - Ballet Technique I **Credits:** (2)
- DNCE 106 - Ballet Technique I **Credits:** (2)
- DNCE 112 - Dance Performance **Credits:** (1)
- DNCE 161 - Cultural History of Dance **Credits:** (4)
- DNCE 212 - Dance Performance **Credits:** (2)
- DNCE 300 - Dance Composition **Credits:** (3)
- DNCE 309 - Teaching Methods: Recreational Dance **Credits:** (3)
- DNCE 311 - Music for Dance - Rhythms and Resources **Credits:** (3)
- DNCE 315 - Teaching Methods: Modern and Ballet Dance **Credits:** (4)
- DNCE 385 - Principles of Functional Alignment for Dance **Credits:** (4)
- DNCE 402 - Dance Production **Credits:** (4)

Total Credits: 40

### College and Department Information

Physical Education, School Health, and Movement Studies  
Department  
College of Education and Professional Studies

## Physical Education - Dance: Teaching Minor

This minor satisfies the endorsement competencies for dance in Washington State. Students must be fully admitted to the Teacher Certification Program to pursue coursework for a Dance Education minor.

Students will be required to complete technique classes in those areas of dance frequently taught in a K-12 setting. Additionally, students will develop competencies in dance composition & choreography, rhythmic concepts, dance production, and teaching.

### Required Courses

- DNCE 101 - Modern Technique I **Credits:** (2)
- DNCE 102 - Modern Technique I **Credits:** (2)
- DNCE 103 - Modern Technique I **Credits:** (2)
- DNCE 104 - Ballet Technique I **Credits:** (2)
- DNCE 105 - Ballet Technique I **Credits:** (2)
- DNCE 106 - Ballet Technique I **Credits:** (2)

- DNCE 161 - Cultural History of Dance **Credits:** (4)
- DNCE 300 - Dance Composition **Credits:** (3)
- DNCE 309 - Teaching Methods: Recreational Dance **Credits:** (3)
- DNCE 311 - Music for Dance - Rhythms and Resources **Credits:** (3)
- DNCE 314 - Dance for Children **Credits:** (3)
- DNCE 385 - Principles of Functional Alignment for Dance **Credits:** (4)
- DNCE 402 - Dance Production **Credits:** (4)

Total Credits: 36

### College and Department Information

Physical Education, School Health, and Movement Studies  
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College of Education and Professional Studies

## Sport Coaching Minor

### Program Coordinator

Brian McGladrey, PhD

### Program Information

The Sport Coaching minor will provide appropriate training to students interested in entering the coaching profession. Typically, students who complete this minor enter the coaching field at the youth, high school, or collegiate levels, either in paid positions or as volunteers. The Sport Coaching program's curriculum satisfies the "initial 30-hour requirement" of the Washington Interscholastic Activities Association's (WIAA) Coaching Standards program. Additionally, coursework is designed to meet the competencies as outlined by the National Council for Accreditation of Coaching Education (NCACE) in its "National Standards for Sport Coaches." The content of the core coursework includes the scientific and practical competencies that athletes, administrators, parents, and the public should expect of coaches; it provides prospective coaches with the knowledge and skills necessary to become competent and effective coaches.

### Admission Requirements

Students wishing to declare Sport Coaching as a minor will need to meet with the Sport Coaching Program Director and complete a CWU program application.

### Program Requirements

Students must achieve a letter grade of C or higher for each of the courses in the minor. Additionally, students will need to complete a fingerprinting process (background check) and CPR certification prior to registering for PE 495 - Field Work in Sport Coaching.

### Required Courses

- HED 205 - Drugs and Sport **Credits:** (3)
- PE 365 - Foundations of Coaching **Credits:** (3)
- PE 448 - Coaching and Competitive Ethics **Credits:** (3)

- PE 453 - Psychological and Sociological Foundations of Coaching **Credits:** (3)
- PE 495 - Field Work in Sport Coaching **Credits:** (3)
- PESH 358 - Applications of Resistance, Core, and Cardiovascular Training **Credits:** (3)
- PESH 458 - Diagnosis and Analysis of Human Movement **Credits:** (3)

Department-Approved Electives Credits: 6

Select a minimum of 6 credits from the following:

- EXSC 350 - Gross Anatomy **Credits:** (3)
- EXSC 350LAB - Gross Anatomy Laboratory **Credits:** (2)
- EXSC 351 - Physiology **Credits:** (4)
- EXSC 351LAB - Physiology Laboratory **Credits:** (1)
- EXSC 352 - Assessment and Treatment of Athletic Injuries **Credits:** (4)
- PE 321 - Football Coaching **Credits:** (3)
- PE 323 - Basketball Coaching **Credits:** (3)
- PE 325 - Baseball Coaching **Credits:** (3)
- PE 326 - Theory of Coaching Soccer **Credits:** (3)
- PE 330 - Volleyball Coach **Credits:** (3)
- PE 346 - Administration of Athletes **Credits:** (3)
- PE 521 - Advanced Football Coaching **Credits:** (3)
- PE 523 - Advanced Basketball Coaching **Credits:** (3)

Total Credits: 27

College and Department Information

Physical Education, School Health, and Movement Studies  
Department  
College of Education and Professional Studies

## Physics Department

College of the Sciences  
Ellensburg  
Discovery Hall, room 139  
Mail Stop 7422  
509-963-2727  
[www.cwu.edu/physics](http://www.cwu.edu/physics)

See website for how these programs may be used for educational and career purposes.

### Faculty and Staff

#### Chair

Bruce Palmquist, PhD

#### Professor

Bruce Palmquist, PhD, science education

#### Associate Professors

Michael Braunstein, PhD, nuclear physics, astronomy  
Andrew Piacsek, PhD, acoustics, computational physics

#### Assistant Professors

Erin Craig, PhD, computational biophysics  
Cassandra Fallscheer, PhD, astronomy  
Christopher Gilbreth, PhD, nuclear physics, cold atomic gases, computational physics  
Nathan Kuwada, PhD, experimental biophysics  
Darci Snowden, PhD, atmospheric physics  
Benjamin White, PhD, condensed matter physics

### Staff

Rachel Foss, secretary  
Deanna Marshall, recruiting and advising specialist  
Addison Wenger, instructional and classroom technician III  
Peter Zencak, instructional and classroom technician IV

### Department Information

#### Overview

Physics is the study of the universe and its elements—from the interaction of subatomic particles and investigations in nanoscale science, to the motion of everyday objects, to the evolution of galaxies. Physics involves discovering the fundamental rules that describe matter and energy on every scale, hence it is the basic science that underlies all the natural sciences. Most businesses want people who can analyze complex situations and solve problems. CWU physics majors learn these skills along with computational and electronics skills. The physics curriculum includes theoretical courses as well as laboratory classes and hands-on research that provide the practical training relevant to both graduate school or professional work in science and engineering. Recent acquisitions of state-of-the-art instrumentation in astronomy, acoustical physics, and lasers enrich students' experience in the laboratory and research setting. Students also have the opportunity to participate in programs outside the formal courses offered by participating in the department's award-winning Physics Club and Astronomy Club. The CWU physics program offers a BS degree, a BA degree (which doubles as our teaching degree), and engineering opportunities through our dual-degree physics/engineering program.

#### Department Standards

All students must meet with the physics chair to map out a four-year plan. The student can then select a faculty advisor. All faculty members are physics major advisors. Most upper-level physics courses are offered every other year. Thus, students who wait too long to meet with an advisor may have their graduation delayed. All physics majors must complete a physics major portfolio.

#### Honors Designation

The honors designation in physics recognizes the academic excellence of its majors. Students in the department's BA and BS programs are eligible for this designation and all physics majors are urged to consider applying. The honors designation in physics is offered in collaboration with Sigma Pi Sigma, the National Physics Honors Society. Please contact the physics department chair for more information.

#### Dual-degree Physics/Engineering Program

This dual-degree program enables a student to receive a baccalaureate degree in physics from CWU and a bachelor of science from an appropriate engineering institution in a respective engineering discipline. The total length of time for both degrees is expected to be about five years, with approximately three years at CWU (dating from enrollment in MATH 172) and approximately two years at the engineering

institution. At CWU, students must complete a minimum of 135 credits, including all general education requirements. Additional courses may be required depending on the specific engineering discipline. Be sure to consult the appropriate dual-degree engineering advisor for details.

In order to receive the baccalaureate degree from CWU, dual-degree students must also complete the remaining credits (to total a minimum of 180 credits) in engineering at the Engineering Institution and transfer these credits to CWU. The remaining credits must include the appropriate number of 300-level or above from the Engineering Institution to satisfy CWU graduation requirements. This transfer of credits and awarding of the baccalaureate degree by CWU can take place as soon as the student earns the necessary credits.

### Special Requirements:

Early consultation with the physics department chair is mandatory to ensure that specific additional requirements of particular engineering curricula are also satisfied. It is solely the student's responsibility to apply and gain admission to the Engineering Institution. It is also the individual student's responsibility to submit an official transcript of the work completed after leaving CWU and to request awarding of the baccalaureate degree in physics.

### Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### Course Offerings

Frequency of course offering information can be found at the department website: [www.cwu.edu/physics](http://www.cwu.edu/physics) or by contacting the department directly.

## Physics Major, BA

The BA program is for students wanting a broad liberal arts education with an emphasis in physics and is the appropriate major for students interested in teaching high school physics. It may be a suitable foundation for students who are planning a career not usually regarded as physics, such as business education, law, medicine, writing, environmental concerns, public safety, or computer programming.

### Teaching Endorsement

This major partially satisfies the criteria for a teaching endorsement in Physics (5-12), qualifying students to teach physics at the high school, middle, or junior high levels. Students who successfully complete the Physics BA and STEM Teaching Program (an alternative to the Professional Education Program) are eligible to apply for Washington State teacher certification. Teacher certification candidates must receive a C grade or higher in all major and STEM Teaching Program courses, have a GPA of at least 3.0 for either the last 45 graded quarter credits or overall CWU/transfer cumulative, and meet all Washington State teacher certification requirements. See the physics teaching advisor as soon as possible to develop a course of study.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate a comprehensive knowledge base of the major areas of physics and related disciplines.
- Perform experimental, computational, and analytical techniques in solving physics and physics-related problems.
- Demonstrate critical thinking skills.
- Demonstrate an ability to communicate effectively.
- Demonstrate responsible stewardship to the community.
- Demonstrate an ability to learn new material independently from a variety of resources, to be used throughout their life.

### Teaching Endorsement Requirements:

This major satisfies the criteria for an endorsement in physics and qualifies students to teach physics at the high school, middle, or junior high levels. Students taking this major for endorsement are required to take the STEM Teaching Program. See the physics teaching advisor as early as possible to develop a graduation plan. Students completing this program are required to demonstrate proficiency of student learning outcomes through a program portfolio prior to student teaching. In addition to the above requirements, students must pass the NES exam for physics to receive a physics endorsement. Students should seriously consider working toward endorsement in a second area, such as biology, chemistry, earth science, middle-level science, middle-level mathematics, secondary mathematics or science.

### Required Courses Credits: 30

- MATH 265 - Linear Algebra I **Credits:** (4)
- PHYS 289 - How to Succeed as a Physics Major **Credits:** (1)
- PHYS 317 - Modern Physics I **Credits:** (4)
- PHYS 318 - Modern Physics II **Credits:** (4)
- PHYS 331 - Laboratory Practices and Techniques **Credits:** (3)
- PHYS 333 - Experimental Physics I **Credits:** (3)
- PHYS 361 - Computational Physics **Credits:** (4)
- PHYS 363 - Optics **Credits:** (4)
- PHYS 489 - Senior Assessment **Credits:** (1)
- PHYS 495 - Undergraduate Research **Credits:** (1-2)  
(Must be taken for 2 credits)

### General Physics - Credits: 15

- PHYS 181 - General Physics I with Laboratory **Credits:** (5)
- PHYS 182 - General Physics II with Laboratory **Credits:** (5)
- PHYS 183 - General Physics III with Laboratory **Credits:** (5)

### General Chemistry - Credits: 10

- CHEM 181 - General Chemistry I **Credits:** (4)



- CHEM 181LAB - General Chemistry Laboratory I **Credits:** (1)
- CHEM 182 - General Chemistry II **Credits:** (4)
- CHEM 182LAB - General Chemistry Laboratory II **Credits:** (1)

Calculus - Credits: 20

- MATH 172 - Calculus I **Credits:** (5)
- MATH 173 - Calculus II **Credits:** (5)
- MATH 272 - Multivariable Calculus I **Credits:** (5)
- MATH 273 - Multivariable Calculus II **Credits:** (5)

Department-Approved Electives Credits: 8

- At least four credits must be from the physics department at the 200-level or above. The rest of the credits may be from any department, including physics, at the 300-level or above. Courses must be approved by the department chair and advisor.

Total Credits: 83

(If applicable) STEM Teaching Program Credits: 44

STEM Teaching Program

(If applicable) Total Credits: 127

College and Department Information

Physics Department  
College of the Sciences

## Physics Major, BS

Those interested in receiving an advanced degree in physics or engineering may choose the bachelor of science degree in physics. The bachelor of science degree is designed for individuals planning careers in physics and related technical fields or in areas where knowledge of basic scientific principles is necessary. Incoming freshman prepared to take calculus their first quarter at CWU should be able to complete the bachelor of science degree in four years.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate a comprehensive knowledge base of the major areas of physics and related disciplines.
- Perform experimental, computational, and analytical techniques in solving physics and physics-related problems.
- Demonstrate critical thinking skills.
- Demonstrate an ability to communicate effectively.
- Demonstrate responsible stewardship to the community.

- Demonstrate and ability to learn new material independently from a variety of resources, to be used throughout their life.

General Chemistry Credits: 10

- CHEM 181 - General Chemistry I **Credits:** (4)
- CHEM 181LAB - General Chemistry Laboratory I **Credits:** (1)
- CHEM 182 - General Chemistry II **Credits:** (4)
- CHEM 182LAB - General Chemistry Laboratory II **Credits:** (1)

Mathematics Credits: 27

- MATH 172 - Calculus I **Credits:** (5)
- MATH 173 - Calculus II **Credits:** (5)
- MATH 265 - Linear Algebra I **Credits:** (4)
- MATH 272 - Multivariable Calculus I **Credits:** (5)
- MATH 273 - Multivariable Calculus II **Credits:** (5)
- MATH 376 - Differential Equations I **Credits:** (3)

Physics Courses Credits: 68

- PHYS 181 - General Physics I with Laboratory **Credits:** (5)
- PHYS 182 - General Physics II with Laboratory **Credits:** (5)
- PHYS 183 - General Physics III with Laboratory **Credits:** (5)
- PHYS 289 - How to Succeed as a Physics Major **Credits:** (1)
- PHYS 317 - Modern Physics I **Credits:** (4)
- PHYS 318 - Modern Physics II **Credits:** (4)
- PHYS 331 - Laboratory Practices and Techniques **Credits:** (3)
- PHYS 333 - Experimental Physics I **Credits:** (3)
- PHYS 342 - Thermodynamics **Credits:** (4)
- PHYS 351 - Analytical Mechanics I **Credits:** (4)
- PHYS 361 - Computational Physics **Credits:** (4)
- PHYS 363 - Optics **Credits:** (4)
- PHYS 381 - Electromagnetic Theory I **Credits:** (4)
- PHYS 382 - Electromagnetic Theory II **Credits:** (4)
- PHYS 383 - Electromagnetic Theory III **Credits:** (4)
- PHYS 451 - Analytical Mechanics II **Credits:** (3)
- PHYS 474 - Quantum Mechanics I **Credits:** (4)
- PHYS 489 - Senior Assessment **Credits:** (1)
- PHYS 495 - Undergraduate Research **Credits:** (1-2)  
(Must be taken for 2 credits)

Department-Approved Electives Credits: 5

Any 300- and 400-level physics courses. 300- and 400-level courses from other departments may be used with approval from the department chair and advisor.

Total Credits: 110

## College and Department Information

Physics Department  
College of the Sciences

# Physics Major BS, Biophysics Specialization

Biophysics is the application of the principles and tools of physics to the study of biological systems. Biophysicists contribute to the understanding of a wide range of interdisciplinary scientific subfields including biotechnology, quantitative molecular and cellular biology, medical physics, neuroscience and biomechanics. The goal of the Physics B.S. with Biophysics specialization is to prepare graduates to be competitive in applications for entry into graduate degree programs in biophysics, physics, and related fields; jobs in government research labs; and private sector employment in areas such as biotechnology. Depending on math preparation, students should be able to complete the Bachelor of Science degree, with Biophysics specialization, in four years at CWU.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate a comprehensive knowledge base of the major areas of physics and related disciplines.
- Perform experimental, computational, and analytical techniques in solving physics and physics-related problems.
- Demonstrate critical thinking skills.
- Demonstrate an ability to communicate effectively.
- Demonstrate responsible stewardship to the community.
- Demonstrate and ability to learn new material independently from a variety of resources, to be used throughout their life.

### Introductory/General Physics Credits: 15

- PHYS 121 - Introductory Physics for Life Sciences I **Credits: (5)**
  - PHYS 122 - Introductory Physics for Life Sciences II **Credits: (5)**
  - PHYS 123 - Introductory Physics for Life Sciences III **Credits: (5)**
- OR**
- PHYS 181 - General Physics I with Laboratory **Credits: (5)**
  - PHYS 182 - General Physics II with Laboratory **Credits: (5)**
  - PHYS 183 - General Physics III with Laboratory **Credits: (5)**

### General Chemistry Credits: 10

- CHEM 181 - General Chemistry I **Credits: (4)**

- CHEM 181LAB - General Chemistry Laboratory I **Credits: (1)**
- CHEM 182 - General Chemistry II **Credits: (4)**
- CHEM 182LAB - General Chemistry Laboratory II **Credits: (1)**

### Specialization Courses Credits: 23

- BIOL 181 - General Biology I **Credits: (5)**
- BIOL 182 - General Biology II **Credits: (5)**
- CHEM 183 - General Chemistry III **Credits: (4)**
- CHEM 183LAB - General Chemistry Laboratory III **Credits: (1)**
- PHYS 322 - Molecular Biophysics **Credits: (4)**
- PHYS 323 - Experimental Biophysics **Credits: (4)**

### Physics Credits: 28

- PHYS 289 - How to Succeed as a Physics Major **Credits: (1)**
- PHYS 317 - Modern Physics I **Credits: (4)**
- PHYS 342 - Thermodynamics **Credits: (4)**
- PHYS 351 - Analytical Mechanics I **Credits: (4)**
- PHYS 361 - Computational Physics **Credits: (4)**
- PHYS 363 - Optics **Credits: (4)**
- PHYS 381 - Electromagnetic Theory I **Credits: (4)**
- PHYS 489 - Senior Assessment **Credits: (1)**
- PHYS 495 - Undergraduate Research **Credits: (1-2)**  
(Must be taken for 2 credits)

### Mathematics Credits: 27

- MATH 172 - Calculus I **Credits: (5)**
- MATH 173 - Calculus II **Credits: (5)**
- MATH 265 - Linear Algebra I **Credits: (4)**
- MATH 272 - Multivariable Calculus I **Credits: (5)**
- MATH 273 - Multivariable Calculus II **Credits: (5)**
- MATH 376 - Differential Equations I **Credits: (3)**

### Department-Approved Electives Credits: 7

Any 300- and 400-level physics, biology, or chemistry courses. 300- and 400-level courses from other departments may be used with approval from the department chair and advisor.

Total Credits: 110

## College and Department Information

Physics Department  
College of the Sciences

# Astronomy Minor

The astronomy minor is an excellent complement to a variety of other science majors. It is also ideal for students who want to

reinforce a liberal arts major with a science background. Astronomy minors may not use any courses in this minor as physics major electives.

#### Required Courses

- PHYS 201 - Operation and Research Techniques for Small Observatories **Credits:** (3)
- PHYS 301 - Stellar Astrophysics I **Credits:** (3)
- PHYS 302 - Stellar Astrophysics II **Credits:** (2)
- PHYS 317 - Modern Physics I **Credits:** (4)

#### Introductory Astronomy - Credits: 5

- PHYS 101 - Introductory Astronomy I **Credits:** (5)

#### Introductory or General Physics - Credits: 15

- PHYS 111 - Introductory Physics I with Laboratory **Credits:** (5)
- PHYS 112 - Introductory Physics II with Laboratory **Credits:** (5)
- PHYS 113 - Introductory Physics III with Laboratory **Credits:** (5)  
**OR**
- PHYS 181 - General Physics I with Laboratory **Credits:** (5)
- PHYS 182 - General Physics II with Laboratory **Credits:** (5)
- PHYS 183 - General Physics III with Laboratory **Credits:** (5)

#### Select either: Credits 2

- PHYS 492 - Laboratory Experience in Teaching Physics **Credits:** (2)
- **OR** PHYS 495 - Undergraduate Research **Credits:** (1-2)

#### Calculus - Credits: 10

- MATH 172 - Calculus I **Credits:** (5)
- MATH 173 - Calculus II **Credits:** (5)

#### Total Credits: 44

#### College and Department Information

Physics Department  
College of the Sciences

## Physics Minor

The physics minor is an excellent complement to a variety of other science majors. It is also ideal for students who want to reinforce a liberal arts major with a technical background.

Students taking this minor to obtain a teaching endorsement can receive a teaching endorsement in physics only if the following requirements are met:

- The student will also earn a certification in Biology, Chemistry, Earth Science, Middle Level Science, or Secondary Mathematics.
- The student passes the NES exam for Physics.

#### Upper-division Physics - Credits: 8

- PHYS 317 - Modern Physics I **Credits:** (4)
- PHYS 363 - Optics **Credits:** (4)

#### Lower-division Physics - Credits: 15

Choose one of the lower-division course sequences.

- PHYS 111 - Introductory Physics I with Laboratory **Credits:** (5)
- PHYS 112 - Introductory Physics II with Laboratory **Credits:** (5)
- PHYS 113 - Introductory Physics III with Laboratory **Credits:** (5)  
**OR**
- PHYS 121 - Introductory Physics for Life Sciences I **Credits:** (5)
- PHYS 122 - Introductory Physics for Life Sciences II **Credits:** (5)
- PHYS 123 - Introductory Physics for Life Sciences III **Credits:** (5)  
**OR**
- PHYS 181 - General Physics I with Laboratory **Credits:** (5)
- PHYS 182 - General Physics II with Laboratory **Credits:** (5)
- PHYS 183 - General Physics III with Laboratory **Credits:** (5)

#### Calculus - Credits: 10

- MATH 172 - Calculus I **Credits:** (5)
- MATH 173 - Calculus II **Credits:** (5)

#### Department-approved Upper-division Electives: 3-5 credits

#### Total Credits: 36-38

#### College and Department Information

Physics Department  
College of the Sciences

## Dual-degree Physics/Engineering Program

This dual-degree program enables a student to receive a baccalaureate degree in physics from CWU and a bachelor of science from an appropriate engineering institution in a respective engineering discipline. The total length of time for both degrees is expected to be about five years, with approximately three years at CWU (dating from enrollment in MATH 172) and approximately two years at the engineering institution. At CWU, students must complete a minimum of 135 credits, including all general education requirements. Additional courses may be required depending on the specific engineering discipline. Be sure to consult the appropriate dual-degree engineering advisor for details.

In order to receive the baccalaureate degree from CWU, dual-degree students must also complete the remaining credits (to total a minimum of 180 credits) in engineering at the Engineering Institution and transfer these credits to CWU. The remaining credits must include the appropriate number of 300-level or above from the Engineering Institution to satisfy CWU graduation requirements. This transfer of credits and awarding of the baccalaureate degree by CWU can take place as soon as the student earns the necessary credits.

### Special Requirements:

Early consultation with the physics department chair is mandatory to ensure that specific additional requirements of particular engineering curricula are also satisfied. It is solely the student's responsibility to apply and gain admission to the Engineering Institution. It is also the individual student's responsibility to submit an official transcript of the work completed after leaving CWU and to request awarding of the baccalaureate degree in physics.

### College and Department Information

Physics Department  
College of the Sciences

## Political Science Department

College of the Sciences  
Ellensburg  
Farrell Hall, room 409  
Mail Stop 7578  
Phone: 509-963-2408  
FAX: 509-963-1134

[www.cwu.edu/political-science](http://www.cwu.edu/political-science)

See the website for how these programs may be used for educational and career purposes.

### Faculty and Staff

#### Interim Chair

Paul Knepper, PhD

### Professors

Michael A. Launius, PhD, comparative politics, Asian politics, international political economy, international politics  
Barb Rieffer-Flanagan, PhD, political theory, comparative politics, politics of the Middle East, international human rights, religion and politics  
Todd M. Schaefer, PhD, American politics, public opinion, congress, campaigns and elections, African politics, American presidency  
Rex Wirth, PhD, public administration and public policy, international politics, Western Europe

### Associate Professor

Gilberto Garcia, PhD, Latino politics and studies, Latin American politics, comparative politics, and U.S.-Mexico border relations

### Emeritus Professors

Robert C. Jacobs, PhD, American law and politics  
Bang-Soon Yoon, PhD, comparative politics, public policy, women and politics, Korean politics, East Asia politics, globalization studies

### Senior Lecturers

Cameron Otopalik, PhD, international political economy, politics of North East Asia, political demography and comparative political development  
Stefanie Wickstrom, PhD, environmental justice and politics, identity politics, social movements and environmental history

### Staff

Jordynne Derrey, secretary senior  
Christina Kruze, office assistant

### Department Information

The department provides an opportunity for students to become knowledgeable about the general subject matter of political science, while also offering a variety of courses that can provide depth in an area of the student's interest. Flexibility in the selection of courses is stressed.

The department requires all political science majors to participate in the end-of-major assessment exercise at the conclusion of their senior year. Information on the assessment requirement may be obtained from the department's main office. Students must earn a grade of C- or higher in order for that course to count in their political science major.

### Political Science Honors

Political science majors will qualify for honors at graduation with an overall GPA of 3.00 and a GPA of 3.50 in all political science courses.

Students may choose either a 47-credit major or a 62-credit major. Those who have a second major or who have a minor in another discipline may opt for the 47-credit major.

### Political Science Core Requirements

POSC 101 - Introduction to Politics 5  
POSC 210 - American Politics 5  
POSC 260 - Comparative Politics 5  
POSC 270 - International Politics 5  
Political Science Core Total Credits: 20

### Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### Course Offerings

Frequency of course offering information can be found at the department website: [www.cwu.edu/political-science](http://www.cwu.edu/political-science) or by contacting the department directly.

## Political Science Major, BA (47 credits) (62 credits)

Students may choose either a 47-credit major or a 62-credit major. Those who have a second major or who have a minor in another discipline may opt for the 47-credit major.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Be expected to thoroughly familiar with structure of field (its 4 sub-fields).
- Demonstrate an understanding of the basic concepts and facts in each of the 4 sub-fields (American, Comparative, International, Theory).
- Acquire analytical tools and skills used in the discipline.
- Demonstrate familiarity and competence w/ scholarly resources & be able to use these to carry out basic research paper in discipline.

### Required Courses

#### Political Science Core Requirements

- POSC 101 - Introduction to Politics **Credits:** (5)
- POSC 210 - American Politics **Credits:** (5)
- POSC 260 - Comparative Politics **Credits:** (5)
- POSC 270 - International Relations **Credits:** (5)

Political Science Core Total Credits: 20

#### Additional Required Courses

- POSC 489 - Senior Assessment **Credits:** (2)

Select from the following: 5 Credits

- POSC 280 - Introduction to Western Political Thought **Credits:** (5)
- POSC 481 - Early Political Thought **Credits:** (5)
- POSC 482 - Early Modern Political Thought **Credits:** (5)
- POSC 483 - Recent Political Thought **Credits:** (5)
- POSC 485 - American Political Thought and Culture **Credits:** (5)

Department-Approved Electives Credits: 20-35

Select from any other courses in this department. (Any transfer political science electives must be approved by the department.)

- 47-credit major (20)
- 62-credit major (35)

Total Credits: 47-62

### College and Department Information

Political Science Department  
College of the Sciences

## Political Science Minor

### Required Courses

#### Political Science Core Requirements

- POSC 101 - Introduction to Politics **Credits:** (5)
- POSC 210 - American Politics **Credits:** (5)
- POSC 260 - Comparative Politics **Credits:** (5)
- POSC 270 - International Relations **Credits:** (5)

Political Science Core Total Credits: 20

Department-Approved Electives Credits: 10

Select from any other courses in this department. (Any transfer political science electives must be approved by the department.)

Total Credits: 30

### College and Department Information

Political Science Department  
College of the Sciences

## Pre-Professional Programs

These programs are planned for two groups of students—those who want one or two years of college work prior to entering an occupation, and those who want to do pre-professional work for one, two, three, or four years before entering a professional school, university, or college.

The programs described are not to be considered unalterable. They represent patterns that generally agree with the requirements of many professional schools. Since there are many variations in the requirements of the professional schools, students should, after consulting the CWU catalog, select courses required by the institution from which they expect to earn a degree.

The following pre-professional programs are offered: pre-chiropractic, pre-dental hygiene, pre-dentistry, pre-dietetics, pre-engineering, pre-law, pre-medical technology, pre-medicine,

pre-nursing in public health, pre-occupational therapy, pre-pharmacy, pre-physical therapy, pre-physician assistant, pre-respiratory therapy and pre-veterinary.

To find an advisor and more information on these programs you can go to: [www.cwu.edu/health-career](http://www.cwu.edu/health-career).

## Pre-Chiropractic

Pre-Chiropractic is a non-degree advising program through which a student can prepare for admission to a professional Chiropractic Medicine program at another institution. CWU does offer all prerequisite courses necessary for successful admission to such a program.

For more information regarding the Pre-Chiropractic program, please go to: [www.cwu.edu/health-career/pre-chiropractic-home](http://www.cwu.edu/health-career/pre-chiropractic-home).

College and Department Information

Pre-Professional Programs

## Pre-Dental Hygiene

For more information on this program, please go to: [www.cwu.edu/health-career/pre-dental-hygiene-home](http://www.cwu.edu/health-career/pre-dental-hygiene-home).

College and Department Information

Pre-Professional Programs

## Pre-Dentistry

For more information on this program, please go to: [www.cwu.edu/health-career/pre-dentistry-home](http://www.cwu.edu/health-career/pre-dentistry-home).

College and Department Information

Pre-Professional Programs

## Pre-Dietetics

### Advisors

David Gee, PhD  
Nutrition, Exercise, and Health Sciences Department  
Program Director of Food Science and Nutrition  
Purser Hall, room 109  
[geed@cwu.edu](mailto:geed@cwu.edu)  
509-963-2772

Susan Hawk, PhD, RDN  
Nutrition, Exercise, and Health Sciences Department  
Dietetic Program Director  
PE Building, room 136

[woodys@cwu.edu](mailto:woodys@cwu.edu)  
509-963-1041

Dana Ogan, MS, RDN  
Nutrition, Exercise, and Health Sciences Department  
Dietetic Internship Director  
Purser Hall, room 137  
[ogand@cwu.edu](mailto:ogand@cwu.edu)  
509-963-2351

Nicole Stendell-Hollis, PhD, RDN  
Nutrition, Exercise, and Health Sciences Department  
Purser Hall, room 132  
[StendellHollisN@cwu.edu](mailto:StendellHollisN@cwu.edu)  
509-963-3360

Kelly Pritchett, PhD, RDN  
Nutrition, Exercise, and Health Sciences Department  
Purser Hall, room 135  
[pritchettk@cwu.edu](mailto:pritchettk@cwu.edu)  
509-963-2786

Patrick Coffey  
Professional Academic Counselor (NEHS & HEAMS)  
Bouillon Hall, room 205i  
509-963-3423

A registered dietitian nutritionist (RDN) is an expert on foods and how they affect human health. An RDN is registered by the Academy of Nutrition and Dietetics (AND) as an individual who has completed an accredited four-year undergraduate program. The BS in food science and nutrition (with a specialization in dietetics) is an accredited program with the Commission on Accreditation Council for Education in Nutrition and Dietetics. In addition, the individual must complete a post-baccalaureate 1,200-hour accredited supervised practice experience at one of over 200 dietetic internship sites. Finally, individuals must then pass the registration examination to attain the RDN credential. Please see an advisor for more information. Dietitians may work in hospitals, clinics, and nursing homes as clinical dietitians; for government and public health agencies as community dietitians, and in food service departments of hospitals, schools, nursing homes, and restaurants as management dietitians. In addition, dietitians also are employed as researchers, educators, and as consultants in a variety of settings.

For more information, please contact an advisor in the Nutrition, Exercise, and Health Science Department.

College and Department Information

Pre-Professional Programs

## Pre-Engineering

Most colleges of engineering accept students into their programs only after they have successfully completed a pre-engineering course of study. This usually takes the first two or three years of a student's college career, and can be done at CWU. Then the student must transfer to the engineering school of his or her choice and apply for admission to the particular engineering program wanted. She or he will graduate from that college and therefore must satisfy its requirements.

The course requirements in engineering vary considerably for different fields of engineering and for various colleges of engineering. The most important step a pre-engineering student can take is to consult the catalog of the particular college of engineering the student hopes to attend and then to plan a program at CWU to satisfy as many specific requirements of that college as possible. Students whose plans are not definite are advised to follow the typical first-year program outlined below and have a firm choice of an engineering program by the beginning of their second year. The pre-engineering advisor can assist you in these matters.

Students selecting this program must have completed a full year of high school calculus, or have a satisfactory score on the Math Placement Test Form PC, which is given by the mathematics department, or MATH 154. These are prerequisites to MATH 172.

The Department of Physics also offers a bachelor of science, physics major-engineering, in which the student receives degrees in physics and engineering. Consult the physics department chair, or pre-engineering advisor for additional information about this program.

For more information please check out the Physics website: [www.cwu.edu/physics](http://www.cwu.edu/physics).

Dual-degree Physics/Engineering Program information.

College and Department Information

Pre-Professional Programs

## Pre-Law

The attainment of a law degree ordinarily involves a seven-year program—the completion of an undergraduate degree (four years), followed by three years at law school. Before winter quarter of one's senior year, a future law student should take the Law School Admission Test (LSAT) and apply to law schools.

Law schools do not require a particular major or courses as a condition for admission. Common undergraduate majors found in the law school population are history, English, economics, business, political science, and philosophy. No specific major will ensure admittance to law school. The most important criteria are your GPA and your score on the Law School Admissions Test (LSAT). The pre-law student should seek a course of study, which enhances his or her verbal comprehension and analytical thinking. Critical understanding of the human institutions and values with which the law deals is also very helpful.

The law and justice department offers an advisory program designed to assist students in choosing and gaining admission to law schools, with several advisors having law degrees. The pre-law student should carefully plan his or her program in close consultation with an advisor.

For more information on this program, please go to: [www.cwu.edu/law](http://www.cwu.edu/law). Also, visit [www.lsac.org](http://www.lsac.org) for more information.

College and Department Information

Pre-Professional Programs

## Pre-Medical Technology

### Advisor

Holly Pinkart, PhD  
Department of Biological Sciences  
SCI 236B  
509-963-2710

A medical technologist performs a full range of laboratory tests from simple blood tests and urinalysis, to identification of microorganisms, and includes phlebotomy (blood-drawing). Medical technologists perform complex chemical, biological, hematological, immunologic, microscopic, and bacteriological tests, and type and cross match blood samples for transfusions. Additionally, medical technologists rigorously maintain clinical laboratory quality control programs to ensure the accuracy of tests, and may supervise medical and clinical laboratory technicians.

Medical technologists are certified by the American Society for Clinical Pathology. Eligibility for the certification exam requires a bachelor's degree and completion of a one year clinical internship in an accredited program. CWU offers all the appropriate coursework required for entry into clinical internship programs.

For more information on this program, please go to: [www.cwu.edu/health-career/pre-medical-technology-home](http://www.cwu.edu/health-career/pre-medical-technology-home).

College and Department Information

Pre-Professional Programs

## Pre-Medicine

This program prepares students for entering professional schools of medicine (MD or DO). In addition to the required science courses, a broad humanities and liberal arts background is encouraged. Although pre-medical students usually major in the sciences (85 percent), any arts or science major is acceptable. Regardless of their academic major, pre-medicine students must work closely with the pre-medicine advisor in order to insure their proper preparation for medical school. The university's pre-medicine program is supported by approximately 10 full tuition and books scholarships, which are based on academic excellence, not need.

For more information on this program go to: [www.cwu.edu/health-career/pre-medicine-home](http://www.cwu.edu/health-career/pre-medicine-home).

College and Department Information

Pre-Professional Programs

## Pre-Nursing in Public Health

The pre-nursing in public health specialization within the public health major prepares students to meet entrance requirements to bachelor of science in nursing (BSN) programs throughout Washington. Armed with leading-edge scientific knowledge and liberal arts content, combined with an extensive public health internship, the pre-public health nursing specialization allows future professionals to enter nursing school with a solid background in public health theory and practice. CWU does not offer a degree program in nursing, but offers all prerequisite courses necessary for successful admission to professional nursing programs available across Washington.

For more information on this program go to:  
[www.cwu.edu/health-career/pre-nursing-home](http://www.cwu.edu/health-career/pre-nursing-home).

College and Department Information

Pre-Professional Programs

## Pre-Occupational Therapy

The pre-occupational therapy program is an advising program through which a student can prepare for admission to a professional occupational therapy program at another institution. CWU does not offer a degree program in occupational therapy or pre-occupational therapy, but does offer all prerequisite courses necessary for successful admission to the professional phase at another university.

Most pre-occupational therapy students will complete their undergraduate degree at CWU and then apply to the program(s) of their choice. Detailed information concerning appropriate undergraduate coursework and professional occupational therapy programs in the Pacific Northwest is available in the Department of Psychology or by visiting [www.cwu.edu/health-career/pre-occupational-therapy-home-0](http://www.cwu.edu/health-career/pre-occupational-therapy-home-0).

College and Department Information

Pre-Professional Programs

## Pre-Pharmacy

A pre-pharmacy program of study may be developed that prepares students for admission into professional programs at any university granting a pharmacy doctoral degree (Pharm-D). Central does not offer a degree program in pharmacy, but does offer all prerequisite courses necessary for admission to pharmacy programs at other universities.

Contact the pre-pharmacy advisor, Professor Gil Belofsky in the Department of Chemistry for help in determining a program of study, for advice on scheduling, or for more details on any aspect of the pre-pharmacy program. See also the CWU Health Career Resources website at [www.cwu.edu/health-career/pre-pharmacy-advisors](http://www.cwu.edu/health-career/pre-pharmacy-advisors).

College and Department Information

Pre-Professional Programs

## Pre-Physical Therapy

The pre-physical therapy program is an advising program through which a student can prepare for admission to a professional physical therapy program at another institution. CWU does not offer a degree program in physical therapy or pre-physical therapy, but does offer all prerequisite courses necessary for successful admission to the professional phase at another university.

Most pre-physical therapy students will complete their undergraduate degree at CWU and then apply to the program(s) of their choice. Detailed information concerning appropriate undergraduate coursework and professional physical therapy programs in the Pacific Northwest is available in the Department of Biological Sciences or by visiting [www.cwu.edu/health-career/pre-physical-therapy-home-0](http://www.cwu.edu/health-career/pre-physical-therapy-home-0).

College and Department Information

Pre-Professional Programs

## Pre-Physician Assistant

Interested in becoming a Physician Assistant?

Things to keep in mind regarding pre-physician assistant studies at CWU:

- Pre-physician assistant studies is not a major. It is a set of prerequisite courses that prepare you for success on the GRE and entry into physician assistant school.
- Physician Assistant schools are looking for well-rounded applicants. While many students choose a field in the natural sciences for a major, many applicants from humanities or social sciences are accepted into PA school. Choose a major that is the best fit for you.
- Students should seek advising early. While we can advise you on strong coursework preparation that will generally support your admission, we cannot be familiar with the specific requirements of all the individual schools. Please check requirements for individual schools as you prepare your applications.

For more information on this program, please go to:  
[www.cwu.edu/health-career/pre-physician-assistant-home](http://www.cwu.edu/health-career/pre-physician-assistant-home).

College and Department Information

Pre-Professional Programs

## Pre-Respiratory Therapy

Respiratory Therapy is a growing healthcare profession that works to prevent, diagnose, and treat disorders of the circulatory and respiratory systems. Respiratory therapists work with medical doctors in a variety of healthcare centers, such as



hospitals, physician offices, rehabilitation centers, and patient's homes, with all ages of patients, from premature infants to the elderly. If you have trouble breathing, or have a respiratory disease such as asthma, then you probably have seen a respiratory therapist!

With a 19% job outlook, respiratory therapy is a great career choice for those interested in working with patients with respiratory dysfunction. An associate's degree is required to achieve the necessary training and education to become a respiratory therapist, however, bachelor's degrees are also an option.

Our Pre-Respiratory Therapy program can help you gain entrance onto an accredited Respiratory therapy program by providing prerequisite coursework needed to apply. Because every program is different, please visit your advisor and compare prerequisites, as they will vary by program.

For more information on this program, please go to:  
[www.cwu.edu/health-career/pre-respiratory-therapy-home](http://www.cwu.edu/health-career/pre-respiratory-therapy-home).

College and Department Information

Pre-Professional Programs

## Pre-Veterinary

While not offering a degree in veterinary medicine, CWU does provide the necessary prerequisite courses and an environment that promotes successful admission to veterinary medicine programs both in the USA and abroad. Although some veterinary medicine programs do not require an undergraduate degree for admission, most CWU students do complete their degree before moving into a veterinary medicine program. Below is a list of suggested courses that will fulfill the prerequisites of many veterinary programs. However, each of the 28 veterinary schools in the United States has its own requirements. You must check to be sure that these courses will meet the admission requirements for each veterinary school to which you will apply.

For more information on this program, please go to:  
[www.cwu.edu/health-career/pre-veterinary-medicine-home](http://www.cwu.edu/health-career/pre-veterinary-medicine-home).

College and Department Information

Pre-Professional Programs

## Primate Behavior and Ecology Program

College of the Sciences  
Ellensburg  
Dean Hall, room 357A

509-963-3201  
Fax: 509-963-3215  
[www.cwu.edu/primate](http://www.cwu.edu/primate)

See website for how this program may be used for educational and career purposes.

### Program Director

Jessica A. Mayhew, PhD, anthropology, Dean Hall, room 341

### Professors

Dan Beck, PhD, biology, ecology and behavior

Kara I. Gabriel, PhD, psychology, experimental psychology, biopsychology

Lori K. Sheeran, PhD, anthropology, primate behavior, primate conservation, biological anthropology

Lixing Sun, PhD, biology, ecology and evolution of animal behavior (especially communication systems), chemical ecology

R. Steven Wagner, PhD, biology, conservation population genetics, molecular evolution

### Associate Professors

Matthew Altman, PhD, philosophy, applied ethics (including environmental ethics and ethics and animals), 19th century philosophy, ethics, social and political philosophy, philosophy of art, philosophy of law

Ralf Greenwald, PhD, psychology, general cognition, human neurophysiology, working memory, attention, language

### Assistant Professor

J. Hope Amason, PhD, anthropology, political economy and globalization, politics of representation, race, class, and gender, museums, memorials, and heritage sites, tourism studies

Jessica A. Mayhew, PhD, anthropology, primate social behavior and socio-cognition, great apes, play behavior

Mary Radeke, PhD, psychology, child-language development, neuropsychology, experimental psychology

Rodrigo Renteria-Valencia, PhD, anthropology, environmental anthropology

### Lecturers

Sofia Blue, PhD, anthropology, primatology, signal systems in nonhuman primates, research methodology

Mary Lee Jensvold, PhD, primatology, primate cognition, chimpanzee behavior

JB Mulcahy, MS, primatology, primate captive care, chimpanzee behavior

### Staff

Penelope Anderson, secretary senior

### Program Information

This program provides majors with interdisciplinary perspectives on the behavior and ecology of nonhuman primates in both captive and free-living settings. It serves as background for graduate study in the behavior, ecology, or phylogeny of primates, as well as for care-giving careers with primates living in laboratories, zoos, or other captive facilities. Lab fees required for PRIM 220, PRIM 320, and ANTH 416.

A double major is REQUIRED with the PBE degree. Students must complete the requirements for the PBE major as well as the requirements for a 45-plus-credit major in anthropology, biology, or psychology. Students interested in the major should contact the program office as soon as possible for further information, application forms, and assignment of an advisor. PBE majors are expected to meet with their advisor at least once a quarter.

### Special Programs

The program sponsors and is affiliated with a wide range of on- and off-campus activities that provide students with opportunities to conduct faculty-mentored scientific projects or internships.

The PBE library in room 204 Dean Hall houses several hundred books, articles, and DVDs/videotapes related to primatology. The room includes a TV, DVD player, and four computer work stations.

The PBE program has available for student use one video camera, two digital cameras, two DVD players, one television, observational software (The Observer), and two PDAs for using this software at remote locations. The Observer software can also be used on two desktop computers.

Students and faculty who have been approved to conduct research at CHCI may have access to resources housed there. These include an extensive library of articles, books, videos, and DVDs, and more than 20 years of archived video footage collected from the chimpanzees living there. CHCI also houses several VCRs, TVs, DVD players, video cameras, and computers that students can use in research projects conducted at CHCI. Access is considered on a case-by-case basis in consultation with the director and associate director of CHCI.

The Anthropological Genetics Laboratory in room 232A Dean Hall is equipped for performing DNA extractions, PCR (Polymerase Chain Reaction) amplification, genotyping, and DNA sequencing. Software for analyzing genetic data and performing phylogenetic analysis is also available.

The anthropology department owns casts of fossil and living nonhuman primates. These span a variety of taxa including prosimians, monkeys, and apes. Access is considered on a case-by-case basis in consultation with the anthropology faculty.

The PBE program is affiliated with the Conservation and Biodiversity Field School in China, which is coordinated through the CWU Office of International Study and Programs.

Students can develop faculty-mentored internship experiences based at CHCI, the Woodland Park Zoo, and other sites.

### Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### Course Offerings

Frequency of course offering information can be found at the department website: [www.cwu.edu/primate](http://www.cwu.edu/primate) or by contacting the department directly.

## Primate Behavior and Ecology Major, BS

This program provides majors with interdisciplinary perspectives on the behavior and ecology of nonhuman primates in both captive and free-living settings. It serves as background for graduate study in the behavior, ecology, or phylogeny of primates, as well as for care-giving careers with primates living

in laboratories, zoos, or other captive facilities.

A double major is REQUIRED with the PBE degree. Students must complete the requirements for the PBE major as well as the requirements for a 45-plus-credit major in anthropology, biology, or psychology. Students interested in the major should contact the program office as soon as possible for further information, application forms, and assignment of an advisor. PBE majors are expected to meet with their advisor at least once a quarter.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Exhibit depth and breadth in their knowledge of concepts, terminology, and theories relevant to primate behavior, ecology, and evolution
- Be skillful in designing, carrying out, and presenting a faculty-mentored research project
- Be proficient at working collaboratively on collaborative projects
- Value the humane treatment of nonhuman animals and will value biodiversity
- Be familiar with causes of primates' decline and endangerment
- Be proficient users of information technology as it relates to primatology

### Required Courses

Introductory Level: Credits: 10

- ANTH 110 - Bones, Apes, and Genes: Exploring Biological Anthropology **Credits: (5)**
- PSY 101 - General Psychology **Credits: (5)**

Choose one from the following: Credits: 5

\*Course selection by advisement depending upon second major.

- BIOL 101 - Fundamentals of Biology **Credits: (5)**
- BIOL 181 - General Biology I **Credits: (5)**

Choose one from the following: Credits: 5

\*Course selection by advisement depending upon second major.

- BIOL 182 - General Biology II **Credits: (5)**
- BIOL 200 - Plants in the Modern World **Credits: (5)**

Choose one from the following: Credits: 5

\*Course selection by advisement depending upon second major.

- BIOL 183 - General Biology III **Credits: (5)**
- BIOL 201 - Human Physiology **Credits: (5)**

Core Requirements

\*Course selection by advisement depending upon second major.

- ANTH 313 - Primate Social Behavior **Credits:** (4)
- ANTH 380 - Non-Verbal Communication **Credits:** (4)
- ANTH 411 - Primate Conservation **Credits:** (4)
- **OR** PHIL 306 - Environmental Ethics **Credits:** (5)
- ANTH 413 - Research Methods in Primatology **Credits:** (5)
- **OR** PSY 300 - Research Methods in Psychology **Credits:** (5)
- PRIM 450 - Primate Behavior and Ecology Capstone **Credits:** (1)

Choose one from the following: Credits: 4

- ANTH 410 - Biological Anthropology: Theoretical and Research Issues **Credits:** (4)
- ANTH 411 - Primate Conservation **Credits:** (4)
- ANTH 499 - Seminar **Credits:** (1-5)
- BIOL 499 - Seminar **Credits:** (1-5)
- PSY 442 - Evolutionary Psychology **Credits:** (4)
- PSY 499 - Seminar **Credits:** (1-5)

Choose one from the following: Credits: 4-5

\*Course selection by advisement depending upon second major.

- ANTH 352 - Anthropology of Environmental Issues **Credits:** (4)
- ANTH 440 - Ecology and Culture **Credits:** (4)
- BIOL 302 - Sustainability and Environmental Change **Credits:** (5)
- BIOL 360 - General Ecology **Credits:** (5)

Choose one from the following: Credits: 4-5

\*Course selection by advisement depending upon second major.

- BIOL 213 - Introductory Biostatistics **Credits:** (4)
- PSY 362 - Introductory Statistics **Credits:** (5)

Choose one from the following: Credits: 4-5

\*Course selection by advisement depending upon second major.

- BIOL 465 - Biology of Animal Behavior **Credits:** (4)
- PSY 301 - Learning **Credits:** (5)

Choose one from the following: Credits: 3-5

- PRIM 220 - Procedures in Captive Primate Care **Credits:** (1)
- PRIM 490 - Cooperative Education **Credits:** (1-12)
- PRIM 495A - Directed Research in Primatology **Credits:** (1-5)
- PRIM 495C - CHCI Directed Research **Credits:** (1-10)
- **OR** Other Research

Choose two of the following: Credits: 8

- ANTH 412 - Monkeys of the Neotropics **Credits:** (4)
- ANTH 416 - Apes **Credits:** (4)
- ANTH 418 - Monkeys of Asia and Africa **Credits:** (4)

Total Credits: 70-76

College and Department Information

Primate Behavior and Ecology Program  
Anthropology and Museum Studies Department  
College of the Sciences

## Captive Primate Care Certificate

CWU undergraduate students or non-matriculated students are eligible to enroll in the proposed certificate program. Certificate coursework can be used toward other degree requirements (as applicable) except ANTH 201 Grade 1 Animal Technician (1 unit), which can only be counted toward the certificate. Completion of the certificate will provide students with all skills and experiences listed by the International Primatological Society for "Animal Technician," and some skills and experiences listed for "Senior Animal Technician." This expertise may assist students in future job searches in captive primate care based at zoos, sanctuaries, and/or laboratories.

Required Courses Credits: 9

- ANTH 201 - Grade 1 Animal Technician **Credits:** (1)
- ANTH 313 - Primate Social Behavior **Credits:** (4)
- **OR** ANTH 412 - Monkeys of the Neotropics **Credits:** (4)
- PRIM 450 - Primate Behavior and Ecology Capstone **Credits:** (1)
- PRIM 490 - Cooperative Education **Credits:** (1-12) (Must be taken for 3 credits.)

Department-approved Applied Field Electives Credits: 8-9

Choose 8-9 credits from the following list of courses:

- ANTH 110 - Bones, Apes, and Genes: Exploring Biological Anthropology **Credits:** (5)
- ANTH 316 - History and Theory of Molecular Anthropology **Credits:** (4)
- ANTH 352 - Anthropology of Environmental Issues **Credits:** (4)
- ANTH 411 - Primate Conservation **Credits:** (4)
- ANTH 413 - Research Methods in Primatology **Credits:** (5)
- ANTH 416 - Apes **Credits:** (4)
- ANTH 418 - Monkeys of Asia and Africa **Credits:** (4)
- BIOL 101 - Fundamentals of Biology **Credits:** (5)
- BIOL 453 - Mammalogy **Credits:** (5)
- BIOL 465 - Biology of Animal Behavior **Credits:** (4)
- BIOL 466 - Conservation Biology **Credits:** (5)

- PRIM 220 - Procedures in Captive Primate Care **Credits:** (1)
  - PRIM 490 - Cooperative Education **Credits:** (1-12)
  - PSY 413 - Conservation Psychology **Credits:** (4)
  - PSY 449 - Abnormal Psychology **Credits:** (4)
- Elective courses may have pre- or co-requisites.

Total Credits: 17-18

#### College and Department Information

Primate Behavior and Ecology Program  
 Anthropology and Museum Studies Department  
 College of the Sciences

## Psychology Department

College of the Sciences  
 Ellensburg  
 Psychology Bldg., room 421  
 Mail Stop 7575  
 509-963-2381  
 Fax: 509-963-2307  
[www.cwu.edu/psychology](http://www.cwu.edu/psychology)

See the department website for how this major may be used for educational and career purposes (see the Career Guide under Prospective Students tab).

#### Faculty and Staff Chair

Stephanie Stein, PhD

#### Assistant Chair

Stephen B. Schepman, PhD

#### Professors

Kara I. Gabriel, PhD, general experimental psychology, spatial skills, risk-taking, biopsychology  
 Susan D. Lonborg, PhD, health psychology, substance abuse, clinical and research ethics, career development, gender, social networking  
 Heath Marrs, EdD, school psychology, educational psychology, response to intervention, gender issues in education  
 Megan D. Matheson, PhD, nonhuman primate social behavior, evolutionary psychology, self-injurious behavior, comparative psychology  
 Stephen B. Schepman, PhD, organization development, work motivation, personality theories, social psychology, statistics  
 Anthony J. Stahelski, PhD, industrial/organizational psychology, social psychology, small group interaction, leadership, cults and extremist groups, aggression and violence, terrorism  
 Stephanie Stein, PhD, school psychology, curriculum-based measurement, behavior disorders in children, lifespan development, psychopathology

#### Associate Professors

Marte Fallshore, PhD, environmental decision-making, psychology of law, learning, memory, statistics, cognition  
 Ralf Greenwald, PhD, cognitive brain dynamics, event-related potentials, critical thinking, psychology of video gaming, general cognitive psychology  
 Jeffrey M. Penick, PhD, mental health counseling, group

counseling, counseling supervision, adult aging and development, health psychology  
 Danielle Polage, PhD, cognitive psychology, psychology and law, memory, eyewitness testimony, lying and jury deliberation  
 Terrence J. Schwartz, PhD, educational psychology, counseling psychology, statistical analysis  
 Wendy A. Williams, PhD, applied behavior analysis, general experimental psychology, adults with autism, canine behavior, single-subject research

#### Assistant Professors

Sara Bender, PhD, psychotic disorders, clinical expectations related to recovery, efficacy of online learning, cyber-supervision  
 Heidi Perez, PhD, school psychology, efficacy of school-based interventions, graduate student success, social-emotional functioning and behavior in children  
 Tonya Buchanan, PhD, experimental psychology, social psychology, implicit and explicit attitudes, power, interpersonal perceptions, deception  
 Maribeth Jorgensen, PhD, researcher and professional identity development, gatekeeping and ethics, sport counseling, research mentorship, suicide prevention, grief and loss  
 Richard Marsicano, PhD, academic and behavioral interventions, intervention adherence, performance feedback, and response to intervention  
 Meaghan Nolte, PhD, mindfulness, addictions treatment, counselor training, identity, epistemological development  
 Liane Pereira, PhD, youth mental health, human development, social determinants of health, educational psychology  
 Mary Radeke, PhD, use of facial cues in personality assessment, conversation development in young children, personality traits, technology in the classroom, primate communication  
 Fred Washburn, PhD, counselor development, supervision readiness, assessing counselor competency, counselor pedagogy

#### Senior Lecturer

Mark Soelling, PhD, counseling psychology, psychology and the law, psychopharmacology

#### Lecturers

Christopher Beeman, PhD, behavioral neuroscience, biology of long term memory, teaching in psychology, neuroscience outreach  
 Cristina Bistricean, MS, high-functioning autism, behavior in rehab/nursing facilities, anxiety, intrusive thoughts  
 Joshua Buchanan, PhD, self-conscious emotion, emotion expression, judgment and decision-making, coordination, psychology of video games  
 Jennifer Kassing, MA, couples counseling, family therapy, disorders of childhood, ecotherapy, integrative care, developmental and health psychology

#### Staff

Debbie Thomas, secretary supervisor  
 Loretta Ney, secretary lead  
 Chris Buchanan, engineering technician III

#### Department Information

The psychology department offers an important behavioral science component of the university's liberal arts curriculum. As part of the General Education program, courses in psychology broaden the student's knowledge about behavior, cognition, and emotion. Through our major and minor programs, students can develop an understanding of the perspectives, content, and

methods of the science and practice of psychology and prepare for graduate study.

### Admission Requirements

Prior to admission to the psychology major, students must meet the following requirements:

Completion of PSY 101 with a grade of C or higher  
GPA of 2.25 or higher in college coursework

Students wishing to apply for admission to the psychology major or minor are required to register with the department and be advised by a member of the department faculty. Students may register as pre-majors in psychology if they wish to join the major but have not yet met the admission requirements. The department reserves the right to change requirements as circumstances warrant. Application forms may be obtained from the department office or on the department website.

### Exit Requirements

Students are required to have a 2.5 GPA within the major area to receive the degree.

Senior psychology majors are required to complete the department's end-of-major examination in the quarter before graduating. Students should register for the examination in the department office. The purpose of this requirement is to enable us to assess whether the department has fulfilled its instructional objectives and to provide us with information that will enable us continuously to improve our programs and courses. In PSY 200 Introduction to the Major (taken after applying to the psychology major), students will learn about the portfolio requirements that will be due in PSY 489 Senior Assessment. One of the PSY 489 portfolio requirements is a minimum of ten hours of service learning and/or research assistant experience. This requirement can be met any time prior to the end of PSY 489.

### Departmental Honors

The eligibility requirements for admission to the Department of Psychology honors program include the following:

1. Admission to the program: The student must be a psychology major, at least a junior but not more than a first quarter senior and have completed core courses with a GPA of at least 3.25 in those courses and have an overall cumulative GPA of 3.0. The student must apply in writing to the department chair, with a supporting letter of recommendation from a member of the faculty who agrees to supervise the student's work to completion.
2. Requirements and Procedures: The student will register for 4-6 credits in PSY 497, Undergraduate Honors Thesis. In consultation with the supervising faculty member, the student chooses a three-person faculty committee. Plans for the honors project, generally an empirical research study, must be approved by the entire committee. The project will culminate in a written research report and a formal defense of the thesis.

### Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### Course Offerings

Frequency of course offering information can be found at the department website: [www.cwu.edu/psychology](http://www.cwu.edu/psychology) or by contacting the department directly.

## Psychology Major, BA (45 credits)

The 45-credit major is intended for students who are interested in careers that would combine a background in psychology with work in fields such as social work, family studies, business, forensics, primate behavior, and other fields for which training in behavioral science would be useful. Students in the 45-credit major are required to complete either a minor or a double major. This major would also be useful for students who intend to go directly into the work force following graduation. If a student decided later to pursue graduate school, the core courses in the 45-credit major may transfer into the 60-credit major.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.
- Apply basic research methods in psychology, including research design, data analysis, and interpretation.
- Respect and use critical and creative thinking, skeptical inquiry, and, when possible, the scientific approach to solve problems related to behavior and mental processes.
- Apply psychological principles to personal, social, and organizational issues.
- Value empirical evidence, tolerate ambiguity, act ethically, and reflect other values that are the underpinnings of psychology as a science.
- Demonstrate information competence and the ability to use computers and other technology for many purposes.
- Communicate effectively in a variety of formats.
- Recognize and respect the complexity of sociocultural and international diversity.

### Required Courses for the 45-credit major

- PSY 101 - General Psychology **Credits:** (5)
- PSY 200 - Introduction to the Major **Credits:** (1)
- PSY 300 - Research Methods in Psychology **Credits:** (5)
- PSY 362 - Introductory Statistics **Credits:** (5)
- PSY 489 - Senior Assessment **Credits:** (2)

Select at least one course from each of the following groups:

#### Group I

- PSY 301 - Learning **Credits:** (5)

- PSY 303 - Analysis of Everyday Behavior **Credits:** (4)

#### Group II

- PSY 310 - Multicultural Psychology and Social Justice **Credits:** (4)
- PSY 313 - Developmental Psychology **Credits:** (4)
- PSY 346 - Social Psychology **Credits:** (4)

#### Group III

- PSY 445 - Clinical, Counseling, and Community Psychology **Credits:** (5)
- PSY 449 - Abnormal Psychology **Credits:** (4)
- PSY 453 - Theories of Personality **Credits:** (5)

#### Group IV

- PSY 420 - Psychology of Language **Credits:** (4)
- PSY 460 - Cognitive Psychology **Credits:** (5)

#### Group V

- PSY 450 - Sensation and Perception **Credits:** (4)
- PSY 478 - Behavioral Neuroscience **Credits:** (4)

Department-Approved Electives Credits: 4-7

May include a maximum of five lower division credits.

In addition to the classes listed above, other 300 and 400-level psychology classes may also qualify for elective credits.

Total Credits: 45

College and Department Information

Psychology Department  
College of the Sciences

## Psychology Major, BA (60 credits)

The 60-credit major is intended to provide a foundation for professional careers and/or graduate training in psychology. It requires substantial coursework in the methodological, statistical, and content areas of psychology, while still allowing for individualized student interests and choice. Students enrolled in the 60-credit major also have the opportunity to receive credit toward their degree for participation in professional development and research experiences.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.
- Apply basic research methods in psychology, including research design, data analysis, and interpretation.
- Respect and use critical and creative thinking, skeptical inquiry, and, when possible, the scientific approach to solve problems related to behavior and mental processes.
- Apply psychological principles to personal, social, and organizational issues.
- Value empirical evidence, tolerate ambiguity, act ethically, and reflect other values that are the underpinnings of psychology as a science.
- Demonstrate information competence and the ability to use computers and other technology for many purposes.
- Communicate effectively in a variety of formats.
- Recognize and respect the complexity of sociocultural and international diversity.

### Required Courses for the 60-credit major

- PSY 101 - General Psychology **Credits:** (5)
- PSY 200 - Introduction to the Major **Credits:** (1)
- PSY 300 - Research Methods in Psychology **Credits:** (5)
- PSY 362 - Introductory Statistics **Credits:** (5)
- PSY 363 - Intermediate Statistics and Research Methods **Credits:** (5)
- PSY 489 - Senior Assessment **Credits:** (2)

Select at least one course from each of the following groups:

#### Group I

- PSY 301 - Learning **Credits:** (5)
- PSY 303 - Analysis of Everyday Behavior **Credits:** (4)

#### Group II

- PSY 310 - Multicultural Psychology and Social Justice **Credits:** (4)
- PSY 313 - Developmental Psychology **Credits:** (4)
- PSY 346 - Social Psychology **Credits:** (4)

#### Group III

- PSY 445 - Clinical, Counseling, and Community Psychology **Credits:** (5)
- PSY 449 - Abnormal Psychology **Credits:** (4)
- PSY 453 - Theories of Personality **Credits:** (5)

#### Group IV

- PSY 420 - Psychology of Language **Credits:** (4)

- PSY 460 - Cognitive Psychology **Credits:** (5)

#### Group V

- PSY 450 - Sensation and Perception **Credits:** (4)
- PSY 478 - Behavioral Neuroscience **Credits:** (4)

Department-Approved Electives Credits: 14-17

May include a maximum of five lower division credits. In addition to the classes listed above, other 300 and 400-level psychology classes may also qualify for elective credits.

\*\*Not more than 10 hours of PSY 295 and PSY 495 combined may be applied to a psychology major.

Total Credits: 60

#### College and Department Information

Psychology Department  
College of the Sciences

## Psychology Minor

Core Courses Credits: (10)

- PSY 101 - General Psychology **Credits:** (5)
- PSY 300 - Research Methods in Psychology **Credits:** (5)  
Students who have taken the research methods course required for their major in law and justice, sociology, or IDS-social sciences do not have to take PSY 300 for the psychology minor. However, they do need to replace the credits from PSY 300 with any five upper division psychology credits not otherwise allocated to the minor. The student must have a minimum of 30 psychology credits to complete the minor.

Choose two courses from the following list: Credits (8-10)

- PSY 301 - Learning **Credits:** (5)
- **OR** PSY 303 - Analysis of Everyday Behavior **Credits:** (4)
- PSY 313 - Developmental Psychology **Credits:** (4)
- **OR** PSY 314 - Human Development and the Learner **Credits:** (4)
- PSY 346 - Social Psychology **Credits:** (4)
- PSY 420 - Psychology of Language **Credits:** (4)
- PSY 445 - Clinical, Counseling, and Community Psychology **Credits:** (5)
- PSY 449 - Abnormal Psychology **Credits:** (4)
- PSY 450 - Sensation and Perception **Credits:** (4)
- PSY 453 - Theories of Personality **Credits:** (5)
- PSY 456 - Industrial and Organizational Psychology **Credits:** (4)
- PSY 460 - Cognitive Psychology **Credits:** (5)
- PSY 478 - Behavioral Neuroscience **Credits:** (4)

Department-Approved Electives Credits: (10-12)

Any upper-division psychology course can be used as an elective.

In addition to the classes listed above, other 300- and 400-level psychology classes may also qualify for elective credit.

Total Credits: 30

#### College and Department Information

Psychology Department  
College of the Sciences

## Science Education Department

College of the Sciences  
Ellensburg  
Discovery Hall, room 301  
Mail Stop 7540  
509-963-2929

[www.cwu.edu/science-education](http://www.cwu.edu/science-education)  
[www.cwu.edu/teachstem/teach-stem](http://www.cwu.edu/teachstem/teach-stem)

See the website for how these programs may be used for educational and career purposes.

#### Faculty and Staff Chair

Jennifer Dechaine, PhD

#### Professors

Martha J. Kurtz, PhD, chemistry and science education  
Bruce Palmquist, PhD, physics and science education  
Ian J. Quitadamo, PhD, biological sciences and science education

#### Associate Professor

Jennifer Dechaine, PhD, biological sciences and science education

Anne Egger, PhD, geological sciences and science education  
Vanessa Hunt, PhD, science education  
Tim Sorey, PhD, chemistry and science education

#### Assistant Professor

Adriano Cavalcanti, PhD, computer sciences and science education  
Emilie Hancock, mathematics and science education  
Allyson Rogan-Klyve, PhD, science education

#### Lecturer

Linda Graf, MS, science education  
Arthur Morken, MS, science education

#### Staff

Rachel George, advisor and recruiter  
Cori Totten, secretary supervisor

#### Department Information

The primary function of the science education department is

preparing people to teach science. Coursework in science pedagogy is offered for students in the Teacher Certification Programs as well as for teachers in the schools. The science education department works with science departments in the design and operation of degree programs for students who are preparing to teach in the secondary schools. We believe that students learn via the active construction of knowledge. To facilitate that process, all of our instruction follows the learning cycle model.

Our program seeks to help students become facilitators of learning in a diverse world. To that end, the science education department has the following goals for an effective science teacher:

- Demonstrate an ability to individually and collaboratively engage in inquiry and integrate the nature of science
- Explain and apply fundamental science content concepts, principles, and methods
- Demonstrate an ability to effectively facilitate learning for all students
- Create safe, effective learning environments that support inquiry, collaboration, intellectual risk-taking, ethical decision-making, and student construction of knowledge
- Demonstrate an ability to assess teaching and learning outcomes using multiple methods, effectively evaluate teaching and learning effectiveness, and improve practice based on reflection and data
- Demonstrate an ability to make science personally and socially relevant to individual and community by incorporating current events within collaborative and social networks

Students seeking endorsement for certification to teach a specialized science at the high school level must satisfactorily complete the teaching major within the specific science department. Students desiring to become middle or junior high school specialized teachers of science are encouraged to obtain a teaching major in one or more of the following areas: biology, chemistry, Earth sciences, middle-level science or physics. All students are advised to work toward a second major or minor endorsement.

All students enrolled in science majors leading to certification are required to have an approved schedule on file with a science education advisor as early as possible and before endorsement for student teaching.

### **Program Outcomes**

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### **Course Offerings**

Frequency of course offering information can be found at the department website: [www.cwu.edu/science-education](http://www.cwu.edu/science-education) or by contacting the department directly.

## **Science: Middle-Level Education, BA**

This major partially satisfies the criteria for a teaching endorsement in Middle-Level Science (4-9), qualifying students to teach science at the middle school or junior high levels. It may also be appropriate for students preparing to teach in informal science education settings, such as museums. Students who successfully complete the Science: Middle-Level Education, BA and STEM Teaching Program (an alternative to the Professional Education Program) are eligible to apply for Washington State teacher certification. Teacher certification candidates must receive a C grade or higher in all major and STEM Teaching Program courses, have a GPA of at least 3.0 for either the last 45 graded quarter credits or overall CWU/transfer cumulative, and meet all Washington State teacher certification requirements. See the middle-level science education advisor as soon as possible to develop a course of study.

### **Admission Requirements**

Mathematics competency equivalent to MATH 153

Note: Admission to the Teacher Certification Program is a separate process from admission to the major and is required for those pursuing public school teacher certification.

### **Graduation Requirements**

Note: See Teacher Certification Program graduation requirements for students pursuing public school teacher certification.

### **Program Requirements**

Candidates must have valid WSP and FBI fingerprint clearance and liability in order to complete any course that requires the candidate to be working with P-12th grade children on or off campus. The fingerprint clearance must be valid through the duration of the course. Fingerprint clearance must appear in the Office of Superintendent of Public Instruction (OSPI) Fingerprinting Database to be accepted.

For students pursuing public school teacher certification:

Successful completion of program portfolio required before student teaching.

Successful completion of the NES exam in middle grades general science and the edTPA required for teacher certification.

### **Program Learner Outcomes**

Upon successful completion of this program, students will be able to:

- Demonstrate an ability to individually and collaboratively engage in inquiry using science and engineering practices.
- Use disciplinary core ideas and cross-cutting concepts to provide evidence-based explanations of the natural world.
- Effectively communicate science to an audience of children, peers, experts, or the public.

Required Courses Credits: 37-38



- SCED 101 - Integrated Life Science **Credits:** (5)
- CHEM 106 - Chemistry Inquiry **Credits:** (5)
- SCED 102 - Integrated Earth and Space Science **Credits:** (5)
- PHYS 101 - Introductory Astronomy I **Credits:** (5)
- **OR** PHYS 102 - Introduction to Astronomy **Credits:** (4)
- PHYS 106 - Physics Inquiry **Credits:** (5)
- SCED 311 - Science Concepts for Teachers **Credits:** (5)
- SCED 320 - Genetics and Cell Biology Concepts **Credits:** (5)
- SCED 354 - Science, Society and the Teaching Community **Credits:** (3)

Department-Approved Electives Credits: 7-8

Science content approved electives at the 300-level or higher. One can be a MATH course.

Total Credits: 45-46

College and Department Information

Science Education Department  
College of the Sciences

#### **Program Outcomes**

Visit program outcomes to find out what you can expect to know and do after successful completion of this program.

## **Science Education - Broad Area Science Teaching Minor**

This minor is restricted to students working on a program aimed at teaching biology, chemistry, earth science, or physics. Science teaching majors must complete the appropriate courses in the three disciplines shown below that are outside their major. For example, a biology teaching major would need to fulfill the chemistry, earth science and physics requirements. Students interested in this minor need to see a science education advisor as soon as possible. This program may result in students taking more than four years to complete their degree. Students completing this minor are required to demonstrate knowledge, skill, and disposition proficiency of student learning outcomes through a program portfolio prior to student teaching. Students must pass the NES exam for General Science to receive the science endorsement.

Required Courses

(Complete all three areas not covered in major program)

Biology Credits: 15

- BIOL 181 - General Biology I **Credits:** (5)
- BIOL 182 - General Biology II **Credits:** (5)
- BIOL 183 - General Biology III **Credits:** (5)

Chemistry Credits: 15

- CHEM 181 - General Chemistry I **Credits:** (4)
- CHEM 181LAB - General Chemistry Laboratory I **Credits:** (1)
- CHEM 182 - General Chemistry II **Credits:** (4)
- CHEM 182LAB - General Chemistry Laboratory II **Credits:** (1)
- CHEM 183 - General Chemistry III **Credits:** (4)
- CHEM 183LAB - General Chemistry Laboratory III **Credits:** (1)

Earth Science Credits: 13-14

- GEOL 101LAB - Introductory Geology Laboratory **Credits:** (1)
- GEOL 302 - Oceans and Atmosphere **Credits:** (4)

Select Either:

- GEOL 101 - Introduction to Geology **Credits:** (4)
- GEOL 103 - Geology of Washington **Credits:** (4)

Select Either:

- PHYS 101 - Introductory Astronomy I **Credits:** (5)
- PHYS 102 - Introduction to Astronomy **Credits:** (4)

Physics Credits: 15

- PHYS 111 - Introductory Physics I with Laboratory **Credits:** (5)
- PHYS 112 - Introductory Physics II with Laboratory **Credits:** (5)
- PHYS 113 - Introductory Physics III with Laboratory **Credits:** (5)  
OR
- PHYS 181 - General Physics I with Laboratory **Credits:** (5)
- PHYS 182 - General Physics II with Laboratory **Credits:** (5)
- PHYS 183 - General Physics III with Laboratory **Credits:** (5)

Total Credits: 43-45

College and Department Information

Science Education Department  
College of the Sciences

## **Science Education K-8 Minor**

This minor is open to students in any education major, as well as to other students as appropriate. This minor does not lead to an endorsement, but it will prepare students to be science leaders in the elementary school.

## Required Courses

- SCED 101 - Integrated Life Science **Credits:** (5)
- SCED 102 - Integrated Earth and Space Science **Credits:** (5)
- SCED 103 - Integrated Physical Science **Credits:** (5)
- SCED 215 - STEM Outreach Field Experience **Credits:** (1-2) (Must be taken for 2 credits)
- **OR** STP 201 - Inquiry Approaches to Teaching **Credits:** (2)
- SCED 322 - Science Education in the Elementary School **Credits:** (4)
- **OR** ELEM 342 - Teaching Elementary Science Inquiry **Credits:** (4)
- SCED 354 - Science, Society and the Teaching Community **Credits:** (3)
- SCED 422 - Advanced Teaching Strategies in K-8 Science **Credits:** (4)

Total Credits: 28

## College and Department Information

Science Education Department  
College of the Sciences

# STEM Teaching Program

The STEM Teaching Program prepares students to teach science, mathematics, or computer science at the middle school, junior high, or high school levels. To take the STEM Teaching Program, students must also be enrolled in one of the approved majors listed below. To qualify for the Washington State Residency Teaching Certificate, students must, in addition to successfully completing the STEM Teaching Program and their approved major degree, demonstrate proficiency in student learning outcomes through a program portfolio and pass the NES exam and the Teacher Performance Assessment (edTPA) in their endorsement area. Certification eligibility is monitored by the Teacher Certification Office in the School of Education. See the STEM Teaching Program advisor as soon as possible for more information and to develop a course of study.

### Approved major degrees:

Biology Major, BA or BS for endorsement in Biology (5-12)  
Chemistry Major, BA or BS for endorsement in Chemistry (5-12)  
Computer Science, BS for endorsement in Computer Science (K-12)  
Geology Major, BA or BS for endorsement in Earth Science (5-12)  
Physics Major, BA or BS for endorsement in Physics (5-12)  
Mathematics: Secondary Education, BA for endorsement in Mathematics (5-12)  
Mathematics: BS for endorsement in Mathematics (5-12)  
Mathematics: Middle Level Education, BA for endorsement in Middle Level Mathematics (4-9)

Science: Middle Level Education, BA for endorsement in Middle Level Science (4-9)

### Admission Requirements

Full admittance to the Teacher Certification is required to enroll in STP 303 (Knowing and Learning).

### Graduation Requirements

- No grade lower than a C in major, minor and STEM Teaching Program courses
- Minimum GPA of 2.5 in major, minor and STEM Teaching Program courses
- Minimum GPA of 3.0 for last 45 graded quarter credits (the total may exceed 45 if an entire quarter is needed to achieve the minimum 45) or overall CWU/transfer cumulative.

### Program Requirements

- Fingerprint Clearance - Candidates must have valid WSP and FBI fingerprint clearance in order to complete any course that requires the candidate to be working with P-12th grade children on or off campus. The fingerprint clearance must be valid through the duration of the course. Fingerprint clearance must appear in the Office of Superintendent of Public Instruction (OSPI) Fingerprinting Database to be accepted.
- Liability Insurance

## Required Courses

- EFC 480 - Student Teaching **Credits:** (16)
- STP 201 - Inquiry Approaches to Teaching **Credits:** (2)
- **AND** STP 202 - Inquiry Based Lesson Design **Credits:** (2)
- **OR** STP 300 - Inquiry Approaches to Teaching and Lesson Design **Credits:** (4)
- STP 303 - Knowing and Learning **Credits:** (4)
- STP 304 - Classroom Interactions 1 **Credits:** (4)
- STP 305 - Classroom Interactions 2 **Credits:** (4)
- STP 306 - Project-Based Instruction **Credits:** (3)
- STP 307A - Functions and Modeling for STEM Teaching **Credits:** (3)
- **OR** STP 307B - Functions and Modeling for Secondary Mathematics **Credits:** (3)
- **OR** STP 307C - Computer Science for STEM Teaching **Credits:** (3)
- STP 308 - Perspectives on Science, Mathematics and STEM Education **Credits:** (3)
- STP 309 - Research Methods **Credits:** (3)

Total Credits: 44

## College and Department Information

Science Education Department  
College of the Sciences

# Sociology Department

College of the Sciences

Ellensburg

Samuelson, room 201

Mail Stop 7545

509-963-1305

Fax: 509-963-1308

[www.cwu.edu/sociology](http://www.cwu.edu/sociology)

See website for how sociology may be used for educational and career purposes.

## Faculty and Staff

### Chair

Eric Cheney, PhD

### Professors

Eric Cheney, PhD, deviance and social control, economic sociology, organizations, statistics and urban sociology  
Delores Cleary, PhD, criminology, the life-course, American society, minorities, ethnic studies, American Indian issues  
Judith Hennessy, PhD, social welfare and poverty, gender, sociology of work, sociology of family  
Nelson Pichardo, PhD, ethnic studies, social movements

### Associate Professors

Michael Harrod, PhD, social psychology, criminology theory, intimate partner violence, statistics, research methods  
Pamela McMullin-Messier, PhD, demography, aging, collective action, social justice, environmental studies, family, gender, and sexuality  
Michael Mulcahy, PhD, political sociology, political economy, organizations, theory  
Griff Tester, PhD, gender, social inequality, aging, health

### Assistant Professors

Tracey Hoover, PhD, gender and identity, feminist movements and theory, family and socialization, and media  
Sarah Samblanet, PhD, social inequality, statistics, gender  
Baiqing (Cythnia) Zhang, PhD, criminology, statics

### Lecturers

Connie Robinson, PhD, historical sociology, political sociology, social movements, race, ethnicity and nation  
Jessica Strawn, MA, criminology and communities, juvenile rehabilitation, social welfare

### Staff

Kelly Zakel-Larson, secretary supervisor

## Department Information

The Department of Sociology provides opportunities for students to understand the conceptual and methodological tools used by sociologists to understand society. Students will be encouraged to: 1) see society as concrete day-to-day behavior of human beings; 2) grasp the relationship between history, society, and the individual's life; 3) realize that social patterns are tools for the accomplishment of human ends and not necessarily unalterable facts of life; and 4) develop the ability to critically analyze social phenomena.

## Department Standards

Students who major in sociology and social services are required to register with the department, at which time an advisor will be selected. In order to develop a program of study, students are required to meet once a quarter with their advisor. Further information on specific courses, the faculty, and career opportunities are available in the department office.

## Exit Requirements

Students are required to have a 2.3 cumulative grade point average for all majors.

## Honors in Sociology and Social Services

1. The sociology department's honors program is designed for students who wish to explore a particular research problem in depth.

2. Admission to the program

The student must:

- (a) Have a 3.50 or higher cumulative GPA in sociology courses
- (b) Be at least a junior
- (c) Have a faculty member sponsorship; the faculty member would submit student's name to the department for admission

3. Requirements

The student is required to:

- (a) Maintain a 3.5 or higher GPA in sociology coursework (including any approved outside electives) applied to the sociology degree
- (b) Enroll in SOC 495 beginning fall quarter of the senior year (minimum of 10 credits over the course of that year)
- (c) Complete a research project under the supervision of a faculty
- (d) Participate in a public presentation of the research project (such as SOURCE, a professional conference, or other departmental-approved venues)

4. Those who fail to maintain a 3.5 GPA in the major, or who fail to participate in a public presentation will not receive honors.

## Sociology Core Requirements

Required Courses

SOC 107 - Principles of Sociology 5

SOC 350 - Social Theory I 5

SOC 363 - Methods of Social Research 5

SOC 364 - Data Analysis in Sociology 5

SOC 489 - Senior Seminar 1

Sociology Core Total Credits: 21

## Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

## Course Offerings

Frequency of course offering information can be found at the department website: [www.cwu.edu/sociology](http://www.cwu.edu/sociology) or by contacting the department directly.

## Sociology Major, BA (45 credits)

The Sociology major is an exciting discipline with expanding opportunities for a wide range of career paths. Sociology is a valuable liberal arts major for students planning careers in a wide variety of fields including social research, criminology, demography, social psychology, public administration, gerontology, education, social work and market research. It provides a useful background for those planning to enter law, business, medicine, community planning, and politics.

Students may choose either a 45-credit major or a 60-credit major.

### Graduation Requirement

In order to graduate, a student who completes the 45-credit major must also have a minor or second major in another discipline.

(NOTE: Students admitted to the sociology major cannot also have a sociology minor; however, they may have a social services minor. Likewise, students admitted to the social services major cannot also have a social services minor, but they may have a sociology minor.)

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate critical thinking skills:
  - Identify underlying assumptions in theoretical models and arguments
  - Distinguish between arguments based on empirical evidence and those based on opinion
  - Recognize alternative viewpoints on social issues
- Communicate effectively:
  - Express sociological ideas in a clear and coherent manner
  - Make oral presentations focused on course content in group settings
  - Read professional-level sociological reports with understanding
- Apply sociological perspective:
  - Describe similarities and differences between sociology and other social sciences
  - Explain contributions of sociology to understanding social reality
  - Define and apply key concepts such as culture, status, roles, norms, socialization, deviance, conformity, self, social structure, social institution, social inequality, stratification, race, gender, social change, cultural diversity, etc.
- Demonstrate competence in sociological theory:
  - Describe the role of theory in building sociological knowledge
  - Compare and contrast major theoretical orientations
  - Explain how theories reflect historical and cultural context of the times and cultures in which they were developed

- Recognize and use different methods of sociological inquiry and data analysis:
  - Identify, compare, and contrast major sociological research and techniques for analyzing data
  - Design and carry out a social research project
  - Be aware of ethical issues in research
  - Demonstrate basic computer skills necessary to find, create, apply, and communicate sociological information
- Show knowledge in substantive areas within sociology:
  - Summarize existing knowledge, current questions, and important issues in one substantive area within sociology
  - Suggest specific policy implications of research and theories in one area
- Integrate the knowledge and skills learned in the sociology program with life goals and career interests:
  - Participate in extra curriculum and service activities that elicit positive social change
  - Apply sociological perspective in real world, professional experience

Required Courses - Credits: 22

- SOC 107 - Principles of Sociology **Credits: (5)**
- SOC 300 - Introduction to the Major **Credits: (1)**
- SOC 350 - Social Theory I **Credits: (5)**
- SOC 363 - Methods of Social Research **Credits: (5)**
- SOC 364 - Data Analysis in Sociology **Credits: (5)**
- SOC 489 - Senior Seminar **Credits: (1)**

Select one course from each of the following categories - Credits: 15

Deviance, Law and Social Control

- SOC 343 - Child Abuse **Credits: (5)**
- SOC 344 - Juvenile Delinquency **Credits: (5)**
- SOC 345 - Deviance **Credits: (5)**
- SOC 346 - Criminology **Credits: (5)**
- SOC 348 - Women and Crime **Credits: (5)**
- SOC 349 - Law and Society **Credits: (5)**
- SOC 352 - Punishment and Corrections **Credits: (5)**
- SOC 447 - White-collar and Organization Crime **Credits: (5)**

Inequality and Social Change

- SOC 325 - Aging **Credits: (5)**
- SOC 326 - Social Demography **Credits: (5)**
- SOC 354 - Minority Experience **Credits: (5)**
- **OR** ETS 354 - Minority Experiences **Credits: (5)**
- SOC 356 - Sociology of Gender **Credits: (5)**
- SOC 358 - Sociology of Sexualities **Credits: (5)**
- SOC 359 - U.S. Feminist Movements **Credits: (5)**
- SOC 362 - Social Movements **Credits: (5)**

- SOC 365 - Minority Groups **Credits:** (5)
- SOC 366 - Sociology of American Indians **Credits:** (5)
- SOC 370 - Social Change **Credits:** (5)
- SOC 371 - Globalization **Credits:** (5)
- SOC 375 - Sociology of Conflict **Credits:** (5)
- SOC 382 - Sociology of the Future **Credits:** (5)
- SOC 386 - Seminar on Racism **Credits:** (5)
- SOC 415 - Urban Sociology **Credits:** (5)
- SOC 442 - Social Welfare Policy **Credits:** (5)
- SOC 445 - Social Inequality **Credits:** (5)
- SOC 446 - Sociology of Immigration **Credits:** (5)

#### Social Structure and Institutions

- SOC 307 - Individual and Society **Credits:** (5)
- SOC 320 - Death and Dying **Credits:** (5)
- SOC 327 - Health and Society **Credits:** (5)
- SOC 331 - Sociology of Sport **Credits:** (5)
- SOC 338 - Political Sociology **Credits:** (5)
- SOC 351 - Sociology of Work **Credits:** (5)
- SOC 357 - Sociology of Families **Credits:** (5)
- SOC 367 - Sociology of Religion (Put on reserve 9/16/18) **Credits:** (5)
- SOC 376 - Sociology of the Military and Veterans in U.S. Society **Credits:** (5)
- SOC 380 - Environmental Sociology **Credits:** (5)
- SOC 425 - Sociology of Education **Credits:** (5)
- SOC 459 - Organizations **Credits:** (5)

Department-Approved Electives - Credits: 8

Any upper-division 300- or 400- level sociology course.

Total Credits: 45

#### College and Department Information

Sociology Department  
College of the Sciences

## Sociology Major, BA (60 credits)

A sociology major provides many distinctive perspectives on the world, generating new ideas and critiquing the old. Sociology addresses the most pressing issues of our time and is a rapidly expanding field whose potential is increasingly tapped by those who craft policies and create programs. Sociologists understand social inequality, patterns of behavior, forces for social change and resistance, and how social systems work. Sociology is an exciting discipline with expanding opportunities for a wide range of career paths and is a valuable liberal arts major for many career paths.

Students may choose either a 45-credit major or a 60-credit major. In order to graduate, a student who completes the 45-credit major must also have a minor or second major in another discipline.

(NOTE: Students admitted to the sociology major cannot also have a sociology minor; however, they may have a social services minor. Likewise, students admitted to the social services major cannot also have a social services minor, but they may have a sociology minor.)

#### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate critical thinking skills:
  - Identify underlying assumptions in theoretical models and arguments
  - Distinguish between arguments based on empirical evidence and those based on opinion
  - Recognize alternative viewpoints on social issues
- Communicate effectively:
  - Express sociological ideas in a clear and coherent manner
  - Make oral presentations focused on course content in group settings
  - Read professional-level sociological reports with understanding
- Apply sociological perspective:
  - Describe similarities and differences between sociology and other social sciences
  - Explain contributions of sociology to understanding social reality
  - Define and apply key concepts such as culture, status, roles, norms, socialization, deviance, conformity, self, social structure, social institution, social inequality, stratification, race, gender, social change, cultural diversity, etc.
- Demonstrate competence in sociological theory:
  - Describe the role of theory in building sociological knowledge
  - Compare and contrast major theoretical orientations
  - Explain how theories reflect historical and cultural context of the times and cultures in which they were developed
- Recognize and use different methods of sociological inquiry and data analysis:
  - Identify, compare, and contrast major sociological research and techniques for analyzing data
  - Design and carry out a social research project
  - Be aware of ethical issues in research
  - Demonstrate basic computer skills necessary to find, create, apply, and communicate sociological information
- Show knowledge in substantive areas within sociology:
  - Summarize existing knowledge, current questions, and important issues in one substantive area within sociology
  - Suggest specific policy implications of research and theories in one area
- Integrate the knowledge and skills learned in the sociology program with life goals and career interests:

- Participate in extra curriculum and service activities that elicit positive social change
- Apply sociological perspective in real world, professional experience

#### Required Courses - Credits: 22

- SOC 107 - Principles of Sociology **Credits: (5)**
- SOC 300 - Introduction to the Major **Credits: (1)**
- SOC 350 - Social Theory I **Credits: (5)**
- SOC 363 - Methods of Social Research **Credits: (5)**
- SOC 364 - Data Analysis in Sociology **Credits: (5)**
- SOC 489 - Senior Seminar **Credits: (1)**

Select at least one course from each of the following categories - Credits: 15

#### Deviance, Law and Social Control

- SOC 343 - Child Abuse **Credits: (5)**
- SOC 344 - Juvenile Delinquency **Credits: (5)**
- SOC 345 - Deviance **Credits: (5)**
- SOC 346 - Criminology **Credits: (5)**
- SOC 348 - Women and Crime **Credits: (5)**
- SOC 349 - Law and Society **Credits: (5)**
- SOC 352 - Punishment and Corrections **Credits: (5)**
- SOC 447 - White-collar and Organization Crime **Credits: (5)**

#### Inequality and Social Change

- SOC 325 - Aging **Credits: (5)**
- SOC 326 - Social Demography **Credits: (5)**
- SOC 354 - Minority Experience **Credits: (5)**
- OR ETS 354 - Minority Experiences **Credits: (5)**
- SOC 356 - Sociology of Gender **Credits: (5)**
- SOC 358 - Sociology of Sexualities **Credits: (5)**
- SOC 359 - U.S. Feminist Movements **Credits: (5)**
- SOC 362 - Social Movements **Credits: (5)**
- SOC 365 - Minority Groups **Credits: (5)**
- SOC 366 - Sociology of American Indians **Credits: (5)**
- SOC 370 - Social Change **Credits: (5)**
- SOC 371 - Globalization **Credits: (5)**
- SOC 375 - Sociology of Conflict **Credits: (5)**
- SOC 382 - Sociology of the Future **Credits: (5)**
- SOC 386 - Seminar on Racism **Credits: (5)**
- SOC 415 - Urban Sociology **Credits: (5)**
- SOC 442 - Social Welfare Policy **Credits: (5)**
- SOC 445 - Social Inequality **Credits: (5)**
- SOC 446 - Sociology of Immigration **Credits: (5)**

#### Social Structure and Institutions

- SOC 307 - Individual and Society **Credits: (5)**
- SOC 320 - Death and Dying **Credits: (5)**
- SOC 327 - Health and Society **Credits: (5)**

- SOC 331 - Sociology of Sport **Credits: (5)**
- SOC 338 - Political Sociology **Credits: (5)**
- SOC 351 - Sociology of Work **Credits: (5)**
- SOC 357 - Sociology of Families **Credits: (5)**
- SOC 367 - Sociology of Religion (Put on reserve 9/16/18) **Credits: (5)**
- SOC 376 - Sociology of the Military and Veterans in U.S. Society **Credits: (5)**
- SOC 380 - Environmental Sociology **Credits: (5)**
- SOC 425 - Sociology of Education **Credits: (5)**
- SOC 459 - Organizations **Credits: (5)**

#### Department-Approved Electives - Credits: 23

A maximum of 5 credits of 100-level electives and up to 5 credits of 200-level electives may be counted toward the major. PSY 363, Intermediate Statistics and Research Methods are an approved elective.

Total Credits: 60

#### College and Department Information

Sociology Department  
College of the Sciences

## Social Services Major, BS

The social service major is designed for students interested in working in the human services delivery systems. Students are required to have a strong grounding in sociology as well as the applied field of social services. The coursework introduces students to critical issues in the field and offers students the opportunity to work within agencies in the community.

The major requirements are such that students are encouraged to organize their program of study to include a minor in an area of interest or specialization outside of sociology. Some areas that fit well with this major include psychology, ethnic studies, family studies, gerontology, women's studies, community health, and the like.

#### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate critical thinking skills:
  - Identify underlying assumptions in theoretical models and arguments
  - Distinguish between arguments based on empirical evidence and those based on opinion
  - Recognize alternative viewpoints on social issues
- Communicate effectively:
  - Express sociological ideas in a clear and coherent manner
  - Make oral presentations focused on course content in group settings
  - Read professional-level sociological reports with understanding

- Apply sociological perspective:
  - Describe similarities and differences between sociology and other social sciences
  - Explain contributions of sociology to understanding social reality
  - Define and apply key concepts such as culture, status, roles, norms, socialization, deviance, conformity, self, social structure, social institution, social inequality, stratification, race, gender, social change, cultural diversity, etc.
- Demonstrate competence in sociological theory:
  - Describe the role of theory in building sociological knowledge
  - Compare and contrast major theoretical orientations
  - Explain how theories reflect historical and cultural context of the times and cultures in which they were developed
- Recognize and use different methods of sociological inquiry and data analysis:
  - Identify, compare, and contrast major sociological research and techniques for analyzing data
  - Design and carry out a social research project
  - Be aware of ethical issues in research
  - Demonstrate basic computer skills necessary to find, create, apply, and communicate sociological information
- Show knowledge in substantive areas within sociology:
  - Summarize existing knowledge, current questions, and important issues in one substantive area within sociology
  - Suggest specific policy implications of research and theories in one area
- Integrate the knowledge and skills learned in the sociology program with life goals and career interests:
  - Participate in extra curriculum and service activities that elicit positive social change
  - Apply sociological perspective in real world, professional experience

Sociology Required Courses Credits: 22

\*\*\*SOC 107 is a prerequisite for SOC 350 and SOC 445.

- SOC 107 - Principles of Sociology **Credits: (5)**
- SOC 300 - Introduction to the Major **Credits: (1)**
- SOC 350 - Social Theory I **Credits: (5)**
- SOC 363 - Methods of Social Research **Credits: (5)**
- SOC 364 - Data Analysis in Sociology **Credits: (5)**
- SOC 489 - Senior Seminar **Credits: (1)**

Social Service Required Courses Credits: 24

- SOC 301 - Introduction and History of Social Service Agencies **Credits: (5)**
- SOC 310 - Social Service Methods and Casework **Credits: (5)**
- SOC 442 - Social Welfare Policy **Credits: (5)**

- SOC 445 - Social Inequality **Credits: (5)**
- SOC 490 - Cooperative Education **Credits: (1-12)**  
(Must be taken for 4 credits.)

Department-Approved Electives Credits: 20

Choose 20 credits of upper-division sociology electives.

\*\*\*Additional credits in SOC 490 may count towards graduation.

- SOC 320 - Death and Dying **Credits: (5)**
- SOC 325 - Aging **Credits: (5)**
- SOC 327 - Health and Society **Credits: (5)**
- SOC 343 - Child Abuse **Credits: (5)**
- SOC 344 - Juvenile Delinquency **Credits: (5)**
- SOC 354 - Minority Experience **Credits: (5)**
- SOC 356 - Sociology of Gender **Credits: (5)**
- SOC 357 - Sociology of Families **Credits: (5)**
- SOC 365 - Minority Groups **Credits: (5)**
- SOC 376 - Sociology of the Military and Veterans in U.S. Society **Credits: (5)**
- SOC 386 - Seminar on Racism **Credits: (5)**
- SOC 415 - Urban Sociology **Credits: (5)**
- SOC 425 - Sociology of Education **Credits: (5)**
- SOC 446 - Sociology of Immigration **Credits: (5)**
- SOC 460 - Community Structure and Organization **Credits: (5)**

Total Credits: 66

College and Department Information

Sociology Department  
College of the Sciences

## Ethnic Studies Minor

Ethnic studies is a minor offered by the Sociology department that explores the multiple issues associated with race/ethnicity in the U.S. The central mission is to increase the understanding of the history and dynamics of race/ethnicity to prepare students for working in and interacting with an increasingly diverse and globalized world. Minor offers classes exploring the concept of race, the experiences of various racial/ethnic groups in the U.S. as well as whiteness studies.

Required Courses Credits:15

- ETS 354 - Minority Experiences **Credits: (5)**
- **OR** SOC 354 - Minority Experience **Credits: (5)**
- **OR** SOC 365 - Minority Groups **Credits: (5)**
- SOC 109 - Social Construction of Race **Credits: (5)**
- SOC 386 - Seminar on Racism **Credits: (5)**

Ethnic Studies Courses Credits: 3-6

Department-Approved Electives Credits: 9-15

Total Credits: 27-36

College and Department Information

Sociology Department  
College of the Sciences

## Social Services Minor

(NOTE: Students admitted to the sociology major cannot also have a sociology minor, however, they may have a social services minor. Likewise, students admitted to the social services major cannot also have a social services minor, but they may have a sociology minor.)

Required Courses

- SOC 301 - Introduction and History of Social Service Agencies **Credits:** (5)
- SOC 310 - Social Service Methods and Casework **Credits:** (5)
- SOC 442 - Social Welfare Policy **Credits:** (5)
- **OR** SOC 460 - Community Structure and Organization **Credits:** (5)

Department-Approved Electives Credits: 15

Electives in Sociology Credits: (15)  
SOC 490, Cooperative Education, and SOC 496, Individual Study, do not count toward the minor. A maximum of 5 credits of elective lower-division coursework may be counted toward the minor.

Total Credits: 30

College and Department Information

Sociology Department  
College of the Sciences

## Sociology Minor

Required Courses

- SOC 107 - Principles of Sociology **Credits:** (5)

Department-Approved Electives Credits: 20

Upper-division electives in Sociology - Credits: 20  
SOC 490, Cooperative Education, and SOC 496, Individual Study, do not count toward the minor. With advisor approval, a maximum of 5 credits of elective lower-division coursework may be counted toward the minor.

Total Credits: 25

College and Department Information

Sociology Department  
College of the Sciences

# STEP (Science Talent Expansion Program)

College of the Sciences  
Ellensburg

Discovery Hall, 111E  
509-963-3002  
Mail Stop 7519  
www.cwu.edu/step

### Contact

Toni Snowden  
STEP Coordinator  
STEP@cwu.edu

The Science Talent Expansion Program (STEP) is an innovative program designed to prepare and retain students in majors and careers in science, technology, engineering, and mathematics (STEM) fields. STEP consists of an integrated sequence of classes, enrichment activities, and student research opportunities through which students gain hands-on experience in modern scientific research methods, explore theme-based interdisciplinary scientific issues, and develop mentoring relationships with CWU STEM faculty.

Application to STEP is open to new freshman and transfer students with an interest in and aptitude for STEM fields.

STEP freshman participate in a three-quarter-long series of courses known as the STEP Freshman Science Seminar (STEP 101, STEP 102, and STEP 103). Completion of these three courses satisfies one of the Natural Sciences General Education Program requirements. Students who successfully complete the STEP Freshman Science Seminar series will be eligible to apply for and participate in the STEP Sophomore Bridging Program. The STEP Sophomore Bridging Program provides the opportunity for students in their sophomore year to participate in undergraduate research or serve as a Teaching Assistant in various STEM courses. Those students who have already had some college-level experience are invited to apply directly to the STEP Transfer Bridging Program and will take two STEP courses, STEP 301 in the fall and STEP 302 in the winter. Upon completion of these courses, transfer students will have the opportunity to apply for positions in the STEP Transfer Bridging Program.

The Science Talent Expansion Program at CWU involves faculty members from several academic departments: Anthropology; Biological Sciences; Chemistry; Computer Science; Geography; Geological Science; Engineering Technologies, Safety, and Construction Management; Mathematics; and Physics. More information about the program and participating faculty members is available on the STEP website.



### **Program Outcomes**

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### **Course Offerings**

Frequency of course offering information can be found at the department website: [www.cwu.edu/step](http://www.cwu.edu/step) or by contacting the department directly.

# Theatre Arts Department

College of Arts and Humanities  
Ellensburg  
McConnell Hall, room 102  
Mail Stop 7460  
509-963-1750  
Fax: 509-963-1767  
e-mail: [theatre@cwu.edu](mailto:theatre@cwu.edu)  
[www.cwu.edu/theatre](http://www.cwu.edu/theatre)

See the website for how this program may be used for educational and career purposes.

### **Faculty and Staff**

#### **Interim Chair**

Christina Barrigan, MFA

#### **Professor**

Michael J. Smith, MFA, head of performance, dialect, acting for the camera

#### **Associate Professors**

Christina Barrigan, MFA, head of design, resident lighting designer

George W. Bellah, 3rd, MFA, movement, performance, stage combat, Asian drama

Terri Brown, PhD, head of music theatre, history, literature and music theatre

David Brown, MM, musical director, music theory

Patrick Dizney, MFA, voice, performance

Marc Haniuk, MFA, resident scenic designer

#### **Assistant Professors**

Natashia Lindsey, PhD, dramaturg, history, literature

Emily Rollie, PhD, theatre studies, education

#### **Senior Lecturer**

Jerry Dougherty, MFA, stage and production management

#### **Lecturers**

David Barnett, MFA, McConnell stage manager, scene shop manager, technical director

M. Catherine McMillen, BA, costume shop manager, wigs and makeup

Jae Hee Kim, MFA, costume design and technology

Nick Ligon, MFA, lighting shop manager

Ramón Esquivel, MFA, theatre education, playwriting

Joseph Sasnett, BFA, voice instructor

Jason Tucholke, MFA, sound design and technology

#### **Staff**

Lori LaFleur, fiscal technician II

Mary Makins, secretary senior

### **Department Information**

The Department of Theatre Arts offers comprehensive study in the varied facets of theatre arts as they relate to theatre production. Coursework prepares students for rigorous and rewarding work within Central Theatre Ensemble (CTE), the production arm of the program, leading to professional work in the entertainment industry. Based on a professional model of theatre, CTE offers students the opportunity to thrive in all aspects of theatre production in a safe and mentoring environment, working in state-of-the-art venues supported by fully equipped shops and studios.

### **Admission Requirements**

A cumulative grade point average of 2.7 (B-) in the pre-major required courses must be achieved with a minimum grade of "C+" (2.3) in each course. The applicant must have earned a minimum cumulative GPA of 2.0 in all other collegiate study.

Pre-major required courses:

- TH 107 - Introduction to Theatre **Credits:** (4)
- TH 144 - Foundations of Acting **Credits:** (3)
- TH 166 - Theory of Play Production **Credits:** (3)

### **BFA Specializations**

Admission to the BFA is by audition/interview only.

Auditions/interviews are held each year, in late February and early March. See the Auditions Procedures Page

[www.cwu.edu/theatre/node/2479/#8](http://www.cwu.edu/theatre/node/2479/#8).

### **Program Outcomes**

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### **Course Offerings**

Frequency of course offering information can be found at the department website: [www.cwu.edu/theatre](http://www.cwu.edu/theatre) or by contacting the department directly.

## Theatre Studies, BA

A perfect choice for the theatre artist, the Theatre Studies, BA allows for advanced study in a variety of areas allowing students to become a well-rounded theatre artist who can go on to a focused study in graduate school or a variety of careers in the field. The theatre studies degree is also a great choice for the student who has a number of interests and needs the flexibility to explore several options.

The Department of Theatre Arts offers students a variety of emphasis areas to choose from to ensure that each participant receives specialized attention in the theatre discipline of their choice. By focusing on an emphasis, students can build skills and acquire the training to build strong resumes and portfolios in order to pursue professional jobs or advanced degrees.

### **Admission Requirements**

Students applying to the major must submit a [major application form](#).

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate the ability to analyze and interpret dramatic literature and performance as a performer, designer, director, or educator.
- Demonstrate the ability to function effectively as members of a collaborative team in the preparation and realization (implementation) of a public performance.
- Have the ability to effectively use the various tools within the work areas of theatre production.
- Analyze and identify a variety of genre of dramatic literature and the themes each presented to the society in which it was developed.

### Theatre Arts Core Requirements

The Theatre Arts programs are designed to prepare knowledgeable, skilled graduates who will successfully compete in an increasingly competitive field. Students will also learn to assess, explain, and interpret the many roles and responsibilities inherent in the world of the professional theatre artist, and beyond. They will understand how to use the skills they develop in other career paths related to their degree.

#### Admission Requirements

**BA students** apply directly to the department through the **one-step online application**, after admitted to the institution. **No audition is required.**

- For a student new to the institution: The theatre arts application should be completed following admission to the university, and one week prior to enrolling in courses.
- For a continuing CWU student: The theatre arts application can be completed at any time.

**BFA students** audition/interview through our online pre-screening web-based program, **GetAcceptd.com**. Information on the audition/interview process can be found at the **department website**.

**Students seeking a theatre minor** apply directly to the department through the **one-step online application**, after enrollment at the institution.

### Theatre Arts Core Requirements

Students in all theatre arts programs must earn a grade of "C+" (2.3) or higher in Theatre Arts Core Requirement courses.

- TH 107 - Introduction to Theatre **Credits: (4)**
- TH 166 - Theory of Play Production **Credits: (3)**
- TH 363 - Theatre History I **Credits: (4)**
- TH 364 - Theatre History II **Credits: (4)**
- TH 365 - Theatre History III **Credits: (4)**

Lab Component - Credits: 4

All theatre students completing programs which share the Theatre Arts Core Requirements are required to complete at least four (4) lab assignments.

Complete four (4) credits of the following:

- TH 393 - Theatre Laboratory **Credits: (1)**
- TH 493 - Theatre Laboratory **Credits: (1)**

Production Component - Credits: 3

All theatre majors are required to complete at least one backstage assignment.

Choose one from the following:

- TH 301 - Production Application **Credits: (3)**
- TH 401 - Production Application **Credits: (3)**

Theatre Arts Core Total Credits: 26

Required Courses Credits: 18

- TH 144 - Foundations of Acting **Credits: (3)**
- TH 261 - Costume Technology **Credits: (3)**
- TH 267 - Scene Technology **Credits: (3)**
- TH 268 - Lighting Technology **Credits: (3)**
- TH 488 - Introduction to Dramaturgy **Credits: (3)**
- TH 495 - Senior Research Project **Credits: (3)**

Choose any of the following for a total of 8 credits:

- TH 375 - Asian Drama **Credits: (4)**
- TH 377 - Staging Gender **Credits: (4)**
- TH 380 - Studies in Drama **Credits: (5)**
- TH 382 - Diverse Experiences in American Drama **Credits: (4)**

Choose any of the following for a total of 3 credits:

- TH 140 - Introduction to Theatre Design **Credits: (3)**
- TH 145 - Foundations of Acting II **Credits: (3)**
- TH 329 - Directing I **Credits: (3)**
- TH 360 - Stage Management **Credits: (3)**

Choose any of the following for a total of 9 credits:

- TH 201 - Dance Production Application **Credits: (1-3)**
- TH 202 - Performance Studio **Credits: (1-3)**
- TH 301 - Production Application **Credits: (3)**
- TH 302 - Performance Application **Credits: (3)**
- TH 303 - Management Application **Credits: (3)**
- TH 401 - Production Application **Credits: (3)**
- TH 402 - Performance Application **Credits: (3)**
- TH 403 - Management Application **Credits: (3)**

Department-Approved Electives Credits: 11

Total Credits: 75

College and Department Information

Theatre Arts Department  
College of Arts and Humanities

## Musical Theatre, BFA

The Musical Theatre, BFA program is designed to prepare knowledgeable, skilled graduates who will compete in an increasingly competitive field. Students will also learn to assess, explain, and interpret the many roles and responsibilities inherent in the world of the professional theatre artist. They will also understand how to use the skills they have developed in other career paths related to their degree.

### Admission Requirements

Admission to the program is by audition/interview only. Auditions/interviews begins with an online screening process that culminates in program admission being offered in early spring for the fall cohort.

See the Auditions Procedures  
Page <http://www.cwu.edu/theatre/auditions>.

### Program Requirements

In addition to the department core courses, Musical Theatre BFA candidates must maintain a cumulative GPA of 3.0 in Theatre Arts with a minimum grade of "B-" (2.7) in each course within Musical Theatre.

Meeting this standard is reviewed as part of the annual jury.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Thoroughly understand and consistently exhibit high standards of professional conduct in stage and film work: respect for collaborators, teachers and supervisors; meticulous preparation of materials for audition, rehearsals and performances; responsible and professional behavior in all facets of auditioning, rehearsing, networking or performing as well as demonstrating the ability to function effectively as members of a collaborative team in the preparation and realization (implementation) of a public performance.
- Students' physical work/body on stage and in exercises will be responsive to impulses, move with variety, nuance, strength, flexibility, grace, with excellent posture; they will be interesting to watch, and have full commitment to physical impulses
- Student voices on stage and in exercises will be resonant, clearly articulated and properly executed, pleasant to listen to, truthful and appropriate to the character, action and style required of stage or film work--close to or at the level needed for professional work.

- Have working knowledge of IPA and familiarity with learning and using dialects in acting work.
- Students performances and performance exercises will consistently exhibit focus and concentration; their imaginations will be developed and honed, resulting in honest and believable acting with a strong sense of objective, point of view, action and subtext while listening and responding to partners, either imagined or real.
- Demonstrate proficiency in actor script analysis process, and will be able to articulate, demonstrate and practice beats, actions, through lines, points of view, given circumstances
- Under supervision, students will demonstrate accepted industry techniques for acting for film and television.
- Be familiar with the history and literature of theatre in the West, from ancient Greece to the present, and be able to identify playwrights, styles and theatre innovations from most of the major movements in Western theatre, including Shakespeare.
- Have a working familiarity with at least one non-Western or non-traditional theatrical form. Students will be well versed in the acting concepts and vocabulary of Stanislavski, and have an understanding of the major acting schools since Stanislavski, including Strasberg, Adler, Meisner, Chekhov, Spolin and Suzuki.

### Theatre Arts Core Requirements

The Theatre Arts programs are designed to prepare knowledgeable, skilled graduates who will successfully compete in an increasingly competitive field. Students will also learn to assess, explain, and interpret the many roles and responsibilities inherent in the world of the professional theatre artist, and beyond. They will understand how to use the skills they develop in other career paths related to their degree.

### Admission Requirements

**BA students** apply directly to the department through the **one-step online application**, after admitted to the institution. **No audition is required.**

- For a student new to the institution: The theatre arts application should be completed following admission to the university, and one week prior to enrolling in courses.
- For a continuing CWU student: The theatre arts application can be competed at any time.

**BFA students** audition/interview through our online pre-screening web-based program, **GetAcceptd.com**. Information on the audition/interview process can be found at the **department website**.

**Students seeking a theatre minor** apply directly to the department through the **one-step online application**, after enrollment at the institution.

### Theatre Arts Core Requirements

Students in all theatre arts programs must earn a grade of "C+" (2.3) or higher in Theatre Arts Core Requirement courses.

- TH 107 - Introduction to Theatre **Credits:** (4)
- TH 166 - Theory of Play Production **Credits:** (3)
- TH 363 - Theatre History I **Credits:** (4)
- TH 364 - Theatre History II **Credits:** (4)
- TH 365 - Theatre History III **Credits:** (4)

Lab Component - Credits: 4

All theatre students completing programs which share the Theatre Arts Core Requirements are required to complete at least four (4) lab assignments.

Complete four (4) credits of the following:

- TH 393 - Theatre Laboratory **Credits:** (1)
- TH 493 - Theatre Laboratory **Credits:** (1)

Production Component - Credits: 3

All theatre majors are required to complete at least one backstage assignment.

Choose one from the following:

- TH 301 - Production Application **Credits:** (3)
- TH 401 - Production Application **Credits:** (3)

Theatre Arts Core Total Credits: 26

## Musical Theatre

The musical theatre builds specific skills in production from a strong foundation of using the body as the artist's instrument through singing, voice, and stage movement in the musical theatre style. Students choose from a range of courses, both introductory and advanced, from writing and movement, dancing, and voice. To help students prepare for future employment or graduate school, all students are strongly encouraged to pursue practical experience through TH 490 - Cooperative Education internship as well as the performance application courses, designed to put theory into practice as part of Central Theatre Ensemble's regular on-campus season.

### Grade Requirement

A minimum grade of "B-" (2.7) in each course within Musical Theatre is required.

Required Courses Credits: 63

#### Acting Requirements

- TH 244 - Basic Acting I **Credits:** (3)
- TH 245 - Basic Acting II **Credits:** (3)
- TH 246 - Basic Acting III **Credits:** (3)
- TH 344 - Intermediate Acting I **Credits:** (3)
- **Career and Development Requirement**
- TH 489 - Career & Portfolio Preparation **Credits:** (3)
- **Directing Requirement**
- TH 329 - Directing I **Credits:** (3)

#### History and Literature Requirements

- TH 415 - Musical Theatre History and Literature I **Credits:** (3)
- TH 416 - Musical Theatre History and Literature II **Credits:** (3)

#### Musical Requirements

- TH 115 - Class Piano I **Credits:** (1)
- TH 116 - Class Piano II **Credits:** (1)
- TH 117 - Class Piano III **Credits:** (1)
- TH 215 - Music Fundamentals I **Credits:** (3)
- TH 216 - Music Fundamentals II **Credits:** (3)
- TH 217 - Music Fundamentals III **Credits:** (3)

#### Technical Requirements

- TH 161 - Intro to Technology 1: Costumes and Makeup **Credits:** (3)
- TH 162 - Intro to Technology 2: Scenery and Lighting **Credits:** (3)

#### Vocal Requirements

- TH 143 - Private Voice Lessons **Credits:** (1-4) (repeated each quarter for residency at least 9 credits)
- TH 148 - Actor Conditioning - Monologue **Credits:** (1)
- TH 243 - Singing for Actors **Credits:** (1) (must be repeated for 3 credits)
- TH 248 - Vocal Conditioning for the Actor **Credits:** (1)
- TH 249 - Vocal Conditioning for the Actor II **Credits:** (1)
- TH 343 - Singing for Actors II **Credits:** (1) (must be repeated for 6 credits)

Movement Component - Credits: 12

Choose any of the following for a minimum of 12 credits.

- DNCE 101 - Modern Technique I **Credits:** (2)
- DNCE 102 - Modern Technique II **Credits:** (2)
- DNCE 104 - Ballet Technique I **Credits:** (2)
- DNCE 121 - Tap Dance I **Credits:** (1)
- DNCE 141 - Jazz Dance I **Credits:** (1)
- DNCE 142 - Jazz Dance II **Credits:** (1)
- DNCE 204 - Ballet Technique II **Credits:** (2)
- PEID 145 - Beginning Circus Arts **Credits:** (1)
- TH 252 - Stage Dance **Credits:** (1)
- TH 333 - Stage Combat Fundamentals **Credits:** (3)
- TH 335 - Movement for the Actor **Credits:** (3)
- TH 352 - Stage Dance II **Credits:** (2)
- TH 433 - Advanced Stage Combat **Credits:** (3)

Performance Component - Credits: 9

Repeat any of the following for a minimum of 9 credits.

- TH 202 - Performance Studio **Credits:** (1-3)
- TH 302 - Performance Application **Credits:** (3)
- TH 402 - Performance Application **Credits:** (3)

Musical Theatre Credits: 84

Total Credits: 110

College and Department Information

Theatre Arts Department  
College of Arts and Humanities

## Theatre Design and Production, BFA

The Theatre Design and Production BFA program is designed to prepare knowledgeable, skilled graduates who will compete in an increasingly competitive field. Students will learn to assess, explain, and interpret the many roles and responsibilities inherent to the world of the professional theatre artist. They will also understand how to use the skills they have developed in other career paths related to their degree.

### Admission Requirements

Admission to the program is by audition/interview only. Auditions/interviews begins with an online screening process that culminates in program admission being offered in early spring for the fall cohort.

See the Auditions Procedures  
Page <http://www.cwu.edu/theatre/auditions>.

### Program Requirements

In addition to the department core courses, Design and Production BFA candidates must maintain a cumulative GPA of 3.0 in Theatre Arts with a minimum grade of "B-" (2.7) in each course within the Design and Production core courses.

Meeting this standard is reviewed as part of the annual jury.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Thoroughly understand and consistently exhibit high standards of professional conduct in stage and film work: respect for collaborators, teachers and supervisors; meticulous preparation of materials for audition, rehearsals and performances; responsible and professional behavior in all facets of auditioning, rehearsing, networking or performing as well as demonstrating the ability to function effectively as members of a collaborative team in the preparation and realization (implementation) of a public performance.
- Students' physical work/body on stage and in exercises will be responsive to impulses, move with variety, nuance, strength, flexibility, grace, with excellent posture; they will be interesting to watch, and have full commitment to physical impulses
- Student voices on stage and in exercises will be resonant, clearly articulated and properly executed, pleasant to listen to, truthful and appropriate to the character, action and style required of stage or film work--close to or at the level needed for professional work.

- Have working knowledge of IPA and familiarity with learning and using dialects in acting work.
- Students performances and performance exercises will consistently exhibit focus and concentration; their imaginations will be developed and honed, resulting in honest and believable acting with a strong sense of objective, point of view, action and subtext while listening and responding to partners, either imagined or real.
- Demonstrate proficiency in actor script analysis process, and will be able to articulate, demonstrate and practice beats, actions, through lines, points of view, given circumstances
- Under supervision, students will demonstrate accepted industry techniques for acting for film and television.
- Be familiar with the history and literature of theatre in the West, from ancient Greece to the present, and be able to identify playwrights, styles and theatre innovations from most of the major movements in Western theatre, including Shakespeare.
- Have a working familiarity with at least one non-Western or non-traditional theatrical form. Students will be well versed in the acting concepts and vocabulary of Stanislavski, and have an understanding of the major acting schools since Stanislavski, including Strasberg, Adler, Meisner, Chekhov, Spolin and Suzuki.

### Theatre Arts Core Requirements

The Theatre Arts programs are designed to prepare knowledgeable, skilled graduates who will successfully compete in an increasingly competitive field. Students will also learn to assess, explain, and interpret the many roles and responsibilities inherent in the world of the professional theatre artist, and beyond. They will understand how to use the skills they develop in other career paths related to their degree.

### Admission Requirements

**BA students** apply directly to the department through the **one-step online application**, after admitted to the institution. **No audition is required.**

- For a student new to the institution: The theatre arts application should be completed following admission to the university, and one week prior to enrolling in courses.
- For a continuing CWU student: The theatre arts application can be competed at any time.

**BFA students** audition/interview through our online pre-screening web-based program, **GetAcceptd.com**. Information on the audition/interview process can be found at the **department website**.

**Students seeking a theatre minor** apply directly to the department through the **one-step online application**, after enrollment at the institution.

### Theatre Arts Core Requirements

Students in all theatre arts programs must earn a grade of "C+" (2.3) or higher in Theatre Arts Core Requirement courses.

- TH 107 - Introduction to Theatre **Credits:** (4)
- TH 166 - Theory of Play Production **Credits:** (3)
- TH 363 - Theatre History I **Credits:** (4)
- TH 364 - Theatre History II **Credits:** (4)
- TH 365 - Theatre History III **Credits:** (4)

Lab Component - Credits: 4

All theatre students completing programs which share the Theatre Arts Core Requirements are required to complete at least four (4) lab assignments.

Complete four (4) credits of the following:

- TH 393 - Theatre Laboratory **Credits:** (1)
- TH 493 - Theatre Laboratory **Credits:** (1)

Production Component - Credits: 3

All theatre majors are required to complete at least one backstage assignment.

Choose one from the following:

- TH 301 - Production Application **Credits:** (3)
- TH 401 - Production Application **Credits:** (3)

Theatre Arts Core Total Credits: 26

### Design and Production

The design and production builds specific skills in production from a strong foundation of general knowledge of technical theatre and the design aspect of theatre. Students choose from a range of courses, both introductory and advanced from writing and drawing, construction, and sewing.

To help students prepare for future employment or graduate school, all students are strongly encouraged to pursue practical experience through TH 490 - Cooperative Education (internship) as well as the production application courses, designed to put theory into practice as part of Central Theatre Ensemble's regular on-campus season.

Required Courses Credits: 30

- TH 140 - Introduction to Theatre Design **Credits:** (3)
- TH 144 - Foundations of Acting **Credits:** (3)
- TH 261 - Costume Technology **Credits:** (3)
- TH 266 - Theatre Drafting **Credits:** (3)
- TH 267 - Scene Technology **Credits:** (3)
- TH 268 - Lighting Technology **Credits:** (3)
- TH 360 - Stage Management **Credits:** (3)
- TH 366 - Theatre Rendering **Credits:** (3)
- TH 489 - Career & Portfolio Preparation **Credits:** (3)
- TH 495 - Senior Research Project **Credits:** (3)

Literature Component - Credits: 8

Choose any of the following for a minimum of 8 credits.

- TH 375 - Asian Drama **Credits:** (4)
- TH 377 - Staging Gender **Credits:** (4)
- TH 380 - Studies in Drama **Credits:** (5)
- TH 382 - Diverse Experiences in American Drama **Credits:** (4)
- TH 488 - Introduction to Dramaturgy **Credits:** (3)

Production Component - Credits: 15

Choose any of the following for a minimum of 15 credits.

- ATM 381 - Fashion Show Production **Credits:** (2)
- TH 201 - Dance Production Application **Credits:** (1-3)
- TH 301 - Production Application **Credits:** (3)
- TH 303 - Management Application **Credits:** (3)
- TH 393 - Theatre Laboratory **Credits:** (1)
- TH 401 - Production Application **Credits:** (3)
- TH 403 - Management Application **Credits:** (3)
- TH 490 - Cooperative Education **Credits:** (1-12)
- TH 492 - Practicum in Devising and Touring Theatre **Credits:** (3-12)
- TH 493 - Theatre Laboratory **Credits:** (1)

Core Skills Component - Credits: 3

Choose any of the following for a minimum of 3 credits.

- ART 150 - Introduction to Drawing **Credits:** (3)
- TH 215 - Music Fundamentals I **Credits:** (3)
- TH 465 - Costume and Fashion Drawing **Credits:** (3)

Area Skills Component - Credits: 12

Choose from the following for a minimum of 12 credits.

- COM 207 - Introduction to Human Communication **Credits:** (5)
- COM 251 - Small Group Dynamics **Credits:** (4)
- EMS 245 - Advanced First Aid and Emergency Response **Credits:** (3)
- ATM 355 - Consumer Textiles **Credits:** (4)
- ETSC 160 - Computer-Aided Design and Drafting **Credits:** (4)
- ETSC 161 - Architectural Computer Aided Design **Credits:** (3)
- TH 270 - Stage Makeup **Credits:** (3)
- TH 353 - Stage Properties **Credits:** (3)
- TH 354 - Scene Painting **Credits:** (3)
- TH 356 - Stage Sound **Credits:** (3)
- TH 357 - Entertainment Rigging **Credits:** (3)
- TH 362 - Costume Crafts **Credits:** (3)
- TH 464 - Wig Creation, Styling, and Maintenance **Credits:** (3)

History/Writing Component - Credits: 6

Choose any of the following for a minimum of 6 credits.

- ADMG 385 - Business Communications and Report Writing **Credits:** (4)
- ART 235 - Prehistoric through Medieval Art **Credits:** (3)
- ART 236 - Renaissance through Mid-19th-century Art **Credits:** (3)
- ART 237 - Impressionism through Postmodernism **Credits:** (3)
- ENG 310 - Technical Writing **Credits:** (4)
- ATM 452 - History of Fashion **Credits:** (4)
- TH 452 - History of Fashion **Credits:** (4)

Intermediate Skills Component - Credits: 6

Choose any of the following for a minimum of 6 credits.

- HRM 381 - Management of Human Resources **Credits:** (5)
- MGT 380 - Organizational Management **Credits:** (5)
- TH 361 - Stage Costuming **Credits:** (3)
- TH 367 - Stage Scenery **Credits:** (3)
- TH 368 - Stage Lighting **Credits:** (3)

Advanced Skills Component - Credits: 4

Choose any of the following for a minimum of 4 credits.

- TH 456 - Advanced Concepts in Sound for Film and Stage **Credits:** (4)
- TH 460 - Production Management **Credits:** (4)
- TH 461 - Costume Design **Credits:** (4)
- TH 467 - Scene Design **Credits:** (4)
- TH 468 - Lighting Design **Credits:** (4)

Design and Production Total Credits: 84

Total Credits: 110

College and Department Information

Theatre Arts Department  
College of Arts and Humanities

## Theatre Education, BFA

The BFA program is designed to prepare knowledgeable, skilled graduates who will compete in an increasingly competitive field. Students will also learn to assess, explain, and interpret the many roles and responsibilities inherent in the world of the educational theatre artist. They will also understand how to use the skills they have developed in other career paths related to their degree.

This major satisfies the Washington State endorsement standards for Theatre. For marketability students should have a minor leading to endorsement in an additional subject area. This pre-professional training program includes the Professional

Education Program and full admission to the teacher certification program offered through the School of Education.

### Admission Requirements

Student will be admitted through a comprehensive application process, and must maintain a minimum cumulative GPA of 3.0 in all collegiate work.

Students must also be fully admitted to the Secondary Education Major within the Curriculum, Supervision, and Education Leadership (CSEL) Department.

### Graduation Requirements

A passing score on each section of the Washington Educator Skills Test - Basic (WEST-E) for Theatre.

### Program Requirements

BFA candidates must maintain a cumulative GPA of 3.0 in Theatre Arts with a minimum grade of "B-" (2.7) in each course.

Student must also meet the standards for full admission to the School of Education Professional Education Program.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate the ability to function effectively as members of a collaborative team in the preparation and realization /implementation of a public performance
- Apply elements processes and tools of these theatre skills and practices: acting, directing, playwriting, design
- Safely and effectively use the tools and equipment basic to theatre production and design technology and demonstrate safe auditorium and facilities management practices.
- Possess the knowledge and skills needed to respond critically to theatre using standard Western theatrical assessment criteria, and understand and analyze theatre in at least two other cultural and/or historical contexts.
- Understand theatre as a learning process of child development and identify, recognize and implement standards of production, design and performance which meet the needs and abilities of different age groups.
- Understand the role of theatre arts in education, including the philosophical, historical and social foundation for theatre education, and will be able to articulate a rationale for theatre in the schools.
- Practice integrating theatre arts with different school subjects, such as literature, history, mathematics and science, using different theatre techniques suitable for the classroom
- Have practice in developing and implementing age appropriate theatre experiences to meet learning goals for diverse populations.

Theatre Endorsement Component Areas

The Theatre Education BFA curriculum is designed to not only meet state endorsement standards for Theatre but will provide

one of the strongest teacher candidate preparation programs in the state. This pre-professional training program will prepare students for careers in K-12 as well as educational programming with regional theatres.

Basic Skills Component Credits: 32

- TH 107 - Introduction to Theatre **Credits: (4)**
- TH 140 - Introduction to Theatre Design **Credits: (3)**
- TH 144 - Foundations of Acting **Credits: (3)**
- **OR** TH 244 - Basic Acting I **Credits: (3)**
- TH 166 - Theory of Play Production **Credits: (3)**
- TH 278 - Creative Drama in the Classroom **Credits: (3)**
- TH 329 - Directing I **Credits: (3)**
- TH 330 - Introduction to Playwriting **Credits: (4)**
- TH 378 - Theatre Facilities Management **Credits: (3)**
- TH 423 - Theatre Pedagogy **Credits: (3)**
- TH 488 - Introduction to Dramaturgy **Credits: (3)**

History Component Credits: 4

Complete any of the following for a total of four (4) credits.

- TH 363 - Theatre History I **Credits: (4)**
- TH 364 - Theatre History II **Credits: (4)**
- TH 365 - Theatre History III **Credits: (4)**

Lab Component Credits: 3

Complete any of the following for a total of three (3) credits.

- TH 393 - Theatre Laboratory **Credits: (1)**
- TH 493 - Theatre Laboratory **Credits: (1)**

Literature Component Credits: 4

Complete any of the following for at least four (4) credits.

- TH 375 - Asian Drama **Credits: (4)**
- TH 377 - Staging Gender **Credits: (4)**
- TH 380 - Studies in Drama **Credits: (5)**
- TH 382 - Diverse Experiences in American Drama **Credits: (4)**

Production Requirement Credits: 3

Complete one from the following for three (3) credits.

- TH 301 - Production Application **Credits: (3)**
- TH 401 - Production Application **Credits: (3)**

Production Component Credits: 3

Complete any additional production course(s) for three (3) credits.

- TH 201 - Dance Production Application **Credits: (1-3)**
- TH 202 - Performance Studio **Credits: (1-3)**
- TH 301 - Production Application **Credits: (3)**
- TH 302 - Performance Application **Credits: (3)**
- TH 303 - Management Application **Credits: (3)**
- TH 401 - Production Application **Credits: (3)**
- TH 402 - Performance Application **Credits: (3)**
- TH 403 - Management Application **Credits: (3)**
- TH 492 - Practicum in Devising and Touring Theatre **Credits: (3-12)**

Technology Component Credits: 9

Choose any of the following for at least nine (9) credits.

- TH 256 - Sound and Mixing - Aesthetics and Essentials **Credits: (3)**
- TH 261 - Costume Technology **Credits: (3)**
- TH 267 - Scene Technology **Credits: (3)**
- TH 268 - Lighting Technology **Credits: (3)**
- TH 270 - Stage Makeup **Credits: (3)**

Total Credits: 58

Professional Education Program Credits: 50

Professional Education Program

Total Credits: 108

College and Department Information

Theatre Arts Department  
College of Arts and Humanities

## Theatre Performance, BFA

The performance program builds specific skills in production from a strong foundation of using the body as the artist's instrument through acting styles, voice, and stage movement. Students choose from a range of courses, both introductory and advanced, from writing and dancing, to stage and screen.

To help students prepare for future employment or graduate school, all students are strongly encouraged to pursue practical experience through TH 490: Cooperative Education (Internship), as well as the production application courses, designed to put theory into practice as part of Central Theatre Ensemble's regular on-campus season.

### Admission Requirements

Admission to the program is by audition/interview only. Auditions/interviews begins with an online screening process that culminates in program admission being offered in early spring for the fall cohort.

See the Auditions Procedures Page  
[www.cwu.edu/theatre/auditions](http://www.cwu.edu/theatre/auditions).



### Program Requirements

In addition to the department core courses requirements, Performance BFA candidates must maintain a cumulative GPA of 3.0 in Theatre Arts with a minimum grade of "B-" (2.7) in each course within the Performance core courses.

Meeting this standard is reviewed as part of the annual jury.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Thoroughly understand and consistently exhibit high standards of professional conduct in stage and film work: respect for collaborators, teachers and supervisors; meticulous preparation of materials for audition, rehearsals and performances; responsible and professional behavior in all facets of auditioning, rehearsing, networking or performing as well as demonstrating the ability to function effectively as members of a collaborative team in the preparation and realization (implementation) of a public performance.
- Students' physical work/body on stage and in exercises will be responsive to impulses, move with variety, nuance, strength, flexibility, grace, with excellent posture; they will be interesting to watch, and have full commitment to physical impulses
- Student voices on stage and in exercises will be resonant, clearly articulated and properly executed, pleasant to listen to, truthful and appropriate to the character, action and style required of stage or film work--close to or at the level needed for professional work.
- Have working knowledge of IPA and familiarity with learning and using dialects in acting work.
- Students performances and performance exercises will consistently exhibit focus and concentration; their imaginations will be developed and honed, resulting in honest and believable acting with a strong sense of objective, point of view, action and subtext while listening and responding to partners, either imagined or real.
- Demonstrate proficiency in actor script analysis process, and will be able to articulate, demonstrate and practice beats, actions, through lines, points of view, given circumstances
- Under supervision, students will demonstrate accepted industry techniques for acting for film and television.
- Be familiar with the history and literature of theatre in the West, from ancient Greece to the present, and be able to identify playwrights, styles and theatre innovations from most of the major movements in Western theatre, including Shakespeare.
- Have a working familiarity with at least one non-Western or non-traditional theatrical form. Students will be well versed in the acting concepts and vocabulary of Stanislavski, and have an understanding of the major acting schools since Stanislavski, including Strasberg, Adler, Meisner, Chekhov, Spolin and Suzuki.

Theatre Arts Core Requirements

The Theatre Arts programs are designed to prepare knowledgeable, skilled graduates who will successfully compete in an increasingly competitive field. Students will also learn to assess, explain, and interpret the many roles and responsibilities inherent in the world of the professional theatre artist, and beyond. They will understand how to use the skills they develop in other career paths related to their degree.

### Admission Requirements

**BA students** apply directly to the department through the **one-step online application**, after admitted to the institution. **No audition is required.**

- For a student new to the institution: The theatre arts application should be completed following admission to the university, and one week prior to enrolling in courses.
- For a continuing CWU student: The theatre arts application can be completed at any time.

**BFA students** audition/interview through our online pre-screening web-based program, **GetAccepted.com**. Information on the audition/interview process can be found at the **department website**.

**Students seeking a theatre minor** apply directly to the department through the **one-step online application**, after enrollment at the institution.

### Theatre Arts Core Requirements

Students in all theatre arts programs must earn a grade of "C+" (2.3) or higher in Theatre Arts Core Requirement courses.

- TH 107 - Introduction to Theatre **Credits:** (4)
- TH 166 - Theory of Play Production **Credits:** (3)
- TH 363 - Theatre History I **Credits:** (4)
- TH 364 - Theatre History II **Credits:** (4)
- TH 365 - Theatre History III **Credits:** (4)

### Lab Component - Credits: 4

All theatre students completing programs which share the Theatre Arts Core Requirements are required to complete at least four (4) lab assignments.

Complete four (4) credits of the following:

- TH 393 - Theatre Laboratory **Credits:** (1)
- TH 493 - Theatre Laboratory **Credits:** (1)

### Production Component - Credits: 3

All theatre majors are required to complete at least one backstage assignment.

Choose one from the following:

- TH 301 - Production Application **Credits:** (3)
- TH 401 - Production Application **Credits:** (3)

Theatre Arts Core Total Credits: 26

## Performance

Required Courses Credits: 33

### Lower-Division Performance Courses

- TH 148 - Actor Conditioning - Monologue **Credits:** (1)
- TH 244 - Basic Acting I **Credits:** (3)
- TH 245 - Basic Acting II **Credits:** (3)
- TH 246 - Basic Acting III **Credits:** (3)
- TH 248 - Vocal Conditioning for the Actor **Credits:** (1)
- TH 249 - Vocal Conditioning for the Actor II **Credits:** (1)

### Upper-Division Performance Courses

- TH 329 - Directing I **Credits:** (3)
- TH 342 - Dialects for Stage and Screen **Credits:** (3)
- TH 344 - Intermediate Acting I **Credits:** (3)
- TH 345 - Intermediate Acting II **Credits:** (3)
- TH 445 - Audition Techniques for the Stage **Credits:** (3)

### Technical Courses Requirement

- TH 161 - Intro to Technology 1: Costumes and Makeup **Credits:** (3)
- TH 162 - Intro to Technology 2: Scenery and Lighting **Credits:** (3)

Literature Component Credits: (8)

Choose any of the following for a minimum of eight (8) credits.

- TH 375 - Asian Drama **Credits:** (4)
- TH 377 - Staging Gender **Credits:** (4)
- TH 380 - Studies in Drama **Credits:** (5)
- TH 382 - Diverse Experiences in American Drama **Credits:** (4)
- TH 488 - Introduction to Dramaturgy **Credits:** (3)

Movement Component Credits: (10)

Choose any of the following for a minimum of ten (10) credits.

- DNCE 101 - Modern Technique I **Credits:** (2)
- DNCE 102 - Modern Technique I **Credits:** (2)
- DNCE 104 - Ballet Technique I **Credits:** (2)
- DNCE 121 - Tap Dance I **Credits:** (1)
- DNCE 141 - Jazz Dance I **Credits:** (1)
- DNCE 142 - Jazz Dance II **Credits:** (1)
- DNCE 204 - Ballet Technique II **Credits:** (2)
- PEID 145 - Beginning Circus Arts **Credits:** (1)
- TH 252 - Stage Dance **Credits:** (1)
- TH 333 - Stage Combat Fundamentals **Credits:** (3)
- TH 335 - Movement for the Actor **Credits:** (3)
- TH 352 - Stage Dance II **Credits:** (2)
- TH 433 - Advanced Stage Combat **Credits:** (3)
- TH 435 - Advanced Movement for the Actor **Credits:** (3)

Performance Component Credits: (9)

Choose or repeat any of the following for a minimum of nine (9) credits.

- TH 202 - Performance Studio **Credits:** (1-3)
- TH 302 - Performance Application **Credits:** (3)
- TH 402 - Performance Application **Credits:** (3)

Special Skills Component Credits: (15)

Choose any of the following for a minimum of fifteen (15) credits.

- TH 143 - Private Voice Lessons **Credits:** (1-4)
- TH 202 - Performance Studio **Credits:** (1-3)
- TH 243 - Singing for Actors **Credits:** (1)
- TH 270 - Stage Makeup **Credits:** (3)
- TH 302 - Performance Application **Credits:** (3)
- TH 343 - Singing for Actors II **Credits:** (1)
- TH 374 - Introduction to Acting for the Camera **Credits:** (3)
- TH 402 - Performance Application **Credits:** (3)
- TH 429 - Directing II **Credits:** (3)
- TH 433 - Advanced Stage Combat **Credits:** (3)
- TH 435 - Advanced Movement for the Actor **Credits:** (3)
- TH 444 - Acting Styles **Credits:** (4)
- TH 474 - Acting for Film and Television **Credits:** (4)
- TH 481 - Kennedy-Center Festival **Credits:** (1-2)
- TH 490 - Cooperative Education **Credits:** (1-12)
- TH 492 - Practicum in Devising and Touring Theatre **Credits:** (3-12)

Performance Credits: 75

Total Credits: 101

College and Department Information

Theatre Arts Department  
College of Arts and Humanities

## Dance Performance Minor (TH)

Dance Performance Minor

**Program Director**  
Therese Young

The dance performance minor is an interdisciplinary minor administered jointly by the dance and theatre arts faculty designed for students who wish to broaden their academic background and receive a well-rounded dance education, thus preparing them in the area of dance performance in a wide variety of settings. Students will develop competencies in choreography, rhythmic concepts, and dance production.

### Program Requirements

Minimum of one-year participation in DNCE 112 Dance Performance (Orchesis Dance Company). By audition.

Required Courses Credits: 28-29

- DNCE 101 - Modern Technique I **Credits:** (2)
- DNCE 102 - Modern Technique I **Credits:** (2)
- DNCE 103 - Modern Technique I **Credits:** (2)
- DNCE 112 - Dance Performance **Credits:** (1)
- DNCE 161 - Cultural History of Dance **Credits:** (4)
- DNCE 204 - Ballet Technique II **Credits:** (2)
- DNCE 205 - Ballet Technique II **Credits:** (2)
- DNCE 206 - Ballet Technique II **Credits:** (2)
- DNCE 212 - Dance Performance **Credits:** (2)
- DNCE 300 - Dance Composition **Credits:** (3)
- DNCE 311 - Music for Dance - Rhythms and Resources **Credits:** (3)
- **OR** TH 215 - Music Fundamentals I **Credits:** (3)
- DNCE 402 - Dance Production **Credits:** (4)
- **OR** TH 301 - Production Application **Credits:** (3)

Department-Approved Electives Credits: 10

Choose any of the following for a minimum of 10 credits: Only one credit courses may be repeated.

- DNCE 121 - Tap Dance I **Credits:** (1)
- DNCE 122 - Tap Dance II **Credits:** (1)
- DNCE 130 - American Style Ballroom Dance I **Credits:** (1)
- DNCE 131 - American Style Ballroom Dance II **Credits:** (1)
- DNCE 132 - American Style Ballroom Dance III **Credits:** (1)
- DNCE 133 - International Standard Ballroom Dance I **Credits:** (1)
- DNCE 134 - International Standard Ballroom Dance II **Credits:** (1)
- DNCE 135 - International Standard Ballroom Dance III **Credits:** (1)
- DNCE 136 - International Latin Ballroom Dance I **Credits:** (1)
- DNCE 137 - International Latin Ballroom Dance II **Credits:** (1)
- DNCE 138 - International Latin Ballroom Dance III **Credits:** (1)
- DNCE 141 - Jazz Dance I **Credits:** (1)
- DNCE 142 - Jazz Dance II **Credits:** (1)
- DNCE 143 - Jazz Dance III **Credits:** (1)
- DNCE 155 - Pointe and Variations **Credits:** (1)
- DNCE 156 - Partnering **Credits:** (1)
- DNCE 201 - Modern Technique II **Credits:** (2)
- DNCE 202 - Modern Technique II **Credits:** (2)
- DNCE 203 - Modern Technique II **Credits:** (2)
- DNCE 304 - Ballet Technique III **Credits:** (2)
- DNCE 305 - Ballet Technique III **Credits:** (2)
- DNCE 306 - Ballet Technique III **Credits:** (2)

- DNCE 401 - Choreography **Credits:** (4)
- PEF 153 - Mat Pilates **Credits:** (1)
- TH 252 - Stage Dance **Credits:** (1)
- TH 352 - Stage Dance II **Credits:** (2)

Total Credits: 38-39

College and Department Information

Theatre Arts Department  
College of Arts and Humanities

## Non-profit Organization Management Minor (TH)

(See catalog under communication department for details)

The minor in non-profit organization management is an interdisciplinary minor designed to provide an understanding of the organization, financing and management issues in non-profit organizations. It is designed to complement majors in artistic, advocacy and educational endeavors. The minor provides practical, hands-on skills as well as discussion of the issues facing non-profit organizations.

Total Credits: 30

College and Department Information

Theatre Arts Department  
College of Arts and Humanities

## Theatre Arts Minor

The theatre arts minor offers an opportunity for students to study theatre while pursuing a degree in another discipline. This minor is often added to enhance study in art, music, politics, and interior design, among others.

Required Courses Credits: 13

- TH 107 - Introduction to Theatre **Credits:** (4)
- TH 144 - Foundations of Acting **Credits:** (3)
- TH 166 - Theory of Play Production **Credits:** (3)

Select 3 credits of production participation from the following:

- TH 201 - Dance Production Application **Credits:** (1-3)
- TH 202 - Performance Studio **Credits:** (1-3)
- TH 301 - Production Application **Credits:** (3)
- TH 302 - Performance Application **Credits:** (3)
- TH 303 - Management Application **Credits:** (3)
- TH 393 - Theatre Laboratory **Credits:** (1)
- TH 401 - Production Application **Credits:** (3)
- TH 402 - Performance Application **Credits:** (3)

- TH 403 - Management Application **Credits:** (3)
- TH 493 - Theatre Laboratory **Credits:** (1)

Department-Approved Electives Credits: 17

Theatre electives as approved by advisor.

Total Credits: 30

College and Department Information

Theatre Arts Department  
College of Arts and Humanities

## International Theatre Experience Certificate

The certificate focuses on theatre as a means of cultural expression and exploration and is designed to enhance existing curriculum, not program-build. Students increase their knowledge base and vocabulary in theatre-making and theatre appreciation through experiencing alternative cultural practices and perspectives. These experiences build upon the students' understanding of theatre performance, theatre craft/design and dramatic literature.

Note: This certificate requires additional travel fees that will be collected as part of the TH 294: International Theatre Experience Preparation course. These additional travel fees, that vary, will be published as the programs are offered and are based on variable such as: the travel experiences, locations, and time abroad.

Required Courses Credits: 8

- TH 294 - International Theatre Experience Preparation **Credits:** (1) (must be taken for 2 credits)
- TH 494 - International Theatre Experience **Credits:** (1-5) (must be taken for 6 credits)

Department-Approved Electives Credits: 7

A list of suggested electives will accompany the announcement of each Travel Experience (TH 494).

Total Credits: 15

College and Department Information

Theatre Arts Department  
College of Arts and Humanities

# University and Enrichment Program

## Undergraduate Studies

### First Area-Skill Building

The first area includes the UNIV 101, 102, and 103 courses. These courses are ancillary courses that enable students to build skills needed to succeed at CWU. These courses allow students to learn about the General Education program, graduation requirements, develop skills for academic and social success, learn about major and minor programs, and how to approach developing an appropriate career. UNIV 101 is a required course for all students who have 45 or fewer transfer credits.

### Second Area-Skill Exploration and Enrichment

The second area is the enrichment program, which includes UNIV 297, 497, and 597. These courses are designed to encourage student exploration and intellectual enrichment and are only offered during summer quarter. Enrichment courses are not intended to substitute for either general education requirements or major or minor requirements. These courses are a part of a student's enrollment planning-specifically as free electives. Only eight enrichment course credits can be counted toward a student's elective degree requirements.

### Third Area-Skill Practice and Engagement

The third area is the civic engagement program, which includes UNIV 109, 295, 308, and 309. These courses are designed to help students explore and engage in career interests while meeting community needs.

## William O. Douglas Honors College

Ellensburg  
Hebeler Hall, room 219  
Mail Stop 7521  
509-963-1900  
[www.cwu.edu/douglas-honors](http://www.cwu.edu/douglas-honors)

### Executive Director

Anne Cubilie, PhD

### Assistant Director

Christina Denison, MEd

### Upper Division Honors Coordinator

Allyson Rogan-Klyve, PhD

### Writing Curriculum Coordinator

Matt Martinson, MA

### Staff

Ralph Bane, secretary senior

The William O. Douglas Honors College (DHC) is Central's interdisciplinary program for academically talented students.

The program is divided into two parts: a core curriculum and an upper-division scholarship experience. The core curriculum is composed of a series of courses that emphasize how the arts, humanities, sciences, and social sciences converge in considering historically important questions. The upper-division scholarship experience involves additional, advanced courses and a culminating research project either in the arts and humanities or in the sciences. DHC also sponsors cultural field trips, guest lectures, and a number of other extracurricular activities.

The college is named for U.S. Supreme Court Justice William O. Douglas, a native of Yakima, Washington, and a great supporter of higher education. Following Justice Douglas' example, the DHC encourages intellectual breadth, academic curiosity, and the application of scholarship to pressing social issues.

Students wishing to apply should contact the DHC office to find out about minimum qualifications and the application process. Students may apply to the honors college at any point in their college career.

DHC students must maintain a high level of academic achievement. A DHC student is in good standing when his or her cumulative grade point average (GPA) is 3.0 or higher. If a first-year DHC student's cumulative GPA falls below 3.0 and remains below 3.0 for two consecutive quarters, the student shall be placed on academic warning for one quarter. After the first year, a DHC student will be placed on academic warning if his or her cumulative GPA falls below 3.0 for one quarter. Any student placed on warning shall be suspended from the DHC if his or her cumulative GPA is not 3.0 or above the quarter following the warning. The DHC director has the discretion to waive and/or modify these standards for individual students as long as such modification does not affect the academic integrity of the DHC, as determined by the DHC director. A student who has been suspended from the DHC may reapply only if his or her cumulative GPA reaches 3.0 or higher.

For additional information, visit the DHC website ([www.cwu.edu/douglas-honors](http://www.cwu.edu/douglas-honors)), stop by the office (Hebeler Hall, room 219), or call 509-963-1900.

## Douglas Honors College

The William O. Douglas Honors College (DHC) is Central's interdisciplinary program for academically talented students. The program is divided into two parts: the Core Curriculum (general education) and Upper Division Honors. The Core Curriculum is composed of a series of courses that emphasize how the arts, humanities, sciences, and social sciences converge in considering important questions. Upper Division Honors involves additional, advanced courses and a culminating research or creative project. DHC also sponsors cultural field trips, guest lectures, and a number of other extracurricular activities.

The college is named for U.S. Supreme Court Justice William O. Douglas, a native of Yakima, Washington, and a great supporter of higher education. Following Justice Douglas' example, the DHC encourages intellectual breadth, academic curiosity, and the application of scholarship to pressing social issues.

Students wishing to apply should contact the DHC office to find out about minimum qualifications and the application process. Students may apply to the honors college at any point in their college career.

DHC students must maintain a high level of academic achievement. All DHC students are held to the academic and behavioral standards as set forth in the DHC Student Code of Conduct. A DHC student is in good academic standing when his or her cumulative grade point average (GPA) is 3.0 or higher. If a first-year DHC student's cumulative GPA falls below 3.0 and remains below 3.0 for two consecutive quarters, the student shall be placed on academic warning for one quarter. After the first year, a DHC student will be placed on academic warning if his or her cumulative GPA falls below 3.0 for one quarter. Any student whose cumulative GPA is below 3.0 at time of graduation will not receive honors recognition from the DHC. The DHC director has the discretion to waive and/or modify these standards for individual students as long as such modification does not affect the academic integrity of the DHC, as determined by the DHC director. A student who has been suspended from the DHC for violating the DHC Student Code of Conduct may reapply; however, re-admittance is not guaranteed.

For additional information, visit the DHC website ([www.cwu.edu/douglas-honors](http://www.cwu.edu/douglas-honors)), stop by the office (Language and Literature Building, room 103), or call 509-963-1900.

Required Courses Credits: 56

Basic and Breadth Requirements (Core Curriculum)

- DHC 140 - Humanistic Understanding I **Credits: (5)**
- DHC 141 - Humanistic Understanding II **Credits: (5)**
- DHC 150 - Aesthetic Experience I **Credits: (5)**
- DHC 151 - Aesthetic Experience II **Credits: (5)**
- DHC 160 - Physical and Biological Systems I **Credits: (5)**
- DHC 161 - Physical and Biological Systems II **Credits: (5)**
- DHC 250 - Social and Behavioral Dynamics I **Credits: (5)**
- DHC 251 - Social and Behavioral Dynamics II **Credits: (5)**
- DHC 260 - Cultural Studies I **Credits: (5)**
- DHC 261 - Cultural Studies II **Credits: (5)**
- DHC 270 - Integrated Learning **Credits: (5)**
- UNIV 101 - Transition to CWU **Credits: (1)**

Advising Seminar

In accordance with university requirements, DHC students must take UNIV 101: Academic Advising Seminar as part of their general education coursework. Preferably, students taking UNIV 101 should take the section designated specifically for DHC students.

World Language

DHC applicants are normally expected to have met the competence requirements for world language prior to

acceptance. Students who have not done so will be required to take classes through World Language 153.

### Mathematics

DHC applicants are normally expected to have met the competence requirements for mathematics prior to acceptance. Students have met the math competency requirement if they passed Calculus in high school. Students who have not done so will be required to take classes through MATH 154 or placement in MATH 172 or higher or take MATH 101H.

### Upper-Division Honors

The upper-division honors involves additional, advanced courses and a culminating research or creative project. Students may enroll in upper-division honors at any time, with or without the DHC core curriculum.

### Arts and Sciences Honors Credits: 15

A student who completes the upper-division honors courses as well as a thesis/capstone project will earn the title *Arts and Sciences Scholar*.

\*Students in the sciences may substitute four (4) research credits for DHC 480.

- DHC 301 - Honors Seminar: Elements of Research **Credits: (2)**
- DHC 380 - History of Science **Credits: (4)**
- DHC 401 - Honors Capstone Seminar **Credits: (3)**
- DHC 480 - Interdisciplinary Senior Seminar **Credits: (4)**
- DHC 497 - Honors Thesis and/or Creative Project **Credits: (2)**

### Douglas Honors College Scholar

A student who completes both the core curriculum and upper-division honors will be designated a *Douglas Honors College Scholar* by the university.

### College and Department Information

William O. Douglas Honors College

## Interdisciplinary Honors Minor

A student who completes the following course regimen (34 credits) earns a DHC minor.

Select from the following: Credits: 5

- DHC 140 - Humanistic Understanding I **Credits: (5)**
- DHC 141 - Humanistic Understanding II **Credits: (5)**

Select from the following: Credits: 5

- DHC 150 - Aesthetic Experience I **Credits: (5)**
- DHC 151 - Aesthetic Experience II **Credits: (5)**

Select from the following: Credits: 5

- DHC 160 - Physical and Biological Systems I **Credits: (5)**
- DHC 161 - Physical and Biological Systems II **Credits: (5)**

Select from the following: Credits: 5

- DHC 250 - Social and Behavioral Dynamics I **Credits: (5)**
- DHC 251 - Social and Behavioral Dynamics II **Credits: (5)**

Select from the following: Credits: 5

- DHC 260 - Cultural Studies I **Credits: (5)**
- DHC 261 - Cultural Studies II **Credits: (5)**

Required Courses Credits: 9

- DHC 270 - Integrated Learning **Credits: (5)**
- DHC 380 - History of Science **Credits: (4)**

Total Credits: 34

### College and Department Information

William O. Douglas Honors College

## Women's, Gender, and Sexuality Studies Program

College of the Sciences  
Ellensburg  
Samuelson, room 231-C

509-963-1574

Fax 509-963-1308

[www.cwu.edu/women-gender](http://www.cwu.edu/women-gender)

See the website for how this program may be used for educational and career purposes.

### Director

Judith Hennessy, PhD

### Program Information

Women's, gender, and sexuality studies cultivates a critical awareness of the contributions of women and the impact of gender in our lives, both historically and in the contemporary world. Our interdisciplinary scope includes examining these

issues from the perspective of politics, anthropology, sociology, psychology, history, philosophy, art, and literature. The objectives of the program are:

1. To explore existing knowledge about women and gender in a variety of disciplines
2. To critically assess the traditional disciplines in the light of new data concerning women and gender
3. To provide an academic foundation for students planning careers in women's studies or related fields
4. To promote research about women and gender within existing disciplines

Women's, gender, and sexuality studies offers an interdisciplinary minor as described below. With approval of the women's, gender, and sexuality studies director, the student will select appropriate electives to meet personal and professional goals.

With faculty advisement, interested students may construct individualized majors in women's, gender, and sexuality studies through the individual studies program for BA or BS major.

### Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### Course Offerings

Frequency of course offering information can be found at the department website: [www.cwu.edu/women-gender](http://www.cwu.edu/women-gender) or by contacting the department directly.

## Women's, Gender, and Sexuality Studies, BA

Women's, gender and sexuality studies cultivates a critical awareness of the contributions of women and the impact of gender and sexuality in our lives, both historically and in the contemporary world. Our interdisciplinary scope includes examining these issues from the perspective of politics, anthropology, sociology, psychology, history, philosophy, artistic expression, and literature. The objectives of the program are:

1. To explore existing knowledge about women, gender, and sexuality across a variety of disciplines
2. To critically assess the traditional disciplines in the light of new data concerning women, gender and sexuality.
3. To provide an academic foundation for students planning careers in diverse organizations; companies; and communities; women's, gender and sexuality studies, or related fields
4. To promote research about women, gender, and sexuality within existing disciplines

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Acquire knowledge of historical and contemporary inequities in societies and cultures, and forms of resistance to these inequities.

- Critically analyze and compare historically and culturally specific constructions of gender and sexuality.
- Develop critical writing and speaking skills on gender-related academic and social issues.
- Critically analyze gender norms and practices, and the intersecting factors of race, class, sexuality, etc.

### Required Courses Credits: 28

- WGSS 201 - Introduction to Women's, Gender, and Sexuality Studies **Credits: (5)**
- WGSS 250 - Introduction to Queer Studies **Credits: (5)**
- WGSS 326 - Intersections of Gender, Race, Class, and Sexualities **Credits: (5)**
- WGSS 340 - Gender and Sexuality in a Global Context **Credits: (5)**
- WGSS 351 - Feminist Theory **Credits: (5)**
- WGSS 489 - Women's, Gender, and Sexuality Studies Senior Capstone **Credits: (3)**

### Department-Approved Electives Credits: 18-20

At least two (2) courses from the Humanities/Arts division and two (2) courses from the Social/Natural Science division with no more than 10 credits from any one discipline.

Humanities/Arts, Education and Professional Studies (Choose at least two courses)

- COM 402 - Gender Communication **Credits: (4)**
- ENG 335 - Women's Literature **Credits: (5)**
- HIST 334 - History of Gender and Sexuality in Africa from Pre-colonial Times to the Present **Credits: (5)**
- PHIL 325 - Women and Philosophy **Credits: (5)**
- PUBH 420 - Women's Health Issues **Credits: (4)**
- PUBH 448 - Sexual Health **Credits: (4)**
- TH 377 - Staging Gender **Credits: (4)**

Social/Natural Sciences (Choose at least two courses)

- ANTH 356 - Gender Roles in Cross-cultural Perspective **Credits: (4)**
  - ANTH 384 - Language and Gender **Credits: (4)**
  - LAJ 403 - Sexual Minorities, the Law, and Justice **Credits: (4)**
  - POSC 311 - Women and Politics **Credits: (5)**
  - PSY 312 - Queer Theory and Sexuality **Credits: (4)**
  - PSY 483 - Psychology of Gender **Credits: (4)**
  - SOC 348 - Women and Crime **Credits: (5)**
  - SOC 356 - Sociology of Gender **Credits: (5)**
  - SOC 357 - Sociology of Families **Credits: (5)**
  - SOC 358 - Sociology of Sexualities **Credits: (5)**
  - SOC 359 - U.S. Feminist Movements **Credits: (5)**
- Special topics courses, cooperative education projects, and independent study courses may also count toward elective credit.

Total Credits: 46-48

#### College and Department Information

Women's, Gender, and Sexuality Studies Program  
College of the Sciences

#### Program Outcomes

Visit program outcomes to find out what you can expect to know and do after successful completion of this program.

## Women's, Gender, and Sexuality Studies Minor

Women's, Gender, and Sexuality Studies minor is an interdisciplinary minor designed to help students cultivate a critical awareness of gender and sexuality in their lives and an increasingly complex world.

#### Required Courses

- WGSS 201 - Introduction to Women's, Gender, and Sexuality Studies **Credits:** (5)

Department-Approved Electives Credits: 20

(select 20 credits, with no more than 10 credits in a single department)

- ANTH 356 - Gender Roles in Cross-cultural Perspective **Credits:** (4)
- ANTH 384 - Language and Gender **Credits:** (4)
- COM 402 - Gender Communication **Credits:** (4)
- ENG 335 - Women's Literature **Credits:** (5)
- PUBH 448 - Sexual Health **Credits:** (4)
- HIST 334 - History of Gender and Sexuality in Africa from Pre-colonial Times to the Present **Credits:** (5)
- LAJ 403 - Sexual Minorities, the Law, and Justice **Credits:** (4)
- LAJ 453 - Domestic Violence Issues **Credits:** (4)
- PHIL 325 - Women and Philosophy **Credits:** (5)
- POSC 311 - Women and Politics **Credits:** (5)
- PSY 312 - Queer Theory and Sexuality **Credits:** (4)
- PSY 483 - Psychology of Gender **Credits:** (4)
- PUBH 420 - Women's Health Issues **Credits:** (4)
- SOC 348 - Women and Crime **Credits:** (5)
- SOC 356 - Sociology of Gender **Credits:** (5)
- SOC 357 - Sociology of Families **Credits:** (5)
- TH 377 - Staging Gender **Credits:** (4)
- SOC 358 - Sociology of Sexualities **Credits:** (5)
- SOC 359 - U.S. Feminist Movements **Credits:** (5)
- WGSS 250 - Introduction to Queer Studies **Credits:** (5)
- WGSS 490 - Cooperative Education **Credits:** (1-12)

Total Credits: 25

#### College and Department Information

Women's, Gender, and Sexuality Studies Program  
College of the Sciences

## World Languages and Cultures Department

College of Arts and Humanities  
Ellensburg  
Language and Literature Bldg., room 102  
Mail Stop 7552  
509-963-1218  
wlang\_dept@cwu.edu  
www.cwu.edu/foreign-language

See website for how these programs can be used for educational and career purposes.

#### Faculty and Staff

##### Chair

Michael Johnson, PhD

##### Professors

Rodney Bransdorfer, PhD, Spanish  
Nathalie Kasselis, PhD, Spanish, French  
Natalie Lefkowitz, PhD, Spanish, French  
Stella Moreno, PhD, Spanish  
Joshua S. Nelson, PhD, Japanese

##### Associate Professors

Michael Johnson, PhD, French  
Eric Mayer, PhD, Spanish

##### Assistant Professors

Volha Isakava, PhD, Russian

##### Lecturers

Roselia Arellano-Sandoval, MA, Spanish  
Dinara Georgeoliani, PhD, Russian  
Mariko Knight, BA, Japanese  
Yuanxia Liu, MA Chinese  
Jer Loudenback, MA, American sign language  
Laurie Moshier, DA, French, German  
Mariko Okada-Collins, MA, Japanese

##### Staff

Ralph Bane, secretary senior

##### Department Information

The Department of World Languages and Cultures offers BA degrees in French, Japanese, Russian, and Spanish and minors in ASL, Chinese, French, German, Japanese, Russian, and Spanish. Spanish has two streams: Heritage and Second Language Learner.

For non-majors or minors, the first-and second-year sequences are designed to provide basic proficiency in a world language. The department recommends that all majors include some organized study abroad where their major language is spoken, but there is no requirement for study abroad in any of the programs.



The World Languages and Cultures Department's Core Values are:

Lifelong Learning; Cross-cultural Communication, and Global Citizenship.

All WLC programs and courses adhere to these values.

### Admission to Department Programs

Students planning to major or minor must meet with an advisor in the World Languages and Cultures department for details about admission requirements and to complete an application form.

### Departmental Standards

Students in the majors and minors must earn a minimum grade of C+ in each course used for their program/s.

### Core Course Requirements

Only courses numbered 200 and above will count toward a major or minor. Students may contact the department to request placement testing if they have prior instruction in any of the languages. For students with sufficient preparation, the 200-level sequence may be waived through our placement exam or credit by examination. Please note that Spanish CLEP test scores may be used to complete General Education and/or graduation requirements but may not be used to fulfill course requirements for Spanish majors or minors. Students planning to study abroad must see their advisor prior to departure to ensure the applicability of the proposed course of study. All upper-division classes not listed as requirements are approved electives.

### Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### Course Offerings

Frequency of course offering information can be found at the department website: [www.cwu.edu/foreign-language](http://www.cwu.edu/foreign-language) or by contacting the department directly.

## French Major, BA

This major requires a minor. Study abroad is recommended but not required for this major.

The French Major program offers small and focused classes taught by expert faculty. Students develop language proficiency and in-depth knowledge of culture through coursework that covers France and the francophone world, including Canada, North and Sub-Saharan Africa, and the Caribbean. This major is an asset to students who seek careers in education, international business, translation and interpretation, hospitality and tourism, foreign services, and more.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Development of listening skills in target language at the intermediate level on the American Council on

Teaching Foreign Languages (ACTFL) proficiency scale

- Development of speaking skills in target language at the intermediate level on the American Council on Teaching Foreign Languages (ACTFL) proficiency scale
- Development of reading skills in target language at the intermediate level on the American Council on Teaching Foreign Languages (ACTFL) proficiency scale
- Development of writing skills in target language at the intermediate level on the American Council on Teaching Foreign Languages (ACTFL) proficiency scale
- Development of pronunciation skills in the target language and metalinguistic terminology that describes oral production
- Development of grammatical and metalinguistic competence in accordance with the American Council on Teaching Foreign Languages (ACTFL)
- Acquire an overview of historical and cultural features of the country/countries in which the target language is spoken.
- Demonstrate critical thinking skills. To ensure that students acquire and develop disciplined habits of critical thinking and creative expression, thus enabling students to make and communicate enlightened judgments.

### Required Courses

Second-year French Credits: 15

- FR 251 - Second-year French **Credits:** (5)
- FR 252 - Second-year French **Credits:** (5)
- FR 253 - Second-year French **Credits:** (5)

Department-Approved French Electives Credits: 30

Total Credits: 45

### College and Department Information

World Languages and Cultures Department  
College of Arts and Humanities

## Japanese Major, BA - Large Plan

This major does not require a minor. Study abroad is recommended but not required for this major.

The Japanese Large Plan Major program guides students through the process of learning Japanese, and in doing so, fosters an appreciation of Japanese culture and history. In a broad sense, our program endeavors to help our students develop expanded intellectual horizons, an understanding of themselves, and improved communication and thinking skills, all through the study of the Japanese language. With Japanese, students can find careers in the electronics and film industries, education, business, tourism, the military, the Foreign Service, and other

areas. The US Government designates Japanese as a "critical" language. ROTC students may be eligible to receive scholarships or other benefits if they select this major.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Development of listening skills in target language at the intermediate level on the American Council on Teaching Foreign Languages (ACTFL) proficiency scale
- Development of speaking skills in target language at the intermediate level on the American Council on Teaching Foreign Languages (ACTFL) proficiency scale
- Development of reading skills in target language at the intermediate level on the American Council on Teaching Foreign Languages (ACTFL) proficiency scale
- Development of writing skills in target language at the intermediate level on the American Council on Teaching Foreign Languages (ACTFL) proficiency scale
- Development of pronunciation skills in the target language and metalinguistic terminology that describes oral production
- Development of grammatical and metalinguistic competence in accordance with the American Council on Teaching Foreign Languages (ACTFL)
- Acquire an overview of historical and cultural features of the country/countries in which the target language is spoken.
- Demonstrate critical thinking skills. To ensure that students acquire and develop disciplined habits of critical thinking and creative expression, thus enabling students to make and communicate enlightened judgments.

### Required Courses

Second-year Japanese Credits: 15

- JAPN 251 - Second-year Japanese **Credits: (5)**
- JAPN 252 - Second-year Japanese **Credits: (5)**
- JAPN 253 - Second-year Japanese **Credits: (5)**

Composition, Grammar and Conversation Credits: 10

- JAPN 361 - Composition, Grammar and Conversation I **Credits: (5)**
- JAPN 362 - Composition, Grammar and Conversation II **Credits: (5)**

Department-approved Japanese Electives Credits: 35

(including those from study abroad institutions)

Total Credits: 60

College and Department Information

World Languages and Cultures Department  
College of Arts and Humanities

## Japanese Major, BA - Small Plan

This major requires a minor. Study abroad is recommended but not required for this major.

The Japanese Small Plan Major program guides students through the process of learning Japanese, and in doing so, fosters an appreciation of Japanese culture and history. In a broad sense, our program endeavors to help our students develop expanded intellectual horizons, an understanding of themselves, and improved communication and thinking skills, all through the study of the Japanese language. With Japanese, students can find careers in the electronics and film industries, education, business, tourism, the military, the Foreign Service, and other areas. The US Government designates Japanese as a "critical" language. ROTC students may be eligible to receive scholarships or other benefits if they select this major.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Development of listening skills in target language at the intermediate level on the American Council on Teaching Foreign Languages (ACTFL) proficiency scale
- Development of speaking skills in target language at the intermediate level on the American Council on Teaching Foreign Languages (ACTFL) proficiency scale
- Development of reading skills in target language at the intermediate level on the American Council on Teaching Foreign Languages (ACTFL) proficiency scale
- Development of writing skills in target language at the intermediate level on the American Council on Teaching Foreign Languages (ACTFL) proficiency scale
- Development of pronunciation skills in the target language and metalinguistic terminology that describes oral production
- Development of grammatical and metalinguistic competence in accordance with the American Council on Teaching Foreign Languages (ACTFL)
- Acquire an overview of historical and cultural features of the country/countries in which the target language is spoken.
- Demonstrate critical thinking skills. To ensure that students acquire and develop disciplined habits of critical thinking and creative expression, thus enabling students to make and communicate enlightened judgments.

### Required Courses

Second-year Japanese Credits: 15

- JAPN 251 - Second-year Japanese **Credits:** (5)
- JAPN 252 - Second-year Japanese **Credits:** (5)
- JAPN 253 - Second-year Japanese **Credits:** (5)

Composition, Grammar and Conversation Credits: 10

- JAPN 361 - Composition, Grammar and Conversation I **Credits:** (5)
- JAPN 362 - Composition, Grammar and Conversation II **Credits:** (5)

Department-approved Japanese Electives Credits: 20

(including those from study abroad institutions)

Total Credits: 45

College and Department Information

World Languages and Cultures Department  
College of Arts and Humanities

## Russian Studies Major, BA

This major requires a minor. Study abroad is recommended but not required for this major.

The Russian major program offers classes in Russian language as well as Russian culture; e.g. film, history, and society. Russian is not only the language of the largest country in the world but is also spoken in 15 countries across Eastern Europe and Central Asia by over 160 million people. Consider taking Russian for careers in the government, Foreign Service, military, journalism, international NGOs and business, education, and tourism. The US Government designates Russian as a "critical" language. ROTC students may be eligible to receive scholarships or other benefits if they select this major.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Development of listening skills in target language at the intermediate level on the American Council on Teaching Foreign Languages (ACTFL) proficiency scale
- Development of speaking skills in target language at the intermediate level on the American Council on Teaching Foreign Languages (ACTFL) proficiency scale
- Development of reading skills in target language at the intermediate level on the American Council on Teaching Foreign Languages (ACTFL) proficiency scale
- Development of writing skills in target language at the intermediate level on the American Council on Teaching Foreign Languages (ACTFL) proficiency scale

- Development of pronunciation skills in the target language and metalinguistic terminology that describes oral production
- Development of grammatical and metalinguistic competence in accordance with the American Council on Teaching Foreign Languages (ACTFL)
- Acquire an overview of historical and cultural features of the country/countries in which the target language is spoken.
- Demonstrate critical thinking skills. To ensure that students acquire and develop disciplined habits of critical thinking and creative expression, thus enabling students to make and communicate enlightened judgments.

Required Courses

Second-year Russian Credits: 15

- RUSS 251 - Second-year Russian **Credits:** (5)
- RUSS 252 - Second-year Russian **Credits:** (5)
- RUSS 253 - Second-year Russian **Credits:** (5)

Advanced Russian Credits: 8

- RUSS 341 - Advanced Russian I **Credits:** (4)
- RUSS 342 - Advanced Russian II **Credits:** (4)

Advanced Composition and Grammar Credits: 4

- RUSS 441 - Advanced Composition and Grammar **Credits:** (4)

Topics in Russian Language Credits: 4

Variable topics (2 courses of 2 credits each)

- RUSS 445 - Topics in Russian Language **Credits:** (2)

Department-approved Russian Electives Credits: 14

Total Credits: 45

College and Department Information

World Languages and Cultures Department  
College of Arts and Humanities

## Spanish Major, BA

This major requires a minor.

There are two streams connected with this major, one for Second Language Learners (students who do not speak Spanish at home), and one for Heritage Students (students with some linguistic familiarity with Spanish in the home).

Study abroad is recommended but not required for this major.

The Spanish major offers small and student-centered classes. Students develop language proficiency and in-depth knowledge of a culture through coursework that covers Spain, Latin America, and the U.S. Latino population. A solid background in Spanish language and culture is an asset to students who seek careers in education, international business, translation and interpretation, hospitality and tourism, and more. Because Spanish is the second language of the U.S., having a degree in Spanish also automatically enhances any other career choice.

The Heritage stream offers differentiated second- and third-year courses especially designed for students who have some prior understanding of the Spanish language, having interacted with it in the home. Students will interact with others who share a similar linguistic and cultural background, as well as learn about the cultures and literatures of the Hispanic world.

### Admission Requirements

Eligibility for 2nd-year Spanish is a requirement for entrance to the major.

### Program Learner Outcomes

Upon successful completion of this program, students will be able to:

- Development of listening skills in target language at the intermediate level on the American Council on Teaching Foreign Languages (ACTFL) proficiency scale
- Development of speaking skills in target language at the intermediate level on the American Council on Teaching Foreign Languages (ACTFL) proficiency scale
- Development of reading skills in target language at the intermediate level on the American Council on Teaching Foreign Languages (ACTFL) proficiency scale
- Development of writing skills in target language at the intermediate level on the American Council on Teaching Foreign Languages (ACTFL) proficiency scale
- Development of pronunciation skills in the target language and metalinguistic terminology that describes oral production
- Development of grammatical and metalinguistic competence in accordance with the American Council on Teaching Foreign Languages (ACTFL)
- Acquire an overview of historical and cultural features of the country/countries in which the target language is spoken.
- Demonstrate critical thinking skills. To ensure that students acquire and develop disciplined habits of critical thinking and creative expression, thus enabling students to make and communicate enlightened judgments.

### Required Courses

Second-year Spanish Credits: 15

- SPAN 251 - Second-year Spanish **Credits: (5)**
- SPAN 252 - Second-year Spanish **Credits: (5)**
- SPAN 253 - Second-year Spanish **Credits: (5)**

OR

Spanish for Heritage Speakers Credits: 15

- SPAN 261 - Spanish for Heritage Speakers I **Credits: (5)**
- SPAN 262 - Spanish for Heritage Speakers II **Credits: (5)**
- SPAN 263 - Spanish for Heritage Speakers III **Credits: (5)**

Literature and Cultures Credits: 10

- SPAN 301 - Introduction to Spanish and Latin American Literature **Credits: (5)**
- SPAN 310 - Hispanic Civilizations and Cultures **Credits: (5)**

Composition and Grammar I Credits: 5

- SPAN 341 - Spanish Composition and Grammar I **Credits: (5)**
- **OR** SPAN 345 - Composition and Grammar for Heritage Speakers I **Credits: (5)**

Department-Approved Spanish Language, Literature, and/or Culture Electives Credits: 20

- SPAN 342 - Spanish Composition and Grammar II **Credits: (5)**
- SPAN 343 - Spanish Conversation **Credits: (5)**
- SPAN 346 - Composition and Grammar for Heritage Speakers II **Credits: (5)**
- SPAN 380 - Contemporary Hispanic Literature and Cultures (Put on reserve 9/16/18) **Credits: (5)**
- SPAN 381 - Hispanic and U.S. Latino Literatures and Cultures **Credits: (5)**
- SPAN 385 - Spanish Phonetics **Credits: (5)**
- SPAN 398 - Special Topics **Credits: (1-6)**
- SPAN 432 - Advanced Spanish Composition and Grammar **Credits: (5)**
- SPAN 442 - Spanish Translation and Interpretation **Credits: (5)**
- SPAN 443 - Advanced Spanish Translation **Credits: (5)**
- SPAN 445 - Spanish Medieval Literature **Credits: (5)**
- SPAN 446 - Hispanic Cinema **Credits: (5)**
- SPAN 447 - Framing Latin American Cinema **Credits: (5)**
- SPAN 448 - Framing South American Cinema (Put on reserve 9/16/17) **Credits: (5)**
- SPAN 449 - Spanish Golden Age Literature **Credits: (5)**
- SPAN 456 - The Spanish and Latin American Short Story **Credits: (5)**
- SPAN 457 - Latin American Theater (Put on reserve 9/16/2014.) **Credits: (4)**
- SPAN 459 - Latin American Poetry (Put on reserve 9/16/17) **Credits: (5)**

- SPAN 466 - Spanish Poetry **Credits:** (5)
- SPAN 496 - Individual Study **Credits:** (1-6)

Total Credits: 50

#### College and Department Information

World Languages and Cultures Department  
College of Arts and Humanities

## American Sign Language Minor

The ASL minor is designed for students who wish to develop advanced level proficiency in American Sign Language. Offering small, focused classes, that cover language, culture, education, and literature, this minor is of benefit to social-minded careers that reach and assist deaf people, like teaching, interpreting, and working in the health-care sectors or government agencies. There is currently a high demand of people proficient in ASL in the U.S.

#### Required Courses

- ASL 251 - Second-year American Sign Language **Credits:** (5)
- ASL 252 - Second-year American Sign Language **Credits:** (5)
- ASL 253 - Second-year American Sign Language **Credits:** (5)
- ASL 301 - American Sign Language Literature **Credits:** (5)
- ASL 310 - Deaf Culture **Credits:** (5)
- ASL 343 - Deaf Education **Credits:** (5)

Total Credits: 30

#### College and Department Information

World Languages and Cultures Department  
College of Arts and Humanities

## Chinese Minor

The Chinese minor offers small and focused courses of language instruction by a native mandarin speaker, and proposes elective courses in Chinese history, culture, or languages. Students are encouraged to study abroad to achieve medium proficiency but may complete the minor on campus. Please contact the department for which courses are available as electives in any given year. In today's global and transnational world, Chinese is one of the most popular and necessary languages, and students with a Chinese minor may also profit from taking CWU's Asia Studies program. With a minor in Chinese, students can find careers in translation and interpretation, education, business, tourism, the military, the Foreign Service, and other areas. The US Government designates Chinese as a "critical" language. ROTC students may be eligible to receive scholarships or other benefits if they select this minor.

Only courses at the 200-level or above may count towards the minor.

#### Required Courses

Second-year Chinese Credits: 15

- CHIN 251 - Second-year Chinese **Credits:** (5)
- CHIN 252 - Second-year Chinese **Credits:** (5)
- CHIN 253 - Second-year Chinese **Credits:** (5)

Department-approved Chinese Electives Credits: 12

Total Credits: 27

#### College and Department Information

World Languages and Cultures Department  
College of Arts and Humanities

## French Minor

The French Studies minor offers small and focused classes taught by expert faculty. Students develop language proficiency and in-depth knowledge of culture through coursework that covers France and the francophone world, including Canada, North and Sub-Saharan Africa, and the Caribbean. This major is an asset to students who seek careers in education, international business, translation and interpretation, hospitality and tourism, foreign services and more.

Only courses at the 200-level or above may count towards the minor.

#### Required Courses

Second-year French Credits: 15

- FR 251 - Second-year French **Credits:** (5)
- FR 252 - Second-year French **Credits:** (5)
- FR 253 - Second-year French **Credits:** (5)

Department-Approved French Electives Credits: 12

Total Credits: 27

#### College and Department Information

World Languages and Cultures Department  
College of Arts and Humanities

## German Minor

The German minor offers small, focused, and student-centered classes in language, language use, and creative expression. Students also gain in-depth knowledge of culture through coursework that covers Germany, Switzerland, and Austria.

Students are encouraged to study abroad to achieve proficiency but may complete the minor on campus. Please contact the department for which courses are available as electives in any given year. A minor in German is an asset to students who seek careers in education, international business, translation and interpretation, hospitality and tourism, the military, and more.

Only courses at the 200-level or above may count towards the minor.

#### Required Courses

Second-year German Credits: 15

- GERM 251 - Second-year German **Credits: (5)**
- GERM 252 - Second-year German **Credits: (5)**
- GERM 253 - Second-year German **Credits: (5)**

Department-Approved German Electives Credits: 12

Total Credits: 27

#### College and Department Information

World Languages and Cultures Department  
College of Arts and Humanities

## Japanese Minor

The Japanese minor guides students through the process of learning Japanese, and in doing so, fosters an appreciation of Japanese culture and history. With Japanese, students can find careers in the electronics and film industries, education, business, tourism, the military, the Foreign Service, and other areas. The US Government designates Japanese as a "critical" language. ROTC students may be eligible to receive scholarships or other benefits if they select this minor.

Only courses at the 200-level or above may count towards the minor.

#### Required Courses

Second-year Japanese Credits: 15

- JAPN 251 - Second-year Japanese **Credits: (5)**
- JAPN 252 - Second-year Japanese **Credits: (5)**
- JAPN 253 - Second-year Japanese **Credits: (5)**

Composition, Grammar and Conversation Credits: 10

- JAPN 361 - Composition, Grammar and Conversation I **Credits: (5)**
- JAPN 362 - Composition, Grammar and Conversation II **Credits: (5)**

Department-Approved Electives Credits: 5

Total Credits: 30

#### College and Department Information

World Languages and Cultures Department  
College of Arts and Humanities

## Russian Studies Minor

Courses must be numbered 200 or above.

#### Required Courses

Second-year Russian Credits: 15

- RUSS 251 - Second-year Russian **Credits: (5)**
- RUSS 252 - Second-year Russian **Credits: (5)**
- RUSS 253 - Second-year Russian **Credits: (5)**

Advanced Russian Credits: 8

- RUSS 341 - Advanced Russian I **Credits: (4)**
- RUSS 342 - Advanced Russian II **Credits: (4)**

Advanced Composition and Grammar Credits: 4

- RUSS 441 - Advanced Composition and Grammar **Credits: (4)**

Topics in Russian Language Credits: 2

Variable topics (1 course of 2 credits)

- RUSS 445 - Topics in Russian Language **Credits: (2)**

Total Credits: 29

#### College and Department Information

World Languages and Cultures Department  
College of Arts and Humanities

## Spanish Minor

There are two streams connected with this minor, one for Second Language Learners (students who do not speak Spanish at home), and one for Heritage Students (students with some linguistic familiarity with Spanish in the home).

The Spanish minor (for Second Language Learners) offers small and student-centered classes. Students develop language proficiency and in-depth knowledge of cultures through coursework that covers Spain, Latin America, and the U.S. Latino population.

The Spanish minor (for Heritage students) offers differentiated second- and third-year courses, especially designed for students

who have some understanding of the Spanish language having interacted with it in the home. Students will interact with others who share a similar linguistic and cultural background, as well as learn about the cultures and literatures of the Hispanic world.

A solid background in Spanish language and culture is an asset to students who seek careers in education, international business, translation and interpretation, hospitality and tourism, and more. Because Spanish is the second official language of the U.S. having a degree in Spanish also automatically enhances any other career choice.

Only courses at the 200-level or above may count towards the minor.

#### Admission Requirements

Eligibility for 2nd-year Spanish is a requirement for entrance to the minor.

#### Required Courses

Second-year Spanish Credits: 15

- SPAN 251 - Second-year Spanish **Credits:** (5)
- SPAN 252 - Second-year Spanish **Credits:** (5)
- SPAN 253 - Second-year Spanish **Credits:** (5)

OR

Spanish for Heritage Speakers Credits: 15

- SPAN 261 - Spanish for Heritage Speakers I **Credits:** (5)
- SPAN 262 - Spanish for Heritage Speakers II **Credits:** (5)
- SPAN 263 - Spanish for Heritage Speakers III **Credits:** (5)

Composition and Grammar Credits: 5

- SPAN 341 - Spanish Composition and Grammar I **Credits:** (5)
- **OR** SPAN 345 - Composition and Grammar for Heritage Speakers I **Credits:** (5)

Department-Approved Spanish Electives Credits: 10

- SPAN 301 - Introduction to Spanish and Latin American Literature **Credits:** (5)
- SPAN 310 - Hispanic Civilizations and Cultures **Credits:** (5)
- SPAN 342 - Spanish Composition and Grammar II **Credits:** (5)
- SPAN 343 - Spanish Conversation **Credits:** (5)
- SPAN 346 - Composition and Grammar for Heritage Speakers II **Credits:** (5)
- SPAN 380 - Contemporary Hispanic Literature and Cultures (Put on reserve 9/16/18) **Credits:** (5)
- SPAN 381 - Hispanic and U.S. Latino Literatures and Cultures **Credits:** (5)

- SPAN 385 - Spanish Phonetics **Credits:** (5)
- SPAN 398 - Special Topics **Credits:** (1-6)
- SPAN 432 - Advanced Spanish Composition and Grammar **Credits:** (5)
- SPAN 442 - Spanish Translation and Interpretation **Credits:** (5)
- SPAN 443 - Advanced Spanish Translation **Credits:** (5)
- SPAN 445 - Spanish Medieval Literature **Credits:** (5)
- SPAN 446 - Hispanic Cinema **Credits:** (5)
- SPAN 447 - Framing Latin American Cinema **Credits:** (5)
- SPAN 449 - Spanish Golden Age Literature **Credits:** (5)
- SPAN 456 - The Spanish and Latin American Short Story **Credits:** (5)
- SPAN 466 - Spanish Poetry **Credits:** (5)
- SPAN 496 - Individual Study **Credits:** (1-6)

Total Credits: 30

#### College and Department Information

World Languages and Cultures Department  
College of Arts and Humanities

## Global Cultural Training Certificate

The Global Cultural Training Certificate equips students with valuable skills for working in a multicultural professional environment in a globalized market through a blend of theoretical (COM 302, WLC 427), applied (global culture electives in World Languages and Cultures), and experiential learning (WLC 490). It also equips students with skills that will enrich their personal lives and help them become ethical and global-minded citizens prepared to build lives for themselves in a world where diversity and interconnectedness are the norm. The Global Cultural Training Certificate provides in-depth focus and training on a specific skill set that will enhance the students' experience and add value to any number of CWU majors.

Required Courses Credits: 14

- COM 302 - Intercultural Communication **Credits:** (4)
- WLC 427 - Cross-Cultural Competence in a Globalized World **Credits:** (5)
- WL 490 - Cooperative Education **Credits:** (1-12) (Must be taken for 5 credits)

Department-Approved Electives Credits: 5

Choose one from the following:

- FR 200 - Introduction to French Culture **Credits:** (5)
- JAPN 311 - Manga and Anime: Japanese Visual Culture **Credits:** (5)

- RUSS 200 - The Art of the Protest: Censorship and Resistance in Russian Culture **Credits:** (5)
- WLC 250 - Language and Power **Credits:** (5)
- WLC 311 - Popular Cultures of the World **Credits:** (5)

Total Credits: 19

College and Department Information  
World Languages and Cultures Department  
College of Arts and Humanities

## Spanish Translation and Interpretation Certificate

A certificate in Spanish Translation and Interpretation which will develop and augment the training and skills you obtain in the Minor or Major. Two of the courses [SPAN 442 and SPAN 443] currently serve as electives for the minor or major. The remaining two courses [SPAN 454 and SPAN 492 or WL 490] are specific to the certificate. Together, these courses will provide you with training in specified terminology, and practical, hands-on experience in providing translation and interpretation services in medical, legal, and academic situations for needful members of the Central Washington region.

### Admission Requirements

Spanish majors and minors must have completed SPAN 341 with a C+ or above. All other students (both matriculated and non-matriculated) must demonstrate equivalent level of proficiency and receive departmental permission.

### Required Courses

- SPAN 442 - Spanish Translation and Interpretation **Credits:** (5)
- SPAN 443 - Advanced Spanish Translation **Credits:** (5)
- SPAN 454 - Medical and Legal Spanish for Translators and Interpreters **Credits:** (5)
- SPAN 492 - Practicum in Spanish Translation and Interpretation **Credits:** (5)
- **OR** WL 490 - Cooperative Education **Credits:** (1-12) (Must be taken for 5 credits.)

Total Credits: 20

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## YESS (Yearlong Exploration of Social Sciences Program)

The Yearlong Exploration of Social Sciences (YESS) is an innovative program designed to prepare and retain students in majors and careers in the social sciences. YESS consists of an integrated sequence of classes, enrichment activities in service learning, and student research opportunities through which students gain hands-on experience in modern social science research methods, explore theme-based interdisciplinary social scientific issues, and develop mentoring relationships with CWU social science faculty.

Application to YESS is open to new first-year students with an interest in social science fields.

First year students enrolled in YESS will participate in a three-quarter-long series of courses known as the YESS Social Science Perspectives and Research Seminar (YESS 101, YESS 102, and YESS 103). Completion of these three courses satisfies one of the General Education Program requirements.

The Yearlong Exploration of the Social Sciences program at CWU involves faculty members from social science academic departments: Anthropology; Geography; Interdisciplinary Studies: Social Sciences Program; Law and Justice; Political Science; Psychology; and Sociology. More information about the program and participating faculty members is available on the YESS website: [www.cwu.edu/yess](http://www.cwu.edu/yess).

### Program Outcomes

For information on program outcomes, please go to: [www.cwu.edu/mission/assessment-improvement/slo-assessment-plans](http://www.cwu.edu/mission/assessment-improvement/slo-assessment-plans).

### Course Offerings

Frequency of course offering information can be found at the department website or by contacting the department directly.

### Courses

- YESS 101 - YESS Social Science Perspectives and Research I **Credits:** (2)
- YESS 102 - YESS Social Science Perspectives and Research II **Credits:** (2)
- YESS 103 - YESS Social Science Perspectives and Research III **Credits:** (1)

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# Course Descriptions

## Africana and Black Studies Courses

- ABS 110. Expressive Black Culture: African American Literary Traditions from Folklore to Rap** (5). Interdisciplinary exploration of perspectives in African American folk culture, from oral expressions originating in Africa and developed during slavery to contemporary rap and stand-up comedy. Course explores the worldwide contribution of black oral performative art. AH-Literature and Humanities. K5 - Humanities
- ABS 210. Intro to the African American Odyssey: Socio-Economic and Political Forces Shaping Black Experience** (5). Examination of African Americans as (1) members of the nation they helped to build; and (2) members of a distinct culture that shapes and is shaped by local, national and global socio-economic and political forces. K2 - Community, Culture, & Citizenship
- ABS 298. Special Topics** (1-6). May be repeated if subject is different.
- ABS 299. Seminar** (1-5). May be repeated if subject is different.
- ABS 300. Black Diaspora Studies: Afro-Latin America and Afro-Caribbean Cultures** (5). Examines communities developing from displacement of Africans during colonization of the New World and the impact of these communities on Latin America and the Caribbean.
- ABS 302. Hip Hop as Global Culture** (5). This course examines Africana and black diasporic connections through popular culture using hip hop music. Hip hop allows us to study and understand contemporary history of black youth in Africa, Europe, and North America.
- ABS 305. 20th Century Black Women's Literature (Put on reserve 9/16/16)** (4). This seminar reads poetry, fiction, memoir, and criticism by and about black American women from 1919 to the 1990s. (Put on reserve 9/16/16. Last taught in 2012. Will go inactive 8/24/19.) Prerequisite: ENG 101.
- ABS 308. African American Folklore** (5). This course focuses on various elements of African American Folklore; including, but not limited to folktales, folk life, music, dance, and material culture.

**ABS 309. Race and Sports: Freedom, Power, and Difference** (4). Sports in the United States present a fascinating paradox: while athletics offers many young people of diverse backgrounds unparalleled opportunities for self-advancement, intercollegiate and professional sports in many respects reproduce or intensify prevailing images and stereotypes around race, difference, and identity.

**ABS 336. Race and Literature** (5). Course reviews theory and use of "race" in the construction of knowledge and in English canonical texts. ABS 336 and ENG 336 are cross listed courses; a student may not receive credit for both. Formerly ABS 400; a student may not receive credit for both. Course will not have an established scheduling pattern. Prerequisite: ENG 102.

**ABS 396. Individual Study** (1-6). May be repeated if subject is different.

**ABS 397. Honors** (1-12). Prerequisite: admission to department honors program.

**ABS 398. Special Topics** (1-6). May be repeated for credit.

**ABS 399. ABS Seminar** (3-5). With faculty mentoring and direction, students conduct in depth study of issues and events impacting African descendants in the United States, the Caribbean, Latin America, and other areas of the African Diaspora. Students present research and projects to SOURCE, academic meetings, ABS faculty, and student audiences. Prerequisite: ABS 210.

**ABS 496. Individual Study** (1-6). May be repeated if subject is different.

**ABS 497. Honors** (1-12). Prerequisite: admission to department honors program.

**ABS 498. Special Topics** (1-6). May be repeated if subject is different.

**ABS 499. Seminar** (1-5). May be repeated if subject is different.

## Accounting Courses

**ACCT 251. Financial Accounting** (5). An introduction to the theory and practice of accounting and financial reporting. Topics include the accounting cycle, financial statements, and corporate accounting for assets, liabilities, equities, revenues and expenses.

## **ACCT 252. Managerial Accounting**

(5). An introduction to the use of accounting information by managers. Topics included the use of accounting information for planning and control, performance evaluation, decision making, and the statement of cash flows, along with financial statement analysis. Prerequisite: C- or higher in ACCT 251.

**ACCT 296. Individual Study** (1-6).

**ACCT 298. Special Topics** (1-6). May be repeated if subject is different.

**ACCT 299. Seminar** (1-5). May be repeated if subject is different.

**ACCT 301. Accounting Skills for Non-Accounting Majors** (5). An overview of accounting, tax, and finance from the viewpoint of the financial statement user. Students will learn basic financial language and analysis skills for assessing enterprise

performance. Customized topics for students in various majors. Course will be offered every year (Fall, Winter, Spring and Summer). The course is recommended for any individuals not majoring in accounting or business.

This course is not open to accounting or business administration majors. K8 - Science & Technology

**ACCT 303. Tax Planning for Personal Finance** (5). Examines the topic of income tax planning and forecasting for individual clients and small business owners. Uses a case study approach to integrate the material and apply it to personal financial planning situations. Emphasizes the evaluation of financial alternatives. Course will be offered every year. Course will not have an established scheduling pattern.

Prerequisite: a grade of C or higher in ACCT 251 or ACCT 301.

**ACCT 305. Cost Accounting** (5).

Economics of cost accounting; industrial analysis, production control through costs, types of cost systems, and burden application. Prerequisites: a grade of C or higher in ACCT 251 and ACCT 252, and a pre-major or major or minor or certificate student in a College of Business program; or admission to the MPA program.

**ACCT 340. Income Tax Accounting I** (5). Introduction to a broad range of tax concepts and types of taxpayers. Coverage focuses primarily on principles in individual income taxation. Course will be offered every

year (Fall, Winter, Spring, Summer). Prerequisite: a grade of C or higher in ACCT 251 and ACCT 252, and a pre-major or major or minor or certificate student in a College of Business program.

**ACCT 350. Intermediate Accounting I**

(5). An in-depth study of financial accounting theory and practice. The first of a three-course intermediate sequence, this course is intended for the student who requires more than principles level accounting coverage. Prerequisite: a grade of C or higher in ACCT 251 and ACCT 252, and a pre-major or major or minor or certificate student in a College of Business program; or admission to the MPA program.

**ACCT 351. Intermediate Accounting II**

(5). The second of a three-course intermediate sequence, this course continues ACCT 350, covering complex topics in accounting and financial reporting. Prerequisite: a grade of C or higher in ACCT 350, and a pre-major or major or minor or certificate student in accounting; or admission to the MPA program.

**ACCT 352. Intermediate Accounting III**

(5). The third of a three-course intermediate sequence, this course continues ACCT 351, covering complex topics in accounting and financial reporting. Also included are special topics and existing/emerging issues. Prerequisite: a grade of C or higher in ACCT 351, and a pre-major or major or minor or certificate student in accounting; or admission to the MPA program.

**ACCT 396. Individual Study** (1-6).

**ACCT 397. Honors** (1-12). Prerequisite: admission to department honors program.

**ACCT 398. Special Topics** (1-6). May be repeated if subject is different.

**ACCT 399. Seminar** (1-5). May be repeated if subject is different.

**ACCT 405. Advanced Cost Accounting**

(5). This course reviews, enhances, and extends concepts learned in ACCT 305. The focus is on assessing the information needs of end users in the organization, then creating reports (including Excel workbooks) to address those needs. ACCT 405 and ACCT 505 are layered courses; students may not receive credit for both. Prerequisites: a grade of C or higher in ACCT 305 and admission to the accounting major AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or

MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25.

**ACCT 430. Governmental and Non-profit Accounting** (5).

Accounting and budgetary controls for governmental units and non-profit service organizations, including educational institutions (from school districts to universities) and hospitals. Emphasis is on the advantages, uses, disadvantages, and differences in fund accounting. ACCT 430 and ACCT 530 are layered courses; students may not receive credit for both. Prerequisites: (a grade of C or higher in ACCT 351 or concurrent enrollment in ACCT 351 with a cumulative CWU GPA greater than 3.0); AND admission to the accounting major AND completion of the college of business foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum grade of C- in each course and a minimum collegiate GPA of 2.25.

**ACCT 441. Advanced Tax 1:**

**Individual** (5). Study of principles of federal income taxation of individuals. Focuses is on individual income tax compliance, such as gross income, deductions, credits, property transactions, retirement income, alternative minimum tax, and self-employment tax. ACCT 441 and ACCT 541 are layered courses; students may not receive credit for both. Formerly ACCT 446, students may not receive credit for both. Course will be offered every year (Fall, Spring). Prerequisites: a grade of C or higher in ACCT 340 and (a) admission to a Tax Certificate Program or (b) admission to the accounting major AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25.

**ACCT 442. Advanced Tax 2:**

**Corporations and other entities** (5). Study of principles of federal income taxation of corporations and pass-through and their investors. Coverage includes formation, distributions, withdrawals, and dissolution. Course introduces income tax issues concerning estates, trusts, exempt organizations, retirement plans, and farmers. ACCT 442 and ACCT 542 are layered courses; a student may not receive credit for both. Course will be

offered every year (Winter).

Prerequisite: Completion of ACCT 303 or ACCT 340 with a minimum grade of C.

**ACCT 443. Advanced Tax 3: Practice and Procedure** (5).

Study of rules of conduct and ethics in tax practice, such as competency, conflicts of interest, penalties, and sanctionable acts. Coverage of federal tax procedure, statute of limitations, notions of evidence, and record maintenance. ACCT 443 and ACCT 543 are layered courses; students may not receive credit for both. Course will be offered every year (Spring). Prerequisite: Completion of a foundation tax course equivalent to ACCT 303 or ACCT 340 with a minimum grade of C.

**ACCT 450. Advanced Accounting** (5).

Accounting theory and practice for business, combinations and consolidated financial statements, foreign currency transactions and translation, partnerships, and advanced special topics. ACCT 450 and ACCT 550 are layered courses; students may not receive credit for both. Prerequisites: a grade of C or higher in ACCT 351 and admission to the accounting major AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25.

**ACCT 455. Accounting Information Systems** (5).

Accounting information system development process and related information systems technologies. Includes the application, control, and audit of accounting information systems. ACCT 455 and ACCT 555 are layered courses; students may not receive credit for both. Prerequisites: a grade of C or higher in ACCT 350, and admission to accounting major and completion of the College of Business Foundation courses (ACCT 251, ACCT 252, BUS 221, BUS 241, ECON 130, ECON 201, MATH 153) with a minimum C- grade in each course and a minimum cumulative GPA of 2.25.

**ACCT 460. Auditing** (5).

Auditor's functions and responsibilities. Evaluation of the system of internal control, the determination of appropriate auditing procedures, and the extent of their application. Prerequisites: (a grade of C or higher in ACCT 352 or concurrent enrollment in ACCT 352 with a cumulative CWU

GPA greater than 3.0); AND admission to the accounting major AND completion of the college of business foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum grade of C- in each course and a minimum collegiate GPA of 2.25.

**ACCT 461. Fraud Examination (5).**

Detection and prevention of financial statement fraud and other forms of business fraud. ACCT 461 and ACCT 561 are layered courses; students may not receive credit for both.

Prerequisites: a grade of C or higher in ACCT 351 and admission to the accounting major AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25.

**ACCT 475. International Accounting (5).**

Explores the formulation and application of accounting principles in other industrialized countries. Particular emphasis directed toward the harmonization of accounting principles between the U.S. and other countries. ACCT 475 and ACCT 575 are layered courses; students may not receive credit for both. Prerequisites: a grade of C or higher in ACCT 351 and admission to the accounting major AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25.

**ACCT 484. Professional Writing and Speaking for the Accountant (5).**

Develop written and verbal communications skills for practical application in public, private, and governmental accounting fields. Includes interviewing techniques, preparation and presentation of group and individual reports, and preparation of resumes, letters, memos, and work papers. ACCT 484 and ACCT 584 are layered courses; students may not receive credit for both. Prerequisites: (a grade of C or higher in ACCT 351 AND admission to the accounting major AND completion of the college of business foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH

154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum grade of C- in each course and a minimum collegiate GPA of 2.25.

**ACCT 490. Cooperative Education (1-12).**

An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. (Student should have an overall GPA greater than a cumulative 2.0 in order to get internship credit.) Note: While ACCT 490 can no-longer be used as an accounting elective in the accounting major, it can still be used toward the 20 hours of internship credit allowed by the university and for the 225-hour requirement for the CPA examination. May be repeated for credit. Grade will either be S or U. Prerequisites: prior approval and admission to the accounting major.

**ACCT 492. Volunteer Income Tax Assistance (2).**

Preparation of tax returns of low income taxpayers, including tax return preparation training. Grade will either be S or U. ACCT 492 and ACCT 592 are layered courses; a student may not receive credit for both. Course will be offered every year (Winter). May be taken concurrently with ACCT 303 or ACCT 340. Prerequisites: ACCT 303 or ACCT 340 and admission to the accounting major or a Tax Certificate; or permission of the department chair.

**ACCT 493. Applied Accounting Techniques (3).**

Under direct supervision of the instructor, assist in answering accounting students' questions and aid in completion of homework for a minimum of six hours weekly. Other tasks as assigned. Grade will either be S or U. Prerequisite: admission to the accounting major.

**ACCT 496. Individual Study (1-6).**

May be repeated for credit. Prerequisite: admission to the accounting major.

**ACCT 497. Honors (1-12).** Prerequisite: admission to department honors program.

**ACCT 498. Special Topics (1-6).** May be repeated for credit under a different subtitle. Prerequisite: admission to the accounting major.

**ACCT 499. Seminar (1-5).** Repeatable for credit under different subtitle. Prerequisite: admission to the accounting major.

**Administrative Management Courses**

**ADMG 201. Introduction to Business (3).** Functions, practices, and

organization of the business enterprise. Course will be offered every year (Fall, Winter, Spring, and Summer).

**ADMG 271. Business Math Applications (4).**

Business and merchandising mathematics applications. Course will be offered every year (Fall, Winter, Spring, and Summer).

**ADMG 285. Sustainable Decision-Making (4).**

Examines the impact of decision-making using short/long term outlooks and multiple perspectives. Develops skills to critically evaluate economic, environmental and social impacts of decisions as well as appropriate methods to professionally communicate those decisions. Course will be offered every year (Fall, Winter, Spring and Summer). K1 - Academic Writing II: Reasoning & Research

**ADMG 298. Special Topics (1-6).** May be repeated if subject is different.

**ADMG 299. Seminar (1-5).** May be repeated if subject is different.

**ADMG 302. Financial Analysis for Administrative and IT Support (5).**

This course addresses the financial analysis functions necessary for an administrative and IT support manager to complete requested financial documents. Administrative and IT support staff must understand the basis of financial accounting. Course will be offered every year (Fall, Winter, Spring, Summer). Prerequisite: junior standing.

**ADMG 371. Administrative Management (4).**

Administrative management techniques and practices.

**ADMG 372. Leadership and Supervision (4).**

Develop leadership techniques and behavioral traits to improve productivity of supervisors and leaders in the workplace, and enhance interpersonal skills for career success.

**ADMG 373. Training and Development for Administrative and IT Support (4).**

This course provides students with an overview of the employee training and development process—a key component to employee success. Development and delivery of a training program will be the outcome of this course. Prerequisite: AMDG 371 and junior standing or above.

**ADMG 374. Project Management (5).**

Development of skills in the core project management areas; scope management, time management, cost management, quality management. Formerly IT 374, students may not receive credit for both. Prerequisite: junior standing or above.

**ADMG 385. Business Communications and Report Writing (4).** Planning and writing skills for business letters, memoranda, employment, and reports. Course will be offered every year (Fall, Winter, Spring, Summer). Prerequisites: Academic Writing II or a direct transfer degree, and junior standing or above.

**ADMG 396. Individual Study (1-6).**

May be repeated if subject is different.

**ADMG 397. Honors (1-12).**

Prerequisite: admission to department honors program.

**ADMG 398. Special Topics (1-6).** May be repeated if subject is different.

**ADMG 399. Seminar (1-5).** May be repeated if subject is different.

**ADMG 410. Comparative Global Studies in ITAM I (4).** This course offers the student an opportunity to study and experience various industries operating in another country or region with an emphasis on global information technology, retail management, entrepreneurship, and leadership. Acceptance to study abroad trip.

Course will not have an established scheduling pattern. Grade will either be S or U. Permission by department.

**ADMG 412. Comparative Global Studies in ITAM II (4).** This course offers the student an opportunity to study and experience cultural differences and similarities in another country or region from the perspective of IT and administrative management. Acceptance to study abroad trip. Grade will either be S or U. Permission by department. Course will not have an established scheduling pattern.

**ADMG 424. Administrative Management Policy (4).**

Administrative management policies dealing with technology and innovation; the analysis, decision making, implementation, and control of these policies; the intent and core competencies of an organization; and the competitive integration of technology. Prerequisites: ADMG 371, ADMG 385 and senior standing.

**ADMG 471. Leading Change (4).** An in-depth study of organizational dynamics, as applied to organization-wide interventions, designed to improve organizational functioning and to implement change in the organization. The course will include techniques for developing and improving organizations through organizational assessment and diagnosis of culture and processes. Prerequisites: ADMG 371, ADMG 372, and senior status. CE - Culminating Experience

**ADMG 474. Executing Project Management I (4).**

This course introduces students to the principles defined by the Institute Project Management Body of Knowledge (PMBOK). Students will examine the PM process groups of initiating, planning and executing while developing a project plan. Prerequisite: ADMG 374.

**ADMG 475. Executing Project Management II (4).**

This course is a continuation of Executing Project Management - I. Students will explore quality, human resources, communications, risk and procurement as they continue to build their project plan. Prerequisite: ADMG 474.

**ADMG 476. Managing Project Uncertainty (4).**

Students will learn to handle various forms of project uncertainty. An emphasis will be placed on handling uncertainty across the entire project. Students will work through problems with an emphasis on real-world solutions. Prerequisite: ADMG 475.

**ADMG 477. Project Performance Reporting (4).**

Students will prepare various project performance reports reflective of the status of the project throughout the project lifecycle. An emphasis will be placed on earned value techniques for reporting project performance. Students will learn techniques for effectively presenting complex project data. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisite: ADMG 475.

**ADMG 479. Project Management Maturity (4).**

Students will assess project management maturity processes through the use of established industry best practices. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisite: ADMG 475.

**ADMG 485. Managerial Communications (3).**

Advanced written, oral, and non-verbal business communications including proposals, crisis management, international communication, international/domestic etiquette, meeting management, conflict resolution, negotiation, and collaboration. Department reactivated 9/16/15. Prerequisite: ADMG 385.

**ADMG 490. Cooperative Education (1-12).** An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. Offered summers only.

Departmental consent. May be repeated for credit. Grade will either be S or U. Prerequisite: RMT 379.

**ADMG 491. Workshop (1-6).** May be repeated for credit under different subtitle.

**ADMG 496. Individual Study (1-6).** By permission. May be repeated for credit.

**ADMG 497. Honors (1-12).**

Prerequisite: admission to department honors program.

**ADMG 498. Special Topics (1-6).** By permission. May be repeated for credit under different subtitle.

**ADMG 499. Seminar (1-5).** By permission. May be repeated for credit under different subtitle.

### Aerospace Studies Courses

**AFRO 101. Foundations of the USAF (1).**

A survey course briefly overviewing Air Force structure, missions, organizations, officership, professionalism, and an introduction to communicative skills.

**AFRO 101LAB. GMC Leadership Laboratory (2).**

Practical experience in Air Force customs and courtesies, physical fitness, drills, ceremonies, and opportunities available to commissioned officers. Grade will either be S or U. Two hours weekly plus mandatory physical training. Co-requisite: AFRO 101.

**AFRO 102. Foundations of the USAF (1).**

A survey course briefly overviewing Air Force structure, missions, organizations, officership, professionalism, and an introduction to communicative skills.

**AFRO 102LAB. GMC Leadership Laboratory (2).**

Practical experience in Air Force customs and courtesies, physical fitness, drills, ceremonies, and opportunities available to commissioned officers. Two hours weekly plus mandatory physical training. Grade will either be S or U. Co-requisite: AFRO 102.

**AFRO 103. Foundations of the USAF (1).**

A survey course briefly overviewing Air Force structure, missions, organizations, officership, professionalism, and an introduction to communicative skills.

**AFRO 103LAB. GMC Leadership Laboratory (2).**

Practical experience in Air Force customs and courtesies, physical fitness, drills, ceremonies, and opportunities available to commissioned officers. Two hours weekly plus mandatory physical training. Grade will either be S or U. Co-requisite: AFRO 103.

**AFRO 201. The Evolution of USAF Air and Space Power (1).** Through

historical examples, we examine the development of Air Force capabilities and missions to demonstrate the evolution of today's USAF air and space power.

**AFRO 201LAB. GMC Leadership Laboratory (2).** Practical experience in Air Force customs and courtesies, drills, ceremonies, giving military commands, and preparation for field training. Two hours weekly plus mandatory physical training. Grade will either be S or U. Co-requisite: AFRO 201.

**AFRO 202. The Evolution of USAF Air and Space Power (1).** Through historical examples, we examine the development of Air Force capabilities and missions to demonstrate the evolution of today's USAF air and space power.

**AFRO 202LAB. GMC Leadership Laboratory (2).** Practical experience in Air Force customs and courtesies, drills, ceremonies, giving military commands, and preparation for field training. Two hours weekly plus mandatory physical training. Grade will either be S or U. Co-requisite: AFRO 202.

**AFRO 203. The Evolution of USAF Air and Space Power (1).** Through historical examples, we examine the development of Air Force capabilities and missions to demonstrate the evolution of today's USAF air and space power.

**AFRO 203LAB. GMC Leadership Laboratory (2).** Practical experience in Air Force customs and courtesies, drill and ceremonies, giving military commands, and preparation for field training. Two hours weekly plus mandatory physical training. Grade will either be S or U. Co-requisite: AFRO 203.

**AFRO 296. Individual Study (1-3).** May be repeated for credit.

**AFRO 298. Special Topics (1-6).** May be repeated for credit under different subtitle.

**AFRO 299. Seminar (1-5).** May be repeated if subject is different.

**AFRO 301. Air Force Leadership Studies (3).** Provides leadership, management fundamentals, professional knowledge, Air Force personnel and evaluation systems, leadership ethics, and the communication skills required of an Air Force junior officer.

**AFRO 301LAB. POC Leadership Laboratory (2).** Students plan, organize, coordinate, and direct cadet corps activities, enhancing communication, management, and

other leadership skills. Three hours weekly plus mandatory physical training. Grade will either be S or U. Course will be offered every year (Fall). Co-requisite: AFRO 301.

**AFRO 302. Air Force Leadership Studies (3).** Provides leadership, management fundamentals, professional knowledge, Air Force personnel and evaluation systems, leadership ethics, and the communication skills required of an Air Force junior officer.

**AFRO 302LAB. POC Leadership Laboratory (2).** Students plan, organize, coordinate, and direct cadet corps activities, enhancing communication, management, and other leadership skills. Three hours weekly plus mandatory physical training. Grade will either be S or U. Course will be offered every year (Winter). Co-requisite: AFRO 302.

**AFRO 303. Air Force Leadership Studies (3).** Provides leadership, management fundamentals, professional knowledge, Air Force personnel and evaluation systems, leadership ethics, and the communication skills required of an Air Force junior officer.

**AFRO 303LAB. POC Leadership Laboratory (2).** Students plan, organize, coordinate, and direct cadet corps activities, enhancing communication, management, and other leadership skills. Three hours weekly plus mandatory physical training. Grade will either be S or U. Course will be offered every year (Spring). Co-requisite: AFRO 303.

**AFRO 350. Four-week Summer Field Training (3).** Organization, operation, and mission of an Air Force base; physical conditioning; applied leadership training and evaluation; marksmanship; survival orientation; and field exercises. May be repeated for credit. Grade will either be S or U.

**AFRO 396. Individual Study (1-6).** May be repeated if subject is different.

**AFRO 397. Honors (1-12).** Prerequisite: admission to department honors program.

**AFRO 398. Special Topics (1-6).** May be repeated for credit under different subtitle.

**AFRO 399. Seminar (1-5).** May be repeated if subject is different.

**AFRO 401. National Security Affairs and Preparation for Active Duty (3).** Examines national security process, regional studies, advanced leadership ethics, Air Force Doctrine, officership, military justice, and preparation for active duty.

**AFRO 401LAB. POC Leadership Laboratory (2).** Advanced leadership experiences involving planning and conducting cadet training activities, oral and written communications, and developing human relations skills. Three hours weekly plus mandatory physical training. Grade will either be S or U. Course will be offered every year (Fall). Co-requisite: AFRO 401.

**AFRO 402. National Security Affairs and Preparation for Active Duty (3).** Examines national security process, regional studies, advanced leadership ethics, Air Force Doctrine, officership, military justice, and preparation for active duty.

**AFRO 402LAB. POC Leadership Laboratory (2).** Advanced leadership experiences involving planning and conducting cadet training activities, oral and written communications, and developing human relations skills. Three hours weekly plus mandatory physical training. Grade will either be S or U. Course will be offered every year (Winter). Co-requisite: AFRO 402.

**AFRO 403. National Security Affairs and Preparation for Active Duty (3).** Examines national security process, regional studies, advanced leadership ethics, Air Force Doctrine, officership, military justice, and preparation for active duty.

**AFRO 403LAB. POC Leadership Laboratory (2).** Advanced leadership experiences involving planning and conducting cadet training activities, oral and written communications, and developing human relations skills. Three hours weekly plus mandatory physical training. Grade will be either S or U. Course will be offered every year (Spring). Co-requisite: AFRO 403.

**AFRO 496. Individual Study (1-3).** May be repeated for credit.

**AFRO 497. Honors (1-12).** Prerequisite: admission to department honors program.

**AFRO 498. Special Topics (1-6).** May be repeated for credit under different subtitle.

**AFRO 499. Seminar (1-5).** May be repeated if subject is different.

#### American Indian Studies Courses

**AIS 101. American Indian Culture before European Contact (5).** An interdisciplinary approach explores the lifeways and environments of American Indians prior to European contact and settlement. Sources of pre-contact information consist of the archaeological, oral history, and paleoenvironmental records. SB-Perspectives on Cultures and

Experiences of U.S. (W). Course will be offered every year (Fall). SB-Perspectives on Cultures and Experiences of U.S. (W). K6 - Individual & Society

**AIS 102. American Indians in the**

**Contact Period (5).** An interdisciplinary study of the lifeways and environments of American Indians during the period of European contact. Sources of contact period information come from the archaeological, American Indian and European written and oral history records. SB-Perspectives on Cultures and Experiences of U.S. (W). Course will be offered every year (Winter). SB-Perspectives on Cultures and Experiences of U.S. (W). K5 - Humanities

**AIS 103. Contemporary American**

**Indian Experience (5).** An interdisciplinary approach explores the emergence of contemporary American Indians after AD 1890 with an emphasis on social, political, and cultural aspects. Sources of information about this period come from written and oral history. SB-Perspectives on Cultures and Experiences of U.S. (W). Course will be offered every year (Spring). SB-Perspectives on Cultures and Experiences of U.S. (W). K2 - Community, Culture, & Citizenship

**AIS 296. Individual Study (1-6).**

**AIS 298. Special Topics (1-6).** May be repeated if subject is different.

**AIS 299. Seminar (1-5).** May be repeated if subject is different.

**AIS 320. American Indian Philosophy**

**(Put on reserve 9/16/17) (5).** The course examines philosophy indigenous to North America through native and non-native historical and contemporary sources; explores the interplay of native and non-native philosophical concepts and the influence of indigenous American roots on contemporary American philosophy. (Put on reserve 9/16/17. Will go inactive 8/24/2020.)

**AIS 321. American Indian Spirituality**

**(5).** Introduction to American Indian spirituality with emphasis on myths, rituals, and beliefs; including historical, economic, political and legal issues that influence the ways of American Indian spiritual practice; Ghost Dance, Native American Church, etc.

**AIS 396. Individual Study (1-6).** May be repeated if subject is different.

**AIS 397. Honors (1-12).** Prerequisite: admission to department honors program.

**AIS 398. Special Topics (1-5).**

**AIS 399. Seminar (1-5).** May be repeated if subject is different.

**AIS 490. Cooperative Education (1-12).**

An individualized contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student-learning plan, cooperating employer supervision, and faculty coordination. By permission. May be repeated for credit. Grade will either be S or U.

**AIS 491. Workshop (1-6).** Occasional workshops will be offered to provide a context for American Indian artists/scholars to teach. May be repeated for credit. Grade will either be S or U.

**AIS 496. Individual Study (1-6).**

**AIS 497. Honors (1-12).** Prerequisite: admission to department honors program.

**AIS 498. Special Topics (1-5).**

**AIS 499. Seminar (1-5).** May be repeated if subject is different.

**Anthropology and Museum Studies Courses**

**ANTH 107. Being Human: Past and Present (5).** Exploration of being human throughout the world from the earliest human ancestors to today using archaeological, biological, cultural and linguistic anthropology methods and perspectives. SB-Foundations of Human Adaptations and Behavior. Course will be offered every year (Fall, Winter, Spring). SB-Foundations of Human Adaptations and Behavior. K6 - Individual & Society

**ANTH 110. Bones, Apes, and Genes: Exploring Biological Anthropology**

**(5).** Exploration of the field of biological anthropology, including humankind's evolutionary relationships to other primate forms, the human fossil record, and on-going evolutionary processes impacting on the human species. NS-Patterns and Connections Natural World. Course will be offered every year (Fall, Winter, Spring, Summer). NS-Patterns and Connections Natural World. K7 - Physical & Natural World

**ANTH 120. Archaeology: Science of the Past (5).**

Introduction to the concepts, methods, and development of archaeology, as well as key discoveries from the ancient world. Illustrations of how fields of science are combined to uncover past human achievements and diverse cultures. SB-Foundations of Human Adaptations and Behavior (W). Course will be offered every year (Fall, Winter, Spring). SB-Foundations of Human Adaptations and Behavior (W). K8 - Science & Technology

**ANTH 130. Cultural Worlds (5).** The cross-cultural and holistic study of humans worldwide, including the analysis of race, gender, power, kinship, globalization, and the role of symbols in social life. Students will also examine their own world through anthropological lenses. SB-Perspectives on World Cultures. SB-Perspectives on World Cultures. K4 - Global Dynamics

**ANTH 137. Race, Power and the**

**American Dream (5).** This class constitutes an anthropological exploration of race in the United States by examining structural inequality in relation to the ideas and experiences reflected in what is popularly called The American Dream. Course will be offered every year (Fall, Spring, and Summer). K2 - Community, Culture, & Citizenship

**ANTH 180. Language and Culture (5).**

This course is an introduction to the scientific and anthropological study of language, concerning its structure and function as an omnipresent system in communication, cognition, and socialization, and its relationship with culture, society, and power. Course will be offered every year (Winter, Spring, Summer). K6 - Individual & Society

**ANTH 201. Grade 1 Animal**

**Technician (1).** Course covers skills of Grade 1 Animal Technician with a focus on primates. Standards follow those of the International Primatological Society and include maintenance of primates' physical environment and USDA standards for management. Grade will be S or U.

**ANTH 296. Individual Study (1-6).** By permission. May be repeated for credit.

**ANTH 298. Special Topics (1-6).**

**ANTH 299. Seminar (1-5).** May be repeated if subject is different.

**ANTH 301. Anthropology: Principles**

**and Assessment (2).** Principles and assessment course for majors: current topics and careers, research, funding; development of assessment portfolios and individual program plans. Required for all BA and BS anthropology majors at admission.

**ANTH 310. Research/Laboratory in**

**Biological Anthropology (1-2).** Laboratory research analysis of biological anthropology materials. May be taken concurrently with and as a supplement to other 300-level courses in biological anthropology. The course may be repeated for a cumulative maximum of 8 credits. No more than 10 credits of ANTH 310 and ANTH 485 are allowed to fulfill BA or BS requirements. Meets anthropology

- subfield Biological Anthropology (B). Prerequisite: previous college work in biological anthropology or other natural sciences, and permission of instructor.
- ANTH 311. Advanced Biological Anthropology: Principles of Human Evolution** (4). Analysis and interpretation of major principles of modern biological anthropology from an evolutionary perspective: genetics, population genetics, ecology, comparative anatomy and human paleontology. Meets anthropology subfield Biological Anthropology (B). Course will be offered every year (Spring).
- ANTH 312. Human Origins: The Fossil Evidence** (4). The fossil record of hominins. Basic data and interpretation. Meets anthropology subfield Biological Anthropology (B). Course will be offered on even numbered years (Fall).
- ANTH 313. Primate Social Behavior** (4). Survey of field studies of nonhuman primates relevant to the study of human social systems and adaptation. Meets anthropology subfield Biological Anthropology (B). Course will be offered every year (Fall).
- ANTH 314. Human Variation** (5). Survey of genetic, physiological, and morphological diversity of modern human populations, with a focus on how humans' biological variation interacts with culture to enable adaptation to various ecological settings. NS-Applications Natural Science. Course will be offered every year (Fall, Winter, Spring, Summer). Prerequisite: sophomore standing or above. NS-Applications Natural Science. K7 - Physical & Natural World
- ANTH 315. Forensic Skeletal Analysis** (4). A survey of the human skeleton and techniques of human skeletal analysis. Identification of age, sex, and other traits in modern and extinct populations. Meets anthropology subfield Biological Anthropology (B).
- ANTH 316. History and Theory of Molecular Anthropology** (4). This seminar will include readings from important studies that have influenced the field of biological anthropology including the areas of human origins, phylogeny and dispersal. Prerequisite: ANTH 311 or by permission of the instructor.
- ANTH 318. Introduction to Forensics** (4). This course explores the subject matter and methods forensic investigators use when searching and recovering evidence from crime scenes. We examine approaches to forensics across multiple disciplines including anthropology, biological sciences, chemistry, law and justice, geological sciences, physics, psychology, and sociology. The goal is to provide a broad overview for students interested in exploring forensic careers. ANTH 318 and LAJ 318 are cross-listed courses; students may not receive credit for both.
- ANTH 320. Research/Laboratory in Archaeology (Put on reserve 9/16/17)** (2). Analysis of archaeological materials. Minimum of 4 hours laboratory per week. No more than 10 credits of ANTH 320 and ANTH 486 allowed to fulfill BA or BS requirements. Meets anthropology subfield Archaeology (A). (Put on reserve 9/16/17. Will go inactive 8/24/2020.) Prerequisite: ANTH 120.
- ANTH 321. Archaeological Methods** (4). Introduction to methods used by archaeologists, with an emphasis on laboratory methods for analysis of chipped stone, ceramics, faunal remains, and other archaeological materials. Meets anthropology subfield Archaeology (A).
- ANTH 321LAB. Archaeological Methods Laboratory** (2). Hands-on application of typical methods used in archaeological investigations, with an emphasis on laboratory techniques for studying chipped stone, ceramics, faunal remains, and other archaeological materials. Meets anthropology subfield Archaeology (A). Co- or prerequisite: ANTH 321.
- ANTH 322. World Prehistory** (4). Old and New World prehistory from late Pliocene to the early historic period, including the ecology and development of hunting-gathering, agriculture and state-level societies. ANTH 322 and HIST 322 are cross-listed courses; students may not receive credit for both. Meets anthropology subfield Archaeology (A).
- ANTH 323. Field Archaeology** (3-6). Identification, mapping and recording of archaeological sites; techniques of excavation. Grade will be either S or U. Meets anthropology subfield Archaeology (A). Prerequisite: ANTH 120.
- ANTH 324. North American Archaeology** (4). Prehistoric cultures of North America, with emphasis on adaptation to changing environments. Meets anthropology subfield Archaeology (A).
- ANTH 325. Prehistory of the Pacific Northwest** (4). Prehistoric cultures of Washington State and adjoining regions. Meets anthropology subfield Archaeology (A).
- ANTH 333. Culture and Marriage** (4). The reciprocal relationships between the biophysical and cultural components in mating, nurturing and sexual access. Cross-cultural patterns in marriage. ANTH 333 and FCL 333 are cross-listed courses; students may not receive credit for both. Meets anthropology subfield Cultural Anthropology (C).
- ANTH 340. Ethnography of China (Put on reserve 9/16/17)** (4). This course is designed to explore China from the perspectives of general cultural patterns and ethnicity. ANTH 340 and AST 340 are cross-listed courses; students may not receive credit for both. (Put on reserve 9/16/17. Will go inactive 8/24/2020.)
- ANTH 341. Native American Cultures of the Pacific Northwest** (4). Ecological settings and cultural adaptations of Pacific Northwest Native Americans in historical and contemporary contexts. Culture change and continuity, language, religion, resource management, and tribal sovereignty. Meets anthropology subfield Cultural Anthropology (C). Course will not have an established scheduling pattern.
- ANTH 343. Culture and Power in Africa** (4). Anthropological study power in precolonial African societies, ideological and cultural dimensions of social inequality and social struggle, classical social anthropology and contemporary analysis of war, genocide, refugee movement, and political consciousness. Meets anthropology subfield Cultural Anthropology (C).
- ANTH 344. Cultures of Asia** (4). Setting and cultural adaptation of the peoples of Asia. Representative groups from cultural regions of East Asia and Central/Inner Asia. Meets anthropology subfield Cultural Anthropology (C).
- ANTH 345. Cultures of Southeast Asia and Oceania** (4). Setting and cultural adaptation of the peoples of Southeast Asia and Oceania. Meets anthropology subfield Cultural Anthropology (C).
- ANTH 346. Cultures of Latin America and the Caribbean** (4). Survey of anthropological research on cultures of Latin America and the Caribbean in historical and contemporary contexts. Meets anthropology subfield Cultural Anthropology (C).
- ANTH 347. Native American Cultures of North America** (4). Ecological settings and cultural adaptations of North American Native Americans in

historical and contemporary contexts. Culture change and continuity, language, religion, resource management and tribal sovereignty. Meets anthropology subfield Cultural Anthropology (C).

**ANTH 348. Contemporary China (4).**

This course focuses on contemporary China and covers such topics as general situation, family, marriage, citizenship, community institutions, work, religion, ethnicity, education, popular culture, politics, social class, rural-urban inequalities, gender, and social change. ANTH 348 and AST 348 are cross-listed courses; a student may not receive credit for both. Course will not have an established scheduling pattern.

**ANTH 351. Visual Anthropology (4).**

Provides methodological, theoretical and practical background to produce and evaluate imagery in films and video; guidelines and practice of image presentation/manipulation in anthropological and social contexts. ANTH 351 and COM 351 are cross-listed courses; students may not receive credit for both. Meets anthropology subfield Cultural Anthropology (C). Prerequisites: ANTH 130 or ART 225 or COM 321 or COM 330.

**ANTH 352. Anthropology of Environmental Issues (4).**

Anthropological approaches to environmental issues and debates, from climate change to the availability of clean water and beyond. Students use critical thinking in assessing the role of culture nationally and internationally in current environmental issues. Meets anthropology subfield Cultural Anthropology (C).

**ANTH 353. Childhood and Culture (4).**

Cross-cultural comparison of children's lives in different societies. Exploration of developmental paradigms and comparison of ideas about what childhood is and how children become competent in different societies.

**ANTH 354. Anthropology of Religion (4).**

A cross-cultural analysis of religion, cosmology and world view. Meets anthropology subfield Cultural Anthropology (C).

**ANTH 355. Culture, Person, Self (4).**

A cross-cultural analysis of the relationship of individuals to cultural beliefs and practices. Meets anthropology subfield Cultural Anthropology (C).

**ANTH 356. Gender Roles in Cross-cultural Perspective (4).**

Bio-cultural factors affecting human gender roles. Meets anthropology subfield Cultural Anthropology (C).

**ANTH 357. Medical Anthropology:**

**Cross-cultural Perspectives on Health and Healing (4).** Emphasizes cultural and biological factors influencing health maintenance in human populations and cross-cultural perspectives on illness, healing and the provision of health care. Meets anthropology subfield Cultural Anthropology (C).

**ANTH 358. Culture and Politics in a Global Economy (Put on reserve 9/16/17) (4).**

Comparative perspectives on cultural processes of change within the global economic system. Meets anthropology subfield Cultural Anthropology (C). (Put on reserve 9/16/17. Will go inactive 8/24/2020.)

**ANTH 359. Survey of Music in Cross-cultural Perspectives (2).**

An introduction to ethnomusicology: the cultural context of music with emphasis on Africa, Asia, Native North and South America, Oceania. ANTH 359 and MUS 359 are cross-listed courses; students may not receive credit for both.

**ANTH 360. Introduction to Museum Studies (4).**

Concepts relating to museums in society: history, ethics, philosophy, administration, legislation and education. Meets anthropology subfield Cultural Anthropology (C).

**ANTH 361. Museum Exhibit Design (4).**

Principles of design applied to visual presentation of material culture, ideas and concepts through educational exhibits.

**ANTH 362. Museum Curation and Management (4).**

Application of techniques of environmental security, restoration and preservation in the management of museum collections.

**ANTH 363. Culture and Economy (4).**

This course considers global perspectives on production, distribution, exchange, and consumption by examining classical works in political economy and economic anthropology, as well as recent research that explores the relationships between capitalism and other economic systems. Students will examine how systems of subsistence, exchange, and distribution operate within diverse cultural, social, and environmental contexts. They will interrogate the relationships between important contemporary issues-poverty, homelessness, and food insecurity, for example-and global capitalism. Course will be offered on odd numbered years (Winter).

**ANTH 380. Non-Verbal Communication (4).**

Fundamentals of non-verbal communication including

codes, relationship to biology and culture, usage, and interrelationships. ANTH 380 and COM 380 are cross-listed courses. Meets anthropology subfield Linguistics (L).

**ANTH 381. Anthropology of Language (4).**

Language as a culture trait. Influence of language on other human institutions. Includes psycholinguistics, sociolinguistics, ethnographic semantics, and multilingualism in its sociocultural setting. Meets anthropology subfield Linguistics (L).

**ANTH 382. Descriptive Linguistics (4).**

Introduction to the basic concepts and mechanics of formal linguistic analysis. Meets anthropology subfield Linguistics (L).

**ANTH 384. Language and Gender (4).**

This course is designed to guide students to explore the active and rapidly expanding field of gender studies and language research dealing with how biological and cultural awareness of sexes are reflected in speech. ANTH 384 and WGSS 384 are cross-listed courses; students may not receive credit for both. Meets anthropology subfield Linguistics (L).

**ANTH 396. Individual Study (1-6).**

May be repeated if subject is different.

**ANTH 397. Honors (1-12).**

Prerequisite: admission to department honors program.

**ANTH 398. Special Topics (1-6).**

May be repeated if subject is different.

**ANTH 399. Seminar (1-5).**

May be repeated if subject is different.

**ANTH 409. Forensics Capstone (1).**

A capstone course designed to assess student mastery of fundamental knowledge of forensics through submission of a portfolio of work collected throughout the program, and explore future opportunities. ANTH 409 and LAJ 409 are crosslisted; students may not receive credit for both. Prerequisite: senior standing.

**ANTH 410. Biological Anthropology: Theoretical and Research Issues (4).**

Exploration of the theoretical underpinnings of biological anthropology, their expression in current research topics in the field, and the transition from earlier approaches to their current implementation. Seminar structure. May be repeated for a total of 8 credits. Meets anthropology subfield Biological Anthropology (B) and Seminar (S). Prerequisites: ANTH 110 and an additional 5 units of biological anthropology.

**ANTH 411. Primate Conservation (4).**

A seminar that focuses on conservation issues of particular relevance for non-human primates, including



deforestation, bushmeat hunting, and pet trade; and on conservation strategies, including reintroduction, captive management, and ecotourism. ANTH 411 and PRIM 511 are cross-listed courses; students may not receive credit for both. Meets anthropology subfield Biological Anthropology (B) and Seminar (S). Prerequisites: ANTH 110 and ANTH 313.

**ANTH 412. Monkeys of the Neotropics (4).** An overview of Neotropical monkey evolution, ecology, and behavior in wild and captive settings. Focuses on species ranging in Mexico, Central America, and South America. Meets anthropology subfield Biological Anthropology (B). ANTH 412 and PRIM 512 are layered courses; students may not receive credit for both. Course will be offered on even numbered years (Spring). Prerequisite: ANTH 313.

**ANTH 413. Research Methods in Primatology (5).** Review of methods used in collection and analysis of primatological data, including hypothesis development, delineation of variables, subject sampling, data collection techniques, data analysis, and captive versus field settings for research projects. ANTH 413 and PRIM 513 are layered courses; students may not receive credit for both. Prerequisite: junior or senior standing or permission of instructor.

**ANTH 414. Forensic Anthropology: Cold Case Analysis (6).** The course explores the recovery and examination of skeletal remains through practical experience in the recovery of buried remains. Students will plan, manage, and conduct a forensic skeletal analysis of a cold case. Findings will be presented. May be repeated for credit. Meets anthropology subfield Biological Anthropology (B). Prerequisites: ANTH 110, ANTH 310, ANTH 315, and permission of the instructor.

**ANTH 415. Forensic Anthropology: Theoretical and Applied Issues (4).** An in-depth and critical analysis of journal articles pertaining to forensic anthropology, osteology, and archaeology. An examination of archaeological techniques that can be adapted to forensic and medico-legal investigations. Meets anthropology subfield Biological Anthropology (B). Prerequisites: ANTH 110, ANTH 310, ANTH 315, and permission of the instructor.

**ANTH 416. Apes (4).** An overview of small- and large-bodied ape evolution, ecology, and behavior in wild and captive settings. ANTH 416 and PRIM 516 are layered courses; a student may

not receive credit for both. Meets anthropology subfield Biological Anthropology (B). Course will be offered on odd numbered years (Spring). Prerequisite: ANTH 313.

**ANTH 418. Monkeys of Asia and Africa (4).** An overview of Old World monkeys' evolution, ecology, and behavior in wild and captive settings. Focuses on species ranging in Africa and Asia. ANTH 418 and PRIM 518 are layered courses; a student may not receive credit for both. Meets anthropology subfield Biological Anthropology (B). Course will be offered on even numbered years (Winter). Prerequisite: ANTH 313.

**ANTH 419. Lemurs and Lorises (4).** An overview of the evolution, ecology, and behavior of lemurs and lorises living in wild and captive settings. ANTH 419 and PRIM 519 are layered courses; a student may not receive credit for both. Meets anthropology subfield Biological Anthropology (B). Course will be offered on odd numbered years (Winter). Prerequisite: ANTH 313.

**ANTH 421. Archaeological Theory (4).** Discussion of research problems in data collection, analysis, and interpretation. Meets anthropology subfield Archaeology (A) and Seminar (S). Prerequisite: ANTH 120.

**ANTH 425. Zooarchaeology (4).** Mammalian osteology and methods in the analysis of animal bones from archaeological sites. Meets anthropology subfield Archaeology (A). Prerequisites: ANTH 120 and either ANTH 110LAB or BIOL 183.

**ANTH 426. Stone Tool Analysis (4).** The theory, method, and technique of stone tool analysis are presented so that students can undertake a research project analyzing a stone tool assemblage. Meets anthropology subfield Archaeology (A). Prerequisites: ANTH 120 or ANTH 323.

**ANTH 427. Environmental Archaeology (4).** Analyses of sediments and plant and animal remains from archaeological sites are used to explore relationships between humans and their environments. Case studies combine natural and physical sciences to study long-term change in landscapes and ecosystems. ANTH 427/527 and GEOG 427/527 are cross-listed courses; students may not receive credit for more than one. Graduate credit requires an additional research paper to be specified in syllabus. Meets anthropology subfield Archaeology

(A). Prerequisites: ANTH 120 or GEOG 107.

**ANTH 432. Heritage Preservation (4).** Students will discuss the merits of preserving heritage buildings and landscapes, and question what is deemed worth of heritage designation. Techniques will be developed for investigating a building's history and experience gained in writing proposals and policies to preserve heritage resources. ANTH 432 and GEOG 432 are cross-listed courses; students may not receive credit for both. Prerequisite: GEOG 305 or enrollment in REM Program or permission of instructor.

**ANTH 440. Ecology and Culture (4).** Investigation into interdependent environmental and human cultural systems. Traditional agroecologies and subsistence strategies; contemporary problems of resource management, social equity, political ecology, and sustainable development. ANTH 440 and GEOG 440 are cross-listed courses; students may not receive credit for both. Meets anthropology subfield Cultural Anthropology (C) and Seminar (S).

**ANTH 444. Ethnographic Field Methods (4).** Methods used in ethnographic field work. Meets anthropology subfield Cultural Anthropology (C) and Seminar (S).

**ANTH 446. Anthropology of Globalization (4).** Critically examines current theories of globalization in anthropology. Course includes selected ethnographic research on topics including global flows of people, material, ideas, identities, global political structures, and local accommodation and resistance. Meets anthropology subfield Cultural Anthropology (C) and Seminar (S).

**ANTH 449. Contemporary Native American Cultures and Issues (4).** Analysis of contemporary Native North American cultures and issues, including tribal sovereignty, resource management, education, religion, economic, and health status, cultural continuity, and adaptation. ANTH 449 and SOC 449 are cross-listed courses; students may not receive credit for both. Meets anthropology subfield Cultural Anthropology (C) and Seminar (S). Course will not have an established scheduling pattern. Prerequisites: AIS 103 or ANTH 341 or ANTH 347 or SOC 366 or permission of instructor.

**ANTH 451. History and Theory of Anthropology (4).** Content and developmental history of anthropological theories and methods.

Meets anthropology subfield Cultural Anthropology (C) and Seminar (S). Prerequisite: 20 units of anthropology courses.

**ANTH 458. Anthropology Senior**

**Comprehensive Survey (4).** Advanced comprehensive survey of the field of anthropology as to its theoretical and methodological content. Course will be offered every year (Fall, Winter, Spring). Prerequisite: admission to an anthropology major plan (ANTH large BA, the ANTH small BA, and the ANTH BS only). CE - Culminating Experience

**ANTH 460. Meaning in a Material**

**World (4).** This course will introduce students to theoretical concepts within the anthropology of material culture that will enable them to develop critical analyses of objects. Course will be offered on odd numbered years (Spring Quarter).

**ANTH 463. Learning in Museums (4).**

This course will provide students with the foundational theory necessary for planning, writing, and implementing museum educational programs. Course will be offered on even numbered years (Winter).

**ANTH 483. Sociolinguistics (4).**

Concepts and methods of sociolinguistic analysis in first and second languages. Will examine differences among cultures in the relationship between language usage and inequality. ANTH 483 and WL 483 are cross-listed courses; students may not receive credit for both. Meets anthropology subfield Linguistics (L). Prerequisites: either ANTH 180, ANTH 381, ENG 180, or WL 481.

**ANTH 485. Method and Theory in Biological Anthropology (1-8).**

Methods and techniques, research problems, data collection, analysis, interpretation. Laboratory orientation. No more than 10 credits of ANTH 310 and ANTH 485 are allowed to fulfill BA or BS requirements. May be repeated up to 8 credits. Meets anthropology subfield Biological Anthropology (B). Prerequisite: introductory plus 5 upper-division credits in biological anthropology or corresponding coursework in the biological sciences.

**ANTH 486. Advanced Methods in**

**Archaeology (1-8).** Archaeological research design; planning and supervision of laboratory and field operation; preparation of reports for publication. May be repeated up to 8 credits. No more than 10 credits of ANTH 320 and ANTH 486 allowed to fulfill BA or BS requirements. Meets

anthropology subfield Archaeology (A). Prerequisite: 5 upper-division credits in archaeology.

**ANTH 487. Field Linguistics (1-8).** A

laboratory oriented course providing both demonstration and practicum in recording, transcription, and structure of languages. Tapes and field derived data. May be repeated up to 8 credits. Meets anthropology subfield Linguistics (L).

**ANTH 488. Advanced Research in**

**Cultural Anthropology (1-8).** May be repeated up to 8 credits. Meets anthropology subfield Cultural Anthropology (C). Prerequisites: ANTH 130 and 5 upper-division credits in cultural anthropology.

**ANTH 490. Cooperative Education (1-**

**12).** An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student-learning plan, cooperating employer supervision, and faculty coordination. By permission. May be repeated for credit. Grade will either be S or U.

**ANTH 491. Workshop (1-6).** May be

repeated for credit.

**ANTH 492. Anthropological Teaching**

**Experience (1-2).** May be repeated for credit. Grade will either be S or U.

**ANTH 493. Anthropological Field**

**Experience (1-8).** Individual or group off-campus experience in the field study of anthropological phenomena. May be repeated for credit.

**ANTH 494. Applied GIS Project (2-6).**

GIS projects in anthropology, biology, geography, geology, resource management. ANTH 494, GEOG 494, and GEOL 494 are cross-listed courses.

**ANTH 496. Individual Study (1-6).** By

permission. May be repeated for credit. Grade will either be S or U.

**ANTH 498. Special Topics (1-6).**

**ANTH 499. Seminar (1-5).**

**Art and Design Courses**

**ART 103. Art Appreciation (4).** Art

Appreciation is an introduction to artistic styles, periods of art, and artistic techniques and processes. It introduces students to the visual components of art, and considers the cultural, economic, and societal significance of art. AH-Aesthetic Experience. Course will be offered every year (Fall, Winter, Spring and Summer). AH-Aesthetic Experience. K3 - Creative Expression

**ART 150. Introduction to Drawing (3).**

Introduction to observational drawing. Students will learn to see, interpret, and accurately render objects while exploring a variety of traditional

drawing media and techniques. Class meets five hours per week.

**ART 170. Two-Dimensional Design (3).**

Fundamental exploration of two-dimensional design, with emphasis on the elements and principles of design, skill acquisition, and the development of creative problem solving in design. Class meets five hours per week.

**ART 171. Three-Dimensional Design**

**(3).** Fundamental exploration of three-dimensional design, with emphasis on the elements and principles of design, skill acquisition, and the development of creative problem solving in design. Class meets five hours per week.

**ART 172. Computer Fundamentals in**

**Art and Design (3).** This course introduces the use of digital media from the artist's perspective, covering basic skills in MAC OS, Windows, the Adobe Creative Suite, and Microsoft Office. Class meets five hours per week.

**ART 225. Beginning Photography (4).**

Introduction to 35mm black and white film-based photography. Emphasis on technical skill development, applied printmaking techniques, and creative problem-solving. Class meets 5 hours per week. Course will be offered every year (Fall, Winter, Spring).

**ART 235. Prehistoric through**

**Medieval Art (3).** A historical survey of the art of the western world from prehistoric art through art of the Medieval era. Class meets four hours per week. Course will be offered every year (Fall).

**ART 236. Renaissance through Mid-**

**19th-century Art (3).** A historical survey of art of the western world from the Renaissance to Impressionism. Class meets four hours per week. Prerequisite: ART 235.

**ART 237. Impressionism through**

**Postmodernism (3).** A historical survey of art of the western world from Impressionism through Postmodernism. Class meets four hours per week. Prerequisites: ART 235 and 236.

**ART 241. Beginning Wood Design (4).**

Introduction to wood as an artistic and design medium. Emphasis on visual communication utilizing basic shaping and finishing processes. Class meets five hours per week.

**ART 246. Beginning Jewelry/ Metals**

**(4).** Design and construction of jewelry and small-scale metal objects. Emphasis on technical skill development, applied technique, conceptual problems and introduction to contemporary work. Class meets five hours per week.

- ART 250. Figure Drawing (3).** Further continuation of the skills, methods, and media from ART 150, with an emphasis on the study of anatomy on drawing the clothed and nude human form. Class meets five hours per week. Prerequisite: ART 150.
- ART 251. Beginning Illustration (4).** Introduction to illustration using a variety of media and industry standard software. Class meets five hours per week. Formerly ART 351; students may not receive credit for both. Course will be offered every year (Fall). Prerequisites: ART 150 and ART 172.
- ART 260. Beginning Painting (4).** An introduction to a variety of painting techniques. Class meets five hours per week.
- ART 262. Beginning Watercolor (4).** An introduction to painting, utilizing watercolor and other water-based media. Class meets five hours per week.
- ART 265. Beginning Ceramics (4).** Beginning instruction in ceramics with a focus on hand-building and wheel-throwing techniques, including concept development and historic, contemporary, and multi-cultural approaches to the medium. Class meets five hours per week.
- ART 274. Beginning Typography (4).** History and application of typography as a tool for visual communication using industry standard software. Class meets five hours per week. Prerequisite: ART 172.
- ART 280. Beginning Sculpture (4).** Introduction to the studio experience in sculpture. Emphasis is on the fundamental materials and basic methods of sculpture. Class meets five hours per week.
- ART 282. Computer Art I (5).** Use of computer systems and web software as tools for creative expression. Prerequisite: ART 170.
- ART 283. Beginning Graphic Interface Design (4).** Design of graphic interfaces for web pages and applications using principles of visual organization and composition. Class meets five hours per week. Prerequisite: ART 172.
- ART 285. Printmaking I (4).** Exploration of techniques and history of prints, with an emphasis on relief printmaking. Five hours of studio per week. Course will not have an established scheduling pattern (Summer).
- ART 296. Individual Study (1-6).** By permission. May be repeated for credit.
- ART 298. Special Topics (1-6).**
- ART 299. Seminar (1-5).**
- ART 324. History of Photography (4).** An historical survey of photography from its beginnings to the present, focusing on interrelationships between photography and other visual arts, changing technologies, and contributions of major photographers and art movements. Class meets four hours per week. Course will not have an established scheduling pattern. Prerequisite: junior standing or above.
- ART 325A. Intermediate Photography: Color (4).** Introduction to digital color photography with emphasis on color image capture, editing, printing, and artificial lighting as well as historical and contemporary uses of color. Class meets five hours per week. Prerequisite: ART 225.
- ART 325B. Intermediate Photography: Analog Processes (4).** Continued exploration of film-based darkroom photography, with the introduction of new techniques, processes and applications. Incorporation contemporary practices and concepts. Class meets five hours per week. Prerequisite: ART 225.
- ART 325C. Intermediate Photography: Visual Narratives (4).** Exploration of the creative and conceptual processes of utilizing the photographic medium to explore visual language. Class meets five hours per week. Prerequisite: ART 225.
- ART 330. Art in the Elementary School (4).** Content and methodology for teaching art in the elementary school. Prerequisite: conditional or full admission to the Teacher Certification Program.
- ART 332. Art Curriculum and Field Experience (4).** Developing discipline-based art education curriculum for the elementary and middle school, as well as preparing curriculum to teach Friday children's art classes. Prerequisite: ART 330 and current WSP/FBI fingerprint clearance .
- ART 333. Art, Design, and Popular Culture (4).** An exploration of artistic eras from a cultural perspective. focus is on the relationship of the fine arts, architecture and design to the historical era in which works were created. The course explores the ways in which art influences and is influenced by its cultural and social context. Class meets four hours per week. Course will be offered every year (Spring). K2 - Community, Culture, & Citizenship
- ART 341. Intermediate Wood Design (4).** Design and fabrication of furniture forms. Emphasis on creative form development utilizing sophisticated fabrication and finishing processes. Class meets five hours per week. Prerequisite: ART 241.
- ART 346A. Intermediate Jewelry/Metals: Casting and Link Structures (4).** Technical and conceptual aspects of jewelry and metalwork through model-making, casting, mold-making, and construction of linkages and chains. Emphasis on personal exploration. Class meets five hours per week. Prerequisite: ART 246.
- ART 346B. Intermediate Jewelry/Metals: Enameling (4).** Technical and conceptual aspects of jewelry and metalwork with focus on enameling (glass on metal). Emphasis on personal exploration. Class meets five hours per week. Prerequisite: ART 246.
- ART 346C. Intermediate Jewelry/Metals: Form and Surface (4).** Technical and conceptual aspects of jewelry and metalwork with focus on form development (chasing, dieforming and electroforming) and surface embellishment techniques. Emphasis on personal exploration. Class meets five hours per week. Prerequisite: ART 246.
- ART 350. Mixed-media Drawing (4).** Continued exploration in drawing with emphasis on mixed-media processes. Class meets five hours per week. Prerequisite: ART 250.
- ART 351. Intermediate Illustration (4).** Continues exploration of illustration stressing development of personal expression in variety of media and industry standard software. Class meets five hours per week. Formerly ART 451; students may not receive credit for both. Course will be offered every year (Spring). Prerequisite: ART 251.
- ART 360A. Intermediate Painting: Narrative and Representation (4).** Continued exploration of painting techniques with a focus on narrative and representation. Class meets five hours per week. Prerequisite: ART 260.
- ART 360B. Intermediate Painting: Color (4).** Further development of painting techniques with emphasis on color as a conceptual, formal, and organization tool. Class meets five hours per week. Prerequisite: ART 260.
- ART 360C. Intermediate Painting: Abstraction (4).** Further development of painting techniques with emphasis on abstraction as a conceptual, formal, and organizational tool. Class meets five hours per week. Prerequisite: ART 260.
- ART 362. Intermediate Watercolor (4).** Further development of the techniques and skills acquired in ART 262, with emphasis on personal expression. Class

meets five hours per week.

Prerequisite: ART 262.

**ART 365A. Intermediate Ceramics:**

**Hand-Building (4).** Intermediate instruction in ceramics with a focus on developing hand-building techniques, including more in-depth concept development and historic, contemporary, and multi-cultural approaches to the medium. Class meets five hours per week. Prerequisite: ART 265.

**ART 365B. Intermediate Ceramics:**

**Wheel-Throwing (4).** Intermediate instruction in ceramics with a focus on developing wheel-throwing techniques, including more in-depth concept development and historic, contemporary, and multi-cultural approaches to the medium. Class meets five hours per week. Prerequisite: ART 265.

**ART 365C. Intermediate Ceramics:**

**Mold-Making (4).** Intermediate instruction in ceramics with a focus on mold-making and mold materials including plaster, plywood and polystyrene molds, including more in-depth concept development and historic, contemporary, and multi-cultural approaches to the medium. Class meets five hours per week. Prerequisite: ART 265.

**ART 370. Beginning Layout and Design**

(4). Application of two and three-dimensional design principles and theoretical concepts to layout and design using industry standard software. Class meets five hours per week. Acceptance into the BFA graphic design major via portfolio review. Course will be offered every year (Winter). Prerequisites: Acceptance into the BFA Graphic Design Specialization and permission.

**ART 371. Intermediate Layout and Design**

(4). Continued work in design composition with emphasis on the application of letter, forms, color, image and concept using industry standard software. Class meets five hours per week. Prerequisite: ART 370.

**ART 372. Beginning Design and Production**

(4). Design composition with emphasis on production techniques, as well as the application of type, image and concept using industry standard software. Class meets five hours per week. Prerequisite: ART 371.

**ART 374. History of Graphic Design**

(4). A historical survey of the graphic arts from their beginning to the present.

**ART 380A. Intermediate Sculpture:**

**Object and Form (4).** A continuation of the studio experience in sculpture, emphasizing the development of object

and form, a higher level of technical competence, continued exploration of materials and conceptual development.

Class meets five hours per week.

Prerequisite: ART 280.

**ART 380B. Intermediate Sculpture:**

**Installation Art (4).** A continuation of the studio experience of sculpture, emphasizing the development of installation art within a spatial context, higher level of technical competence, continued exploration of materials and conceptual development. Class meets five hours per week. Prerequisite: ART 280.

**ART 380C. Intermediate Sculpture:**

**Materials and Processes (4).** A continuation of the studio experience in sculpture, emphasizing experimentation with materials and processes, a higher level of technical competence, and a continued exploration of conceptual development. Class meets 5 hours per week. Course will be offered every year (Fall). ART 280

**ART 382. Computer Art II (Put on**

**reserve 9/16/16) (5).** Exploration of several software programs and computer output devices for creation of electronic art. (Put on reserve 9/16/16. Last taught in 2012. Will go inactive 8/24/19.)

**ART 383. Intermediate Graphic**

**Interface Design (4).** Further exploration of graphic interface design for web pages and applications using principles of visual organization and composition. Class meets five hours per week. Course will be offered every year (Winter). Prerequisite: ART 283.

**ART 389. Contemporary Concepts in**

**Art (Put on reserve as of 9/16/15) (4).** Exploration of the contextual, formal, and philosophic meanings of current art movements and theories in regards to their relevance and place in contemporary art practice. Put on reserve as of 9/16/15. Will go inactive 8/24/18.

**ART 396. Individual Study (1-6).**

May be repeated if subject is different.

**ART 397. Honors (1-12).**

Prerequisite: admission to department honors program.

**ART 398. Special Topics (1-6).**

**ART 399. Seminar (1-5).**

May be repeated if subject is different.

**ART 414. Recent Art (4).** The visual arts of the last 25 years, including the traditional forms of painting, sculpture and architecture, and newer forms including video, computer, and performance art. Prerequisite: ART 237.

**ART 416. International Experience in Art, Architecture, and Design (1-4).**

An in-class and on-site study of art, architecture and design which provides firsthand experience of art and culture of countries that have had an enormous impact on history. May be repeated up to 8 credits. By permission of instructor based on application through Study Abroad and Exchange Program. Course will be offered every year (Fall, Spring).

**ART 420. American Art and**

**Architecture (4).** A study of art and architecture in America from the Colonial era to today. Contributions of Americans to world art, the role of art in American life and the work of canonical artists and architects are stressed. Recognition of major and styles is emphasized. Class meets four hours per week. Course will be offered every year (Winter). Prerequisite: junior standing or higher.

**ART 425. Advanced Photography (4).**

Development of a personal portfolio with emphasis on developing conceptual ideas through research, planning, and experimentation. Class meets five hours per week. May be repeated up to 20 credits. Course will be offered every year (Fall, Winter, Spring). Prerequisites: ART 325A, and ART 325B, and ART 325C or by permission after having taken two of these three courses.

**ART 430. Components of Art**

**Education (4).** Content and strategies for teaching aesthetics, art criticism, art history, and art production in art education; writing, implementing, and assessing quality art lessons. Prerequisite: ART 330.

**ART 432. Art in Secondary School (4).**

Current philosophies and curriculum in the secondary school; objectives, planning, methods of teaching and evaluation. Prerequisite: ART 430.

**ART 441. Advanced Wood Design (4).**

Advanced design and fabrication of furniture forms, with emphasis on research and development utilizing advanced or innovative fabrication and finishing processes. Class meets five hours per week. May be repeated up to 16 credits. Prerequisite: ART 341.

**ART 446. Advanced Jewelry/Metals**

(4). Advanced exploration of personal expression in jewelry and/or metals. Emphasis on self-direction, conceptual and technical mastery and professionalization of practice. Class meets five hours per week. May be repeated up to 16 credits. Prerequisites: ART 346A, and ART 346B, and ART 346C or by permission after having taken two of these three courses.

- ART 450. Advanced Drawing (4).** Further development of skills in drawing with emphasis on building a cohesive body of work. Class meets five hours per week. May be repeated up to 16 credits. Prerequisite: ART 250.
- ART 460. Advanced Painting (4).** Advanced exploration of painting with an emphasis on building a cohesive body work. Class meets five hours per week. May be repeated up to 16 credits. Prerequisites: ART 360A, and ART 360B, and ART 360C or permission of instructor.
- ART 465. Advanced Ceramics (4).** Advanced instruction in ceramics with a focus on developing technical expertise and creating a visual voice in the medium through self-directed research in historical, contemporary, and multi-cultural approaches to the medium. Class meets five hours per week. May be repeated up to 16 credits. Prerequisites: ART 365A, and ART 365B, and ART 365C, or permission of instructor.
- ART 470. Advertising Graphic Design (4).** Concept and design as applied to advertising problems with emphasis on presentation and communication skills with analysis and implementation of marketing strategies. Class meets five hours per week. Acceptance into the BFA graphic design major via portfolio review. May be repeated up to 8 credits. Course will be offered every year (Fall). Prerequisite: ART 371.
- ART 471. Corporate Graphic Design (4).** Concept and design as applied to corporate graphic design problems with emphasis on presentation and communication skills with analysis and implementation of marketing strategies. Class meets five hours per week. Prerequisite: ART 470.
- ART 472. Intermediate Design and Production (4).** Development of professional practices, creative problem solving techniques, and understanding and establishing relationships with vendors. Class meets five hours per week. Prerequisite: ART 471.
- ART 474. Intermediate Typography (4).** Exploration of advanced type and image relationships, including conceptual, structural and visual elements with an emphasis on history and terminology. Class meets five hours per week. Prerequisites: ART 172 and ART 274.
- ART 480. Advanced Sculpture (4).** Advanced studies in sculpture. Emphasis is on creative self-expression and the development of a self-directed body of work. Class meets five hours per week. May be repeated up to 16 credits. Prerequisites: ART 380A and ART 380B or by permission.
- ART 483. Advanced Graphic Interface Design (4).** Advanced exploration of graphic interface design for web pages and applications using principles of visual organization and composition. Class meets five hours per week. Course will be offered every year (Spring). Prerequisite: ART 383.
- ART 490. Cooperative Education (1-12).** An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student-learning plan, cooperating employer supervision, and faculty coordination. By permission. May be repeated for credit. Grade will either be S or U.
- ART 491. Workshop (1-6).** May be repeated for credit.
- ART 495. Studio Project (2).** Preparation of a professional portfolio and presentation of the portfolio or of a body of work for exhibition. Satisfies end-of-year assessment requirements. Must be taken during one of the last two quarters prior to graduation. Prerequisite: by permission. CE - Culminating Experience
- ART 496C. Individual Study: Ceramics (1-6).** By permission. May be repeated for credit.
- ART 496D. Individual Study: Drawing (1-6).** By permission. May be repeated for credit.
- ART 496E. Individual Study: Art Education (1-6).** By permission. May be repeated for credit.
- ART 496G. Individual Study: Graphic Design (1-6).** By permission. May be repeated for credit.
- ART 496H. Individual Study: Art History (1-6).** By permission. May be repeated for credit.
- ART 496J. Individual Study: Jewelry/Metals (1-6).** By permission. May be repeated for credit.
- ART 496P. Individual Study: Painting (1-6).** By permission. May be repeated for credit.
- ART 496S. Individual Study: Sculpture (1-6).** By permission. May be repeated for credit.
- ART 496T. Individual Study: Photography (1-6).** By permission. May be repeated for credit.
- ART 496W. Individual Study: Wood Design (1-6).** By permission. May be repeated for credit.
- ART 497. Honors (1-12).** Prerequisite: admission to department honors program.
- ART 498. Special Topics (1-6).**
- ART 499. Seminar (1-5).**
- American Sign Language Courses**
- ASL 151. American Sign Language (5).** Conversational approach with intensive visual/manual drill. Firm foundation in basic signs and structural principles of the language. Courses must be taken in sequence.
- ASL 152. American Sign Language (5).** Conversational approach with intensive visual/manual drill. Firm foundation in basic signs and structural principles of the language. Courses must be taken in sequence. Prerequisite: ASL 151.
- ASL 153. American Sign Language (5).** Conversational approach with intensive visual/manual drill. Firm foundation in basic signs and structural principles of the language. Courses must be taken in sequence. Prerequisite: ASL 152.
- ASL 251. Second-year American Sign Language (5).** How signers construct meaning and messages in ASL, grammatical variation, and discourse strategies is covered with special focus on increasing non-manual behavior. Courses must be taken in sequence.
- ASL 252. Second-year American Sign Language (5).** How signers construct meaning and messages in ASL, grammatical variation, and discourse strategies is covered with special focus on increasing non-manual behavior. Courses must be taken in sequence. Prerequisite: ASL 251.
- ASL 253. Second-year American Sign Language (5).** How signers construct meaning and messages in ASL, grammatical variation, and discourse strategies is covered with special focus on increasing non-manual behavior. Courses must be taken in sequence. Prerequisite: ASL 252.
- ASL 298. Special Topics (1-6).** May be repeated if subject is different.
- ASL 299. Seminar (1-5).** May be repeated if subject is different.
- ASL 301. American Sign Language Literature (5).** Introduces aspects of ASL literature, including poetry, narrative, humor and folklore. Students will develop knowledge of the literary history of ASL and will acquire skills in comprehending and producing ASL literary texts. By permission only. Prerequisite: ASL 253.
- ASL 310. Deaf Culture (5).** Overview of the cultural development and linguistic history of the Deaf. Provides a comprehensive study of the deaf-world through analysis of historical events, sociolinguistic factors that affect ASL and current issues. By permission only. Prerequisite: ASL 253.
- ASL 343. Deaf Education (5).** Overview of current practices concerning the use

of ASL in the educational setting.

Topics explored will include manually coded English systems, bilingual bicultural education, and language acquisition in deaf children.

Prerequisite: C+ or higher in ASL 310. By permission only.

**ASL 396. Individual Study** (1-6). May be repeated if subject is different.

**ASL 397. Honors** (1-12). Prerequisite: admission to department honors program.

**ASL 398. Special Topics** (1-6). May be repeated if subject is different.

**ASL 399. Seminar** (1-5). May be repeated if subject is different.

**ASL 415. Community Relations: Current Issues in the Deaf World** (5).

Gain an understanding of Deaf community and individuals in regards to identity, education, medical, legal, public services, politics, and communication access. May be taught in ASL or both ASL and interpreted. ASL 253 or Department Permission.

**ASL 496. Individual Study** (1-6). May be repeated if subject is different.

**ASL 497. Honors** (1-12). Prerequisite: admission to department honors program.

**ASL 498. Special Topics** (1-6). May be repeated if subject is different.

**ASL 499. Seminar** (1-5). May be repeated if subject is different.

### Accessibility Studies Program Courses

**ASP 298. Special Topics** (1-6). May be repeated if subject is different.

**ASP 299. Seminar** (1-5). May be repeated if subject is different.

**ASP 305. Accessibility and User Experience** (4). Quality of life issues of accessibility in everyday experiences and environments. Common conditions (disabilities) requiring proactive access. Changes in laws and attitudes about the need for accessibility. Current careers requiring competence in troubleshooting accessibility. Course will be offered every year (Fall, Winter, Spring and Summer). K6 - Individual & Society

**ASP 325. Universal Design** (4).

Proactive accessibility design for high incidence problems in commercial, leisure, occupational, and personal living spaces. Assistive technology, adapted architecture, differentiated activity. Standards for safety and equity. ADA compliance. Risk management strategies. Course will be offered every year (Fall, Winter, Summer).

**ASP 365. Assistive Technology: Tactile Graphics** (3). Use of both low and high

technology methods to translate verbal information into Braille. Includes standards for developing content and designing products. Course will not have an established scheduling pattern.

**ASP 396. Individual Study** (1-6). May be repeated if subject is different.

**ASP 397. Honors** (1-12). Prerequisite: admission to department honors program.

**ASP 398. Special Topics** (1-6). May be repeated if subject is different.

**ASP 399. Seminar** (1-5). May be repeated if subject is different.

**ASP 435. Accessible Information Design** (5). Standards for barrier-free public communication, issues of disclosure and advocacy, laws and civil rights legislation and court decisions, and social justice and social psychology aspects will be addressed for all environments, e.g. work, learning, commerce. Course will be offered every year (Winter and Summer). (ENG 101 or PHIL 110) and (ENG 102 or ENG 103 or MGT 200 or PHIL 152 or PHIL 153 or HIST 302).

**ASP 485. Accessibility Studies Capstone** (2-3). Experiential-based capstone course. Accessibility competence demonstrated in portfolio and capstone project. Laboratory time will include a variety of service learning, professional visits, and applied practical experience. Strategies for engaging stakeholders in troubleshooting accommodations. Permission by department. Course will be offered every year. Course will not have an established pattern. Co- or prerequisite: ASP 305 and ASP 325 and ASP 435. CE - Culminating Experience

**ASP 490. Accessibility Studies Internship** (1-12). Field experience in a real-world context for observing, analyzing and investigating principles and issues crucial to developing competence in understanding efforts to minimize barriers for all people, especially those with specific limitations in their perception or mobility. Fingerprinting may be required. May be repeated up to 20 credits. Grade will be either S or U. Course will not have an established scheduling pattern. Co- or Prerequisite: ASP 435.

**ASP 492. Advanced Practicum in Accessibility Studies** (1-15). Field experience in a real-world context for preparing career applications of accessibility competencies. May be repeated up to 15 credits. Fingerprinting may be required prior to enrollment. Permission of the department. Course will not have an

established scheduling pattern. Co- or Prerequisite: ASP 435.

**ASP 496. Individual Study** (1-6). May be repeated if subject is different.

**ASP 497. Honors** (1-12). Prerequisite: admission to department honors program.

**ASP 498. Special Topics in Accessibility** (1-6).

Investigate principles and issues of accessibility applied to specific practical or creative contexts. May be repeated under different topics up to 20 credits. Course will not have an established scheduling pattern.

**ASP 499. Seminar** (1-5). May be repeated if subject is different.

### Asian Studies Courses

**AST 102. Introduction to Asian Studies** (5). An interdisciplinary introduction to the study of Asia; emphasizing geography, history, culture, and economics. SB-Perspectives on World Cultures (W). Course will be offered every year (Fall, Winter, Spring, and Summer). SB-Perspectives on World Cultures (W). K4 - Global Dynamics

**AST 298. Special Topics** (1-6). May be repeated if subject is different.

**AST 299. Seminar** (1-5). May be repeated if subject is different.

**AST 301. Chinese Literature in Translation** (4). A survey of Chinese literature in translation. AST 301 and CHIN 301 are equivalent courses; students may not receive credit for both.

**AST 310. Japan Today** (3). Study of culture, social structure, human relations, and issues and problems in contemporary Japan.

**AST 340. Ethnography of China (Put on reserve 9/16/17)** (4). This course is designed to explore China from the perspectives of general cultural patterns and ethnicity. ANTH 340 and AST 340 are cross-listed courses; students may not receive credit for both. (Put on reserve 9/16/17. Will go inactive 8/24/2020.)

**AST 348. Contemporary China** (4). This course focuses on contemporary China and covers such topics as general situation, family, marriage, citizenship, community institutions, work, religion, ethnicity, education, popular culture, politics, social class, rural-urban inequalities, gender, and social change. ANTH 348 and AST 348 are cross-listed courses; a student may not receive credit for both. Course will not have an established scheduling pattern.

**AST 396. Individual Study** (1-6).

**AST 397. Honors** (1-12). Prerequisite: admission to department honors program.

**AST 398. Special Topics** (1-6).

**AST 399. Seminar** (1-5). May be repeated if subject is different.

**AST 401. Asia/Pacific Studies**

**Capstone** (3). Senior research project of creative expression, to be completed in conjunction with elective course under the supervision of an Asia Pacific Studies teaching faculty member or someone designated by director. CE - Culminating Experience

**AST 496. Individual Study** (1-6). May be repeated if subject is different.

**AST 497. Honors** (1-12). Prerequisite: admission to department honors program.

**AST 498. Special Topics** 1-6. May be repeated if subject is different.

**AST 499. Seminar** (1-5). May be repeated if subject is different.

### Apparel Textiles and Merchandising Courses

**ATM 251. Style Principles: Body to Store** (3). Theory and practice of merchandise presentation from store windows and displays to merchandising on the body. Application of principles and elements of design and concept development to execution for a variety of mediums. Course will be offered every year (Spring).

**ATM 270. Digital Presentation**

**Techniques** (4). Introduction to industry standard software used to visually communicate information. Basic skills acquired include the development of line plan components, presentation techniques, and concept boards.

**ATM 280. Basic Sewing Techniques**

(3). Basic clothing construction theory, techniques, and teaching methods covering basic garment components: collars, sleeves, bodices, pleats, etc. Formerly FCSA 280, students may not receive credit for both.

**ATM 281. Socio-cultural Aspects of Apparel** (4).

Clothing in relation to individual and group behavior patterns; personal and social meanings attributed to dress; and cultural patterns of technology, aesthetics, ritual, morality, and symbolism. Formerly FCSA 351 and ATM 351, students may not receive credit for both. Course will be offered every year (Fall, Winter, Summer). K6 - Individual & Society

**ATM 285. Buying and Merchandising**

**Math** (4). An introduction to the financial management of fashion products; mathematical applications using percentages, mark-ups, profit

formulas, pricing principles, tracking inventory, and mathematical formulas used in all levels of apparel operations.

**ATM 289. Northwest Field Experience in Apparel and Textiles** (3).

An applied study of clothing, textiles, fashion merchandising, and design through regional field visits to meet with fashion professionals within a range of careers. Formerly FCSA 289, students may not receive credit for both. By permission.

**ATM 298. Special Topics** (1-6).

**ATM 299. Seminar** (1-5). May be repeated if subject is different.

**ATM 301. Introduction to the Fashion**

**Industry** (4). Overview of the history, structure, and operation of the fashion industry. Provides knowledge and skills for effective development in understanding the dynamics of the fashion industry. Course will be offered every year (Winter).

**ATM 353. Apparel Manufacturing** (5).

Analysis and evaluation of apparel through manufacturing; specification development, seam/stitch classifications, apparel assembly, equipment capabilities and production processes, costing, strategic sourcing, and quality assurance. Consideration of consumer product expectations, sustainability and intended end-use will be evaluated throughout the course. Formerly FCSA 353, students may not receive credit for both. Prerequisites: ATM 280, and ATM 301, and ATM 355 are required.

**ATM 355. Consumer Textiles** (4).

Study of natural and synthetic textiles: generic classification, fiber-forming substances, morphology, fabrication, finishing and dyeing processes, properties, and performances. Ten dollar material fee. Formerly FCSA 355, students may not receive credit for both.

**ATM 379. ATM Internship Planning**

(1). Preparation for required ATM internship; identifying professional goals, skills, opportunities and strategies, complete resumes, the application processes, preparing for interviews, analyzing the student internship, and introductory portfolio preparation. Formerly FCSA 379, students may not receive credit for both.

**ATM 381. Fashion Show Production**

(2). Preparation, production, and evaluation of special fashion related events. Professional learning experiences will include modeling techniques, organization and directing procedures. Formerly FCSA 381,

students may not receive credit for both. May be repeated up to 4 credits.

**ATM 388. Advanced Fashion Design**

(3). Fundamental concepts of flat pattern and draping design theories and techniques. Design and execution of draped and flat patterned samples and garment structures will be required. Includes translation of garment ideas from conception through production and merchandising. May be repeated up to 6 credits. Prerequisite: ATM 280 or TH 261 and admission to the apparel, textiles and merchandising major or minor or the apparel design minor or permission of the instructor.

**ATM 389. Fashion Trend Analysis** (3).

Fashion forecasting; reflecting the acceptance or rejection of trends; analysis of socio-economic, demographic, media, and fashion influences. Students will have an opportunity to travel to market. Formerly FCSA 389, students may not receive credit for both. Prerequisite: ATM 301.

**ATM 396. Individual Study** (1-6). May be repeated if subject is different.

**ATM 397. Honors** (1-12). Prerequisite: admission to department honors program.

**ATM 398. Special Topics** (1-6).

**ATM 399. Seminar** (1-5). May be repeated if subject is different.

**ATM 452. History of Fashion** (4).

Historical changes in fashion and costume design from Egyptian period through Eastern civilization to present. Social, political, and religious influences on fashions. ATM 452 and TH 452 are cross-listed courses; students may not receive credit for both.

**ATM 485. International Retailing** (4).

Emphasis on international retailing and global trade. Focus on cross-cultural differences, work environments, policies, and regulations. ATM 485 and RMT 485 are cross-listed courses; students may not receive credit for both. Formerly FCSA 485, students may not receive credit for both. Prerequisite: RMT 330.

**ATM 487. Fashion Merchandising Exit**

**Assessment** (1). During the last quarter of their program, students are assessed on program outcomes and portfolios are created for internship and job interviews. Formerly FCSA 487, students may not receive credit for both. Grade will either be S or U.

**ATM 488. Fashion Line Development**

(3). Production of an apparel line from conceptualization to completion. Design concepts will be executed through storyboards, identification of

target market, merchandising strategy, and completion of muslin samples. A final project of three original designs will be showcased at the annual fashion show. May be repeated up to 6 credits. Prerequisite: ATM 388 or TH 361 and admissions to the apparel, textiles and merchandising major or minor or the apparel design minor or permission of the instructor.

**ATM 489. Merchandise Buying and Planning (4).** Principles of buying and selling merchandise; analysis of consumer demand, stock inventories and open-to-buy. Formerly FCSA 489, students may not receive credit for both. Prerequisite: ATM 285 and RMT 330.

**ATM 490. Cooperative Education (1-12).** An individualized, contracted field experience within the apparel industry. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. 40 hours required per credit. May be repeated up to 20 credits. Prerequisite: ATM 379.

**ATM 491. Workshop (1-6).** Formerly FCSA 491, students may not receive credit for both. May be repeated for credit.

**ATM 492. Apparel, Textiles and Merchandising Practicum (1-10).** Supervised practicum experience for apparel, textiles and merchandising majors. May be repeated up to 15 credits. Course will be offered every year (Spring and Summer). Prerequisite: ATM 379.

**ATM 496. Individual Study (1-6).** May be repeated if subject is different.

**ATM 497. Honors (1-12).** Prerequisite: admission to department honors program.

**ATM 498. Special Topics (1-6).**

**ATM 499. Seminar (1-5).**

#### Aviation Management Courses

**AVM 296. Individual Study (1-6).** By permission. May be repeated for credit.

**AVM 298. Special Topics (1-6).** May be repeated for credit.

**AVM 299. Seminar (1-5).** May be repeated if subject is different.

**AVM 330. Aviation Law (3).** This course provides an introduction to aviation law, the legal system, and the principles of law and how they may be applied to aspects of air transportation. Students must be junior standing or above to enroll in this class.

**AVM 332. Aviation Legislation (4).** History and evolution of aviation governmental regulatory agencies in the US and internationally, including FAA, ICAO, and homeland security.

Agency organization and operation, and legislative acts and treaties related to enforcement of aviation standards. Prerequisite: AVM 330.

**AVM 333. Air Transportation (4).** The air transportation system including facilities, regulations, and problems encountered in commercial transportation, airline operations, economic, ethical, and social considerations. Prerequisite: English 101 with a grade of C- or higher.

**AVM 334. Airport Management (3).** Airport operations and management, including analysis of the role of the airport manager in planning, finance, and administration; public relations, social, political, and environmental considerations; operational requirements and facilities maintenance.

**AVM 335. Aviation Management (3).** Management of aviation activities, manpower, facilities, regulations, and flight operations.

**AVM 338. Airport Administration and Finance (4).** The role of airport and airline in the aviation industry, including time value of money, risk and return, complex nature of costs (fixed, semi-fixed, variable and marginal). Analysis of financial statements as they apply to the overall financial health and revenue stream of an aviation organization such as an airport or airline. Prerequisite: AVM 334.

**AVM 350. Aviation Career Planning and Professionalism (3).** Career planning as applicable to students pursuing careers in the air transportation industry.

Prerequisite: junior standing or above.

**AVM 396. Individual Study (1-6).** May be repeated if subject is different.

**AVM 397. Honors (1-12).** Prerequisite: admission to department honors program.

**AVM 398. Special Topics (1-6).** May be repeated if subject is different.

**AVM 399. Seminar (1-5).** May be repeated if subject is different.

**AVM 417. Aviation Safety Management (4).** Fundamentals of aviation safety program management. Prerequisites: AVP 340 or enrolled in aviation management major/minor and junior or senior standing.

**AVM 418. Threat and Error Management in Aviation (3).** Principles of Threat and Error Management (TEM) in aviation operations. Course will be offered every year (Winter, Spring). Co-requisite or Prerequisite: AVP 304. Prerequisite: AVP 340.

#### **AVM 420. Aviation Labor Relations**

(4). Overview of aviation industries and development of US labor law and policy, including statutory, regulatory, and case laws in airline and corporate aviation. Principles, practices and procedures in collective bargaining and dispute resolution; and the changing airline labor relations environment. Prerequisite: AVM 330.

**AVM 422. Legal Ethics in Aviation (4).** Aviation ethical issues relative to the deregulation act of 1978. Government and industry roles in aviation employee responsibility, diversity, airport ground issues, air traffic control and security, health and the environment, and crew/passenger safety. Prerequisite: AVM 330.

**AVM 424. Aviation Security (4).**

Airport security systems, protection criteria, crime prevention, perimeter security, and access control. Policies and procedures forming security infrastructure required by Department of Homeland Security and the TSA to maintain a secure air transportation system. Prerequisite: AVM 333.

#### **AVM 426. International Aviation Management (4).**

International aviation management and policy, including cross-cultural challenges, interpersonal relationships in a diverse domestic and foreign environment, and evolving global trends. Managing workforce diversity from a culture-based perspective, including social responsibility, ethics, and environmental interdependence. Prerequisite: AVM 335.

#### **AVM 430. Airport/Airline Marketing (4).**

Basic economics and marketing principles of airports, airlines, and aviation business within air transport value chain. New principles including inclusive advertising, marketing to the connected traveler online, offline advertising, and social media. Prerequisite: AVM 335.

#### **AVM 434. Airport Operations (3).**

Prerequisites: AVM 333 and AVM 334.

#### **AVM 438. Airport Planning and Design (4).**

Methodologies necessary to the planning and design of airports. Prerequisite: AVM 434.

#### **AVM 490. Cooperative Education (1-12).**

An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student-learning plan, cooperating employer supervision, and faculty coordination. Prior approval required. May be repeated up to 20 credits. Grade will either be S or U.



- AVM 496. Individual Study** (1-6). By permission. May be repeated for credit.
- AVM 497. Honors** (1-12). Prerequisite: admission to department honors program.
- AVM 498. Special Topic** (1-6). May be repeated for credit.
- AVM 499. Seminar** (1-5). May be repeated for credit.

### Aviation Pilot Courses

#### **AVP 101. Private Pilot Flight**

**Laboratory I** (2). Basic flight maneuvers, solo flight in local area, and introduction of maximum performance takeoff and landing procedures. Course will be offered every year (Fall, Winter, Spring, Summer). Course hours: dual hours 22.5, solo hours 1, pre/post hours 10. Co-requisite: AVP 141.

#### **AVP 102. Private Pilot Flight**

**Laboratory II** (2). Plan and conduct cross-country flights and perform short-field and soft-field takeoffs and landings. Course will be offered every year (Fall, Winter, Spring, Summer). Course hours: dual hours 14.5, solo hours 7, pre/post 11.

#### **AVP 103. Private Pilot Flight**

**Laboratory III** (2). Perform private pilot operation at a standard to obtain the private pilot certificate. Course will be offered every year (Fall, Winter, Spring, Summer). Course hours: dual hours 11, solo hours 9, pre/post 10.

#### **AVP 104. Intermediate Pilot Flight**

**Laboratory** (1). Flight operations for recurrent and standardization training for professional pilot degree. May be repeated up to 3 credits. Grade will either be S or U.

#### **AVP 131. Introduction to Aviation** (1).

Introduction to basic concepts in aviation and career opportunities within the field of aviation. Course consists of guest speakers from across the aviation industry. Open to both aviation and non-aviation majors and non-degree seeking students. Course will be offered every year (Fall, Winter, Spring, Summer).

#### **AVP 141. Principles of Flight I** (4).

Basic knowledge of airplanes and systems, aerodynamics, flight safety, airports, aeronautical charts, airspace, radio communications, air traffic control services, and aviation regulations. Minimum B- required to continue flight training and to earn graduation certificate. Course will be offered every year (Fall). Co-requisite: AVP 221.

#### **AVP 142. Principles of Flight II** (4).

Basic knowledge of airplane performance and loading, preflight planning including weather analysis,

visual and radio (VOR/ADF) navigation, flight physiology, and aeronautical decision making. Preflight planning for cross-country flights. A grade of B- is required for an FAA graduation certificate. Prerequisite: AVP 141. Co-requisite: AVP 211.

#### **AVP 201. Instrument Pilot Flight**

**Laboratory I** (2). Altitude control by instrument reference only, use of full and partial panel, and radio navigation. Student must show proof of possession of a Private Pilot Airplane, Single Engine Land certificate in order to be enrolled. Course will be offered every year (Fall, Winter, Spring, Summer). Course hours: dual hours 17, sim hours 7, pre/post 10. Prerequisite: AVP 103 with a grade of C or higher or department approval.

#### **AVP 202. Instrument Pilot Flight**

**Laboratory II** (2). IFR approaches and holding patterns. Course will be offered every year (Fall, Winter, Spring, Summer). Course hours: dual hours 17, sim hours 10, pre/post 11.

#### **AVP 203. Instrument Pilot Flight**

**Laboratory III** (2). Perform all IFR maneuvers and procedures to FAA instrument rating practical test standards. Course will be offered every year (Fall, Winter, Spring, Summer). Course hours: dual hours 17, sim hours 3, pre/post 9, FAA solo 2.

#### **AVP 211. Meteorology for Pilots** (4).

Meteorological processes and weather hazards applicable to the flight environment.

#### **AVP 221. Aircraft Systems I -**

**Reciprocating** (4). Light training aircraft engines, propellers and engine systems, flight controls, fuel systems, instrumentation, tires, wheels and brakes. Course will be offered every year (Fall, Winter, Spring, Summer). Prerequisite: AVP 141.

#### **AVP 237. Outdoor Survival for Pilots**

(1). Basic introduction to outdoor wilderness survival for flight crew. Course will be offered every year (Fall, Summer). Prerequisite: AVP 142.

#### **AVP 241. Instrument Flight I** (4).

Aircraft instruments, basic attitude instrument flying, navigation, regulations, procedures, and ADM for the instrument pilot. Private Pilot ASEL required to enroll. Minimum B- required to continue flight training and to earn graduation certificate. Course will be offered every year (Fall and Summer). (AVP103 with a grade of C or higher and AVP142 with a grade of B- or higher) or Department Approval.

#### **AVP 242. Instrument Flight II** (3).

Procedures for IFR departure, enroute and arrival operations. Preparation for

FAA aeronautical knowledge exam. A minimum grade of B- is required for an FAA graduation certificate.

Prerequisite: AVP 241. Co-requisite: AVP 312.

**AVP 296. Individual Study** (1-6). By permission. May be repeated for credit.

**AVP 298. Special Topics** (1-6). Course content identified by title in the university class schedule. May be repeated for credit under different titles.

**AVP 299. Seminar** (1-5). May be repeated if subject is different.

#### **AVP 304. Commercial Pilot Flight**

**Laboratory I** (2). Plan and conduct VFR cross-country flights using pilotage, dead reckoning, and radio navigation. Night flight operations. Course will be offered every year (Fall, Winter, Spring, Summer). Course hours: dual archer hours 13, solo archer hours 40, pre/post 6. Co- or Prerequisite: AVP 354.

#### **AVP 305. Commercial Pilot Flight**

**Laboratory II** (2). Operation of complex aircraft and basic knowledge of advanced commercial maneuvers. Course will be offered every year (Winter, Spring, Summer). Course hours: dual archer hours 10, dual arrow hours 10, solo archer hours 9, pre/post 8.

#### **AVP 306. Commercial Pilot Flight**

**Laboratory III** (2). Review of instrument procedures ASEL. Perform flight maneuvers and procedures to FAA commercial pilot ASEL practical test standards. Course will be offered every year (Spring, Summer). Course hours: dual archer hours 17, dual arrow hours 5, solo archer hours 16, pre/post 10.

#### **AVP 308. Instrument/Commercial**

**Pilot Flight Laboratory** (1). Flight operations for recurrent and standardization training for Instrument/Commercial Pilot transition. May be repeated up to 3 credits. Grade will be S or U. Department permission.

#### **AVP 312. Aviation Weather Services**

(3). Comprehensive analysis of weather service for flight crews, including interpretation of applicable alpha-numeric and graphic weather reports and forecasts. Co-requisite: AVP 241.

#### **AVP 319. Applied Aerodynamics** (3).

Theories of flight and flight factors including airfoil shape, drag, velocity, lift and thrust, stability and control. Co-requisite: AVP 242.

#### **AVP 321. Aircraft Systems -**

**Turboprop** (3). Introduction and familiarization of turbine engines and turboprop aircraft systems. Course will be offered every year (Fall, Winter,

- Spring, Summer). Prerequisites: AVP 221 and AVP 354.
- AVP 322. Aircraft Systems II (3).** Complex aircraft systems. Prerequisite: AVP 221.
- AVP 323. Advanced Navigation (3).** Advanced navigation systems, their function, operation and application. Prerequisite: AVP 354.
- AVP 331. National Airspace System (3).** The national air traffic control system, control procedures, the integration of centers, approach communications, navigation procedures, radar operations, and facilities.
- AVP 332. Aviation History (3).** Major developments in the history of powered flight. Includes perspectives from civilian, military, international, and air carrier operations. Prerequisite: ENG 101 with a grade of C- or higher.
- AVP 337. Aviation Physiology and Survival (4).** Physiological aspects of flight crew performance, including effects of high altitude, accelerations, disorientation, and fatigue. Basic introduction to wilderness survival. Prerequisites: AVP 141 and AVP 142.
- AVP 340. Human Factors in Flight (5).** Physiological and psychological aspects of flight crew performance. Course will be offered every year (Fall, Spring). Prerequisite: AVP 241.
- AVP 348. Air Carrier Operations (4).** Familiarization and utilization of Company Operations Manual excerpts, Operations Specifications, and Minimum Equipment Lists, and the Code of Federal Regulations (CFR), Hazardous Materials (HMR) part 175, CFR parts 119, 120, 121, and NTSB830 to determine safety of flight and compliance with company policies and procedures and federal regulations. Exposure to multi-crew environment and expectations of professional behavior for flight crews. Prerequisite: AVP 354.
- AVP 352. Multiengine Principles (2).** Discussion and study of multiengine aerodynamics, operating procedures, systems, performance, weight, and balance considerations, engine-out procedures, single-engine aerodynamics, and instrument flight. Prerequisite: AVP 354.
- AVP 354. Commercial Pilot (4).** Operation of advanced systems appropriate to complex airplanes and execution of advanced flight maneuvers. Preparation for FAA written examination. A minimum grade of B- in CW's FAA course graduation certificate as required by FAR141.
- Prerequisites: AVP 242 with a grade of B- or higher.
- AVP 375. Mountain and Canyon Flying (3).** Synthesis of fundamental concepts and practices including navigation in mountainous terrain, aircraft performance and density altitude, canyon flying and airport operations in constricted areas, mountain and canyon meteorology, emergencies, and flight safety. Prerequisite: AVP 103 or permission of the instructor or department.
- AVP 396. Individual Study (1-6).** May be repeated if subject is different.
- AVP 397. Honors (1-12).** Prerequisite: admission to department honors program.
- AVP 398. Special Topics (1-6).** May be repeated if subject is different.
- AVP 399. Seminar (1-5).** May be repeated if subject is different.
- AVP 401. Multiengine Flight Laboratory (1-2).** Operation of multiengine aircraft systems. Perform normal and emergency procedures to FAA practical test standards for Commercial AMEL certificate. Permission of department. Course hours: dual twin hours 18.5, solo ck ride hours 1.5, pre/post 6. Prerequisite: AVP 352.
- AVP 402. Certified Flight Instructor Laboratory (1-2).** Analyze and perform maneuvers from the right seat. Demonstrate proficiency and instructional knowledge to FAA practical test standards. The student must possess a Commercial Pilot certificate ASEL to enroll. Department permission. Formerly AVP 301, students may not receive credit for both. Prerequisite: AVP 448.
- AVP 410. Crew Resource Management (3).** Fundamental concepts of crew resource management (CRM) with practical application of human factors and performance on the modern flight deck. Course will be offered every year (Fall, Summer). Prerequisite: AVP 340.
- AVP 421. Aircraft Systems III-Turbojet (4).** Introduction and familiarization of transport category aircraft systems. Course will be offered every year (Fall, Winter, Spring, Summer). Prerequisite: AVP 321.
- AVP 444. Multiengine FTD, Baron G58 (2).** Introduction to and familiarization of Electronic Flight Instrument Systems (EFIS), Crew Resource Management (CRM) in multi-crew environment, and use of flight director and autopilot in a simulated flight environment. Prerequisite: AVP352, admitted to the Flight Officer specialization or department permission.
- AVP 445. Turboprop FTD, King Air 200 (2).** Introduction and familiarization of turbine-powered aircraft operations in a simulated flight environment, including Crew Resource Management (CRM), Electronic Flight Information Systems (EFIS), Flight Director (FD), and Autopilot (AP) operations. Department permission. Prerequisites: AVP 422 and AVP 444.
- AVP 448. Fundamentals of Flight Instruction (5).** A two-part course consisting of fundamentals of instruction and flight instructor airplane subjects. Details the role of the airplane flight instructor, including privileges and responsibilities, teaching aeronautical decision making, flight safety, and professionalism. Department permission. Prerequisites: AVP 354 and AVP 304.
- AVP 458. Advanced Flight Instruction, Instrument (Put on reserve 9/16/18) (3).** Methodology used in teaching instrument flight and acquisition of the Instrument Ground Instructor certificate (IGI). (Put on reserve 9/16/18, will go inactive 8/24/21) Prerequisite: AVP 448, and Certified Flight Instructor Certificate course stage 1.
- AVP 469. Turbojet Operations (4).** Introduction and familiarization of transport category aircraft operations including: Crew Resource Management (CRM), flows and checklist procedures, aircraft limitations, normal and emergency operational procedures. Prerequisite: AVP 423.
- AVP 470. Professional Pilot Capstone (1).** Drawing from coursework accomplished in flight operations, pilot certification, aviation safety, and aviation career preparation; students will prepare an academic portfolio that reflects their culminating learning experience and accomplishments in the Professional Pilot degree program. Department permission. Course will be offered every year (Fall, Winter, Spring, Summer). Prerequisites: AVP 305, AVM 350, and AVM 418.
- AVP 475A. Specialty Flight Laboratory: Single Engine Seaplane (1).** Receive ground and flight instruction in the listed specialty. Flight hours will vary with each specialty. A minimum of 10 flight hours normally required for credit except as approved by aviation faculty. May be repeated for a different specialty. Grade will either be S or U. Prerequisite: FAA pilot certificate or equivalent and permission.

**AVP 475B. Specialty Flight****Laboratory: Multiengine Seaplane**

(1). Receive ground and flight instruction in the listed specialty. Flight hours will vary with each specialty. A minimum of 10 flight hours normally required for credit except as approved by aviation faculty. May be repeated for a different specialty. Grade will either be S or U. Prerequisite: FAA pilot certificate or equivalent and permission.

**AVP 475C. Specialty Flight****Laboratory: Helicopters**

(1). Receive ground and flight instruction in the listed specialty. Flight hours will vary with each specialty. A minimum of 10 flight hours normally required for credit except as approved by aviation faculty. May be repeated for a different specialty. Grade will either be S or U. Prerequisite: FAA pilot certificate or equivalent and permission.

**AVP 475D. Specialty Flight****Laboratory: Mountain Flying**

(1). Receive ground and flight instruction in the listed specialty. Flight hours will vary with each specialty. A minimum of 10 flight hours normally required for credit except as approved by aviation faculty. Prerequisite: FAA pilot certificate or equivalent and permission. May be repeated for a different specialty. Grade will either be S or U.

**AVP 475E. Specialty Flight****Laboratory: Aerobatics**

(1). Receive ground and flight instruction in the listed specialty. Flight hours will vary with each specialty. A minimum of 10 flight hours normally required for credit except as approved by aviation faculty. May be repeated for a different specialty. Grade will either be S or U. Prerequisite: FAA pilot certificate or equivalent and permission.

**AVP 475F. Specialty Flight****Laboratory: Other**

(1). Receive ground and flight instruction in the listed specialty. Flight hours will vary with each specialty. A minimum of 10 flight hours normally required for credit except as approved by aviation faculty. Hang gliders are specifically omitted. By advisement and permission. May be repeated for a different specialty. Grade will either be S or U. Prerequisite: FAA pilot certificate or equivalent and permission.

**AVP 489. Turbo FTD, CRJ-200**

(3). Introduction and familiarization of turbojet-powered aircraft operations in simulated flight environment, including Crew Resource Management (CRM), Electronic Flight Instrument Systems

(EFIS), Engine Indicating Crew Alerting Systems (EICAS), Flight Director (FD), and automation philosophy/operation. Student may be enrolled in AVP 469 with AVP 489 in the same quarter with department permission. Course will be offered every year (Fall, Winter, Spring, Summer). Prerequisite: AVP 421. Co- or Prerequisite: AVP 469.

**AVP 490. Cooperative Education** (1-12). An individualized contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. By permission. May be repeated for credit. Grade will either be S or U.

**AVP 496. Individual Study** (1-6). By permission. May be repeated for credit.

**AVP 497. Honors** (1-12). Prerequisite: admission to department honors program.

**AVP 498. Special Topics** (1-6). Course content identified by title in the university class schedule. May be repeated for credit under different subtitle.

**AVP 499. Seminar** (1-5). May be repeated for credit.

**Biological Sciences Courses****BIOL 101. Fundamentals of Biology**

(5). Introduction to scientific inquiry and basic principles of biology at molecular, cellular, organismal, community, and ecosystem levels as applied to humans, society, and the environment. Four hours lecture and one two-hour laboratory per week. May not be counted toward a major or minor in the department of biological sciences. NS-Fund Disc Phys and Biological Sciences (L). Course will be offered every year (Fall, Winter, Spring, and Summer). NS-Fund Disc Phys and Biological Sciences (L). K7 - Physical & Natural World

**BIOL 181. General Biology I**

(5). Introduction to the scientific method and the principles of ecology, genetics and evolution. Four lecture hours and three laboratory hours per week. Co- or prerequisite: CHEM 181.

**BIOL 182. General Biology II**

(5). Introduction to the principles of cellular and molecular biology. Four lecture hours and three laboratory hours per week. Prerequisite: BIOL 181. Co- or prerequisite: CHEM 182.

**BIOL 183. General Biology III**

(5). Introduction to the form and function of multicellular organisms. Four lecture hours and three laboratory hours per

week. Prerequisite: BIOL 182. Co- or prerequisite: CHEM 183.

**BIOL 200. Plants in the Modern**

**World** (5). In this course, students will develop a broad knowledge base about plants, their life processes and ways in which humans are dependent on plants and their products. The course includes inquiry-driven laboratory and field observations. May not be counted toward a major or minor in the department of biological sciences. NS-Patterns and Connections Natural World (W) (L). Course will be offered every year. Course will not have an established scheduling pattern. NS-Patterns and Connections Natural World (W) (L). K7 - Physical & Natural World

**BIOL 201. Human Physiology**

(5). An introduction to the function of human cells, organs, and organ systems as it relates to health and well-being current developments, and society. Not open to students with credit in BIOL 455; may not be counted toward a major or minor in the department of biological sciences. NS-Patterns and Connections Natural World. Course will be offered every year (Fall, Winter, Spring, and Summer). NS-Patterns and Connections Natural World. K8 - Science & Technology

**BIOL 204. The Science and Practice of Growing Plants**

(5). An introduction to the scientific principles and real-world practices of growing plants for household, community, and horticultural uses. The course will cover topics ranging from physiology to sustainability and involves independent and community-focused projects. Course will not have an established scheduling pattern (Spring and Summer). K8 - Science & Technology

**BIOL 205. Microbes and Mankind**

(5). Microbes are significant in our daily lives. The course covers disease and epidemics, prevention and control of infectious disease, the necessity of microbes in health, and the use of microbes for the benefit of mankind. Course will be offered every year. Course will not have an established scheduling pattern. K8 - Science & Technology

**BIOL 213. Introductory Biostatistics**

(4). An introduction to commonly used methods for analyzing biological data. Use of statistical and graphical software will be emphasized. Course will be offered every year (Fall, Winter, Spring, and Summer). Prerequisites: (MATH 153 or MATH 154 or MATH 172) or (a score of 17 or higher on the

Advanced Math Placement Test) or (a score of College Math 65+ or higher in Acuplacer) or (a score of 46 or higher on the Compass College Algebra Test). FYE3 - Quantitative Reasoning

**BIOL 220. Introductory Cell Biology**

(5). Concepts, processes and structures involved in understanding life at the cellular level. Does not count toward biology majors for students who complete BIOL 181, 182, and 183. Prerequisites: CHEM 113 or 183.

**BIOL 262. Natural History of the**

**Pacific Northwest** (5). Classroom, lab and field exploration of the biological diversity of the Pacific Northwest. Emphasis will be on the natural history of local flora and fauna and their ecological and evolutionary relationships. May not be counted toward a major in the department of biological sciences.

**BIOL 295. Research** (1-6). Laboratory research experience. May be repeated up to 15 credits.

**BIOL 298. Special Topics** (1-6).

**BIOL 299. Seminar** (1-5). May be repeated if subject is different.

**BIOL 300. Introduction to Evolution**

(5). An introduction to the Darwinian theory of evolution. Exploration of the mechanisms of evolutionary change, speciation, and macroevolutionary patterns of the evolution of life on Earth including humans. May not be counted toward a major or minor in the department of biological sciences. NS-Patterns and Connections Natural World. Course will not have an established scheduling pattern. Prerequisite: sophomore standing or above. May not be counted toward a major in the department of biological sciences. NS-Patterns and Connections Natural World. K8 - Science & Technology

**BIOL 302. Sustainability and Environmental Change**

(5). Basic concepts of ecology with emphasis on ecosystems and populations and how human activities and attitudes relate to these basic concepts. May not be counted toward a major or a minor in the department of biological sciences. NS-Applications Natural Science. NS-Applications Natural Science. K8 - Science & Technology

**BIOL 305. Human Anatomy and Physiology for Health-Related**

**Majors I** (5). The first quarter of a two-quarter study of the structure and function of the human body. Four hours of lecture and two hours laboratory per week. Cannot be used within a Biology major. Prerequisites: EXSC 351 and EXSC 351LAB; or BIOL 220.

**BIOL 306. Human Anatomy and Physiology for Health-Related**

**Majors II** (5). The second quarter of a two-quarter study of the structure and function of the human body. Four hours lecture and two hours laboratory per week. Cannot be used within a Biology major. Co- or prerequisite: BIOL 305.

**BIOL 321. Genetics** (5). A lecture and laboratory course in the basic principles of heredity of plants and animals. Four hours lecture and two hours laboratory per week. Prerequisites: BIOL 183 or BIOL 220 and either BIOL 213 or CHEM 332 and CHEM 332LAB.

**BIOL 322. Introductory Microbiology**

(5). Introductory biology of microorganisms and viruses with applications to medicine, food science, industry, and agriculture. Intended for nutrition and allied health students. Three hours lecture and four hours laboratory per week. Biology majors are encouraged to take BIOL 323. May be counted toward a degree in the biology department in lieu of BIOL 323, but cannot be counted toward a degree in the biology department if BIOL 323 is successfully completed. Prerequisites: BIOL 182 or BIOL 220.

**BIOL 323. Microbiology**

(5). Principles of microbiological practice, including isolation, cultivation, identification, physiology, evolution, and ecology. Two hours lecture and six hours laboratory per week. Does not count toward any biology major if student has successfully completed BIOL 322. Prerequisites: BIOL 213 and either BIOL 183 or BIOL 220.

**BIOL 341. Plant Taxonomy**

(5). Classification of vascular plants, using local flora. Two hours lecture and six hours laboratory per week; the course includes field trips and individual field work. Prerequisites: BIOL 182, BIOL 183 or BIOL 200.

**BIOL 343. Plant Anatomy**

(5). A treatment of the fundamental facts and aspects of vascular plant anatomy. Plant tissues with special reference to their development, organization, and biological significance. Three hours lecture and four hours laboratory per week. Prerequisites: BIOL 182 or BIOL 183.

**BIOL 344. Dendrology**

(4). A study of trees, their habits of growth, the characteristic forest areas of North America. Two hours lecture and four hours laboratory per week. A field course. Prerequisite: BIOL 183.

**BIOL 351. General Entomology**

(5). Insect biology, taxonomy, structure, and relationships to man. Two hours

lecture and six hours laboratory or field work per week. Prerequisite: BIOL 183 or permission.

**BIOL 352. Parasitology** (5). Biological relations of animal parasite and host; structure, classification, and methods of diagnosis of parasitic protozoa, worms, and arthropods. Two hours lecture and six hours laboratory per week. Prerequisite: BIOL 183.

**BIOL 353. Integrative Anatomy** (6). Vertebrate and human anatomy and embryology in an evolutionary context. Three hours lecture and six hours laboratory per week. Prerequisite: BIOL 183 or EXSC 350 and EXSC 350LAB.

**BIOL 354. Developmental Biology** (5). Embryonic development with an emphasis on the molecular mechanisms involved in fertilization, pattern formation, and cell differentiation. Three hours lecture and four hours laboratory per week. Prerequisites: CHEM 361 and BIOL 183.

**BIOL 355. Human Anatomy and Physiology I**

(5). The first quarter of a two-quarter study of the structure and function of the human body. Students should not take BIOL 355 unless they intend to take BIOL 356. Three hours lecture and four hours laboratory per week. A student cannot use BIOL 355/356 and BIOL 455 in the major. A student cannot receive credit for both BIOL 355 and BIOL 305. Prerequisites: BIOL 183.

**BIOL 356. Human Anatomy and Physiology II**

(5). The second quarter of the two quarter study of the structure and function of the human body. Three hours lecture and four hours laboratory per week. A student cannot use BIOL 355/356 and BIOL 455 in the major. A student cannot receive credit for both BIOL 356 and BIOL 306. Co- or prerequisite: BIOL 355.

**BIOL 360. General Ecology**

(5). Interrelationships of organisms with their environment. Three hours lecture and four hours laboratory/field work/discussion per week. A weekend field trip may be required. Prerequisites: BIOL 183, and BIOL 213, and MATH 153 or a higher math course.

**BIOL 362. Biomes of the Pacific**

**Northwest** (4). One-week field trip to explore the various biomes of Washington. Emphasis on writing field notes, observing and identifying organisms and communities. Prerequisite: BIOL 181.

**BIOL 371. Paleobiology** (4). Using fossils in the geologic record to explore evolution and extinction, ancient

ecology and environments, and the geographical distribution of plants and animals. BIOL 371 and GEOL 371 are cross-listed courses; students may not receive credit for both. Prerequisite: BIOL 181 or GEOL 101 or GEOL 103 or GEOL 106 or GEOL 107 or GEOL 108.

**BIOL 377. Regional Natural History** (2). Classroom study of the natural history of a selected region as preparation for a one- to two-week field trip. Emphasis will be on developing background skills to undertake a field exploration over the quarter (winter, spring, summer) break. Subtitles will identify the selected geological region (e.g. Baja California Natural History). BIOL 377 and GEOL 377 are cross-listed courses, students may not receive credit for both. By permission. May be repeated for credit under a different subtitle (region).

**BIOL 377LAB. Regional Natural History** (3). Special fees required. One- to two-week field trip to explore biological and physical patterns and processes in selected regions of North America. Emphasis will be on recording field observations, keeping a field journal, field study techniques, and performing investigations chosen and developed by student participants. Subtitles will identify the region studied. BIOL 377LAB and GEOL 377LAB are cross-listed courses, students may not receive credit for both. May be repeated for credit.

**BIOL 396. Individual Study** (1-6). May be repeated if subject is different.

**BIOL 397. Honors** (1-12). Prerequisite: admission to department honors program.

**BIOL 398. Special Topics** (1-6).

**BIOL 399. Seminar** (1-5). May be repeated if subject is different.

**BIOL 405. Current Topics in Biology** (2-5). An in-depth analysis of a specific topic within the field of biological science. Current literature and research will be reviewed, analyzed, and discussed. May be repeated up to 10 credits. Prerequisite: BIOL 213.

**BIOL 413. Advanced Biostatistics** (5). Visualization and analysis of complex biological data-sets. Computer laboratory exercises will utilize R, a free and powerful software environment for statistical computing and graphics. BIOL 413 and BIOL 513 are layered courses; students may not receive credit for both. Three hours lecture and two hours laboratory per week. Prerequisites: BIOL 213 or permission of instructor.

#### **BIOL 420. Environmental**

**Microbiology** (5). Ecology of microorganisms in marine, fresh-water and soil environments. Three hours lecture and four hours laboratory per week. Prerequisites: BIOL 323 and CHEM 362.

#### **BIOL 421. General Virology** (5).

Interrelationship between animal, plant, and bacterial viruses and their hosts, with emphasis on the animal viruses. Five hours lecture per week.

Prerequisites: BIOL 430 or BIOL 321 or CHEM 432.

**BIOL 422. Immunology** (5). Nature of the immune response, disease preventing and producing mechanisms and laboratory applications. Five hours lecture per week. Prerequisites: BIOL 183 or BIOL 220 and CHEM 361.

#### **BIOL 423. Techniques in Immunology and Virology** (5).

A practical course in dealing with the routine techniques used in diagnostic and experimental immunology and virology. Three hours lecture and four hours laboratory per week. Course will not have an established scheduling pattern (Winter - Ellensburg). Prerequisite: BIOL 421 or BIOL 422.

#### **BIOL 425. Molecular Biotechnology**

(5). The practice and theory of techniques used in molecular biology. Two hours lecture and six hours laboratory per week. Prerequisite: BIOL 321.

#### **BIOL 426. Medical Microbiology** (3).

An introduction to medical microbiology emphasizing the biology of pathogenic bacteria, their relation to infectious diseases and the isolation and identification of specific disease agents. Three lectures per week. Prerequisite: BIOL 323.

#### **BIOL 426LAB. Medical Microbiology Laboratory** (2).

Prerequisite: BIOL 323. Co-prerequisite: BIOL 426.

#### **BIOL 427. Biotechnology for Teachers**

**(Put on reserve 9/16/18)** (5). This course will help pre-service teachers develop the necessary skills to construct and perform biological experiments using contemporary biotechnology in the context of educational theory and application. May be repeated for credit. (Put on reserve 9/16/18, will go inactive 8/24/21) Prerequisite: BIOL 321.

**BIOL 428. Nutrigenomics** (5). The interrelationships of genetic variation, nutrition, and diet-related diseases. Topics to be covered include techniques used in the field, disease susceptibility alleles, diet and gene expression, personalized diets, and case studies. BIOL 428 and BIOL 528 is a

layered course; students may not receive credit for both. Course will not have an established scheduling pattern. Prerequisite: BIOL 321 or CHEM 432 or instructor permission.

**BIOL 430. Cell Biology** (5). Analysis of cell organization and the processes governing cell function and behavior. Four hours lecture and three hours laboratory per week. Prerequisites: CHEM 361, CHEM 361LAB, and BIOL 182.

#### **BIOL 431. The Cell Biology of Cancer**

(3). The study of the biology of cancer with an emphasis on dysregulation of cellular pathways responsible for cancer development and the effectiveness of current therapeutic drugs on treatment. Three hours lecture per week. Prerequisite: BIOL 430 or CHEM 431.

#### **BIOL 431LAB. The Cell Biology of Cancer Lab** (2).

This course will allow students to perform advanced laboratory techniques in biochemistry, cell and molecular biology related to the study and diagnosing of cancer. Co- or prerequisite: BIOL 431.

#### **BIOL 435. Cell Analysis by Flow**

**Cytometry** (4). Acquire flow cytometry skills (fluorochrome selection, sample preparation, data acquisition, data analysis, data interpretation). Design and conduct research projects requiring in-depth analysis of physical and chemical characteristics of cells acquired by flow cytometry. Discuss flow cytometry applications in various scientific fields. BIOL 435 and BIOL 535 are layered courses; students may not receive credit for both. Prerequisites: BIOL 321 and CHEM 361.

#### **BIOL 441. Plant Physiology** (5).

A critical study of the physiological processes of plants including water relations, photosynthesis, mineral assimilation, and responses to the environment. Prerequisites: BIOL 183 and BIOL 213 and CHEM 361.

**BIOL 443. Mycology** (5). The biology, morphology, and economic importance of the major groups of fungi including the slime molds. Three hours lecture and four hours laboratory per week. Prerequisite: BIOL 183.

#### **BIOL 444. Algae and Bryophytes** (5).

Study of the occurrence, evolution, physiology, and ecology of fresh-water and marine algae and non-vascular plants with emphasis on those in the Pacific Northwest. Prerequisite: BIOL 183.

**BIOL 445. Field Mycology** (5). Stresses taxonomy, morphology, and ecology of mushrooms and related forms with

- emphasis on Northwest flora. Offered fall quarter only. Prerequisite: BIOL 183.
- BIOL 450. Ichthyology (4).** An introduction to the biology, taxonomy, and distribution of modern fishes with special reference to the Pacific Northwest. Three hours lecture and two hours laboratory or field work per week. Prerequisites: BIOL 183 and BIOL 213.
- BIOL 451. Herpetology (4).** An introduction to biology, taxonomy, and distribution of modern amphibians and reptiles with special reference to the Pacific Northwest. Two hours lecture and four hours laboratory or field studies per week. Prerequisite: BIOL 183.
- BIOL 452. Ornithology (4).** Study of birds with special emphasis on anatomic and behavioral adaptations. Three hours lecture and two hours laboratory or field study per week. Prerequisite: BIOL 183.
- BIOL 453. Mammalogy (5).** Evolution, taxonomy, and ecology of mammals with laboratory emphasis on Pacific Northwest mammals. Three hours lecture and four hours laboratory per week. Prerequisite: BIOL 183.
- BIOL 454. Histology (3).** An introduction to the basic tissues of vertebrates, including humans. Three hours of lecture per week. Prerequisites: BIOL 353 or BIOL 356 or EXSC 351 and EXSC 351LAB.
- BIOL 455. Integrative Animal Physiology (5).** The comparative study of animal physiology, with a broad approach crossing organizational levels. Three hours lecture and four hours laboratory per week. A student cannot use BIOL 355/356 and BIOL 455 in the major. Prerequisites: BIOL 183 and BIOL 213.
- BIOL 457. Fundamentals of Neuroscience (5).** The study of integrated neuroscience from the molecular to the systems level. Included is examination of neural plasticity in the developing and adult brain as well as dysfunctions associated with disease states. Prerequisites: BIOL 183 and either CHEM 431 or BIOL 430.
- BIOL 459. Winter Biology (4).** A field and laboratory course exploring the ecology and physiology of organisms in winter. Activities will include laboratory work, field trips, and an overnight camping trip. Prerequisites: BIOL 183 and BIOL 213.
- BIOL 461. Community Ecology (3).** Principles of the structure and function of ecological communities. Three hours lecture/discussion per week. Course will not have an established scheduling pattern (Winter - Ellensburg). Prerequisite: BIOL 360.
- BIOL 461LAB. Community Ecology Laboratory (2).** Laboratory and field study of the structure and function of ecological communities. Four hours of laboratory/field work per week. Weekend field trips may be required. Course will not have an established scheduling pattern (Winter - Ellensburg). Co- or prerequisite: BIOL 461.
- BIOL 462. Wildlife and Fisheries Ecology (5).** Ecological principles of wildlife and fish populations and communities as they relate to management theory and practice in the Pacific Northwest. Three hours lecture/discussion and four hours laboratory/field work per week. Weekend field trips may be required. Prerequisite: BIOL 360.
- BIOL 463. Limnology (5).** Chemical, physical, and biological characteristics of inland waters. Three hours lecture and four hours laboratory per week. Prerequisite: BIOL 360.
- BIOL 464. Terrestrial Plant Ecology (5).** The ecological relationships of plant species and plant communities. Three hours lecture and either four hours laboratory. Weekend field trips may be required. Prerequisite: BIOL 360.
- BIOL 465. Biology of Animal Behavior (4).** Three lectures and two hours of laboratory a week. Prerequisites: BIOL 213 or PSY 362.
- BIOL 466. Conservation Biology (5).** An introduction to the theory and practice of conservation biology, with emphasis on case studies. Two hours lecture, one hour discussion, and four hours lab or field study per week. Weekend field trips may be required. BIOL 466 and BIOL 566 are equivalent courses; students may not receive credit for both. Prerequisite: BIOL 360.
- BIOL 467. Biological Field Techniques (5).** Intensive, field-based experience in techniques used by field biologists to sample organisms and their environments, and analyze data collected in the field.
- BIOL 470. Mechanisms of Evolution (5).** Darwinian evolution and the modern synthesis. Prerequisite: BIOL 321.
- BIOL 487. Biology Capstone (1).** Biology Capstone is the culminating experience in the Biology major. In this course, you will reflect on your education through various assessments of the knowledge, skills, and dispositions you have acquired during your coursework, and by evaluating primary literature. The class also prepares to enter the job market via resume and cover letter writing and mock interviews. Prerequisite: senior standing. CE - Culminating Experience
- BIOL 490. Cooperative Education (1-12).** An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. By permission. May be repeated for credit. Grade will either be S or U.
- BIOL 491. Workshop (1-6).** May be repeated for credit.
- BIOL 492. Laboratory Experience in Teaching Biological Sciences (2).** Experience in planning, managing, and teaching in a laboratory setting. May be repeated up to 4 credits. By permission of department. Prerequisite: combined cumulative GPA of 2.5.
- BIOL 493. Biological Field Practicum (Put on reserve 9/16/16) (1-15).** Individual or group off-campus experience in the field study of biological phenomena. May be repeated for credit. (Put on reserve 9/16/16. Last taught in 2012. Will go inactive 8/24/19.)
- BIOL 495. Research (1-6).** Laboratory research experience. May be repeated up to 6 credits.
- BIOL 496. Individual Study (1-6).**
- BIOL 497. Honors Thesis (1-5).** Either this course or BIOL 499S, Senior Seminar, is required in all baccalaureate programs of the biology department. Prerequisite: admission to Departmental Honors Program.
- BIOL 498. Special Topics (1-6).**
- BIOL 499. Seminar (1-5).**
- Business Marketing Education Courses**
- BME 146. Basic Accounting (5).** Basic introductory course to accounting concepts. May not be taken for college credit if any other college accounting course or courses have been completed. May be audited. Formerly BSED 146, students may not receive credit for both.
- BME 296. Individual Study (1-6).** Formerly BSED 296 students may not receive credit for both.
- BME 298. Special Topics (1-6).** Formerly BSED 298, students may not receive credit for both.

- BME 299. Seminar** (1-5). Formerly BSED 299, students may not receive credit for both.
- BME 316. Educational Technology for Business and Marketing** (3). Students will explore a variety of concepts and resources related to the appropriate and effective integration of technology/media in school settings. Formerly BSED 316, students may not receive credit for both. Course will not have an established scheduling pattern. Prerequisites: CS 101 or IT 101 and full admission to the Teacher Certification Program.
- BME 346. Basic Accounting for Business and Marketing Education** (5). For business and marketing education majors to become proficient in secondary level accounting course subject matter. Prerequisite: CTE 310 and conditional admission to the Teacher Certification Program.
- BME 347. Marketing Curriculum for Secondary Education** (4). This course prepares Business and Marketing Education majors for the curricular materials they will teach in secondary marketing education programs. Prerequisite: admission to the business and marketing education major.
- BME 396. Individual Study** (1-6). May be repeated if subject is different.
- BME 397. Honors** (1-12). Prerequisite: admission to department honors program.
- BME 398. Special Topics** (1-6). May be repeated if subject is different.
- BME 399. Seminar** (1-5). May be repeated if subject is different.
- BME 445. Technology for Business and Marketing Education** (4). Skill development in current technologies being applied in secondary business and marketing programs. Course will not have an established scheduling pattern.
- BME 450. Curriculum Development for Business and Marketing Education** (4). Curriculum development for business and marketing education. Develop and design curricula based on business and industry standards and accepted current pedagogical and learning standards. Prerequisite: full admission to the major and the Teacher Certification Program.
- BME 451. Methods and Materials for Teaching Information Technology** (3). Methods and materials for teaching Information Technology curricula. Course will not have an established scheduling pattern. Prerequisite: full admission to the major (Business and Marketing Education) and the Teacher Certification Program.
- BME 452. Methods and Materials for Teaching Basic Business and Marketing** (3). Methods and materials for teaching basic business curricula. Course will not have an established scheduling pattern. Prerequisite: full admission to the major (Business and Marketing Education) and the Teacher Certification Program.
- BME 492. Practicum** (5-15). Grade will either be S or U. Formerly BSED 492, students may not receive credit for both. Prerequisite: permission of department chair.
- BME 493A. Undergraduate Research Practicum** (1-3). Conduct research under direct supervision of a professor with specific learning agreement required. Department requirements must be met. ADMG, IT, and RMT 493A are equivalent courses; students may not receive credit for more than one. May be repeated for credit. Grade will either be S or U. Formerly BSED 493A, students may not receive credit for both.
- BME 496. Individual Study** (1-6). May be repeated if subject is different.
- BME 497. Honors** (1-12). Prerequisite: admission to department honors program.
- BME 498. Special Topics** (1-6). May be repeated if subject is different.
- BME 499. Seminar** (1-5). May be repeated if subject is different.
- Business Courses**
- BUS 102. Business Computer Skills** (5). This course will develop practical computer skills needed to evaluate and help solve business problems. Students will learn how to use software commonly used in businesses to access, organize and analyze information and present it professionally in presentations and reports. Course will be offered every year (Fall, Winter, Spring, Summer). Basic Skills 6 - Computer Fundamentals.
- BUS 110. Professional Development 1** (1). This course is designed to assist students with transition into College of Business and guide them through their major exploration and career planning processes. Admittance to a business major. Prerequisite: UNIV 101.
- BUS 198. Special Topics** (1-6). May be repeated for credit.
- BUS 221. Introductory Business Statistics** (5). Introduction to inferential business statistics. Using probability distributions and information from samples for business decisions. Prerequisite: ECON 130 or MATH 130 or higher with a minimum grade of C- or higher. FYE3 - Quantitative Reasoning
- BUS 241. Legal Environment of Business** (5). An introduction to legal reasoning, ethics in business, the law of contracts, torts, agency, sales, bailments, and personal property. Course will be offered every year (Fall, Winter, Spring, Summer). Prerequisite: sophomore standing or above. K2 - Community, Culture, & Citizenship
- BUS 298. Special Topics** (1-6).
- BUS 299. Seminar** (1-5). May be repeated if subject is different.
- BUS 301. Contemporary Approaches to Personal and Professional Development** (3). Address lifetime career development and the tools and resources to plan and manage transitions. Includes self-assessment, company and industry research, self branding and promotion, networking, interviewing and the hiring process. Course will be offered every year (Fall, Winter and Spring).
- BUS 310. Professional Development 2** (1). This course is designed to assist students with transition into the professional business environment and provide them with the skills to implement effective career search strategies. May be repeated once. Grade will be S or U. Prerequisites: UNIV 101 and BUS 110 or MGT 200 or BUS 301.
- BUS 311. Business Epistemology** (3). This course introduces the value of evidence-based research in business theory and practice in making successful choices in an uncertain and complex world. Course will be offered every year (Fall, Winter, Spring, Summer). Prerequisites: BUS 221, ECON 201, MGT 380, AND MKT 360.
- BUS 374. Personal Investments** (5). Introduction to investment goals, strategies, and securities, including certificates of deposit, money market instruments, stocks, bonds, and mutual funds. Additional topics introduced are risk analysis, taxes, and portfolio basics. Does not count for credit in the finance specialization.
- BUS 389. Sustainable Business** (5). This course considers the role that business plays in bringing about an environmentally, socially, and economically sustainable future. Topics include how to build sustainability into a business and whether sustainable companies can be profitable. Course will be offered every year (Winter and Summer). K6 - Individual & Society
- BUS 396. Individual Study** (1-6).

**BUS 397. Honors** (1-12). Prerequisite: admission to department honors program.

**BUS 398. Special Topics** (1-6).

**BUS 399. Seminar** (1-5). May be repeated if subject is different.

**BUS 401. Business Boot Camp** (1). Supervised field experience seminar. On-location industry engagement. Education, training, and business skills application in industry setting. May be repeated up to 5 credits. Grade will either be S or U. Prerequisite: instructor permission.

**BUS 441. Advanced Business Law** (5). The law of negotiable instruments, suretyship, business structures including partnerships and corporations, trusts and estates, bankruptcy and government regulations of business. BUS 441 and BUS 541 are layered courses; students may not receive credit for both. Prerequisite: BUS 241 and admission to the College of Business major AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25. Formerly BUS 341, students may not receive credit for both.

**BUS 489. AACSB Assessment** (2). This end of program course provides the venue for students to document their learning accomplishments and their readiness for their professional careers. Course will be offered every year (Fall, Winter, Spring). Prerequisites: Admission to a College of Business Major AND Completion of the College of Business Foundation Courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and ECON 130 or MATH 130 and ECON 201 and MATH 153 or higher) with a grade of C- of higher AND completion of College of Business Core Courses (ECON 202 and FIN 370 and SCM 310 and MIS 386 and MKT 362 and MGT 382 and COM 301 and ENG 311) with a minimum grade of a C- in each course and a minimum collegiate GPA of 2.25 AND senior standing AND completed application for graduation; (OR admission to a College of Business Graduate Program). Co-requisite: MGT 489.

**BUS 490. Cooperative Education** (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating

employer supervision, and faculty coordination. By permission. May be repeated for credit. Grade will either be S or U. Prerequisite: 2.8 overall GPA.

**BUS 492. Applied Leadership** (2-5). Leadership practicum and mentorship experience. Mentor, supervise and guide MGT 200 student groups through habit formation and professional skills acquisition. By permission of instructor. May be repeated up to 10 credits. Course will be offered every year (Fall, Winter, and Spring).

**BUS 495. Directed Research** (1-5). May be repeated for up to 15 credits. Grade will either be S or U. Prerequisite: permission of instructor.

**BUS 496. Individual Study** (1-6).

**BUS 497. Honors** (1-12). Prerequisite: admission to department honors program.

**BUS 498. Special Topics** (1-6).

**BUS 499. Seminar** (1-5).

### College of Arts and Humanities Courses

**CAH 289. Introduction to Liberal Studies** (1). Introduction to the Liberal Studies major, the development, design and preparation of the proposed degree plan of study. Grade will either be S or U.

**CAH 389. Academic and Career Exploration** (3). This course leads BA, Liberal Studies students in the development of a career/graduate school plan. Students will investigate the work world and/or graduate schools in terms of their academic and personal career goals.

**CAH 489. Senior Portfolio Capstone** (1). End-of-program assessment, preparation of comprehensive plan of study report, and descriptive portfolio of project. By instructor permission.

### Chemistry Courses

**CHEM 101. Chemistry and Planet Earth** (5). Introduction to chemical principles and applications for non-scientists, with a focus on the interaction of human beings with the natural environment, 4 hours lecture and 2 hours lab weekly. NS-Applications Natural Science (L). Course will be offered every year (Fall, Spring, Summer). NS-Applications Natural Science (L). K8 - Science & Technology

**CHEM 106. Chemistry Inquiry** (5). Inquiry-based investigations into chemistry to help students develop understanding of fundamental concepts and the process of scientific investigation. This course is designed for prospective elementary teachers but

is open to all students. Course will not have an established scheduling pattern.

**CHEM 110. Introduction to Scientific Problem Solving Used in Modern Chemistry** (1). Intended for students who have limited or no experience with scientific problem solving as it relates to modern chemistry. Students who have not taken high school chemistry or physics are strongly encouraged to take this course. A scientific calculator is required for this course. Course will be offered every year (Fall, Winter, Spring, Summer).

**CHEM 111. Introduction to Chemistry** (4). Chemical principles of the compositions, structure, properties, and changes of matter. Designed for students in certain health science programs. Four lectures weekly. Combined with CHEM 111LAB satisfies Physical and Natural World, Ways of Knowing pathway. NS-Fund Disc Phys and Biological Sciences. Course will be offered every year (Fall, Winter, Spring). NS-Fund Disc Phys and Biological Sciences. K7 - Physical & Natural World

**CHEM 111LAB. Introductory Chemistry Laboratory** (1). Introduction to basic chemistry techniques. Two hours laboratory weekly. Combined with CHEM 111 lecture satisfies Physical and Natural World, Ways of Knowing. NS-Fund Disc Phys and Biological Sciences (L). Course will be offered every year (Fall, Winter, Spring and Summer). Co- or prerequisite: CHEM 111. NS-Fund Disc Phys and Biological Sciences (L). K7 - Physical & Natural World

**CHEM 112. Introduction to Organic Chemistry** (4). Structure, properties, nomenclature and reactions of carbon compounds. Course will be offered every year (Winter and Spring). Prerequisites: CHEM 111 or CHEM 183 with a grade of C- or higher.

**CHEM 112LAB. Introduction to Organic Chemistry Laboratory** (1). Basic techniques in organic chemistry. Two hours of laboratory weekly. Course will be offered every year (Winter and Spring). Prerequisites: CHEM 111LAB or CHEM 183LAB or CHEM 193LAB with a grade of C- or higher. Pre- or Corequisite: CHEM 112.

**CHEM 113. Introduction to Biochemistry** (4). Structure, properties, and metabolism of biomolecules. Course will be offered every year (Spring). Prerequisite: CHEM 112 with a grade of C- or higher. K7 - Physical & Natural World



**CHEM 113LAB. Introduction to****Biochemistry Laboratory (1).**

Supports CHEM 113 lecture. Two hours of laboratory weekly. Course will be offered every year (Spring). Co- or prerequisite: CHEM 113. Prerequisite: CHEM 112LAB with a grade of C- or higher. K7 - Physical & Natural World

**CHEM 181. General Chemistry I (4).**

This course introduces chemistry concepts such as atoms and molecules, stoichiometry, solution chemistry, thermochemistry, electronic structure of the atom and periodicity, and chemical bonding. NS-Fund Disc Phys and Biological Sciences. Course will be offered every year (Fall, Winter and Spring). Prerequisites: [Satisfactory score on math placement exam or completion of MATH 100C or higher\*] or [completion of CHEM 110 with a passing grade (CR)] or [CHEM 111 with a grade of C- or higher]. High school chemistry is strongly encouraged. NS-Fund Disc Phys and Biological Sciences. K7 - Physical & Natural World

**CHEM 181LAB. General Chemistry**

**Laboratory I (1).** This laboratory supports hands-on, inquiry-based approaches to exploring topics presented in CHEM 181. Three hours of laboratory weekly. NS-Fund Disc Phys and Biological Sciences (L). Course will be offered every year (Fall, Winter and Spring). Co- or prerequisite: CHEM 181. NS-Fund Disc Phys and Biological Sciences (L). K7 - Physical & Natural World

**CHEM 182. General Chemistry II (4).**

Builds upon concepts from CHEM 181. Introduces molecular geometry and bonding theories, gas laws, solution properties and chemical kinetics. Students planning on taking CHEM 183 are advised that they must be qualified for MATH 154 before enrolling in CHEM 183. Course will be offered every year (Winter and Spring). Prerequisite: Qualify for MATH 154 or higher on a math placement exam, or completion of MATH 153 with a C- or better, or completion of a course higher than MATH 153, and completion of CHEM 181 with a C- or better.

**CHEM 182LAB. General Chemistry**

**Laboratory II (1).** Integrates concepts learned in CHEM 181 and supports hands-on, inquiry-based approaches to topics presented in CHEM 182. Three hours of laboratory weekly. Course will be offered every year (Winter and Spring). Co- or prerequisite: CHEM 182. Prerequisite: CHEM 181LAB with a grade of C- or higher.

**CHEM 183. General Chemistry III (4).**

Builds upon chemical concepts from CHEM 181 and CHEM 182. Introduces chemical equilibria, acid-base chemistry, solubility, entropy, free energy, and electrochemistry. Course will be offered every year (Fall and Spring). Prerequisite: CHEM 182 with a C- or better.

**CHEM 183LAB. General Chemistry**

**Laboratory III (1).** Integrates concepts introduced in CHEM 181 and CHEM 182 and supports hands-on, inquiry-based approaches to topics in CHEM 183. Three hours of laboratory weekly. Course will be offered every year (Fall and Spring). Co- or prerequisite: CHEM 183. Prerequisite: CHEM 182LAB with a grade of C- or higher.

**CHEM 193LAB. General Chemistry**

**III Honors Laboratory (1).** As a more advanced version of CHEM 183LAB, this course integrates concepts introduced in CHEM 181 and CHEM 182 and utilizes hands-on, inquiry-based approaches to investigate topics in CHEM 183. Students will work closely with one or more faculty on research-type projects. Course will be offered every year (Spring).

Prerequisites: CHEM 182LAB with a grade of B or higher and permission of instructor. Co-requisite: CHEM 183.

**CHEM 295. Research (1-6).**

By permission. May be repeated for credit. Course will be offered every year (Fall, Winter, and Spring).

**CHEM 296. Individual Study (1-6).****CHEM 298. Special Topics (1-6).****CHEM 299. Seminar (1-5).** May be repeated if subject is different.**CHEM 332. Quantitative Analysis (3).**

Principles of quantitative analytical chemistry, including statistical treatment of data, complex equilibria, activity, and volumetric, gravimetric, and instrumental analysis. Course will be offered every year (Fall).

Prerequisites: CHEM 183 and either CHEM 183LAB or CHEM 193LAB with a grade of C- or higher in each.

Co-requisite: CHEM 332LAB.

**CHEM 332LAB. Quantitative Analysis**

**Laboratory (2).** Accompanying laboratory to quantitative chemistry including statistical treatment of data and volumetric, gravimetric, and instrumental analysis. Six hours of laboratory weekly. Course will be offered every year (Fall). Prerequisites: CHEM 183 and either CHEM 183LAB or CHEM 193LAB with a grade of C- or higher in each. Co-requisite: CHEM 332.

**CHEM 345. Environmental Chemistry**

(5). Introduction to aquatic, atmospheric, and soil chemistry.

Chemical analysis of environmental samples collected on class field trips.

Three lectures and six laboratory hours per week. Course will be offered on even numbered years (Spring).

Prerequisite: CHEM 183 with a grade of C- or higher.

**CHEM 350. Inorganic Chemistry (3).**

Atomic structure, properties, and chemical bonding. Includes a discussion of molecular orbital theory, symmetry, group theory, and bonding in solids. Course will be offered every year (Winter). Prerequisites: CHEM 183 and either PHYS 113 or PHYS 123 or PHYS 183 with a grade of C- or higher in each.

**CHEM 361. Organic Chemistry I (3).**

An introduction to organic chemistry for students majoring in the sciences or preparing for health related careers. Organic structures, nomenclature, spectroscopy, and chemistry of alkanes, alkenes, and alkynes. Course will be offered every year (Fall and Winter). Co- or prerequisite: CHEM 183 with a grade of C- or higher.

**CHEM 361LAB. Organic Chemistry**

**Laboratory I (2).** An introduction to organic chemistry laboratory techniques including melting point determination, recrystallization, extraction, distillation, chromatography, and IR and NMR spectroscopy. Six hours of laboratory weekly. Course will be offered every year (Fall and Winter). Co- or prerequisite: CHEM 361.

**CHEM 362. Organic Chemistry II (3).**

Part two of the organic chemistry series. Stereochemistry, nucleophilic substitution and elimination, chemistry of alcohols, ethers, and an introduction to the chemistry of the carbonyl group. Course will be offered every year (Winter and Spring). Prerequisite: CHEM 361 with a grade of C- or higher.

**CHEM 363. Organic Chemistry III (3).**

Part three of the organic chemistry series. Carbonyl alpha-substitutions and condensations and the chemistry of carboxylic acid derivatives, benzene, amines, and carbohydrates. Course will be offered every year (Spring).

Prerequisites: CHEM 362 and CHEM 361LAB with a grade of C- or higher.

**CHEM 363LAB. Organic Chemistry**

**Laboratory II (2).** Application of basic laboratory techniques learned in CHEM 361LAB to more advanced functional group transformations. Six hours of laboratory weekly. Course will be

offered every year (Spring). Co- or prerequisite: CHEM 363. Prerequisite: CHEM 361LAB with a grade of C- or higher.

**CHEM 381. Physical Chemistry (Thermodynamics) (5).**

Thermodynamics and chemical equilibrium. Phase diagrams. Electrochemistry. Course will be offered every year (Fall). Prerequisites: (CHEM 183 and either CHEM 183LAB or CHEM 193LAB), (MATH 272), and (either PHYS 113 or PHYS 123 or PHYS 183) with a grade of C- or higher in each.

**CHEM 382. Physical Chemistry (Quantum Chemistry) (3).**

Introduction to quantum mechanics as applied to chemical systems. The electronic structure of atoms and molecules. Course will be offered every year (Winter). Prerequisite: CHEM 381 with a grade of C- or higher.

**CHEM 382LAB. Integrated**

**Physical/Inorganic Laboratory I (2).** Synthesis of inorganic compounds and their characterizations using physical chemistry methods, with additional experiments in thermodynamics, quantum mechanics, and kinetics. Six hours of laboratory weekly. Course will be offered every year (Winter). Co- or prerequisite: CHEM 382.

**CHEM 383. Physical Chemistry (Quantum, Statistical Mechanics) III (4).**

Electronic structures of atoms and molecules. Introduction to statistical thermodynamics. Course will be offered every year (Spring). Prerequisite: CHEM 382 with a grade of C- or higher.

**CHEM 383LAB. Integrated**

**Physical/Inorganic Laboratory II (1).** Synthesis of inorganic compounds and their characterization using physical chemistry methods, with additional experiments in thermodynamics, quantum mechanics, and kinetics. Three hours of laboratory weekly. Course will be offered every year (Spring). Co- or prerequisite: CHEM 383. Prerequisite: CHEM 382LAB with a grade of C- or higher.

**CHEM 395. Research (1-6).** By permission. May be repeated for credit.

**CHEM 396. Individual Study (1-6).** May be repeated if subject is different.

**CHEM 397. Honors (1-12).** Prerequisite: admission to department honors program.

**CHEM 398. Special Topics (1-6).** May be repeated if subject is different.

**CHEM 399. Seminar (1-5).** May be repeated if subject is different.

**CHEM 431. Biochemistry I (3).**

Chemical structure, physical properties, nomenclature and function of proteins, carbohydrates, lipids, nucleic acids, and biological membranes. Protein function includes membrane transporters and enzyme kinetics, inhibition, and regulation. Course will be offered every year (Fall). Prerequisite: CHEM 362 with a grade of C- or higher.

**CHEM 431LAB. Biochemistry**

**Laboratory (2).** Quantitative and qualitative biochemical techniques applied to proteins and nucleic acids. Six hours of laboratory weekly. Course will be offered every year (Fall and Winter). Co- or prerequisite: CHEM 431. Prerequisite: CHEM 361LAB with a grade of C- or higher.

**CHEM 432. Biochemistry II (3).**

Metabolism of carbohydrates, lipids, amino acids, and nucleotides, including metabolic regulation and thermodynamics. Course will be offered every year (Winter). Prerequisite: CHEM 431 with a grade of C- or higher.

**CHEM 433. Biochemistry III (3).**

In depth coverage of the central dogma of biochemistry, including DNA replication and repair and transcriptional and translational aspects of genetic regulation, with emphasis on common biochemical techniques and data analysis. Course will be offered every year (Spring). Prerequisite: CHEM 431 with a grade of C- or higher.

**CHEM 433LAB. Biochemistry Lab II**

**(2).** Molecular cloning of a gene into a plasmid vector, followed by expression and purification of the encoded protein using modern chromatography techniques. Downstream analysis and experimentation is then conducted on the purified protein. Six hours of laboratory weekly. Course will be offered every year (Spring). Prerequisite: CHEM 431LAB. Co- or prerequisite: CHEM 433.

**CHEM 452. Instrumental Analysis**

**Lecture (3).** Theory and functional aspects of modern analytical instrumentation. Emphasis is on components of instruments, limitations of measurements, and applicability of techniques to specific analytical problems. Course will be offered every year (Winter). Prerequisites: CHEM 332 and CHEM 332LAB with a grade of C- or higher. Co-requisite: CHEM 452LAB.

**CHEM 452LAB. Instrumental**

**Analysis Laboratory (2).** Accompanying laboratory to

Instrumental Analysis Lecture providing hands-on experience with a number of instrumental methods used in modern chemical research, analysis, and process control. Six hours of laboratory weekly. Course will be offered every year (Winter). Co- or prerequisite: CHEM 452 with a grade of C- or higher.

**CHEM 473. Transition Metal**

**Chemistry (3).** A survey of the structure, spectroscopy, and characterization of transition metal compounds, and the electronic structures of transition metals and lanthanides. Course will be offered on odd numbered years (Spring). Prerequisites: CHEM 350 and 382 with a grade of C- or higher in each.

**CHEM 488. Colloquium (1).**

Students prepare a poster presentation on a current topic in chemistry. May be from a research experience or from a review of the chemistry literature. Course will be offered every year (Fall, Winter and Spring). Prerequisite: senior standing. CE - Culminating Experience

**CHEM 490. Cooperative Education (1-**

**12).** An individualized contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. Course will not have an established scheduling pattern. Prerequisite: prior approval.

**CHEM 491. Workshop (1-6).** May be repeated for credit.

**CHEM 492. Laboratory Experience in Teaching Chemistry (2).**

Integrates both chemistry and education in order to guide teaching assistants into hands-on, inquiry-based approaches to learning in the laboratory environment. May be repeated for credit. Grade will be either S or U. Additional time to be assigned. Course will be offered every year (Fall, Winter and Spring).

**CHEM 495. Senior Research (1-6).** By permission. May be repeated for credit.

**CHEM 496. Individual Study (1-6).**

**CHEM 497. Honors (1-12).**

Prerequisite: admission to department honors program.

**CHEM 498. Special Topics (1-6).**

**CHEM 499. Seminar (1-5).**

**Chinese Courses**

**CHIN 151. First-year Chinese (5).**

Courses must be taken in sequence. Conversational approach with intensive oral-aural drill. A firm foundation in

- basic structural principles of the language is necessary.
- CHIN 152. First-year Chinese (5).** Courses must be taken in sequence. Conversational approach with intensive oral-aural drill. A firm foundation in basic structural principles of the language is necessary. Prerequisite: CHIN 151.
- CHIN 153. First-year Chinese (5).** Courses must be taken in sequence. Conversational approach with intensive oral-aural drill. A firm foundation in basic structural principles of the language is necessary. Prerequisite: CHIN 152.
- CHIN 251. Second-year Chinese (5).** Graduated readings in modern Chinese writings with discussion conducted in Chinese. Courses must be taken in sequence.
- CHIN 252. Second-year Chinese (5).** Graduated readings in modern Chinese writings with discussion conducted in Chinese. Courses must be taken in sequence. Prerequisite: CHIN 251.
- CHIN 253. Second-year Chinese (5).** Graduated readings in modern Chinese writings with discussion conducted in Chinese. Courses must be taken in sequence. Prerequisite: CHIN 252.
- CHIN 261. Heritage Chinese Through Film and Media (5).** Develop communicative skills and cultural literacy using Chinese film and popular media as a basis. For heritage speakers. CHIN 261 and CHIN 251 are equivalent courses; students may not receive credit for both.
- CHIN 298. Special Topics (1-6).**
- CHIN 299. Seminar (1-5).** May be repeated if subject is different.
- CHIN 301. Chinese Literature in Translation (4).** A survey of Chinese literature in translation. CHIN 301 and AST 301 are equivalent courses; students may not receive credit for both.
- CHIN 396. Individual Study (1-6).** May be repeated if subject is different.
- CHIN 397. Honors (1-12).** Prerequisite: admission to department honors program.
- CHIN 398. Special Topics (1-6).**
- CHIN 399. Seminar (1-6).** May be repeated if subject is different.
- CHIN 461. Chinese Cinema (4).** An examination of the history, aesthetic achievements, major directors and themes, and cultural explorations of Chinese cinema. Includes films from mainland China, Taiwan, and Hong Kong. Prerequisite: FILM 250.
- CHIN 496. Individual Study (1-6).**
- CHIN 497. Honors (1-12).** Prerequisite: admission to department honors program.
- CHIN 498. Special Topics (1-6).**
- CHIN 499. Seminar (1-5).** May be repeated if subject is different.
- Construction Management Courses**
- CMGT 101. Construction and the Built Environment (4).** Introduction to construction and the built environment focusing on construction history, categories, materials and parties involved. Career opportunities and professional ethics in the construction industry are also discussed. Course will be offered every year (Ellensburg Winter, Spring).
- CMGT 201. Computer Applications in Construction (3).** Introduction to the use of innovative technologies, computer-based management and construction principles to manage construction projects. Two hours of lecture and two hours of lab per week. Permission by instructor. Course will be offered every year (Fall). Prerequisite: CMGT 101.
- CMGT 245. Light Commercial Construction (5).** Construction of building foundations, commercial carpentry, and enclosing of wood frame structures. Students participate in construction of a building. Prerequisite: CMGT 265.
- CMGT 265. Construction Documents (3).** Introduction to construction documents used for planning and management of construction processes. Extensive work with reading, interpreting and analyzing of construction plans, technical specifications, conditions, agreements, proposal documents and other related documents. Permission by instructor. Prerequisites: CMGT 201 and ETSC 161. Course will be offered every year (Fall and Winter).
- CMGT 267. Plane Surveying (3).** General surveying theory and practice pertaining to distance, elevation, and angle measurement. Includes traverse calculations and an emphasis on construction applications. Prerequisites: MATH 154 and CMGT 265. Co-requisites: CMGT 267LAB or CMGT 267LABHC.
- CMGT 267LAB. Plane Surveying Field Session (1).** One surveying field session weekly. Co- or prerequisite: CMGT 267.
- CMGT 267LABHC. Heavy Civil Highway Field Session (1).** One surveying field session weekly. Co- or prerequisite: CMGT 267.
- CMGT 298. Special Topics (1-6).** May be repeated if subject is different.
- CMGT 299. Seminar (1-5).** May be repeated if subject is different.
- CMGT 320. Electrical Systems (3).** Design and specification of building electrical systems including circuit principles, power distribution, and low voltage controls. Two hours of lecture and two hours of lab per week. By permission of instructor. Course will be offered every year (Winter). Prerequisite: CMGT 265.
- CMGT 343. Construction Estimating I (4).** Quantity surveying and bid preparation for general construction. Use of cost handbooks, specifications, and bid documents. Three hours of lecture and one hour of practice. Permission by instructor. Course will be offered every year (Fall). Prerequisite: CMGT 265.
- CMGT 343LAB. Construction Estimating I Laboratory (1).** One estimating computer laboratory session weekly. Prerequisite: CMGT 343.
- CMGT 344. Construction Estimating II (4).** An advanced course to build on estimating skills, determine resources, cost requirements and bid preparation for general construction. Three hours lecture and two hours lab. Permission by instructor. Course will be offered every year (Winter). Prerequisite: CMGT 343 and CMGT 346.
- CMGT 344LAB. Construction Estimating II Laboratory (1).** One estimating computer laboratory session weekly. Prerequisite: CMGT 344.
- CMGT 345. Heavy Civil Estimating II (4).** Advanced estimating techniques, resource selection, cost requirements and bid preparation for heavy civil and highway construction. Three hours lecture and two hours lab. Permission by instructor. Course will be offered every year (Winter). Prerequisites: CMGT 343 and CMGT 347.
- CMGT 345LAB. Heavy Civil Estimating II Laboratory (1).** One weekly estimating laboratory session. Co- or prerequisite: CMGT 345.
- CMGT 346. Construction Methods and Materials (4).** Materials commonly used and the various methods employed in construction. Introduction to materials testing. Prerequisite: CMGT 265.
- CMGT 347. Heavy Civil Methods and Materials (4).** Materials commonly used and the various methods employed with an emphasis on heavy, civil, marine, and highway construction. Prerequisite: CMGT 265.

**CMGT 396. Individual Study** (1-6).

May be repeated if subject is different.

**CMGT 397. Honors** (1-12).

Prerequisite: admission to department honors program.

**CMGT 398. Special Topics** (1-6). May

be repeated if subject is different.

**CMGT 399. Seminar** (1-5). May be

repeated if subject is different.

**CMGT 440. Temporary Structures** (4).

An introduction to the materials, methods, and techniques associated with temporary construction facilities such as false work, scaffolding, formwork, and cofferdams.

Prerequisites: IET 312 and either CMGT 346, or CMGT 347.

**CMGT 441. Wood and Steel**

**Construction** (4). A comprehensive study of the materials, design, and erection of wood and steel structures.

Prerequisites: IET 312 and CMGT 346.

**CMGT 442. Building Mechanical**

**Systems** (3). An introduction to building service systems. Study the interfaces and specifications of mechanical and plumbing systems in building construction. Topics include plumbing, fire suppression, storm drainage, heat gain/loss, heating and cooling systems. Permission by instructor. Course will be offered every year (Winter). Prerequisite: CMGT 265.

**CMGT 443. Heavy Civil Utilities** (3).

An introduction to the materials, equipment, methods, and safety requirements for the construction of underground and above ground utilities including water, sewer, natural gas, and electrical systems. Prerequisites: CMGT 346 or CMGT 347.

**CMGT 444. Codes, Contracts, and**

**Specifications** (4). Construction contracts and liability, bonding, arbitration, specifications, and building codes administration. Prerequisites: BUS 241, ENG 102, and CMGT 346 or CMGT 347.

**CMGT 445. Heavy Civil Contract Law**

(4). Construction contracts, liability, bonding, arbitration, and heavy civil highway specifications. Prerequisites: BUS 241, ENG 102, and CMGT 346 or CMGT 347.

**CMGT 447. Construction Planning, Scheduling, and Control** (4). Project

scheduling and evaluation using network scheduling techniques, including critical path scheduling. Includes short interval scheduling and cash flow forecasting. Three hours of lecture and one hour of practice. Permission by instructor. Course will be offered every year (Spring).

Prerequisite: CMGT 344 or CMGT 345.

**CMGT 450. Soils and Foundations** (4).

An introduction to soil mechanics and analysis and design of both shallow and deep foundations. Three hours lecture and two hours of lab. Permission by instructor. Course will be offered every year (Fall). Prerequisites: ETSC 312 and either CMGT 346 or CMGT 347.

**CMGT 452. LEED in Sustainable Construction** (4). The process using LEED as a measurement for sustainable construction. The course covers benefits and mechanisms of green building, cost analyses, and professional problem solving. CMGT 452 and ETSC 552 are equivalent courses; students may not receive credit for both. Course will be offered every year (Spring). Prerequisite: CMGT 265.

**CMGT 455. Principles of Construction Management** (4). Fundamental tools of construction management. Topics include contract management, scheduling, cost estimating, cost control, conflict management, negotiating, team building, quality control, safety, and a capstone project. Prerequisites: CMGT 447 and either CMGT 444 or CMGT 445.

**CMGT 456. Principles of Heavy Civil Construction Management** (4). Fundamental tools of heavy civil highway construction management.

Topics include contract management, scheduling, cost estimating, cost control, conflict management, negotiating, team building, quality control, safety, and a capstone project. Prerequisites: CMGT 447 and CMGT 344 or CMGT 345.

**CMGT 460. Concrete Construction** (4).

Manufacturing and testing of concrete, field practices, and formwork. Two hours lecture and two hours laboratory per week. Prerequisites: IET 312, CMGT 346 or CMGT 347, and CMGT 440 or CMGT 441.

**CMGT 461. Pavement Design and**

**Construction** (4). An introduction to flexible and rigid pavement design and construction including pavement types, materials, construction methods, and maintenance concerns. Prerequisites: IET 312, and either CMGT 346 or CMGT 347.

**CMGT 481. Construction**

**Management Capstone** (4). Students work in teams to prepare a cost estimate, schedule, site mobilization plan, and safety plan and present to an industry representative for a negotiated construction project. Three hours lecture and two hours of lab. Permission by instructor. Course will

be offered every year (Spring).

Prerequisites: CMGT 346 or CMGT 347 and CMGT 455 or CMGT 456. CE - Culminating Experience

**CMGT 485. Construction Accounting, Finance, and Contemporary Topics**

(4). The process using LEED as a measurement for sustainable construction. The course covers benefits and mechanisms of green building, cost analyses, and professional problem solving. CMGT 452 and ETSC 552 are equivalent courses; students may not receive credit for both. Course will be offered every year (Spring). Prerequisite: CMGT 265.

**CMGT 488. Professional Certification** (1). A comprehensive review of professional construction management principles and technical skills in preparation for a national certification examination. Grade will either be S or U. Prerequisites: CMGT 444 or CMGT 445.

**CMGT 495. Construction Management Competition Preparation**

(1). Students work in teams to prepare for construction management competition. Teams develop cost, schedule, site layout, and safety plans for a major construction project. Students will compete in the Associated Schools of Construction competition in Reno, Nevada. May be repeated for credit. Grade will either be S or U. Prerequisite: CMGT 344.

**CMGT 495A. Construction Management Competition Preparation - Fall**

(2). Students work in teams to prepare for the Associated Schools of Construction (ASC) competition. Teams develop cost, schedule, site layout, and safety plans for a major construction project. Students will compete in the ASC competition in Reno, Nevada. One hour lecture and two hours lab per week. Permission by instructor. Course will be offered every year (Fall). Prerequisite: CMGT 344 or CMGT 345. CE - Culminating Experience

**CMGT 495B. Construction Management Competition Preparation - Winter**

(2). Students work in teams to prepare for the Associated Schools of Construction (ASC) competition. Teams develop cost, schedule, site layout, and safety plans for a major construction project. Students will compete in the ASC competition in Reno, Nevada. One hour lecture and two hours lab per week. Permission by instructor. Course will be offered every year (Winter). Prerequisite: CMGT 495A. CE - Culminating Experience

- CMGT 496. Individual Study** (1-6). May be repeated if subject is different.
- CMGT 497. Honors** (1-12). Prerequisite: admission to department honors program.
- CMGT 498. Special Topics** (1-6). May be repeated if subject is different.
- CMGT 499. Seminar** (1-5).

### Communication Courses

- COM 201. Introduction to Mass Communication** (5). This course critically reviews media from historical, societal, cultural and political viewpoints. It examines the impact of mass media on consumers as individuals and on society, and also improves media literacy.
- COM 202. The First Amendment: Rights and Responsibilities** (5). This class explores the First Amendment freedoms as the foundation of a free, tolerant and democratic society. The communicative rights and responsibilities of citizens in a democracy governed by such an amendment are also examined. SB-Perspectives on Cultures and Experiences of U.S. Course will be offered every year (Fall, Winter, Spring, Summer). SB-Perspectives on Cultures and Experiences of U.S. K2 - Community, Culture, & Citizenship
- COM 204. Radio Studies** (2). Fundamental survey of the Radio Broadcast industry. Emphasis on understanding cultural history, corporate hierarchy, industry standards, economic conditions and types of audiences. Course will be offered every year (Fall). Prerequisites: COM 201 and COM 202 and FILM 215 or instructor permission.
- COM 205. Radio Production Skills** (4). A combined lecture and skills development course that teaches students comprehensive skills in radio production. Course will be offered every year (Winter). Prerequisites: COM 201 and COM 202 and FILM 215 or instructor permission. Co-requisite: COM 304.
- COM 207. Introduction to Human Communication** (5). Introductory course designed to allow students to develop effective communication skills across a variety of human communication contexts including public speaking, interpersonal relationships, and professional settings.
- COM 208. Introduction to Public Relations Writing** (4). Integrated approach to media writing emphasizing public relations writing styles.
- COM 222. Media Literacy in the Digital Age** (5). This course enables students to be discerning, perceptive, ethical and responsible consumers and creators of the mass media that pervade their lives in the digital age - whether that be news, entertainment, advertising or social media. Course will be offered every year (Fall, Winter, Spring, Summer). K6 - Individual & Society
- COM 226. Introduction to Writing and Reporting for Digital Journalism** (5). Students will receive an introduction to writing and reporting of journalistic stories for print and online media. Pre or co-requisite: ENG 220 or ENG 320. Students who take COM 226 must have passed or be simultaneously taking either ENG 220 or ENG 320.
- COM 251. Small Group Dynamics** (4). Analysis and practice of communication principles affecting effectiveness of small group discussion. Includes theory and practice of leadership and problem solving in small groups. Prerequisite: COM 207.
- COM 253. Interpersonal Communication** (4). Investigation of theory, research, and practice of the role of communication in effective interpersonal relationships. Prerequisite: COM 207.
- COM 270. Introduction to Public Relations** (4). The basic concepts of public relations; the tools and media used in communicating with the variety of publics.
- COM 280. Advertising Fundamentals** (4). An introductory course that introduces the principles of advertising, including: ethics, social issues, professional practice, and the application of advertising principles to problems of business, non-profit, and political issues. Prerequisite: COM 201.
- COM 290. Cooperative Field Experience** (1-6). Internship designed to explore career opportunities in the major. Open to all students. May be repeated for credit. Grade will either S or U.
- COM 296. Individual Study** (1-6).
- COM 298. Special Topics** (1-6).
- COM 299. Seminar** (1-5). May be repeated if subject is different.
- COM 300. Media Research** (5). Development, understanding and application of media research theories, methodologies and techniques. Prerequisite: admission to either the communication studies, public relations, film, or journalism major.
- COM 301. Public Speaking for Business and Organizations** (2). The course develops student knowledge and basic oral communication skills with an emphasis on presentation skills focusing on organization, delivery, and forms of support as applied in different professional contexts.
- COM 302. Intercultural Communication** (4). The objective of this course is to give the participants the skills and understanding necessary to improve communication with peoples of other nations and cultures. SB-Perspectives on World Cultures (W). Prerequisite: sophomore standing or above. SB-Perspectives on World Cultures (W). K4 - Global Dynamics
- COM 303. Online and Social Media Strategies** (5). Students will learn how to create online websites and use social media to develop their "brand" online. They will use that "brand" to engage with appropriate audiences and create visibility for their work, skills or clients. Course will be offered every year (Fall, Winter, Spring, Summer).
- COM 304. Radio Programming Application** (5). A rotational laboratory focusing on the individual methods, principals, and best practices of Radio Broadcasting. Students will learn and execute real-life Radio Broadcast programs of various formats on KCWU-FM, taking on a rotation of responsibilities. May be repeated up to 15 credits. Course will be offered every year (Fall, Winter and Spring). Prerequisites: COM 201 and COM 202 and FILM 215 or instructor permission.
- COM 305. Advertising Copywriting** (4). Students will learn to write for the advertising industry, including a study of effective advertising copy, and the methods of creating project proposals and project assessments. Prerequisite: COM 280.
- COM 308. Public Affairs Reporting and Writing** (5). Students will learn more advanced methods of writing and reporting of journalistic stories for print and online media, with a focus on how to cover public affairs news beats. Course will be offered every year (Fall). Prerequisites: COM 226, and admission to the communication department majors.
- COM 309. Writing Broadcast Advertising** (4). Principles and techniques used in writing effective radio and television commercials, public service announcements, and promotional copy. A writing intensive course. Prerequisite: admission to either the communication studies, public relations, film, or journalism major.
- COM 310. Writing and Reporting for Broadcast Journalism** (5). Writing, news gathering, and reporting for the electronic media. Includes on-the-scene coverage and interviewing.

Prerequisite: admission to either the communication studies, public relations, film, or journalism major.

**COM 312. Introduction to Non-Profit Leadership** (4). This course introduces key elements in nonprofit organization leadership, and makes brief reviews of various nonprofit management topics, such as strategic missions, board development, leadership roles, fundraising, staffing, performance evaluation and accountability, nonprofit marketing and legal issues.

Prerequisite: admission to the nonprofit major, minor or certificate, public relations major, comm. major or permission of instructor.

**COM 315. Studies in Communication** (1). Specialized topics in communication providing depth of knowledge, expand theoretical exposure, and/or practical communication skills. By permission. May be repeated for credit under a different sub-topic. Grade will either be S or U.

**COM 321. Visual Storytelling** (5). The methods used to communicate journalistic stories effectively and ethically using still photography and video. Course will be offered every year (Spring). Prerequisite: admission to the digital journalism major or instructor permission.

**COM 322. Introduction to Studio Production** (4). A combined lecture and skills development course that introduces students to the production elements of a television show with emphasis on the function and operation of studio lighting, audio, and cameras. Prerequisites: film or broadcast journalism major status. Co-requisite: COM 322LAB.

**COM 322LAB. Introduction to Studio Production Lab** (1). Introduction to basic television studio production work-flow and production equipment certification. Four lab sessions held over two successive weekends. Course will be offered every year (Fall and Winter). Prerequisites: journalism or film major status or instructor permission.

**COM 333. Communication Ethics** (4). The study of ethical issues in communication. Prerequisite: COM 202 and admission to major.

**COM 340. Public Communication: Theory and Practice (Put on reserve 9/16/18)** (4). Survey of rhetorical theory and practice from ancient to modern times. Emphasis on rhetorical application to public speaking settings. (Put on reserve 9/16/18, will go inactive 8/24/21) Prerequisite: students

must be admitted to communication studies, public relations, film or journalism major in order to register for this course.

**COM 341. Introduction to Field Production** (4). A combined lecture and skills development course that introduces students to the principles and techniques of location production and visual storytelling for narrative and documentary film. Prerequisites: film or broadcast journalism major status or instructor. Co-requisite: COM 341LAB.

**COM 341LAB. Introduction to Field Production Lab** (1). Introduction to cameras, lighting, audio and grip equipment used in field production, set etiquette and production work flow including post-production and exporting the finished product. One two-hour laboratory session weekly. Permission by instructor. Course will be offered every year (Fall and Spring). Prerequisite: journalism or film major status or instructor permission.

**COM 342. Broadcast News Producing** (4). Principles and techniques used in producing newscasts for broadcast news, with emphasis on television news. Prerequisite: Com 310 and admission to the digital journalism major.

**COM 345. Business and Professional Speaking** (4). Oral communication in career and professional settings with focus on public presentations, briefings, and persuasion.

**COM 347. Copy Editing** (4). Students will learn the editing process, how to edit for mechanics and content, including Associated Press style, as well as how to write headlines and cutlines. Prerequisites: admission to the major (i.e. com studies, public relations, film, journalism, English writing specialization), or professional writing certificate program or permission of the instructor.

**COM 348. Publication Design** (4). Publication design, the theories of graphics, headlines, and text. Management of the design process. Prerequisite: admission to either the English writing specialization, communication studies, public relations, film, or journalism major.

**COM 350. Persuasion and Culture** (4). Role of persuasion in society, elements of human motivation, techniques, and appeals of the persuader. Prerequisite: admission to either the communication studies, public relations, film, or journalism major.

**COM 351. Visual Anthropology** (4). Provides methodological, theoretical,

and practical background to produce and evaluate imagery in films and video; guidelines and practice of image presentation/ manipulation in anthropological and social contexts. COM 351 and ANTH 351 are cross-listed courses; students may not receive credit for both. Prerequisites: ANTH 130 or ART 225 or COM 321 or COM 330.

**COM 362. Conflict and Communication** (4). Communication and decision-making strategies for conflict resolution. Negotiating agreement and mediating differences in interpersonal and organizational settings. Prerequisite: admission to either the communication studies, public relations, film, or journalism major.

**COM 365. Organizational Communication** (4). Function, forms, and patterns of communication in organizations. Effects of organizational structures and dynamics on communication. Methods of evaluating communication policies and practices as an aid to organizational management. By permission.

Prerequisite: admission to either the communication studies, public relations, or journalism major or permission of instructor.

**COM 369. Mass Media and Society** (4). Relationship of the mass media to social institutions; including philosophy, responsibilities, regulations, and criticism. Variable topic, may be repeated for up to 8 credits under a different title. COM 369 and SOC 369 are cross-listed courses; students may not receive credit for both. May be repeated for credit.

**COM 370. Advanced Public Relations Writing** (4). Practical instruction in persuasive writing, news releases, broadcast material, speeches, institutional messages, newsletter articles, employer publications, backgrounders, features, and corporate profiles. Prerequisites: COM 208, and COM 270, and admission to the public relations major, or non-profit minor, or instructor permission.

**COM 371. Event Planning and Management** (4). This course offers a comprehensive study of the event management field. The course will enable participants to develop an innovative and multi-skilled approach to planning and coordination events. Topics include: legal issues in event planning and coordination promotions, design, catering, and other relevant topics. Prerequisite: admission to the communication or recreation and

- tourism major, minor or certificate program or permission of instructor.
- COM 375. Interviewing Principles and Techniques (4).** Examination of the basic principles and techniques of interviewing and their application in informational, employment, and persuasive/counseling contexts. Extensive in-class and community experience in interviewing provided. Prerequisites: COM 207 and admission to a communication major.
- COM 380. Non-Verbal Communication (4).** Fundamentals of nonverbal communication including codes, relationship to biology and culture, usage, and interrelationships. COM 380 and ANTH 380 are cross-listed courses; students may not receive credit for both.
- COM 382. History of American Journalism (4).** Survey of American journalism since colonial times; emphasis on understanding the evolution of journalism in the United States and the changing technological, social, and cultural trends affecting print and broadcast journalism. Prerequisites: COM 201 and admission to a communication major.
- COM 388. Advertising Planning (4).** Development of media strategies in advertising campaigns, including analysis of research, making useful media buys, integrating multiple objectives in the media message, and developing an assessment plan for effectiveness of message. Prerequisite: COM 280.
- COM 396. Individual Study (1-6).** May be repeated if subject is different.
- COM 397. Honors (1-12).** Prerequisite: admission to department honors program.
- COM 398. Special Topics (1-6).** May be repeated if subject is different.
- COM 399. Seminar 1-5.** May be repeated if subject is different.
- COM 401. Communication Theory (4).** Examination of human communication on an individual, interpersonal, and public level. Exploration of the relationship between communication theory and the practice of communication in various professional settings. Prerequisite: admission to either the communication studies, public relations, film, or journalism major.
- COM 402. Gender Communication (4).** Analysis of gender role development in females and males with focus on effective relationship development between sexes. Analysis and development of communication skills useful in cross-sex friendships, working relationships, and romantic/family relationships. Prerequisite: admission to either the communication studies, public relations, film, or journalism major.
- COM 403. Family Communication (4).** This course is designed to provide an overview of family dynamics and the processes that influence family communication and family functioning. FCL 403, COM 403 and FCL 503 are cross-listed courses; students may not receive credit for both.
- COM 404. Radio Ratings and Revenue (2).** This course explores the radio ratings and billing structure theory and practice, covering radio formats, radio markets, methodology and execution. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: COM 201 and COM 202 and FILM 215 and COM 304.
- COM 407. Advanced Intercultural Communication (4).** In-depth study of theory and practice of intercultural, cross-cultural, co-cultural and sub-cultural communication. Examination of the communication plays in these groups' interactions with each other and the relevant dominant culture. Prerequisites: COM 302, and admission to the communication studies major, communication minor, organizational communication minor, or instructor permission.
- COM 408. Feature Writing and Freelancing (5).** Students will learn the skills needed to conceive, report and write a wide range of feature stories for newspapers, magazines, and online publications, as well as how to succeed as a freelance writer. Prerequisite: COM 226.
- COM 409. Magazine Freelancing (4).** This entrepreneurial journalism course introduces students to the concepts of how to work as a freelancer, and to the basics of writing for magazines. Grade will be S or U. Prerequisite: COM 226 or instructor permission.
- COM 427. Grant Writing (4).** Students will learn how to evaluate nonprofit organizational needs, identify and research foundations and other funding organizations as potential sources of support, and grant proposal writing. Prerequisite: COM 312 and a nonprofit major, minor, or certificate, public relations major, communications major or by permission of instructor.
- COM 441. Documentary Production (4).** Detailed analysis of the creative and technical elements of documentary production. Emphasizes "hands-on" application of production techniques for documentary storytelling from concept through to final product. May be repeated for credit. Combined lecture/workshop. Prerequisites: COM 341 and admission to either the communication studies, public relations, film, or journalism major. COM 363 and ENG 363 is also a recommended prerequisite.
- COM 442. CentralNewsWatch Reporting (3).** Gather, write, and report news stories for newscasts to be aired on cable and to also be distributed online and through social media. May be repeated up to 12 credits. Prerequisite: COM 310.
- COM 446. Pulse (2).** Gather, write, report and design features and other articles for Pulse, the twice-quarterly student-written and student-run magazine. May be repeated for credit.
- COM 450. Advanced Public Speaking (4).** Preparation and delivery of specialized forms of public address. Writing speeches for others, advanced forms of style and support, and speeches for special occasions. Prerequisite: COM 340 (Put on reserve 9/16/18) or COM 345, and admission to the communications major.
- COM 451. Communication Analysis and Research (4).** Theory and practice in and study of methodology for gathering and analyzing data on human communication. Behavior identification, instrument types and uses, and assessment strategies. Prerequisites: COM 401 and admission to a communication major.
- COM 456. History and Practice of Convergent Gaming (Put on reserve 9/16/18) (4).** Course emphasizes the design and practice of role-playing games with a significant focus on computer-based Massive Multi-user Online Role Play Games (MMORPGs). The course will look at the economics, culture, art, design, and history of the rapidly growing Role Playing Games market. (Put on reserve 9/16/18, will go inactive 8/24/21) Prerequisite: admission to either the communication studies, public relations, film, or journalism major.
- COM 460. Communication Law (5).** Understanding legal issues for the communication professions including libel, slander, privacy, copyright, and First Amendment. Prerequisites: admission to either the liberal studies, communication studies, public relations, film, or journalism major.
- COM 462. CentralNewsWatch Management (3).** Administrative responsibilities for the production of CentralNewsWatch and CNW social

media. May be repeated up to 12 credits. Prerequisites: COM 310 and COM 442. Co-requisite: COM 342.

**COM 464. Nonfiction Multimedia Storytelling (5).** Students in the digital journalism writing and reporting specialization will hone their multimedia storytelling skills by producing a multi-platform package using information gathered through the COM 466 Investigative Journalism course. Prerequisites: COM 226 and COM 303 and COM 308 and COM 321 and admission to the digital journalism major with writing and reporting specialization. Co-requisites: COM 466 and COM 466LAB.

**COM 465. Communication and Organizational Leadership (4).** This course builds on COM 365 and provides advanced study of communication within organizations and the role of communication in leadership. The course is designed for senior students who will apply previous course information to advanced projects and study. Prerequisites: COM 365 and admission to the communications major.

**COM 466. Investigative Reporting and Writing (3).** This class teaches the skills needed to conceive, report and write investigative stories based on documents, data and interviews to be published in newspapers, magazines and online publications. Course will be offered every year (Spring). Prerequisites: COM 226 and COM 303 and COM 308 and COM 321 and admission to the communication department major status. Co-requisite: COM 466LAB.

**COM 466LAB. Investigative Reporting and Writing Lab (2).** A lab during which students learn software programs commonly used to analyze data in investigative reporting projects. Prerequisites: COM 226 and COM 308, or instructor permission.

**COM 468. Observer (1-3).** Reporting and writing, photo assignments and copy editing for the campus newspaper. May be repeated up to 12 credits.

**COM 469. Media and Cultural Studies (Put on reserve 9/16/16) (4).** Detailed examination of the media from the perspectives and insights of critical theoretical approaches ranging from the Frankfurt School, to cultural studies, to postmodern theory. Emphasis on unlocking the domains of meaning, value, politics, and ideology in the development of entertainment and information technology industries. COM 469 and COM 569 are layered courses; students may not receive credit

for both. (Put on Reserve 9/16/16. Last taught in 2013. Will go inactive 8/24/19.)

**COM 470. Public Relations Strategies (4).** Creation of a public relations program for an organization, agency, or institution. Prerequisites: COM 370 and admission to either the communication studies, film, public relations, or journalism major.

**COM 471. Corporate Communication in Latin America (4).** This course studies business communication in Latin America. It provides a Latin American perspective for business communication theories, strategies and practices. It also investigates the interaction of cultures from social, political, and legal viewpoints. Prerequisite: COM 370 and major status for public relations majors or instructor permission.

**COM 472. Global Public Relations (4).** This course studies public relations from a global perspective. It provides an international point of view for public relations theories, strategies, and practices. It also compares cultures and investigates the interaction of cultures from a cultural, social, political, and legal perspective. Grade will either be S or U. Prerequisites: COM 370 and admission to either the communication studies, film, public relations, or journalism major.

**COM 473. Crisis Communication Management (4).** Crisis communication management is concerned with all of an organization's stakeholders and the multifaceted way in which an organization communicates (customers, investors, employees, etc.). Prerequisites: admission to the communication studies or public relations major, or instructor permission.

**COM 475. Public Relations Management (4).** Application of theory and concepts to managing public relations and advertising accounts. Prerequisites: COM 470 and admission to public relations major, or instructor permission.

**COM 476. Corporate Communications and Investor Relations (4).** Professional financial communications course, focusing on SEC disclosure requirements and accurate/complete communications with shareholders and investors. Intended to strengthen business-related verbal/writing/presentation skills for careers in advertising, public relations, journalism, marketing/business

administration. Prerequisites: COM 208 and COM 270.

**COM 478. Advanced Newspaper Editing (3-6).** Administrative responsibilities for students serving as editors of the campus newspaper. Variable credit with a maximum of 6 credits. May be repeated for credit. Prerequisites: COM 208, COM 347, and COM 468.

**COM 481. Central Communication Agency (2).** Managing real clients for the student-run, full-service public relations and advertising communication firm. May be repeated up to 6 credits. Prerequisite: COM 208 or by permission of instructor.

**COM 483. Advanced Central Communication Agency (3).** Administrative responsibilities for teams within Central Communication Agency, the student-run, full-service public relations and advertising communication firm. May be repeated up to 9 credits. Prerequisite: COM 208 and COM 481 or by permission of instructor.

**COM 485. Senior Seminar (4).** A research project leading to a thesis. Prerequisites: admittance to a communication major and COM 401.

**COM 486. Advanced Journalism Seminar (4).** Issues and skills in specialized journalistic situations. Seminar topics will change from quarter to quarter. May be repeated for up to 8 credits under a different subtitle. Prerequisites: COM 308 and admission to either the communication studies, public relations, or journalism major.

**COM 487. Advanced Public Relations Seminar (4).** Advanced public relations seminar topics will change from quarter to quarter. May be repeated for credit under a different title. Prerequisites: COM 470 and admission to either the communication studies, public relations, or journalism major.

**COM 489. Portfolio Assessment (1).** End-of-program assessment activities. Preparation, presentation, and evaluation of a professional portfolio of work produced during the major. Prerequisites: senior standing and admission to either the communication studies, public relations, or journalism major. CE - Culminating Experience  
**COM 490. Cooperative Education (1-12).** Individual contract arrangement involving student, faculty, and cooperating agency to gain practical experience in communication. May be repeated for credit. Grade will either be S or U.



- COM 491. Workshop** (1-6). May be repeated for credit.
- COM 492. Communication Practicum** (2). Faculty supervised applied and/or service learning experience for students pursuing a major or minor in the communication department. May be repeated for up to 6 credits. Grade will either be S or U. Prerequisites: students must be admitted to communication studies, public relations, film or journalism major or minor.
- COM 496. Individual Study** (1-6).
- COM 497. Honors** (1-12). Prerequisite: admission to department honors program.
- COM 498. Special Topics** (1-6). May be repeated up to 12 credits.
- COM 499. Seminar** (1-5).

#### Craft Brewing Courses

- CRBW 298. Special Topics** (1-6). May be repeated if subject is different.
- CRBW 299. Seminar** (1-5). May be repeated if subject is different.
- CRBW 312. Brewing Microbiology** (4). An introduction to the biology of yeasts and other organisms important in the craft brewing industry. Includes the application of laboratory methods useful in brewing and quality control. Students must be 21 years of age or older. Formerly BIOL 312, students may not receive credit for both. Prerequisites: CHEM 101 or CHEM 111 or CHEM 181 and MATH 153 with a grade of C or higher and acceptance to the Certificate Program or Brewing Program.
- CRBW 317. Principles and Biochemistry of Brewing** (4). An introduction to the principles of brewing and biochemistry of fermentation processes important in the craft brewing industry. Includes the application of laboratory methods useful in product evaluation and quality control. Students must be 21 years of age or older. Formerly BIOL 317, students may not receive credit for both. Prerequisites: CHEM 101 or CHEM 111 or CHEM 181 and MATH 153 with a grade of C or higher and acceptance to the Certificate Program or Brewing Program.
- CRBW 360. Brewing Process Technology** (3). Study of brewing technology including equipment and processes from the brewhouse through packaging and distribution. Topics include factors that affect product quality. Formerly IET 360, students may not receive credit for both. Prerequisites: CHEM 101 and CHEM 111 or CHEM 181 and MATH 153 with a grade of C or higher. Student must also be admitted to the Craft Brewing Program.
- CRBW 396. Individual Study** (1-6). May be repeated if subject is different.
- CRBW 397. Honors** (1-12). Prerequisite: admission to department honors program.
- CRBW 398. Special Topics** (1-6). May be repeated if subject is different.
- CRBW 399. Seminar** (1-5). May be repeated if subject is different.
- CRBW 450. Sensory Analysis for Brewing** (5). Advanced sensory analysis of beer styles for quality control, recipe development, and identification of ingredients in the brewing process. Must be 21 years old. Permission by department. Course will be offered every year (Winter). Prerequisite: CRBW 317, acceptance to the Craft Brewing Program.
- CRBW 470. Current Topics in Brewing** (1-6). An in-depth analysis of a specific topic within the field of brewing. Current literature and research will be reviewed, analyzed, and discussed. May be repeated up to 12 credits. Prerequisites: Acceptance to the Craft Brewing Program. Must be 21 years old.
- CRBW 490. Cooperative Education** (1-12). An individualized contracted field experience in the brewing industry. A learning agreement is created to identify and plan the directed and supervised study. Must be 21 years old. May be repeated up to 18 credits. Prerequisite: CRBW 317, acceptance to the Craft Brewing Program.
- CRBW 495. Brewing Research Methods** (5). Conduct brewing research projects using pilot brewing equipment. Must be 21 years old. May be repeated up to 15 credits. Permission by department. Course will be offered every year (Winter). Prerequisites: CRBW 317. Acceptance to the Craft Brewing Program.
- CRBW 496. Individual Study** (1-6). May be repeated if subject is different.
- CRBW 497. Honors** (1-12). Prerequisite: admission to department honors program.
- CRBW 498. Special Topics** (1-6). May be repeated up to 12 credits. Prerequisite: acceptance to the Craft Brewing Program.
- CRBW 499. Seminar** (1-5). May be repeated up to 12 credits. Prerequisite: acceptance to the Craft Brewing Program.

#### Computer Science Courses

- CS 101. Computer Basics** (4). Integrated, project-based course using student-produced working materials in

the form of a mini thesis. Microsoft Office tools are learned in a web-based practical application environment. Basic Skills 6 - Computer Fundamentals. Basic Skills 6 - Computer Fundamentals.

- CS 102. Health and Technology** (4). Students will analyze the impact of health factors through construction of a personal health index calculator, create health analysis tools with instantaneous updating, and evaluate the pros and cons of technology in the health field. K8 - Science & Technology
- CS 105. The Logical Basis of Computing** (4). Students develop mathematical and quantitative reasoning skills by learning the fundamentals of computer programming. Students gain an understanding of possible connections between technology and artistic expression. Basic Skills 5 - Reasoning. Course will be offered every year (Fall, Winter, Spring, Summer). Basic Skills 5 - Reasoning. K8 - Science & Technology
- CS 107. Make a Game with Computer Science** (4). This course provides an overview of gaming within the field of computer science including social, cultural, ethical, legal, and economic issues. Software engineering principles will be introduced and applied to a game development. K8 - Science & Technology
- CS 109. Quantitative Reasoning Using Python** (4). Students explore quantitative and statistical processes by implementing the popular programming language Python. Course will be offered every year (Fall, Winter, Spring, Summer). Prerequisite: students must achieve an appropriate test score or successfully complete the required prerequisite courses before enrolling in a quantitative reasoning course. FYE3 - Quantitative Reasoning
- CS 110. Programming Fundamentals I** (4). Fundamental concepts of programming from an object-oriented perspective. Classes, objects and methods, algorithm development, problem-solving techniques, basic control structures, primitive types and arrays.
- CS 111. Programming Fundamentals II** (4). Continuation of object-oriented programming concepts introduced in CS 110. Inheritance, exceptions, graphical user interfaces, recursion, and data structures. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: CS 110 and one of

MATH 153 or MATH 154 or MATH 172 or MATH 173.

**CS 112. Foundations of Computer Science (4).** Overview of the computer science profession including basic computer organization, algorithm development and analysis, computer data representation, computer applications, and social issues.

**CS 290. Cooperative Education (1-5).** An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student-learning plan, cooperating employer supervision, and faculty coordination. By permission. May be repeated for credit. Grade will either be S or U.

**CS 298. Special Topics (1-6).**

**CS 299. Seminar (1-5).** May be repeated if subject is different.

**CS 301. Data Structures (4).**

Introduction to data structures, simple list processing, basic searching and sorting techniques, stacks, queues, and trees. Prerequisites: CS 111 and MATH 154.

**CS 302. Advanced Data Structures and File Processing (4).** Sequential, random access and indexed file organizations; B-trees; external searching and sorting; I/O buffering.

Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: C or higher in CS 111, CS 301 and C or higher in Math 154, 172, or 173.

**CS 311. Computer Architecture I (4).**

Introduction to computer architecture, data representations, assembly language, addressing techniques. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisite: C or higher in CS 111.

**CS 312. Computer Architecture II (4).**

Introduction to the structure of computers. Digital circuits, central processing units, memory, input/output processing, parallel architectures. Course will be offered every year. Prerequisites: C or higher in CS 301 and CS 311 and CS 325.

**CS 325. Technical Writing in**

**Computer Science (3).** Writing and editing technical material in computer science. Course will be offered every year (Fall, Winter, Spring). Prerequisites: ENG 101 and ENG 102 with a grade of C or higher and CS 110 and CS 111 and CS 301 with a grade of B- or higher.

**CS 351. Web Development**

**Technologies II (4).** Server-side technologies for web software

development including programming languages, database access, e-commerce, testing, and ethical issues related to the web. Course will not have an established scheduling pattern.

Prerequisite: C or higher CS 111.

**CS 361. Principles of Language Design**

**I (4).** Topics will include evolution of programming languages, syntax and semantics, bindings, scoping, data types, assignment, control, and subprograms. Course will be offered every year (Fall). Prerequisite: C or higher in CS 302.

**CS 362. Principles of Language Design**

**II (4).** Topics will include abstract data types, parallel processing, object-oriented programming, exception handling functional programming, and logic programming. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: CS 361 and MATH 260 with a grade of C or higher in both.

**CS 367. Advanced Visual Basic**

**Programming (4).** Visual Basic programming and applications. Topics will include advanced data structures, error trapping and debugging, advanced VB and ActiveX controls, macros and databases. Not intended for CS majors. Prerequisite: CS 105 or CS 110 with a grade of C or higher.

**CS 370. Introduction to the UNIX**

**Operating System (4).** The fundamental requirements, features and functions of the UNIX operating system. A UNIX-compatible OS will be used as a working model. Installation, configuration, setup, shell operations, and program development with the UNIX operating system. Course will not have an established scheduling pattern. Prerequisites: C or higher in CS 110, CS 111, and CS 301; C or higher in Writing I & II and C or higher in Math 172.

**CS 380. Introduction to Software**

**Engineering (4).** An introduction to the principles and practices of software engineering, including object-oriented analysis and design, design patterns, and testing. Course will not have an established scheduling pattern. Prerequisite: C or higher in CS 302 and CS 325.

**CS 392. Lab Experience in Teaching**

**Computer Science (1).** Supervised experience in developing procedures and techniques in teaching computer science. Grade will either be S or U.

**CS 396. Individual Study (1-6).** May be repeated if subject is different.

**CS 397. Honors (1-12).** Prerequisite: admission to department honors program.

**CS 398. Special Topics (1-6).** May be repeated if subject is different.

**CS 399. Seminar (1-5).** May be repeated if subject is different.

**CS 420. Database Management**

**Systems (4).** Logical aspects of database processing; concepts of organizing data into integrated databases; hierarchical, network, and relational approaches. Course will not have an established scheduling pattern. Prerequisites: C or higher in CS 302, CS 325 and Math 260.

**CS 426. Autonomous Robotics (4).** This course teaches how to integrate cloud computing and big data analytics for robotics machine learning programming, providing the fundamentals of real time distributed computing, mobile devices, and IoT systems, including implementation of cloud robotics. CS 426 and CS 526 are layered courses; a student may not receive credit for both. Course will be offered every year (Spring). Prerequisite: CS 301 with a grade of C or higher.

**CS 427. Algorithm Analysis (4).** Topics will include basic algorithmic analysis, algorithmic strategies, fundamental computing algorithms, basic computability, the complexity classes P and NP, and advanced algorithmic analysis. Course will not have an established scheduling pattern. Prerequisites: C or higher in CS 302 and Math 330.

**CS 428. Introduction to Graph**

**Algorithms (4).** This course gives a wide introduction to the field of graph algorithms. Students will learn how to recognize and analyze algorithmic graph problems, as well as how to develop practical approaches for solving them. Course will not have an established scheduling pattern (Spring). Prerequisite: C or higher in CS 302 and MATH 330.

**CS 430. Cybersecurity (4).** Students will learn elements of computer forensics, how to encrypt and hide information, and how to detect and prevent cyber-attacks. Course will not have an established scheduling pattern (Fall). Prerequisite: C or higher in CS 312.

**CS 440. Computer Graphics (4).**

Graphic I/O devices, two-dimensional and three-dimensional display techniques, display processors, clipping and windowing, hidden line removal, data structures for graphics. Course will not have an established scheduling pattern. Prerequisites: C or higher in

CS 302, CS 361; C or higher in Math 260; Recommend students take Math 265.

**CS 441. Computer Graphics II (Put on reserve 9/16/17)** (4). Advanced graphics in 3-D with vector tools. Topics include: transformations, affine transformations, changing coordinate system, drawing scenes, modeling shapes, solid modeling, and smooth objects. (Put on reserve 9/16/17. Will go inactive 8/24/2020.) Prerequisite: CS 440.

**CS 445. Data and Information Visualization** (4). Data visualization includes the visualization pipeline, basic and advanced visual data representations, fundamental and advanced visualization algorithms, visualization on the web, applications and software tools. CS 445 and CS 545 are layered courses; students may not receive credit for both. Course does not have an established scheduling pattern. Prerequisite: C or higher in CS 302.

**CS 446. User Interface Design and Development** (4). The relationship of user interface design to human-computer interaction. Types of user interfaces, methods of evaluation, user-centered design and task analysis, programming tools and environments, and hardware devices. Course will not have an established scheduling pattern. Prerequisite: CS 111 with a grade of C or higher.

**CS 450. Computer Network and Data Communications** (4). Device protocols, network configurations, encryption, data compression and security, satellite networks. Course will not have an established scheduling pattern. Prerequisites: C or higher in CS 301, CS 311, and CS 325; C or higher Math 172.

**CS 455. Artificial Intelligence** (4). Introduction to the principles of artificial intelligence. Pattern matching, knowledge representation, natural language processing, expert systems. Prerequisites: CS 302, CS 325, CS 362 and MATH 330.

**CS 456. Data Mining** (4). Introducing concepts, models, algorithms, and tools for solving data mining tasks; decision trees, time series, Bayesian methods, k-nearest neighbors, and relational databases. CS 456 and CS 556 are layered courses; students may not receive credit for both. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: CS 302 and CS 361 and MATH 260.

**CS 457. Computational Intelligence and Machine Learning** (4).

Introducing intelligent systems: artificial neural networks, deep learning, evolutionary computation, fuzzy systems, swarm intelligence, and hybridizations of the above techniques. We will look at these techniques from a machine learning perspective. CS 457 and CS 557 are layered courses; students may not receive credit for both. Course will not have an established scheduling pattern (Winter). Prerequisites: C or higher in CS 302 and Math 330.

**CS 460. Software Engineering for Mobile Devices** (4). Development of stand-alone applications (apps) intended to be downloaded onto and run on mobile devices. Android and iOS is taught. Topics include XML, data and control flow diagrams, IDEs, layout design, etc. Prerequisite: CS 301.

**CS 470. Operating Systems** (4). Topics will include principles of operating systems, concurrency, scheduling and dispatch, memory management, processes and threads, device management, security and protection, and file systems. Course will not have an established scheduling pattern. Prerequisites: C or higher in CS 302, CS 312, CS 325, and CS 361.

**CS 471. Optimization** (4). Unimodal and Multimodal problems; combinatorial optimization problems; deterministic algorithms; Hill climbing algorithm; Tabu Search Algorithm; Evolutionary algorithms; Particle swarm optimization; Differential evolution; Single and Multi-objective optimization. Prerequisites: CS 302 and CS 325 and MATH 330.

**CS 473. Parallel Computing** (4). Major parallel architectures and languages. Parallel programming methodologies and applications. CS 473 and CS 573 are layered courses; students may not receive credit for both. Course will not have an established scheduling pattern. Prerequisite: C or higher in CS 361.

**CS 475. Programming for Distributed Environments (Put on reserve 9/16/18)** (4). An introduction to technologies used for creating applications that run in a distributed computing environment, such as across local/wide area networks (LAN/WAN) and the internet. (Put on reserve 9/16/18, will go inactive 8/24/21) Prerequisite: CS 302.

**CS 476. Social Informatics for Computer Science** (4). A survey of the issues related to computer and/or information systems design, development, implementation, use and management. Focus on the critical

analysis of social, cultural, philosophical, ethical, legal, public policy, and economic issues. Course will not have an established scheduling pattern. Prerequisite: C or higher in CS 301.

**CS 480. Advanced Software Engineering** (4). Advanced principles and practices of software engineering, including project management, requirements gathering and specification, design, coding, testing, maintenance and documentation.

Students work in teams to develop a large software project. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: CS 325 and CS 380 and admission to computer science major.

**CS 481. Software Engineering Project** (4). Continuation of coding, testing, and implementation phases of project begun in CS 480. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: CS 325 and CS 480 and admission to computer science major.

**CS 489. Senior Colloquium** (1). Introduction to research in computer science through investigation of ethical and historical topics in the field. End-of-major assessment activities. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: CS 325 and admission to the computer science major.

**CS 490. Cooperative Education** (1-12). An individualized contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. By permission. May be repeated for credit. Grade will either be S or U.

**CS 491. Workshop** (1-6).

**CS 492. Laboratory Experience in Teaching Computer Science** (1-2). Supervised progressive experience in developing procedures and techniques in teaching computer science. May be repeated up to 15 credits. Grade will either be S or U.

**CS 493. Practicum** (1-5). Supervised progressive experience in management, operation, programming, or systems work in one of the university's computing centers. May be repeated for credit.

**CS 495. Directed Research** (1-6). By permission. May be repeated up to 12 credits.

**CS 496. Individual Study** (1-6).

**CS 497. Honors** (1-12). Prerequisite: admission to department honors program.

**CS 498. Special Topics** (1-6).

**CS 499. Seminar** (1-5).

### **Career and Technical Education Courses**

#### **CTE 292. Work-site Learning**

**Practicum** (1-12). One university credit is awarded for every 40 hours of work experience. Practicum may be paid or unpaid. Prerequisite: Successful acceptance into a CTE work-site learning program.

**CTE 298. Special Topics** (1-6). May be repeated if subject is different.

**CTE 299. Seminar** (1-5). May be repeated if subject is different.

#### **CTE 310. Introduction to Career and Technical Education** (3).

An entry-level course that introduces students to career and technical education careers, the assessment process, and requirements for program completion.

#### **CTE 310A. Career and Technical Education Teaching Methods** (3-5).

An introduction to teaching pedagogy and application of occupational skills, knowledge, and practice to a career and technical education classroom setting. Formerly OCED 310A, students may not receive credit for both. May be repeated up to 5 credits.

#### **CTE 310B. Career and Technical Education Occupational Analysis** (3-5).

An introduction to teaching pedagogy and application of occupational skills, knowledge, and practice to a career and technical education classroom setting. Formerly OCED 310B, students may not receive credit for both. May be repeated up to 5 credits.

#### **CTE 310C. Career and Technical Education Course Organization and Curriculum Design** (3-5).

An introduction to teaching pedagogy and application of occupational skills, knowledge, and practice to a career and technical education classroom setting. Formerly OCED 310A, students may not receive credit for both. May be repeated up to 5 credits.

#### **CTE 311A. Career and Technical Education Coordination Techniques of Cooperative Education** (3-5).

Advanced teaching pedagogy, history, and philosophy of career and technical education, school law and issues related to abuse, leadership, and work-based learning. Formerly OCED 311A, students may not receive credit for both. May be repeated up to 5 credits.

#### **CTE 311B. History and Philosophy of Career and Technical Education** (3-

5). Advanced teaching pedagogy, history, and philosophy of career and technical education, school law, and issues related to abuse, leadership, and work-based learning. Formerly OCED 311B, students may not receive credit for both. May be repeated up to 5 credits.

#### **CTE 311C. Career and Technical Education Student and Professional Leadership Development** (3-5).

Career and technical education student leadership curricular requirements and professional leadership development. Formerly OCED 311C, students may not receive credit for both. May be repeated up to 5 credits.

#### **CTE 311D. Career and Technical Education School Law and Issues Related to Abuse** (2-5).

Advanced teaching pedagogy, history, and philosophy of career and technical education, school law and issues related to abuse, leadership, and work-based learning. May be repeated up to 5 credits. Formerly OCED 311D, students may not receive credit for both. Course will be offered every year. Course will not have an established scheduling pattern.

**CTE 396. Individual Study** (1-6). May be repeated if subject is different.

**CTE 397. Honors** (1-12). Prerequisite: admission to department honors program.

**CTE 398. Special Topics** (1-6). May be repeated if subject is different.

**CTE 399. Seminar** (1-5). May be repeated if subject is different.

#### **CTE 410. Career and Technical Education School to Work Programs** (4).

Work-based learning, student leadership, advisory committees, program promotion, and professional responsibilities in career and technical education. Prerequisite: full admission to the Teacher Preparation Program.

#### **CTE 422. Impact of Education Reform on Career and Technical Education** (2).

Student will use program of study content knowledge to improve a community situation. Formerly FCSE 422, students may not receive credit for both.

#### **CTE 432. Occupational Analysis** (3).

Analysis of jobs and trades to determine related technical information, skills, and advisory sources necessary to develop content materials for a course of study. Formerly OCED 432, students may not receive credit for both.

#### **CTE 440. Total Quality Learning in Career and Technical Education (Put on reserve 9/16/18)** (3).

Concepts of continuous improvement in teaching

career and technical education. (Put on reserve 9/16/18, will go inactive 8/24/21)

#### **CTE 460. Business and Marketing Education Exit Assessment** (4).

During the last quarter of their program, students are assessed on writing skills, speaking skills, visual/graphic skills, and knowledge of theory and research. Prerequisites: CTE 310, BME 450, BME 451 and BME 452, and full admission to the major and the Teacher Certification Program.

**CTE 496. Individual Study** (1-6). May be repeated if subject is different.

**CTE 497. Honors** (1-12). Prerequisite: admission to department honors program.

**CTE 498. Special Topics** (1-6). May be repeated if subject is different.

**CTE 499. Seminar** (1-5). May be repeated if subject is different.

### **Central Washington University Courses**

#### **CWU 184. First-Year Experience** (4).

Discipline-specific content designed to introduce scholarly approaches to inquiry and problem solving. Small classes facilitate interaction with faculty and peers, and develop skills in critical thinking, oral and written communication, and information literacy. Prerequisite: students must have appropriate test scores to be eligible for ENG 101 or have satisfactorily completed Transitional English (ENG 100T) prior to enrolling.

#### **CWU 400. General Education**

**Culminating Experience** (2). Course provides opportunities to integrate, apply, and share knowledge acquired through General Education. Projects focus on demonstrating communication, critical and creative thinking, reasoning, information literacy, use of evidence, and professional competencies. Course will be offered every year (Fall, Winter, Spring, Summer). Prerequisite: junior or senior standing. CE - Culminating Experience

### **Douglas Honors College**

#### **DHC 140. Humanistic Understanding I** (5).

Variable topic. Courses in the humanities focuses on the analysis and interpretation of human stories of the past, present, and future in order to understand the processes of continuity and change in individuals and cultures through both documented and imaginative accounts. May be repeated for credit. Prerequisite: admission to the Douglas Honors College.

**DHC 141. Humanistic Understanding**

**II (5).** Variable topic. Courses in the humanities focuses on the analysis and interpretation of human stories of the past, present, and future in order to understand the processes of continuity and change in individuals and cultures through both documented and imaginative accounts. May be repeated for credit. Prerequisite: admission to the Douglas Honors College.

**DHC 150. Aesthetic Experience I (5).**

Variable topic. Courses in this area explore questions about the nature of art; to understand, interrogate, and engage in the creative process; and to explore the connections between art, culture, and history. May be repeated for credit. Prerequisite: admission to the Douglas Honors College.

**DHC 151. Aesthetic Experience II (5).**

Variable topic. Courses in this area explore questions about the nature of art; to understand, interrogate, and engage in the creative process; and to explore the connections between art, culture, and history. May be repeated for credit. Prerequisite: admission to the Douglas Honors College.

**DHC 160. Physical and Biological**

**Systems I (5).** Variable topic. Courses in this area study physical and life systems, provide basic methods for rigorously describing the natural world, or treat social, economic, technological, ethical, or other implications of natural phenomena. May be repeated for credit. Prerequisite: admission to the Douglas Honors College.

**DHC 161. Physical and Biological**

**Systems II (5).** Variable topic. Courses in this area study physical and life systems, provide basic methods for rigorously describing the natural world, or treat social, economic, technological, ethical or other implications of natural phenomena. Students will perform scientific inquiry and experimentation in a laboratory setting. May be repeated for credit. Prerequisite: admission to the Douglas Honors College.

**DHC 250. Social and Behavioral**

**Dynamics I (5).** Variable Topic. Courses focus on how individuals, cultures, and societies operate and evolve and introduce disciplined ways of thinking about individuals and groups. May be repeated for credit. Prerequisite: admission to the Douglas Honors College.

**DHC 251. Social and Behavioral**

**Dynamics II (5).** Variable topic. Courses focus on how individuals, cultures, and societies operate and evolve and introduce disciplined ways of thinking about individuals and

groups. May be repeated for credit.

Prerequisite: admission to the Douglas Honors College.

**DHC 260. Cultural Studies I (5).**

Variable topic. Courses focus on negotiating cultural differences by applying appropriate patterns of understanding and behavior in culturally diverse settings. Courses focus on one or more non-dominant cultures or peoples of the United States. May be repeated for credit.

Prerequisite: admission to the Douglas Honors College.

**DHC 261. Cultural Studies II (5).**

Variable topic. Courses focus on negotiating cultural differences by applying appropriate patterns of understanding and behavior in culturally diverse settings. Courses focus on comparative cultures across national and continental boundaries. May be repeated for credit.

Prerequisite: admission to the Douglas Honors College.

**DHC 270. Integrated Learning (5).**

Variable topic. Courses take an interdisciplinary approach to examining social, economic, technological, ethical, cultural, or aesthetic implications of knowledge. In addition to department courses that embrace multiple disciplines, these opportunities include learning community service learning and international studies courses. May be repeated for credit. Prerequisite: admission to the Douglas Honors College.

**DHC 290. Cooperative Education (1-**

**6).** An individualized contracted field experience with business, industry, government, or social service agencies. Requires a student learning plan, cooperating employer supervision, and faculty coordination. By permission. May be repeated for credit. Grade will either be S or U.

**DHC 296. Individual Study (1-6).****DHC 298. Special Topics (1-6).****DHC 299. Seminar (1-5).** May be

repeated for credit. By permission.

**DHC 301. Honors Seminar: Elements**

**of Research (2).** An exploration of research from a multidisciplinary perspective, including the formulation of a research question, organization of the research process, and preparation of DHC thesis or creative project proposal. By permission of department. Course will be offered every year (Spring). Prerequisite: admission to the Douglas Honors College.

**DHC 380. History of Science (4).**

Introduction to major themes in the history of science. Investigation of historical and scientific methods

through the study of particular historical cases. May be repeated up to 8 credits with different sub-topics.

Permission by department. Course will be offered every year (Fall, Spring).

Prerequisite: admittance to the Douglas Honors College.

**DHC 396. Individual Study (1-6).**

**DHC 397. Honors (1-12).** Prerequisite: admission to department honors program.

**DHC 398. Special Topics (1-6).****DHC 399. Interdisciplinary Honors**

**Seminar (5).** Interdisciplinary approach to examining current social, economic, ethical, and cultural issues. May be repeated for credit. Prerequisite: admission to the Douglas Honors College.

**DHC 401. Honors Capstone Seminar**

**(3).** Skills and techniques for the presentation of the results of interdisciplinary research. Students prepare drafts of their DHC thesis or artist's statement for their creative project as part of their coursework. Permission by department. Course will be offered every year (Fall). Prerequisites: DHC 301 with at least a grade of B or higher and admittance to the Douglas Honors College.

**DHC 480. Interdisciplinary Senior**

**Seminar (4).** Interdisciplinary approach to examining current social, economic, ethical, and cultural issues. May be repeated up to 8 credits with different sub-topics. Course will be offered every year (Winter). Permission by department. Prerequisite: admittance to the Douglas Honors College.

**DHC 490. Cooperative Education (1-**

**12).** An individualized, contracted field experience with business, industry, government, or social service agencies. Requires a student learning plan, cooperating employer supervision, and faculty coordination. By permission. May be repeated for a total of 12 credits. Grade will either be S or U.

**DHC 496. Individual Study (1-6).****DHC 497. Honors Thesis and/or**

**Creative Project (2).** Completion of honors thesis or creative project. Students must complete a thesis or creative project approved by their faculty advisor and the DHC director and present at the DHC presentation event to receive credit for the course. Permission by department. Course will be offered every year (Winter).

Prerequisites: Students must pass DHC 301 and DHC 401 with a B or higher and admission to the Douglas Honors College.

**DHC 498. Special Topics (1-6).**

**DHC 499. Seminar** (1-5). May be repeated if subject is different.

### **Dance Courses**

**DNCE 101. Modern Technique I** (2).

Beginning modern dance theory and technique. Introduction of dance terminology and principles of movement dynamics. May be repeated up to 4 credits. Formerly PED 101, students may not receive credit for both. Course will be offered on odd numbered years (Fall).

**DNCE 102. Modern Technique I** (2).

Continuation of modern technique and theory at the intermediate beginner level. Continued work on movement dynamics and compositional explorations. May be repeated up to 4 credits. Course will be offered on odd numbered years (Winter).

Formerly PED 102, students may not receive credit for both. Prerequisite: DNCE 101 or instructor permission.

**DNCE 103. Modern Technique I** (2).

Continuation of modern technique and theory at the advanced beginner level. Emphasis on performance qualities and group dynamics. May be repeated up to 4 credits. Course will be offered on odd numbered years (Summer).

Formerly PED 103, students may not receive credit for both. Prerequisite: DNCE 102 or instructor permission.

**DNCE 104. Ballet Technique I** (2). This

is an introductory level course in classical Ballet technique, including barre, center work and enchainments (center combinations). No prior experience necessary. May be repeated up to 4 credits. Course will be offered every year (Fall). Formerly PED 104, students may not receive credit for both.

**DNCE 105. Ballet Technique I** (2). A

continuation of classical Ballet technique at the intermediate beginner level. The course will include barre, center work and enchainments (center combinations). May be repeated up to 4 credits. Course will be offered every year (Winter). Formerly PED 105, students may not receive credit for both. Prerequisite: DNCE 104 or instructor permission.

**DNCE 106. Ballet Technique I** (2). This

course will cover classical Ballet technique at the advanced beginner level. The course will include barre, center work and enchainments (center combinations). May be repeated up to 4 credits. Course will be offered every year (Spring). Formerly PED 106, students may not receive credit for both. Prerequisite: DNCE 105 or instructor permission.

**DNCE 109. Physics of Dance** (4). In

Physics of Dance, students will explore the connections between the art of dance and the science of physics.

Students will learn physics principles as they apply to the movement of the human body. During lab practice, students will move and dance, then analyze that motion from a scientific perspective. PHYS 109 and DNCE 109 are cross-listed courses; a student may not receive credit for both. Prerequisite: eligible to enroll in MATH 101.

**DNCE 112. Dance Performance** (1).

Open to individuals participating in performances of Orchestis Dance Company. May be repeated for 12 credits. Course will be offered every year (Fall, Winter and Spring). Formerly PED 112, students may not receive credit for both.

**DNCE 116. Beginning Folk Dance** (1).

Traditional recreational dances of various countries. Formerly PED 116, students may not receive credit for both. Course will be offered every year (Fall, Winter, Spring, and Summer).

**DNCE 121. Tap Dance I** (1). Formerly

PED 121, students may not receive credit for both. Course will be offered every year (Fall, Winter, Spring, and Summer).

**DNCE 122. Tap Dance II** (1). Formerly

PED 122, students may not receive credit for both. Course will be offered every year (Fall, Winter, Spring, and Summer). Prerequisite: DNCE 121.

**DNCE 130. American Style Ballroom**

**Dance I** (1). Course includes Social Foxtrot, Waltz, Triple step Swing, Cha Cha and Tango at the beginning level. May be repeated up to 3 credits. Course will be offered every year (Fall).

**DNCE 131. American Style Ballroom**

**Dance II** (1). Continuation of Social Foxtrot, Waltz, Triple step Swing, Cha Cha, and Tango at the intermediate level. May be repeated up to 3 credits.

**DNCE 132. American Style Ballroom**

**Dance III** (1). Continuation of Social Foxtrot, Waltz, Triple step Swing, Cha Cha and Tango at the advanced level. May be repeated up to 3 credits. Course will be offered every year (Spring).

Prerequisite: DNCE 131 or instructor permission.

**DNCE 133. International Standard**

**Ballroom Dance I** (1). Course includes, Waltz, Foxtrot, Tango, Viennese Waltz, and Quickstep at the beginning level. May be repeated up to 3 credits. Course will be offered every year (Fall).

**DNCE 134. International Standard**

**Ballroom Dance II** (1). Continuation of Waltz, Foxtrot, Tango, Viennese

Waltz, and Quickstep at the intermediate level. May be repeated up to 3 credits. Course will be offered every year (Winter). Prerequisite: DNCE 133 or instructor permission.

**DNCE 135. International Standard**

**Ballroom Dance III** (1). Continuation of Waltz, Foxtrot, Tango, Viennese Waltz, and Quickstep at the advanced level. May be repeated up to 3 credits. Formerly PED 135, students may not receive credit for both. Course will be offered every year (Spring).

Prerequisite: DNCE 134 or instructor permission.

**DNCE 136. International Latin**

**Ballroom Dance I** (1). Course includes Rumba, Cha Cha, Samba, Paso Doble, and Jive at the beginning level. May be repeated up to 3 credits. Formerly PED 136, students may not receive credit for both. Course will be offered every year (Fall).

**DNCE 137. International Latin**

**Ballroom Dance II** (1). Continuation of Rumba, Cha Cha, Samba, Paso Doble, and Jive at the intermediate level. May be repeated up to 3 credits. Formerly PED 137, students may not receive credit for both. Course will be offered every year (Winter).

Prerequisite: DNCE 136 or instructor permission.

**DNCE 138. International Latin**

**Ballroom Dance III** (1). Continuation of Rumba, Cha Cha, Samba, Paso Doble, and Jive at the advanced level. May be repeated up to 3 credits. Formerly PED 138, students may not receive credit for both. Course will be offered every year (Spring).

Prerequisite: DNCE 137 or instructor permission.

**DNCE 141. Jazz Dance I** (1). Formerly

PED 141, students may not receive credit for both. Course will be offered every year (Fall, Winter, Spring, and Summer).

**DNCE 142. Jazz Dance II** (1). Formerly

PED 142, students may not receive credit for both. Course will be offered every year (Fall, Winter, Spring, and Summer). Prerequisite: DNCE 141.

**DNCE 143. Jazz Dance III** (1).

Advanced level jazz dance technique. Formerly PED 143, students may not receive credit for both. Course will be offered every year (Fall, Winter, Spring, and Summer).

**DNCE 155. Pointe and Variations** (1).

This course will introduce pre-pointe and pointe work techniques in strengthening and alignment specific to the legs, ankles, and feet. Ballet variations from historically significant ballet productions will be studied and

learned. May be repeated for 12 credits. Course will be offered every year (Fall, Winter and Spring). Formerly PED 155, students may not receive credit for both. Prerequisites: DNCE 104 and DNCE 105 and DNCE 106 or instructor permission.

**DNCE 156. Partnering (1).** This course is designed to introduce beginning level techniques in basic dance partnering. Students will learn how to transfer weight, improve core strength and safely perform lifts with their partner. May be repeated for 4 credits. Formerly PED 156, students may not receive credit for both. Course will be offered every year (Winter). Prerequisites: DNCE 101 or DNCE 104 or instructor permission.

**DNCE 161. Cultural History of Dance (4).** A comprehensive look at the global dynamics of dance, examining the diverse cultural traditions and the innovations that have advanced dance into the 21st century. AH-Aesthetic Experience. Formerly PED 161, students may not receive credit for both. Course will be offered every year (Fall, Winter, Spring, and Summer). AH-Aesthetic Experience. K3 - Creative Expression

**DNCE 198. Special Topics (1-6).**

**DNCE 201. Modern Technique II (2).** Continuation of modern technique and theory at the Beginning/intermediate level. Exploration of various styles in Modern dance. May be repeated up to 4 credits. Course will be offered on odd numbered years (Fall). Prerequisites: DNCE 101 and DNCE 102 and DNCE 103.

**DNCE 202. Modern Technique II (2).** Intermediate level modern dance technique and theory. Continuation of series. Emphasis on timing, articulation and performance qualities. May be repeated up to 4 credits. Course will be offered on odd numbered years (Winter). Prerequisite: DNCE 201 or instructor permission.

**DNCE 203. Modern Technique II (2).** Continuation of modern technique and theory at the advanced/intermediate level. Emphasis on advanced technique and use of movement qualities. May be repeated up to 4 credits. Course will be offered on odd numbered years (Spring). Prerequisite: DNCE 202 or instructor permission.

**DNCE 204. Ballet Technique II (2).** Continued training in classical ballet techniques at a beginning/intermediate level, including barre and center work. Increased emphasis on beats, multiple turns, and jumps. May be repeated for 4 credits. Formerly PED 204, students

may not receive credit for both. Course will be offered every year (Fall). Prerequisite: DNCE 104 and DNCE 105 and DNCE 106 or instructor permission.

**DNCE 205. Ballet Technique II (2).**

Continued training in classical ballet at the intermediate level, including barre and center work. Increased emphasis on beats multiple turns and jumps. By permission. May be repeated for 4 credits. Formerly PED 205, students may not receive credit for both. Course will be offered on even numbered years (Winter). Prerequisite: DNCE 204 or instructor permission.

**DNCE 206. Ballet Technique II (2).**

Continued training in classical ballet technique at the advanced intermediate level, including barre and center work. Increased emphasis on beats, multiple turns and jumps. May be repeated for 4 credits. Formerly PED 206, students may not receive credit for both. Course will be offered on even numbered years (Spring). Prerequisite: DNCE 205 or instructor permission.

**DNCE 212. Dance Performance (2).** By audition. Participation in 2-4 pieces of choreography for performances of the Orchesis Dance Company. Permission by instructor. May be repeated for up to 18 credits. Formerly PED 212, students may not receive credit for both. Course will be offered every year (Fall, Winter and Spring).

**DNCE 298. Special Topics (1-6).** May be repeated if subject is different.

**DNCE 299. Seminar (1-5).** May be repeated if subject is different.

**DNCE 300. Dance Composition (3).**

This course is an introduction to dance composition. The students will explore movement invention through improvisation, readings and discussion. Through this exploration students will begin to discover the choreographic process as well as their choreographic voice. Course will be offered on even numbered years (Fall).

**DNCE 304. Ballet Technique III (2).**

Beginning Advanced training in classical Ballet technique. Emphasis on developing performance quality movement, musicality and attention to detail. May be repeated up to 4 credits. Course will be offered on even numbered years (Fall). Prerequisite: DNCE 204 and DNCE 205 and DNCE 206 or permission.

**DNCE 305. Ballet Technique III (2).**

Intermediate Advanced training in classical Ballet technique. Emphasis on developing performance quality movement, musicality and attention to detail. May be repeated for 4 credits.

Course will be offered on even numbered years (Winter). Prerequisite: DNCE 304 or instructor permission.

**DNCE 306. Ballet Technique III (2).**

Advanced training in classical Ballet technique. Emphasis on developing performance quality movement, musicality and attention to detail. May be repeated up to 4 credits. Course will be offered on even numbered years (Spring). Prerequisite: DNCE 305 or instructor permission.

**DNCE 309. Teaching Methods:**

**Recreational Dance (3).** Knowledge of skills necessary in the teaching of various forms of recreational dance styles. Two hours lecture and two hours laboratory per week. Formerly PED 309, students may not receive credit for both. Course will be offered every year (Fall, Winter, Spring, and Summer).

**DNCE 311. Music for Dance -**

**Rhythms and Resources (3).** A study of rhythmic concepts as related to dance movements and composition; an introduction to music resources emphasizing composer/choreographer collaborations. Course will be offered on odd numbered years (Fall). Formerly PED 211, students may not receive credit for both.

**DNCE 312. Dance Performance (3).** By audition. Participation in choreography for performances of the Orchesis Dance Company. May be repeated up to 18 credits. By permission of instructor. Course will be offered every year (Fall, Winter, and Spring).

**DNCE 314. Dance for Children (3).**

Strategies for teaching dance in elementary education, including creative dance, rhythmic exploration, use of props, unit plan development, and methods of assessment. Formerly PED 314, students may not receive credit for both. Course will be offered every year (Fall, Winter, Spring, and Summer). Prerequisite: current WSP/FBI fingerprint clearance.

**DNCE 315. Teaching Methods:**

**Modern and Ballet Dance (4).** Teaching methods for modern and ballet technique classes which emphasizes the development of critical and creative thinking skills, observations skills, and assessment skills. May be repeated up to 8 credits. Formerly PED 315, students may not receive credit for both. Course will be offered on odd numbered years (Winter). Prerequisites: DNCE 101 and DNCE 104.

**DNCE 360. Dance Injury Prevention**

(3). The purpose of this course is to explore dance related injuries and their most common causes, analyze

movement tendencies, and investigate research to reduce injury, expel myths and enhance performance. Course will be offered on odd numbered years (Spring). Prerequisite: DNCE 385.

**DNCE 385. Principles of Functional Alignment for Dance (4).** This course is a study of anatomical principles that apply to dance training and performance. Emphasis on optimal dance posture and efficient movement by gaining an understanding of the bones, joints and muscles in movement. Course will be offered on even numbered years (Spring). Formerly DNCE 355; a student may not receive credit for both.

**DNCE 396. Individual Study (1-6).** May be repeated if subject is different.

**DNCE 397. Honors (1-12).** Prerequisite: admission to department honors program.

**DNCE 398. Special Topics (1-6).** May be repeated if subject is different.

**DNCE 399. Seminar (1-5).** May be repeated if subject is different.

**DNCE 401. Choreography (4).** The study and practice of choreographic techniques and tools utilizing creative problem solving. May be repeated up to 8 credits. Formerly PED 301, students may not receive credit for both. Course will be offered on on odd numbered years (Fall). Prerequisite: DNCE 300.

**DNCE 402. Dance Production (4).** Aspects of organizing and mounting a dance production, including scheduling, programming, publicity, costuming, lighting, and sound design. May be repeated up to 8 credits. Formerly PED 302, students may not receive credit for both. Course will be offered on even numbered years (Winter).

**DNCE 420. Capstone Project (3).** Students will design an online portfolio developed on a personal website, which represents a comprehensive synthesis of the knowledge they have gained during their years in the program in the areas of choreography, research, and performance. By permission of instructor. Course will be offered every year (Winter, and Spring).

**DNCE 495. Practicum (1-4).** Dance teaching practicum. Students will teach dance in a variety of settings including K-12, private studios, special education and geriatrics. May be repeated up to 12 credits. Course will not have an established scheduling pattern. Prerequisites: DNCE 309 and DNCE 314 or DNCE 315 or permission of instructor.

**DNCE 496. Individual Study (1-6).** May be repeated if subject is different.

**DNCE 497. Honors (1-12).** Prerequisite: admission to department honors program.

**DNCE 498. Special Topics (1-6).** May be repeated if subject is different.

**DNCE 499. Seminar (1-5).** May be repeated if subject is different.

#### Economics Courses

**ECON 101. Economic Issues (5).** For the student who desires a general knowledge of economics. Applications of economic principles to current social and political problems. ECON 101 cannot be substituted for either ECON 201 or 202. SB-Perspectives on Cultures and Experiences of U.S. Course will be offered every year (Fall, Winter). SB-Perspectives on Cultures and Experiences of U.S. K2 - Community, Culture, & Citizenship

**ECON 102. World Economic Issues (5).** An introduction to current international issues related to international trade and finance, economic development, and comparative economic systems. SB-Perspectives on World Cultures (W). Course will be offered every year (Fall, Spring). SB-Perspectives on World Cultures (W). K4 - Global Dynamics

**ECON 130. Foundations for Business Analytics (5).** Role of mathematics, statistics and software to business and economic decision making; business and economics applications including indexing, percentage changes, compounding, financing, and accounting; probability theory and descriptive statistical analysis; modelling. Includes a lab component. Prerequisites: either at least 500 on the SAT, 19 on the ACT, a Compass test score of either 50-Pre-Algebra, 26-Algebra, 31-College Algebra, or 31-Trigonometry, or completed MATH 100B or a higher level math class. FYE3 - Quantitative Reasoning

**ECON 201. Principles of Economics Micro (5).** Introduction to standard economic models used to examine how individuals and firms make decisions under different market structures; role of government in the economy in addressing market failure and efficiency equity tradeoff. SB-Perspectives on Cultures and Experiences of U.S. Course will be offered every year (Fall, Winter, Spring, Summer). SB-Perspectives on Cultures and Experiences of U.S. K6 - Individual & Society

**ECON 202. Principles of Economics Macro (5).** Organization of the U.S. economy, structure, and role of the monetary system, problems of

employment and inflation, overall impact of government spending and taxation on the economy. Economic growth, world economic problems, and a comparison of capitalism with other economic systems. Course will be offered every year (Fall, Winter, Spring, Summer). Prerequisite: ECON 201. K4 - Global Dynamics

**ECON 298. Special Topics (1-6).**

**ECON 299. Seminar (1-5).** May be repeated if subject is different.

**ECON 306. Gender in the Economy (5).** Gender in business. Effects of gender on labor market outcomes, educational attainment, earnings, and occupations. Topics include family formation, changing work roles, labor force participation, gender gap in wage earnings, and occupational choices.

**ECON 310. International Economics (5).** International trade and monetary theories; analyzing economic relationships and adjustments within and among trading nations; specialization, tariffs, balance of payments, and international monetary systems. Course will be offered every year (Winter). Prerequisite: ECON 201.

**ECON 325. Introduction to Forecasting (5).** An introduction to methods employed in business and econometric forecasting. Topics include time series modeling, Box-Jenkins models, and seasonal adjustments. Covers data collection methods, graphing, model building, model interpretation, and presentation of results. Prerequisites: ECON 202 and either MATH 153, MATH 154, MATH 170, MATH 172, or MATH 173.

**ECON 330. Money and Banking (5).** The supply of money and the Federal Reserve System; financial intermediaries and financial instruments; macroeconomic theory and policy. Prerequisite: ECON 202.

**ECON 332. Public Finance (5).** Rationale of public sector; effect of government expenditure and taxation on resource allocation and income distribution; structure of federal, state, and local tax systems. Emphasis is on current policy problems. Prerequisite: ECON 202.

**ECON 333. Behavioral Economics (5).** Behavioral economics examines how psychological factors affect individual and organizational decision making. It departs from standard economics assumptions of rationality, and the course examines implications for public policy, touching on related research in experimental economics. Course will



be offered every year (Winter).

Prerequisite: ECON 201.

**ECON 348. Economic Development of the United States (5).** Economic factors in the development of the American nation from the European background to the present.

**ECON 349. Economic Development of Asia (5).** This course analyzes the post-war economic development of Asia. Dubbed the "Economic miracle of the 20th century" by the World Bank, the rapid economic rise of China, Taiwan, Japan, South Korea, India, and Singapore will be covered. Topics will include industrialization, state-society relations, labor migration, and the environment.

**ECON 352. Managerial Economics (5).** Application of microeconomic theories to managerial decisions and planning utilizing the case method. Prerequisites: ECON 202 and BUS 221.

**ECON 355. Economics of Labor (5).** Economics of the labor market, labor, productivity, investment in human capital, manpower problems, and public policy. Prerequisite: ECON 202.

**ECON 356. Government and Business (Put on reserve 9/16/16) (5).** The development and current status of relations between the U.S. government and business firms. Government regulation of competition and monopoly; subsidies and public enterprise. (Put on Reserve 9/16/16. Last taught in 2013. Will go inactive 8/24/19.) Prerequisite: ECON 201.

**ECON 396. Individual Study (1-6).** May be repeated if subject is different.

**ECON 397. Honors (1-12).** Prerequisite: admission to department honors program.

**ECON 398. Special Topics (1-6).**

**ECON 399. Seminar (1-5).** May be repeated if subject is different.

**ECON 401. Intermediate Microeconomic Analysis (5).** Markets as mechanisms for organizing and directing human activities; production of goods and services; the allocation of labor, capital, and natural resources to various productive activities; and the distribution of income. Relationship between microeconomics theory and contemporary thought, practical problems and government policies. Prerequisite: ECON 201.

**ECON 402. Intermediate Macroeconomic Analysis (5).** Analysis and measurement of U.S. national income and product accounts; determinants of income, employment and prices under the Classical and Keynesian systems; problems of inflation, economic growth and

stabilization policy. Prerequisite: ECON 202.

**ECON 406. Business Analytics (5).** Introduction to business analytics methods, approaches and tools. Students develop skills in: descriptive and predictive analytics methods; software tools for business analytics; forecasting; optimal analysis method selection. Course will be offered every year (Spring). Prerequisites: BUS 221 or MATH 311 or PSY 362 or SOC 363. CE - Culminating Experience

**ECON 424. Introduction to Econometrics (5).** Evaluation of economic models and forecasting of economic variables using multiple regression techniques and cross sectional data. Brief introduction to advanced techniques which may include IV, time series, logit and probit, or panel data methods. Formerly ECON 324, students may not receive credit for both. Prerequisites: BUS 221 or MATH 211 or PSY 362 or SOC 363.

**ECON 426. Economic Research (5).** Students will undertake several applied economics research projects, drawn from the entire spectrum of economic fields (including, potentially, general business and finance.) Project results will be presented both in writing and orally. Prerequisites: ECON 202 and BUS 221.

**ECON 462. Environmental and Resource Economics (5).** Economics of environmental issues and natural resource management; economic implications of environmental policies and regulations. Topics in economics of pollution, land, water, recycling, and benefit-cost analysis. Prerequisite: ECON 201.

**ECON 463. Energy Economics (5).** Theoretical and empirical perspectives on economics of energy; political economy of energy supply and demand; regulation in energy sector; analysis of prevalent market structures; economics of oil, coal, electricity generation, natural gas and alternative energies. Prerequisite: ECON 201.

**ECON 490. Cooperative Education (1-12).** An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. By permission. May be repeated for credit. Grade will either be S or U.

**ECON 493. Economics Boot Camp (1-6).** Supervised field experience focused on economics related organizations and processes. On-location industry

engagement. Education, training, and business skills application in industry setting. May be repeated up to 6 credits. Grade will either be S or U. Permission of instructor. Course will not have an established scheduling pattern.

**ECON 496. Individual Study (1-6).**

**ECON 497. Honors (1-12).** Prerequisite: admission to department honors program.

**ECON 498. Special Topics (1-6).**

**ECON 499. Seminar (1-5).**

### Education: Center for Teaching Learning Courses

**ECTL 201. CWU Youth Mentoring I (3).** Compass 2 Campus (C2C) is a class designed as an introduction to service-learning. Students participate in a campus wide mentoring initiative designed to encourage under-represented, low-income, first generation, and diverse fifth-twelfth grade students to graduate from high school and consider post-secondary education. May be repeated up to 9 credits.

**ECTL 298. Special Topics (1-6).** May be repeated if subject is different.

**ECTL 299. Seminar (1-5).** May be repeated if subject is different.

**ECTL 396. Individual Study (1-6).** May be repeated if subject is different.

**ECTL 397. Honors (1-12).** Prerequisite: admission to department honors program.

**ECTL 398. Special Topics (1-6).** May be repeated if subject is different.

**ECTL 399. Seminar (1-5).** May be repeated if subject is different.

**ECTL 470. Alternative Pathways to Teaching: Seminar Series (3).**

Reserved for candidates in Alternative Pathways to Teaching (APT).

Introduces candidates to the technical skills of teaching by using case studies with embedded problems encountered in Washington public schools. Students will solve the problems through individual online research and group discussion. Seminar topics include online learning, inquiry-based learning, assessment, professional, legal and ethical requirements, special education and English language learners. Department consent required. Grade will either be S or U.

**ECTL 480. Alternative Pathways to Teaching: Curriculum Planning (3).**

Course reserved for candidates admitted into the APT Regional Consortia Program. Candidates will learn about and develop practical lesson planning, management, and assessment strategies, as well as

methods and models of teaching, including reflection and analysis. Prerequisite: full admission to CWU, and the APT Regional Consortia Program. Grade will either be S or U.

**ECTL 490. Alternative Pathways to Teaching: Internship (6).** Course reserved for Alternative Pathways to Teaching (APT) Program. Candidates will be required to complete a school year-long internship in a public school setting to satisfy legislative requirements using a co-teaching model. The final quarter the candidate must take and pass the Teacher Performance Assessment before exiting the program and applying for certification. Must be repeated for 3 quarters for a total of 18 credits. Department consent required. Grade will either be S or U.

**ECTL 496. Individual Study (1-6).** May be repeated if subject is different.

**ECTL 497. Seminar (1-12).**

Prerequisite: admission to department honors program.

**ECTL 498. Special Topics (1-6).** May be repeated if subject is different.

**ECTL 499. Seminar (1-5).** May be repeated if subject is different.

#### **Education: Bilingual Courses**

**EDBL 212. Cultural Literacies, Society, and Schooling (4).** Discussion on research on linguistic, social and community issues pertaining to cultural literacies, the global/national communities and education policies in schooling.

**EDBL 250. Ethnic and Cultural Minorities in American Education: Past and Present (4).** This course will provide students the opportunity to explore, analyze, and present information related to the educational experiences of ethnic and cultural minorities in America. This will include both historical and contemporary conditions. Course will be offered every year (Fall, Winter). K2 - Community, Culture, & Citizenship

**EDBL 296. Individual Study (1-6).**

**EDBL 298. Special Topics (1-6).**

**EDBL 299. Seminar (1-5).** May be repeated if subject is different.

**EDBL 312. Foundations in Bilingual Education (3).** Introduction to the education of students whose primary language is other than English. Research on linguistic, social and community issues pertaining to bilingualism and bilingual education. Course will be offered every year (Fall, Winter, Spring, Summer).

**EDBL 318. Family, Community, and Culture in Education (3).** This course will explore the impact of families, communities, and culture on the educational experiences of students.

Particular focus will be on the families and communities of diverse populations. Course will be offered every year (Fall, Winter). Prerequisite: Conditional admission to the Teacher Certification Program or completion of the Teacher Certification Waiver letter.

**EDBL 396. Individual Study (1-6).**

**EDBL 397. Honors (1-12).** Prerequisite: admission to department honors program.

**EDBL 398. Special Topics (1-6).**

**EDBL 399. Seminar (1-5).** May be repeated if subject is different.

**EDBL 401. Principles and Practices for Educating Linguistically Diverse Students (3).**

Required coursework that provides the fundamental background in language and learning theories needed to educate linguistically diverse students. The basics of sheltered instruction are introduced. Course will be offered every year (Fall, Winter, Spring, Summer). Prerequisites: PSY 314 and [EFC 250 OR (EFC 210 AND EFC 310)] with a grade of C or higher and full admission to the Teacher Certification Program.

**EDBL 430. Sheltering Instruction for Linguistically Diverse Students (3).**

This course provides teacher candidates the basic competencies and skills needed to make appropriate modifications and accommodations for linguistically diverse students in content area instruction. Prerequisites: students must be admitted to the bilingual education/TESL minor or teaching English as a second language minor.

**EDBL 433. Educational Linguistics (3).**

Phonology, syntax, and semantics applicable to speech and learning situations in the school. Not recommended for undergraduates with no teaching experience. Prerequisite: full admission to the Teacher Certification Program.

**EDBL 435. Bilingual Education in the Content Areas (3).**

Designed to develop teacher competency related to the bilingual instruction of coursework in language arts, social studies, science and mathematics in both English and Spanish. The use of ESL in these content areas is emphasized. Taught in English and Spanish. Prerequisite: admission to the Teacher Certification Program.

**EDBL 438. Teaching English as a Second Language (3).** Prepares

teachers in the development and practice of research-based methods and techniques used to assist K-12 English Language Learners in acquiring academic English. Course will be offered every year (Fall, Winter, Spring, Summer).

**EDBL 439. Assessment of**

**Linguistically Diverse Students (3).**

This course prepares students to use effective assessment programs and techniques with linguistically diverse students in order to improve identification, reclassification, and teaching of such students. Prerequisite: admission to the Teacher Certification Program.

**EDBL 440. Development of Literacy with Linguistically Diverse Students (3).**

Reading instruction for K-12 students who are speakers of a language other than English. Linguistic theory and information for developing and implementing strategies and techniques for literacy acquisition in English. Prerequisite: full admission to the Teacher Certification Program.

**EDBL 492. Practicum (1-15).** This course will provide students with experience working in bilingual education and/or English as a second language settings. Students may accumulate no more than 15 hours of practicum credit. May be repeated up to 15 credits. Grade will either be S or U. Prerequisite: students must have completed four courses in the Bilingual Ed or Teaching ESL minor, and admission to the Teacher Certification program and current WSP/FBI fingerprint clearance.

**EDBL 496. Individual Study (1-6).**

**EDBL 497. Honors (1-12).** Prerequisite: admission to department honors program.

**EDBL 498. Special Topics (1-6).**

**EDBL 499. Seminar (1-5).**

#### **Education: Curriculum and Supervision Courses**

**EDCS 298. Special Topics (1-6).** May be repeated if subject is different.

**EDCS 299. Seminar (1-5).** May be repeated if subject is different.

**EDCS 312. Educational Statistics (4).** Use and interpretation of elementary statistical techniques.

**EDCS 392. Practicum (3-5).** Practical experience in a state-approved K-12 educational setting. Grade will either be S or U.

**EDCS 396. Individual Study (1-6).** May be repeated if subject is different.

**EDCS 397. Honors (1-12).** Prerequisite: admission to department honors program.

- EDCS 398. Special Topics** (1-6). May be repeated if subject is different.
- EDCS 399. Seminar** (1-5). May be repeated if subject is different.
- EDCS 492. Practicum** (1-15). Experience working in educational settings. Students may accumulate no more than 15 hours of practicum credit. May be repeated for credit. Grade will either be S or U.
- EDCS 496. Individual Study** (1-6). May be repeated if subject is different.
- EDCS 497. Honors** (1-12). Prerequisite: admission to department honors program.
- EDCS 498. Special Topics** (1-6). May be repeated if subject is different.
- EDCS 499. Seminar** (1-5). May be repeated if subject is different.

**Education: Curriculum and Supervision Courses**

- EDEC 232. Child Development** (3). Developmental characteristics of children with emphasis from conception to eight years. Includes observation techniques. EDEC 232 and FCL 232 are cross-listed courses; students may not receive credit for both.
- EDEC 292. Assisting in the Child-centered Classrooms** (5). Students work with children in ECE classrooms, learning and practicing the fundamentals of guidance, curriculum implementation, and maintaining the physical environment. Students participate in a two-hour seminar each week. May be taken twice for credit with the permission of the division head. Grade will be either S or U.
- EDEC 296. Individual Study** (1-6).
- EDEC 298. Special Topics** (1-6).
- EDEC 299. Seminar** (1-5).
- EDEC 306. Professional Growth and Expectations** (2). This initial course in the Early Childhood Education sequence is a survey of the profession. Students begin a professional growth and development plan, develop philosophical underpinnings, and systematically organizing resources that will be used throughout the program. Co-requisite: EDEC 307.
- EDEC 307. Equity, Culture, and Anti-bias in ECE** (3). Principles of equity, cultural relevancy, and anti-bias approaches appropriate for programs serving children from birth through eight years of age. Course will not have an established scheduling pattern (Fall, Spring). Pre-requisite: EDEC 306.
- EDEC 312. Childhood Learning** (3). Childhood Learning is an exploration of the specific content knowledge and processes, such as reading, math, science, language arts, etc. that are found in preschool through third grade developmentally appropriate programs. Course will be offered every year (Fall, Spring). Prerequisite: EDEC 306.
- EDEC 313. Materials and Manipulatives in ECE** (3). Strategies are investigated for developing games and learning opportunities through the use of classic ECE manipulatives. The potential for fostering teaching knowledge and skills is emphasized. Course will be offered every year (Fall, Winter, Spring). Prerequisite: EDEC 306.
- EDEC 314. Learning through Play** (3). Learning through play is a dynamic look at how to introduce and solidify skills through play based emergence curriculum. The use of play to developmentally explore in depth reading, math, emotions, etc. Course will be offered every year (Fall, Winter, Spring). Prerequisite: EDEC 306.
- EDEC 321. Curriculum I** (3). Historical influences and knowledge of child development/psychological theories/contemporary models will form the basis for curriculum development, implementation, and interactions with children from birth to preschool age. Course will be offered every year (Fall, Winter, Spring). Prerequisite: EDEC 306.
- EDEC 322. Parent Involvement** (3). Parent-child and parent-school interactions as educational and developmental aids. Emphasis upon the school's use of the home and community for educational purposes. Course will be offered every year (Fall, Winter, Spring). Prerequisite: EDEC 306.
- EDEC 396. Individual Study** (1-6).
- EDEC 397. Honors** (1-12). Prerequisite: admission to department honors program.
- EDEC 398. Special Topics** (1-6).
- EDEC 399. Seminar** (1-5). May be repeated if subject is different.
- EDEC 411. Curriculum II** (3). Historical influences and knowledge of child development, psychological theories, and contemporary models as bases for curriculum development and implementation in pre-kindergarten settings. Course will be offered every year (Fall, Winter, Spring). Prerequisite: EDEC 306.
- EDEC 412. Responsible Childhood Assessment** (3). Exploration and application of childhood assessment, birth-elementary with emphasis on responsibility, ethics, purpose, decision-making, and alignment; designed to impact individual learning outcomes, professional implementation, and program improvement. Course will be offered every year (Fall, Winter, Spring). Prerequisite: EDEC 306.
- EDEC 422. Classroom Management in an ECE Classroom** (3). This course provides students the opportunity to explore, apply, synthesize and evaluate techniques and strategies for creating positive classroom climates through organization and management techniques. Course will be offered on even numbered years (Fall, Winter, Spring). Prerequisites: EDEC 312 and EDEC 321 and EDEC 411.
- EDEC 424. Curriculum III** (3). Historical influences and knowledge of child development, psychological theories, contemporary models will form the basis for curriculum development, implementation, and interactions with children from kindergarten through primary grades. Course will be offered on even numbered years (Fall, Winter, Spring). Prerequisites: EDEC 306, EDEC 321, and EDEC 411.
- EDEC 432. Theories in Child Development** (3). Assists the student in formulating his or her own general assumptions about the nature of child development through study of various theoretical viewpoints and current issues. EDEC 432 and FCL 432 are cross-listed courses, students may not receive credit for both. Course will be offered every year (Fall, Winter, Spring). Prerequisite: EDEC 306.
- EDEC 447. Curriculum Exploration** (3). Guided exploration of curriculum or guidance needs as identified by student self-evaluation. Consistency with the student's personal philosophy and child development will be emphasized. Prerequisites: EDEC 331 or FCSF 331.
- EDEC 465. Directing ECE Programs (Put on reserve 9/16/17)** (3). Budgeting, governmental requirements, staffing, nutritional and health care, parental involvement, community and agency liaison, and the integration of developmental/educational curriculum. (Put on reserve 9/16/17. Will go inactive 8/24/2020.)
- EDEC 490. Cooperative Education** (1-12). An individualized contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. Prior approval. May be repeated for credit. Grade will either be S or U.

**EDEC 492. Senior Seminar (3).** This capstone seminar integrates the hands-on experiences from the EDEC 493 practicum with the ECE major course content. Students will actively problem solve, develop professional resources, compile a portfolio and career growth plan. May be repeated with or without EDEC 493 practicum. Department consent required. May be repeated up to 6 credits. Corequisite: EDEC 493 and EDEC 432 must be taken concurrently.

**EDEC 493. Professional Educators Field Experience (3-18).** Students will work in ECE settings 20 hours per credit. Classroom interactions will include group instruction, individual tutoring, assessing students' learning, classroom management, classroom maintenance, as well as other duties determined by the site supervisors. May be repeated a second time without the EDEC 492 senior seminar; may be repeated up to 30 credits. Department consent required. Grade will either be S or U. Course will be offered every year (Fall, Winter, Spring). Prerequisites: EDEC 422, and EDEC 424, and current WSP/FBI fingerprint clearance. Corequisite: EDEC 492 required for the initial experience.

**EDEC 494. Professional Educators Advanced Field Experience (3-10).** A course designed to meet special needs as determined by the student, his/her advisor and the director. Grade will be S or U. Prerequisite: EDEC 493.

**EDEC 496. Individual Study (1-6).**

**EDEC 497. Honors (1-12).** Prerequisite: admission to department honors program.

**EDEC 498. Special Topics (1-6).**

**EDEC 499. Seminar (1-5).**

#### Education: Elementary Courses

**EDEL 120. Educating America (4).** The course takes a chronological look at how the institution of education has influenced and been influenced by the development of the U.S. socially, economically, politically, and culturally.

**EDEL 130. Relationship Development Across the Lifespan (4).** This course focuses on human interaction through the development of relationships across the lifespan with particular emphasis on relationship formation and stages of parenting.

**EDEL 296. Individual Study (1-6).**

**EDEL 298. Special Topics (1-6).**

**EDEL 299. Seminar (1-5).**

**EDEL 320. Integrated Arts in the Elementary School (5).** This course contains content and methodology for

elementary majors preparing to teach all of the arts (dance, drama/theatre arts, music and visual arts) with connections to pedagogy, artistic expression, and the other content area of elementary education. Prerequisites: conditional admission to the Teacher Certification Program and current WSP/FBI clearance.

**EDEL 323. Teaching Elementary School Mathematics (4).** Methods and materials for helping children learn mathematics with emphasis on the use of manipulatives, problem solving, cooperative learning, and communication. Prerequisites: MATH 164, MATH 250, and full admission to the Teacher Certification Program, and current WSP/FBI fingerprint clearance.

**EDEL 396. Individual Study (1-6).**

**EDEL 397. Honors (1-12).** Prerequisite: admission to department honors program.

**EDEL 398. Special Topics (1-6).**

**EDEL 399. Seminar (1-5).** May be repeated if subject is different.

**EDEL 401. Foundations/Philosophy for Teaching Highly Capable Learners (2).** An exploration of philosophies, concepts, and historical realities that have implications for supporting the education and development of highly capable learners.

**EDEL 405. Societal and Cultural Perceptions of Giftedness (3).** Exploration of the cultural and societal influences that shape perceptions of what it means to be "gifted" and the implications for the appropriate education of highly capable learners. Prerequisite: junior standing. Acceptance into TPP or have a valid WA teaching certificate.

**EDEL 410. Identification of Highly Capable Learners (2).** A review of the criteria, tools, and data interpretation for identifying and assessing highly capable learners. Prerequisite: junior standing. Acceptance into TPP or have a valid WA teaching certificate.

**EDEL 415. Learning Environments for Highly Capable Learners (3).** An exploration of the unique criteria for establishing appropriate learning environment for highly capable learners across a broad spectrum of capabilities and content areas. Prerequisite: junior standing. Acceptance into TPP or have a valid WA teaching certificate.

**EDEL 420. Social Sciences in the Elementary School (4).** Methods, techniques, content, and materials for the various grade levels with an emphasis on history, geography,

economics, civics, political science, and social studies skills, through the use of inquiry, primary source documents, and integration of content within the elementary school curriculum. Prerequisite: full admission to the Teacher Certification Program and senior level status or by permission.

**EDEL 423. Integrated Methods for the Elementary School (3).** In this capstone course, elementary teacher candidates will explore interdisciplinary instruction and design standards-based unit plans that incorporate best teaching practices for specific teaching assignments. Prerequisites: EDEL 323 and EDEL 420 and EDLT 409 and EDLT 422 and SCED 322 and complete four of the following courses: EDEL 320 or EDLT 321 or HED 446, or PE 334 and full admission to the Teacher Certification Program.

**EDEL 425. Curriculum Development/Modification-Highly Capable Learners (3).** Practical and specific strategies for creating curriculum tasks and adapting given curricular resource materials to support highly capable learners; their growth, development, and personal goals. Prerequisite: junior standing. Acceptance into TPP or have a valid WA teaching certificate.

**EDEL 430. Individual Development of Highly Capable Learners (3).** Exploration of the unique development of highly capable learners and how teachers, families, and the learners collaborate to support the learner in and out of school settings. Prerequisite: junior standing. Acceptance into TPP or have a valid WA teaching certificate.

**EDEL 435. Introduction to Project-Based Learning (PBL) (2).** This course explores project-based learning (PBL) as defined by best-practices and established criteria from recognized long-term PBL advocates. Prerequisite: junior standing. Acceptance into TPP or have a valid WA teaching certificate.

**EDEL 450. Planning and Instruction I: Highly Capable Learners (3).** Exploration and application of a variety of methodologies and planning tools to support highly capable learners for a variety of capabilities. Takes place in field-based clinical setting. Prerequisite: junior standing. Acceptance into TPP or have a valid WA teaching certificate.

**EDEL 455. Planning and Instruction II: Highly Capable Learners (3).** Continued and deeper exploration and direct application of a variety of

methodologies and planning tools to support highly capable learners for a variety of upper-grade levels capabilities and content areas. Takes place in field-based clinical setting. Prerequisite: junior standing.

Acceptance into TPP or have a valid WA teaching certificate.

**EDEL 468. Teaching Problem-solving Techniques for Upper Elementary and Middle School Mathematics (3).**

Methods and materials for helping the upper elementary/middle school (5th-8th grade) students learn mathematics with emphasis on appropriate manipulatives, teaming, problem solving, and communication strategies. Department reactivated 9/16/15.

Prerequisites: EDEL 323 and MATH 164 and MATH 250 and full admission to the Teacher Certification Program.

**EDEL 476. Integrated Humanities at the Middle-level Grades (5).**

This course focuses on integrated instructional strategies and methods for working with middle-level (grades 4-9) students in the humanities (English, reading, social studies, history, civics, economics, and geography) content areas. EDEL 476 and ENG 476 are cross-listed; students may not receive credit for both. Prerequisites: ENG 320 and admission to the teacher education or hold a valid Washington teaching certificate.

**EDEL 477. Middle School Students and Their Environment (4).**

An in-depth exploration of the developmental learning needs of 5th-8th grade students and the physical, social, and management systems utilized by middle-level education programs. The major focus of this course is to create developmentally appropriate classroom practices that merge educational developmental needs. Prerequisites: full admission to the Teacher Certification Program and current WSP/FBI fingerprint clearance.

**EDEL 478. Developmentally Responsive Curriculum in the Middle Grades (3).**

An in-depth exploration of research-based middle school curriculum that meets the development needs of young adolescents. This course focuses on middle school curriculum and its process by which it is designed, integrated, and evaluated. Prerequisite: full admission to the Teacher Certification Program and current WSP/FBI fingerprint clearance.

**EDEL 482. Instruction and Assessment for the Middle-level: Grades Five through Eight (3).**

provides the future middle-level educator with comprehensive skills in instructional methods, curriculum alignment, lesson development, and assessment methodology within the middle school environment.

Department reactivated 9/16/15. Prerequisites: PSY 314, EFC 310, EDSC 311, and admission to the Teacher Certification Program.

**EDEL 490. Cooperative Education (1-12).**

An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will be either S or U. Prerequisites: prior approval and conditional or full admission to the Teacher Certification Program.

**EDEL 491. Workshop (1-6).**

May be repeated for credit. Prerequisite: full admission to the Teacher Certification Program and current WSP/FBI fingerprint clearance.

**EDEL 493. Professional Educators Field Experience (1-15).**

Experience working in educational settings. Application must be submitted before registration - see department of TEACH office. Students may accumulate no more than 15 hours of practicum credit. Formerly EDEL 492, students may not receive credit for both. Grade will either be S or U. Prerequisite: full admission to the Teacher Certification Program and current WSP/FBI fingerprint clearance.

**EDEL 496. Individual Study (1-6).**

Prerequisite: admission to department honors program.

**EDEL 497. Special Topics (1-6).**

Prerequisite: admission to department honors program.

**EDEL 498. Seminar (1-5).**

Prerequisite: admission to department honors program.

**EDEL 499. Special Topics (1-6).**

Prerequisite: admission to department honors program.

**EDEL 499. Seminar (1-5).**

Prerequisite: admission to department honors program.

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**EDEL 499. Seminar (1-5).**

Prerequisite: admission to department honors program.

**EDEL 499. Seminar (1-5).**

Prerequisite: admission to department honors program.

**EDF 496. Individual Study (1-6).**

Prerequisite: admission to department honors program.

**EDF 497. Honors (1-12).**

Prerequisite: admission to department honors program.

**EDF 498. Special Topics (1-6).**

Prerequisite: admission to department honors program.

**EDF 499. Seminar (1-5).**

Prerequisite: admission to department honors program.

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Prerequisite: admission to department honors program.

**EDF 499. Seminar (1-5).**

Prerequisite: admission to department honors program.

**EDLM 436. Survey of Children's and Young Adult Literature** (3). Considers the field of children's and young adult literature; literary genres, major literary awards, leading representative authors, historical and recent trends. Includes topics of cultural diversity and reading promotion. EDLM 436 and EDLM 536 are layered courses, students may not receive credit for both.

**EDLM 448. Collection Development/Library Media** (3). Explore the methods used and the issues and solutions involved in developing a collection in a school library media center. EDLM 448 and EDLM 548 are layered courses; students may not receive credit for both.

**EDLM 458. Cataloging and Classification for Library Media** (3). Cataloging and classification of library media materials with an emphasis on MARC records. Includes Dewey Decimal classification system, authorized subject headings, and assigning MARC tags using original and copy cataloging of book and non-print items. EDLM 458 and EDLM 558 are layered courses, students may not receive credit for both.

**EDLM 468. Research and Information Fluency** (3). Reference tools, information sources, search strategies, research models, and evaluative techniques will be explored as tools to enable students to be more information literate. EDLM 568 and EDLM 468 are layered courses, students may not receive credit for both.

**EDLM 478. Administration of Library Media Programs** (3). Develops competency in administering materials, equipment, and services of library media program as integral part of the school. Focus on leadership, personnel, budgets, facility planning, state and national standards in planning, evaluation and program development. EDLM 478 and EDLM 578 are layered courses, students may not receive credit for both.

**EDLM 492. Library Media Practicum** (1-4). An individualized field experience in a public/private school setting supervised/coordinated by CWU faculty. Prerequisite: permission to register only by the department.

**EDLM 496. Individual Study** (1-6). May be repeated if subject is different.

**EDLM 497. Honors** (1-12). Prerequisite: admission to department honors program.

**EDLM 498. Special Topics** (1-6). May be repeated if subject is different.

**EDLM 499. Seminar** (1-5). May be repeated if subject is different.

**Education: Literacy Courses**

**EDLT 217. Exploring Global Dynamics through Children's and Adolescent Literature** (4). Interdisciplinary connections with critical analysis of global and international children's/adolescent literature are explored. Comparisons across contemporary, historical, social, political, and economic issues through global and international children's/adolescent literature read and discussed. Course will be offered every year (Fall). K4 - Global Dynamics

**EDLT 218. Exploring Issues of Sustainability through Writing** (4). Issues of sustainability (social, political, environmental, and economic human practices) will be explored through a "flipped classroom." Writer's workshop will be used during class, with course information and readings presented through digital and print means. Course will be offered every year (Spring, Summer).

**EDLT 219. Storytelling Across Disciplines** (4). Contemporary trends and interdisciplinary connections of storytelling are explored. Selection, adaptation, and presentation of stories across culture, perspectives, histories, and societies will be emphasized. Aesthetic judgement and critical thinking will be used in evaluating storytelling. Course will be offered every year (Winter). K3 - Creative Expression

**EDLT 296. Individual Study** (1-6).

**EDLT 298. Special Topics** (1-6).

**EDLT 299. Seminar** (1-5). May be repeated for credit.

**EDLT 308. Literacy I** (3). First of two courses designed to prepare prospective teachers to teach literacy in elementary school classrooms. Deals with processes and products of the literacy act, methods and materials, assessment procedures, and instruments.

**EDLT 315. Literacy Strategies for Struggling and Advanced Learners** (Put on reserve 9/16/16.) (3). Techniques for identifying and differentiating instruction for both struggling and advanced literacy learners. (Put on reserve 9/16/16. Last taught in 2012. Will go inactive 8/24/19.) Prerequisite: current WSP/FBI fingerprint clearance .

**EDLT 317. Early Literacy (On reserve as of 9/16/15)** (3). Aspects of early literacy acquisition and instruction including language development, phonemic awareness, writing, play and

socio-cultural contexts are emphasized. Put on reserve 9/16/15. Will go inactive 8/24/18. Prerequisite: current WSP/FBI fingerprint clearance .

**EDLT 319. Storytelling Techniques (Put on reserve 9/16/16.)** (3). Storytelling in the integrated curriculum. Students become familiar with a variety of stories and demonstrate the ability to tell stories. (Put on reserve 9/16/16. Last taught in 2013. Will go inactive 8/24/19.) Prerequisite: current WSP/FBI fingerprint clearance.

**EDLT 321. Teaching Children's Literature** (3). The types of literature suited to children in grades 1-6; includes reading and evaluation of material from early folklore to present day books for children. Prerequisite: current WSP/FBI fingerprint clearance.

**EDLT 324. Literacy Across the Curriculum Grades 6-12** (3). Theories of language and literacy instruction as applied to teaching across the curriculum in grades 6-12. Emphasis on reading and writing in content areas, as well as instructional strategies to support students' literacy development. Focuses on ways that reading, writing, speaking, and listening are developed and used in learning discipline-specific curriculum. Prerequisite: current WSP/FBI fingerprint clearance.

**EDLT 396. Individual Study** (1-6). By permission. May be repeated for credit.

**EDLT 397. Honors** (1-12). Prerequisite: admission to department honors program.

**EDLT 398. Special Topics** (1-6). May be repeated for credit.

**EDLT 399. Seminar** (1-5). May be repeated if subject is different.

**EDLT 409. Literacy II** (5). Content and methodology of early literacy, vocabulary development, phonics and structural analysis, comprehension and study skills. Field experience in a local school embedded. Prerequisites: EDLT 308, current WSP/FBI fingerprint clearance, and admission to the Teacher Certification Program.

**EDLT 410. Literacy Teaching and Learning Birth-Grade 3** (3). Theories of language and literacy development birth to third grade. Methods/materials for developing literacy - oral (listening and speaking) and written language (reading and writing). Focus on assessment, word study, fluency, writing, and vocabulary development. Prerequisites: ELEM 321 and ELEM 331, admission to the Teacher Certification Program, and current WSP/FBI fingerprint clearance.

**EDLT 411. Teaching Comprehension**

(3). Comprehension strategies and techniques; techniques for vocabulary development. Prerequisites: EDLT 308 and EDLT 409, admission to the Teacher Certification Program, and current WSP/FBI fingerprint clearance .

**EDLT 412. Assessment of Literacy Skills and Processes**

(3). Assessment instruments, procedures, and interpretive skills for determining student reading levels and needs. Emphasizes the selection, administration, and interpretation of evaluation tools. Prerequisites: EDLT 308 and EDLT 409, admission to the Teacher Certification Program, and current WSP/FBI fingerprint clearance .

**EDLT 413. Literacy Teaching and Learning Grades 4-8**

(3). Theories of literacy development for grades 4-8. Methods and materials of developing literacy skills including oral (listening and speaking) and written language (reading and writing). Specific focus on assessment, word study, vocabulary development, fluency, and writing. Prerequisite: ELEM 341.

**EDLT 414. Linguistics and Literacy for Diverse Learners**

(3). Introduction to theories and the major fields of linguistics and the relationship to teaching literacy in multilingual/multicultural settings. Theories and strategies for teaching literacy and developing language skills in students with diverse backgrounds. Prerequisites: ELEM 331 and ELEM 341, current WSP/FBI fingerprint clearance, and admission to the Teacher Certification Program.

**EDLT 418. Literacy and Linguistics**

(3). This course is intended to provide literacy teachers with a general introduction to the major fields of linguistics, including phonology and phonetics, morphology, syntax, semantics, discourse analysis, language acquisition, and dialects. Prerequisites: EDLT 308 and EDLT 409, admission to the Teacher Certification Program, and current WSP/FBI fingerprint clearance .

**EDLT 422. Teaching the Language Arts**

(4). Primarily for prospective elementary school teachers. Listening, writing, speaking, spelling, and handwriting development. Emphasizes curriculum, methods, materials, and research. Experienced teachers see EDEL 531. Prerequisites: EDLT 308, current WSP/FBI fingerprint clearance, and admission to the Teacher Certification Program.

**EDLT 490. Cooperative Education**

(1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. By permission. May be repeated for credit. Grade will either be S or U. Prerequisite: admission to the Teacher Certification Program.

**EDLT 493. Literacy Practicum**

(6). Practical experience working with children in classroom settings. By permission. Grade will either be S or U. Prerequisite: EDLT 409, and 5 required courses in the literacy minor.

**EDLT 496. Individual Study** (1-6). By permission. May be repeated for credit. Grade will either be S or U.

**EDLT 497. Honors** (1-12). Prerequisite: admission to department honors program.

**EDLT 498. Special Topics** (1-6). May be repeated for credit.

**EDLT 499. Seminar** (1-5). May be repeated for credit.

**Education: Special Education Courses**

**EDSE 296. Individual Study** (1-6).

**EDSE 298. Special Topics** (1-6). May be repeated if subject is different.

**EDSE 299. Seminar** (1-5). May be repeated if subject is different.

**EDSE 302. Introduction to Students with Exceptionalities** (3). Introduces strategies for effective teaching and adapting standard instruction to meet needs of range of students found in a typical classroom. Provides information about students considered disabled and gifted and students with multicultural heritages. Course will be offered every year (Fall, Winter, Spring, Summer). Prerequisites: PSY 314 and [EFC 250 OR (EFC 210 AND EFC 310)] with a grade of C or higher and full admission to the Teacher Certification Program.

**EDSE 310. Introduction and Foundations of Special Education**

(4). Designed to introduce prospective teachers to the legal requirements of special education and skills for collaborative relationships in the multidisciplinary team process. This course includes field experience observations. A valid WSPI/FBI fingerprint clearance and Liability Insurance are required; this can be obtained through the School of Education office. Course will be offered every year (Fall, Winter, Spring). Prerequisite: Conditional or full admission to the Teacher Certification Program.

**EDSE 396. Individual Study** (1-6).

**EDSE 397. Honors** (1-12). Prerequisite: admission to department honors program.

**EDSE 398. Special Topics** (1-6).

**EDSE 399. Seminar** (1-5). May be repeated if subject is different.

**EDSE 410. Behavior Management for Students with Disabilities**

(5). Fundamentals of behavior change related to the education of students with exceptionalities. Monitoring individual student progress and utilizing data collected for program instructional change. Practical Field Experience included in this course. Required: valid WSPI/FBI fingerprint clearance and Professional Liability Insurance. Course will be offered every year (Fall, Winter, Spring).

Prerequisites: EDSE 310, Required: valid WSPI/FBI fingerprint clearance and Professional Liability Insurance, and conditional or full admission to the Teacher Preparation Program.

**EDSE 411. Assessment of Students with Exceptionalities** (5). Selecting, administering, scoring, and interpreting formal and informal assessment tools.

Designing and using informal testing techniques, summative and formative. Course will be offered every year (Fall, Winter, Spring).

Prerequisites: EDSE 310 and conditional or full admission to the Teacher Certification Program.

**EDSE 422. Teaching Strategies, Curriculum, and Materials for Students with Exceptionalities**

(5). Individual, small, and large group teaching strategies essential to individualized education programs, and selection, evaluation, and adaptation of commercially available materials, including computer applications. Prerequisites: EDSE 310 and admission to the Teacher Certification Program.

**EDSE 423. Instructional Practices/Strategies in Literacy and Math for Students with High Incident Disabilities**

(5). Specially designed instructional strategies and programming considerations for students with high incidence special needs in reading, written expression and mathematics. A field experience practicing instructional strategies. A valid WSPI/FBI fingerprint clearance and liability insurance are required; this can be obtained through the School of Education office. Course will be offered every year (Winter, Spring). Prerequisites: EDSE 310 and admission to the Teacher Certification Program.

**EDSE 426. The Child with Language Exceptionalities** (3). An exploration of

the child with language exceptionalities (age birth-6) from the perspective of typical language development, assessment strategies, and remedial techniques. Recommended for teachers of children with mild and severe exceptionalities. Course will be offered every year (Fall, Winter, Spring, Summer). Prerequisites: Current WSP/FBI fingerprint clearance and application or admission to the Teacher Certification Program.

**EDSE 431. Individualized Educational Programs for Students with Exceptionalities (4).** Designed to introduce prospective students to the legally and professionally supported process for creating IFSP's and IEP's. Course will be offered every year (Fall, Winter, Spring). Prerequisites: EDSE 310 and admission to the Teacher Certification Program.

**EDSE 432. Strategies for Working with Students with Low Incidence Disabilities (4).** Designed to introduce prospective teachers to the research supported strategies necessary for effective implementation for students with low incidence disabilities. This course includes a clinical field experience. A valid WSPI/FBI fingerprint clearance and Liability Insurance are required; this can be obtained through the School of Education office. Course will be offered every year (Winter, Spring). Prerequisites: EDSE 310 and admission to the Teacher Certificate Program.

**EDSE 460. Collaboration with Parents, Paraprofessionals, and Community Agencies (4).** Designed to emphasize skills necessary for collaborative relationships in the team process, including collaboration with other teachers, families, paraprofessionals, administration, and community agencies. A practical field experience is included in this course. Required: valid WSPI/FBI fingerprint clearance and Professional Liability Insurance. Course will be offered every year (Winter, Spring).

**EDSE 490. Cooperative Education (1-12).** An individualized contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. Prior approval required. May be repeated for credit. Grade will either be S or U. Prerequisite: current WSP/FBI fingerprint clearance, and admission to the Teacher Certification Program.

**EDSE 491. Workshop (1-6).** May be repeated for credit. Prerequisite: admission to the Teacher Certification Program or permission of the instructor.

**EDSE 495. Practicum (5-16).** Practical experience with children having learning, behavioral or physical disabilities; using behavioral management techniques in an effort to bring the child up to maximum potential as determined by his/her flexibility, sociality and capacity. May be repeated up to 16 credits. Grade will either be S or U. Prerequisite: current WSP/FBI fingerprint clearance.

**EDSE 496. Individual Study (1-6).**

**EDSE 497. Honors (1-12).** Prerequisite: admission to department honors program.

**EDSE 498. Special Topics (1-6).**

**EDSE 499. Seminar (1-5).**

### Electronics Engineering Technology Courses

**EET 101. Everyday Electronics (4).** An introduction to electronics history, analog and digital circuit components, common troubleshooting practices, and circuit analysis techniques, with an emphasis on modern devices and their impact on society. Course will be offered every year (Fall, Winter, Spring, Summer). K8 - Science & Technology

**EET 221. Basic Electricity (3).** The fundamental principles of DC and steady state AC circuit analysis are introduced. Analysis techniques include series/parallel equivalence, nodal, mesh, and phasor analysis. Three hours of lecture per week. Course will be offered every year (Fall). Prerequisite: MATH 154 or instructor permission . Co-requisite: EET 221LAB.

**EET 221LAB. Basic Electricity Laboratory (1).** Basic Electricity Laboratory. Must be taken concurrently with EET 221. Two hours of laboratory per week. Course will be offered every year (Fall).

**EET 231. Introduction to Electrical Power (4).** An introduction to electrical power and energy conversion in DC, single phase AC and balanced three phase AC systems. Prerequisite: EET 221 and MATH 172.

**EET 271. Digital Circuits (4).** Introduction to number systems, Boolean algebra, combinational logic, and the analysis and design of digital logic circuits. Formerly EET 371; student may not receive credit for both. Three hours lecture and two hours laboratory per week. Course will be offered every year (Winter).

**EET 298. Special Topics (1-6).** May be repeated if subject is different.

**EET 299. Seminar (1-5).** May be repeated if subject is different.

**EET 312. Basic Electronics (4).**

Analysis of semiconductor devices and their application in power supplies, amplifiers, and control circuits. Three hours lecture and two hours laboratory per week. Course will be offered on odd numbered years (Winter). Prerequisite: EET 221 and EET 221LAB.

**EET 323. Active Linear Circuits (4).**

Analysis and design of operational amplifier circuits including amplifiers, comparators, active filters, controls, and instrumentation devices. Three hours lecture and two hours laboratory per week. Course will be offered on odd numbered years (Spring).

Prerequisites: EET 312 and MATH 172.

**EET 325. Electrical Networks (4).**

Introduction to continuous-time linear signals and systems. Topics include differential-equation models, convolution, and Fourier analysis. Formerly EET 313; student may not receive credit for both. Four hours of lecture per week. Course will be offered every year (Fall). Prerequisites: EET 221 and EET 221LAB and MATH 173.

**EET 332. Electrical Machines (4).** An introduction to motors and generators, including control systems, electrical analysis, standards and best practices for implementation. Theory is reinforced with laboratory experiments and field trips. Three hours lecture and two hours laboratory per week. Course will be offered on even numbered years (Winter). Prerequisite: EET 221 and EET 221LAB or permission of instructor.

**EET 343. Process Control (4).**

Application of analog and digital controller principles to process control systems. Three hours lecture and two hours laboratory per week. Prerequisite: ETSC 242. Co- or Prerequisite: EET 426.

**EET 372. Advanced Digital Circuits (4).**

Introduction to sequential logic, state machines, digital interfacing techniques and memory devices. Programmable logic devices introduced as time permits. Two hours lecture and four hours laboratory per week. Course will be offered every year (Spring). Prerequisite: EET 271.

**EET 373. Introduction to Embedded Programming (4).** Introduction to embedded programming using C and C++. Programming proficiency,



algorithm development and hardware considerations in software design are emphasized. Formerly EET 370; student may not receive credit for both. Three hours lecture and two hours laboratory per week. Course will be offered every year (Fall). Prerequisites: CS 110 and MATH 154 or permission of instructor.

**EET 374. Microprocessors (4).** Study of microprocessor system components, functions, and programming methods using the assembly programming language. Formerly EET 375; student may not receive credit for both. Two hours lecture and four hours laboratory per week. Course will be offered every year (Fall). Prerequisites: CS 110 and EET 372.

**EET 376. Advanced Microprocessors (4).** Study of microprocessor system configuration, design, integration of input and output devices, and program development in C/C++. Two hours lecture and four hours laboratory per week. Course will be offered every year (Winter). Prerequisite: EET 373 and EET 374.

**EET 377. Advanced Robotics and Automation (4).** Advanced topics covering robotics in the automation industry. Two hours lecture and four hours lab per week. Course will be offered every year (Winter). Prerequisite: ETSC 242 and (ETSC 277 or CS 110).

**EET 396. Individual Study (1-6).** May be repeated if subject is different.

**EET 397. Honors (1-12).** Prerequisite: admission to department honors program.

**EET 398. Special Topics (1-6).** May be repeated if subject is different.

**EET 399. Seminar (1-5).** May be repeated if subject is different.

**EET 426. Advanced Electrical Network (4).** Analysis of continuous-time linear time-invariant systems using Laplace transforms. Topics include the forward and inverse Laplace transform, system response and stability, transfer functions, and state variable modeling. Formerly EET 324, students may not receive credit for both. Four hours of lecture per week. Course will be offered every year (Winter). Prerequisite: EET 325.

**EET 433. Transmission and Distribution of Electrical Power (4).** A study of the transmission and distribution of electrical power. Includes techniques used by electric utilities for the protection of generation equipment and transmission lines during switching of loads. Formerly EET 432, students may not receive

credit for both. Three hours lecture and two hours laboratory per week. Course will be offered on even numbered years (Spring). Prerequisite: EET 332.

**EET 444. Supervisory Control Networks (4).** An introduction Supervisory Control and Data Acquisition (SCADA), network interfacing techniques and data transfer between industrial controller systems. Prerequisite: EET 343 and EET 374.

**EET 452. Computer Networks (4).** A study of computer network protocols, topologies, and device configurations. Two hours lecture and four hours laboratory per week. Course will be offered every year (Spring). Prerequisite: EET 374.

**EET 455. Electronic Communications (Put on reserve 9/16/18) (4).** An introduction to electronic communications circuits. Two hours lecture and four hours laboratory per week. (Put on reserve 9/16/18, will go inactive 8/24/21) Prerequisite: EET 312.

**EET 475. Microcontrollers (4).** Use and programming of microcontrollers in the design and implementation of embedded controller systems.

**EET 477. Industrial Robotics and Automation (4).** An applied study of Industrial automation design and practices utilizing industrial robots and PLCs. Two hours lecture and four hours laboratory per week. Course will be offered every year (Spring). Prerequisites: ETSC 241 and EET 377.

**EET 487. Senior Project Management (2).** Research, planning, and conceptual section of a capstone analysis and design project. Collaborative group endeavors in cooperation with industry, community, or government entities are encouraged. Senior standing. Formerly EET 478; student may not receive credit for both. Two hours of lecture per week. Course will be offered every year (Fall). Co-requisite: EET 487LAB. CE - Culminating Experience

**EET 487LAB. Senior Project Management Laboratory (2).** Laboratory section for senior project management. Must be taken concurrently with EET 487. Four hours of laboratory per week. Course will be offered every year (Fall). CE - Culminating Experience

**EET 488. Senior Project Quality (2).** Development section of a capstone analysis and design project where the creation of a prototype or method for the advancement of a concept takes place. Senior standing. Formerly EET 479, students may not receive credit for both. Two hours of lecture per

week. Course will be offered every year (Winter). Prerequisite: EET 487. Co-requisite: EET 488LAB. CE - Culminating Experience

**EET 488LAB. Senior Project Quality Laboratory (2).** Laboratory section for senior project quality. Must be taken concurrently with EET 488. Four hours of laboratory per week. Course will be offered every year (Winter). Prerequisite: EET 487LAB. CE - Culminating Experience

**EET 489. Senior Technical Presentations (2).** Written and oral presentation section of a capstone analysis and design project where communication of technical concepts takes place. Four hours of laboratory per week. Course will be offered every year (Spring). Prerequisite: EET 488. CE - Culminating Experience

**EET 496. Individual Study (1-6).** May be repeated if subject is different.

**EET 497. Honors (1-12).** Prerequisite: admission to department honors program.

**EET 498. Special Topics (1-6).** May be repeated if subject is different.

**EET 499. Seminar (1-5).** May be repeated if subject is different.

#### **Education: Foundation and Curriculum Courses**

**EFC 210. Seminar (1).** Discussion of field observation and program planning for prospective teachers. Prerequisite: prior completion of pre-admission observation, sophomore standing.

**EFC 250. Introduction to Education (4).** Introduction to teaching as career, foundations and overview of American public education, effective teachers, responsibilities of schools in democratic society, essential professional competencies, preparation, and certification. Culturally anchored, and offers a framework of equity pedagogy. Course will be offered every year (Fall, Winter, Spring, Summer). K2 - Community, Culture, & Citizenship

**EFC 298. Special Topics (1-6).** May be repeated if subject is different.

**EFC 299. Seminar (1-5).** May be repeated if subject is different.

**EFC 310. Orientation to Teaching (3).** Teaching as a career and essential features of preparation. Study of the teacher's role and function in the school; characteristics of good teachers; preparation for professional competencies and certification; the American public school system; and the responsibilities of schools in a democratic society. Co- or prerequisite: EFC 210.

**EFC 315. Educational Assessment (3).**

The assessment/planning/instruction cycle. Standards-based assessment. Reliability, validity, bias. Basic statistics used in test construction and interpretation. Construction of classroom tests: multiple-choice, short answer, essay, etc. Performance assessment, portfolio assessment, affective assessment. Course will be offered every year (Fall, Winter, Spring, Summer). Prerequisites: PSY 314 and [EFC 250 OR (EFC 210 AND EFC 310)] with a grade of C or higher and full admission to the Teacher Certification Program or Instructional Foundations. Pre- or Co-requisite: EFC 320.

**EFC 320. Multicultural Education (3).**

Exploration of marginalized groups and the implications for change in education. Examination of foundational elements of and approaches to Multicultural Education as the underpinning to the development of cultural competence. Course will be offered every year (Fall, Winter, Spring, Summer). Prerequisites: PSY 314 with a grade of C or higher and application to the Teacher Certification Program or Instructional Foundations major and valid WSP/FBI fingerprint clearance and liability insurance. Pre- or Co-requisite: EFC 250 OR (EFC 210 AND EFC 310) with a grade of C or higher.

**EFC 330. Field Experience (2).**

Laboratory experience for prospective teachers. Opening of school, professional relationships, school/community relationships, school district organization, instructional support, resource services. Students assigned in off-campus schools for two weeks before fall quarter or during quarter. Grade will either be S or U. Permission of department. Course will be offered every year (Fall, Winter, Spring). Prerequisites: PSY 314 and [EFC 250 OR (EFC 210 AND EFC 310)] with a grade of C or higher and full admission to the Teacher Certification Program or Instructional Foundations and valid WSP/FBI fingerprint clearance and liability insurance. Pre- or Co-requisite: EFC 320 with a grade of C or higher.

**EFC 340. Methods of Instruction (3).**

Introduction to basic instructional methods aligned with standards and assessment for classroom. Development of a comprehensive curriculum aligned with Teacher Performance Assessment (edTPA). Methods appropriate for subject and grade level in lab and field experience.

Course will be offered every year (Fall, Winter, Spring, Summer).

Prerequisites: PSY 314 and EFC 320 and [EFC 250 OR (EFC 210 AND EFC 310)] with a grade of C or higher and full admission to the Teacher Certification Program or Instructional Foundations. Pre- or Co-requisites: EFC 315 and EFC 330 with a grade of C or higher.

**EFC 350. Classroom Management (3).**

Development of philosophical values, style, confidence, assertiveness, decision-making skills, strategies, and interventions for creating an effective classroom environment and managing student behavior. Development of a comprehensive management plan for first year of teaching. Course will be offered every year (Fall, Winter, Spring, Summer). Prerequisites: PSY 314 and EFC 320 and [EFC 250 OR (EFC 210 AND EFC 310)] with a grade of C or higher and full admission to the Teacher Certification Program. Pre- or Co-requisites: EFC 315 and EFC 330 and EFC 340 and EFC 416 with a grade of C or higher.

**EFC 396. Individual Study (1-6).** May be repeated if subject is different.

**EFC 397. Honors (1-12).** Prerequisite: admission to department honors program.

**EFC 398. Special Topics (1-6).** May be repeated if subject is different.

**EFC 399. Seminar (1-5).** May be repeated if subject is different.

**EFC 416. Educational Technology (3).** Concepts and resources related to appropriate and effective integration of technology and media in school settings. CS 101 or IT 101 recommended prior to enrollment. Course will be offered every year (Fall, Winter, Spring, Summer).

Prerequisites: PSY 314 and EFC 320 and [EFC 250 OR (EFC 210 AND EFC 310)] with a grade of C or higher and full admission to the Teacher Certification Program or Instructional Foundations. Pre- or Co-requisites: EFC 315 and EFC 330 and EFC 340 with a grade of C or higher.

**EFC 440. Education Law (3).** Major legal issues confronting educators, including student and teacher rights, due process, torts, current laws, equity, and the identification and reporting of child abuse. Course will be offered every year (Fall, Winter, Spring, Summer). Prerequisites: PSY 314 and EFC 315 and EFC 320 and [EFC 250 OR (EFC 210 AND EFC 310)] with a grade of C or higher and full admission to the Teacher Certification Program.

Pre- or Co-requisites: EFC 340 and EFC 350 and EFC 416 and EDSE 302 and (EDBL 401 OR EDBL 430) with a grade of C or higher.

**EFC 460. Pedagogy Capstone (2).**

Culminating pedagogical experience for the secondary education major completed the quarter preceding student teaching. Synthesis and application of teacher preparation coursework and development of edTPA Task 1 in the assigned classroom placement for student teaching. Course will be offered every year (Fall, Winter, Spring). Prerequisite: admission to Teacher Certification Program and EFC 250 and EFC 315 and EFC 320 and EFC 340 and PSY 314 with a C or higher and EFC 330 with an S grade, and current WSP/FBI fingerprint clearance, and liability insurance. Pre or Co-requisite: EDBL 401 and EDSE 302 and EFC 350 and EFC 416 and EFC 440. CE - Culminating Experience

**EFC 470. Student Teaching Secondary (14).**

Culminating field experience to demonstrate competence by Student Teaching a full quarter in a major endorsement area secondary classroom. Includes 20 hours of seminar designated by the university supervisor. Grade will either be S or U. Course will be offered every year (Fall, Winter, Spring). Prerequisites: PSY 314 and (EFC 250 or (EFC 210 and EFC 310) and EDSE 302 and (EDBL 401 or EDBL 430) and EFC 315 and EFC 320 and EFC 330 and EFC 340 and EFC 416 and EFC 350 and EFC 440 and EFC 460 and Full admission to the Teacher Certification Program and valid WSP and FBI fingerprint clearance and liability insurance and completed Student Teacher Application and stated requirements.

**EFC 480. Student Teaching (16).**

Teacher candidates must demonstrate their competence by student teaching a full quarter in their major endorsement area. Includes 20 hours of seminar at a time and place designated by the university supervisor. See Student Teaching Requirements in this catalog, and the Student Teaching Handbook for other requirements and policies. SCED 325 may be substituted for EFC 350, and SCED 487, may be substituted for EFC 416. Grade will either be S or U. Prerequisites: admission to the Teacher Certification Program, and completion of the Professional Education Program with grades of C or higher, and current WSP/FBI fingerprint clearance .

**EFC 491. Workshop** (1-6). May be repeated for credit. Grade will either be S or U.

**EFC 496. Individual Study** (1-6). May be repeated if subject is different.

**EFC 497. Honors** (1-12). Prerequisite: admission to department honors program.

**EFC 498. Special Topics** (1-6). May be repeated if subject is different.

**EFC 499. Seminar** (1-5). May be repeated if subject is different.

### Elementary Foundation Courses

**ELEF 212. Introduction to Teaching in Elementary Schools** (3). Study of the teacher's role and function in elementary schools; characteristics of good teachers; preparation for professional competencies and certification; the American public-school system; and the legal responsibilities of schools in a democratic society. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: Valid WSP/FBI fingerprint clearance is required for this course. The clearance must appear in OSPI's Fingerprinting Database and be valid throughout the quarter enrolled.

**ELEF 322. Culturally Responsive Teaching** (3). Exploration of marginalized groups and implications for change in the educational setting. Examination of foundational elements of and approaches to multicultural education as the underpinning to the development of cultural competence. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: ELEF 212 and ELEM 323 and PSY 314 and valid WSP/FBI fingerprint clearance is required for this course. The clearance must appear in OSPI's Fingerprinting Database and be valid throughout the quarter enrolled.

**ELEF 324. Educational Technology for Elementary Classrooms** (2). Concepts and resources related to appropriate and effective integration of technology and media in elementary school settings. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: Full admission to the Teacher Certification Program and ELEF 322 and valid WSP/FBI fingerprint clearance is required for this course. The clearance must appear in OSPI's Fingerprinting Database and be valid throughout the quarter enrolled.

**ELEF 332. Instructional Design and Assessment** (5). Introduction to standards-based instructional planning,

design, methodology, evaluation, assessment in a classroom for content, grade level, and individual learners. Teaching learning, assessment cycle; construction of various assessments; use of reliability, validity, bias, data-driven instructional decisions. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: Full admission to the Teacher Certification Program and ELEF 322 and valid WSP/FBI fingerprint clearance is required for this course. The clearance must appear in OSPI's Fingerprinting Database and be valid throughout the quarter enrolled.

**ELEF 426. Ethics and Education Law for Elementary Teachers** (3). Major legal issues confronting educators, including students and teacher rights, due process, torts, and the identification and reporting of child abuse. History of legal cases and issues. Exploration of ethical practices for educators. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: Full admission to the Teacher Certification Program and ELEF 472 and valid WSP/FBI fingerprint clearance is required for this course. The clearance must appear in OSPI's Fingerprinting Database and be valid throughout the quarter enrolled.

**ELEF 472. Classroom Management for Elementary Teachers** (3). Development of philosophy, values, confidence, assertiveness, and decision-making skills based on effective research-based strategies in classroom management. Development of a comprehensive classroom management plan for first year teaching. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: Full admission to the Teacher Certification Program and ELEF 332 and valid WSP/FBI fingerprint clearance is required for this course. The clearance must appear in OSPI's Fingerprinting Database and be valid throughout the quarter enrolled.

**ELEF 492. Practicum I: Instructional Design** (1). An opportunity for education students to implement and assess instructional activities within an elementary classroom. A minimum of 30 observation/engagement hours at assigned school(s) and participation in weekly group discussion is required. Grade will either be S or U. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: Full admission to the Teacher Certification Program and ELEF 322 and valid WSP/FBI fingerprint clearance is required for this

course. The clearance must appear in OSPI's Fingerprinting Database and be valid throughout the quarter enrolled. Co-requisite: ELEF 332.

### **ELEF 493. Practicum II:**

**Differentiation** (2). An opportunity for education students to identify differentiation practices within an educational setting. A minimum of 60 observation/engagement hours at assigned school(s) and participation in weekly group discussion is required. Grade will either be S or U. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: Full admission to the Teacher Certification Program and valid WSP/FBI fingerprint clearance is required for this course. The clearance must appear in OSPI's Fingerprinting Database and be valid throughout the quarter enrolled. Co-requisite: ELEF 472.

**ELEF 495. Practicum IV: Professional Engagement** (2). An opportunity for education students to implement and assess integrated instructional activities within the context of service. A minimum of 60 observation/engagement hours at assigned school(s) and participation in weekly group discussion is required. Grade will either be S or U. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: Full admission to the Teacher Certification Program and valid WSP/FBI fingerprint clearance is required for this course. The clearance must appear in OSPI's Fingerprinting Database and be valid throughout the quarter enrolled. Co-requisite: ELEM 471.

### Elementary Courses

**ELEM 292. Lab I: Introduction to the Teaching Profession** (1). An opportunity for beginning education students to develop a holistic understanding of an elementary school, beyond a classroom. A minimum of 30 observation/engagement hours at assigned school(s) and participation in weekly group discussion is required. Grade will either be S or U. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: Valid WSP/FBI fingerprint clearance is required for this course. The clearance must appear in OSPI's Fingerprinting Database and be valid throughout the quarter enrolled. Co-requisite: ELEM 323 and ELEF 212.

**ELEM 298. Special Topics** (1-6). May be repeated if subject is different.

**ELEM 299. Seminar** (1-5). May be repeated if subject is different.

**ELEM 321. Children's Literature** (3).

The genres of literature suited to children in grades 1-6 are reviewed, including those from diverse backgrounds. Attention to how to use literature as the basis for literacy development across English Language Arts is emphasized. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: Valid WSP/FBI fingerprint clearance is required for this course. The clearance must appear in OSPI's Fingerprinting Database and be valid throughout the quarter enrolled.

**ELEM 323. Learners and the Learning Environment** (4).

This course bridges concepts of social justice, classroom management, educational psychology, and pedagogy to explore the complexities of creating a positive and productive learning community. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: Valid WSP/FBI fingerprint clearance is required for this course. The clearance must appear in OSPI's Fingerprinting Database and be valid throughout the quarter enrolled. Co-requisite: ELEM 212.

**ELEM 325. Integrating the Arts** (3).

This course develops knowledge and skills to integrate the arts (i.e., dance, drama/theatre arts, music and visual arts) into elementary curricula. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: Valid WSP/FBI fingerprint clearance is required for this course. The clearance must appear in OSPI's Fingerprinting Database and be valid throughout the quarter enrolled.

**ELEM 331. Foundations of Teaching Literacy** (3).

Designed to prepare prospective elementary teachers to teach literacy in the classroom. Processes and products of the literacy act, methods and materials, and factors that affect literacy are covered. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: ELEM 212 and ELEM 321 and ELEM 323 and PSY 314 and valid WSP/FBI fingerprint clearance is required for this course. The clearance must appear in OSPI's Fingerprinting Database and be valid throughout the quarter enrolled.

**ELEM 333. Inclusive Teaching** (3).

Introduce effective teaching strategies and strategies for adapting standard instruction to meet the needs of a range of students found in the typical elementary education classroom,

including those with exceptionalities and multicultural heritages. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: Full admission to the Teacher Certification Program and ELEM 322 and valid WSP/FBI fingerprint clearance is required for this course. The clearance must appear in OSPI's Fingerprinting Database and be valid throughout the quarter enrolled.

**ELEM 341. Reading Assessment and Instruction** (4).

The use of assessment of literacy skills and processes that drive instruction, as well as content and methodology of vocabulary development, fluency, word study, and comprehension are covered. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: Full admission to the Teacher Certification Program and ELEM 331 and valid WSP/FBI fingerprint clearance is required for this course. The clearance must appear in OSPI's Fingerprinting Database and be valid throughout the quarter enrolled.

**ELEM 342. Teaching Elementary Science Inquiry** (4).

Methods and pedagogical strategies that develop children's foundational concepts and principles across STEM domains. Candidates will incorporate Next Generation Science Standards and research based practices for developing, implementing, and assessing inquiry lessons in elementary classrooms. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: Full admission to the Teacher Certification Program and ELEM 472 and valid WSP/FBI fingerprint clearance is required for this course. The clearance must appear in OSPI's Fingerprinting Database and be valid throughout the quarter enrolled.

**ELEM 351. Writing Assessment and Instruction** (4).

Designed to prepare prospective elementary teachers to assess/teach language arts in the classroom. Processes and products of writing, reading, speaking, listening, visualizing, and viewing instruction, including the integration across content areas are emphasized. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: Full admission to the Teacher Certification Program and ELEM 331 and valid WSP/FBI fingerprint clearance is required for this course. The clearance must appear in OSPI's Fingerprinting Database and be valid throughout the quarter enrolled.

**ELEM 353. Teaching Elementary Social Studies** (4).

Examines the structure/content of K-8 Social Studies curriculum. Identify and practice research-based instructional approaches across the social studies disciplines. Emphasis will be placed on strategies to engage young learners in participatory citizenship. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: ELEM 212 and ELEM 323 and PSY 314 and valid WSP/FBI fingerprint clearance is required for this course. The clearance must appear in OSPI's Fingerprinting Database and be valid throughout the quarter enrolled.

**ELEM 392. Lab II: Culture and Society** (1).

An introduction to culture and society relative to education, emphasizing learning at home and within the community. A minimum of 25 school, and 5 community, observation/engagement hours, and participation in weekly group discussion is required. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: Valid WSP/FBI fingerprint clearance is required for this course. The clearance must appear in OSPI's Fingerprinting Database and be valid throughout the quarter enrolled. Co-requisite: ELEM 322.

**ELEM 396. Individual Study** (1-6).

May be repeated if subject is different.

**ELEM 397. Honors** (1-12). Prerequisite: admission to department honors program.

**ELEM 398. Special Topics** (1-6). May be repeated if subject is different.

**ELEM 399. Seminar** (1-5). May be repeated if subject is different.

**ELEM 443. Teaching in Linguistically Diverse Classrooms** (3).

Foundational background in second language learning practices to educate linguistically diverse students. The basics of sheltered instruction for K-8 settings are introduced. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: Full admission to the Teacher Certification Program and ELEM 332 and valid WSP/FBI fingerprint clearance is required for this course. The clearance must appear in OSPI's Fingerprinting Database and be valid throughout the quarter enrolled.

**ELEM 451. Teaching Elementary Mathematics Early Grades** (3).

Focus on research based developmental practices in teaching and learning mathematics in early elementary grades. Pedagogical strategies, curricular development, and content

delivery for deep foundational mathematical development. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: Full admission to the Teacher Certification Program and ELEF 472 and MATH 164 and MATH 226 and valid WSP/FBI fingerprint clearance is required for this course. The clearance must appear in OSPI's Fingerprinting Database and be valid throughout the quarter enrolled.

**ELEM 452. Teaching Elementary Mathematics Upper Grades (4).**

Focuses on research based practices in teaching/learning mathematics in the upper elementary grades. Content includes pedagogical strategies, curricular development, and content delivery for deep foundational mathematics construct development and application. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: Full admission to the Teacher Certification Program and ELEM 451 and MATH 164 and MATH 226 and valid WSP/FBI fingerprint clearance is required for this course. The clearance must appear in OSPI's Fingerprinting Database and be valid throughout the quarter enrolled.

**ELEM 471. Elementary Education Capstone (2).**

Elementary teacher candidates will explore interdisciplinary instruction and design standards-based unit plans that incorporate best teaching practices for specific teaching assignments. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: Full admission to the Teacher Certification Program and ELEM 494 and valid WSP/FBI fingerprint clearance is required for this course. The clearance must appear in OSPI's Fingerprinting Database and be valid throughout the quarter enrolled.

**ELEM 494. Practicum III: Inquiry-Based Learning (2).**

An opportunity for education students to implement and assess inquiry-based instructional activities within an elementary classroom. A minimum of 60 observation/engagement hours at assigned school(s) and participation in weekly group discussion is required. Course will be offered every year. Grade will either be S or U. Course will not have an established scheduling pattern. Prerequisites: Full admission to the Teacher Certification Program and ELEF 493 and valid WSP/FBI fingerprint clearance is required for this course. The clearance must appear in OSPI's Fingerprinting Database and be

valid throughout the quarter enrolled. Co-requisite: ELEM 342 and ELEM 452.

**ELEM 496. Individual Study (1-6).**

May be repeated if subject is different.

**ELEM 497. Honors (1-12).** Prerequisite: admission to department honors program.

**ELEM 498. Special Topics (1-6).** May be repeated if subject is different.

**ELEM 499. Seminar (1-5).** May be repeated if subject is different.

**Emergency Medical Services Courses**

**EMS 245. Advanced First Aid and Emergency Response (3).**

This course will help students identify hazards in an emergency situation and enable them to administer principles of emergency first aid care until more advanced medical providers arrive. An AHA certification can be achieved from this course.

**EMS 247. Wilderness Emergency Care (2).**

This course provides lecture and practical skills instruction on the basic elements of emergency medical care in a wilderness or otherwise austere environment. It contains content that is supplemental to EMS 245. Course will be offered every year (Fall, Winter, Spring, Summer).

**EMS 247LAB. Wilderness Emergency Care Laboratory (1).**

This course will employ the cognitive objectives of EMS 247 into practical skill development through classroom lab and outdoor evolution lab scenarios. Course will be offered every year (Fall, Winter, Spring, Summer). Co-requisite: EMS 247.

**EMS 250. Emergency Medical Technician Lecture (9).**

Emergency Medical Technician (EMT) is a course that enables the successful student to become eligible for certification as an EMT with the National Registry. This course provides the didactic instruction in basic life support in accordance with the National EMS Education Standards. Attendance in all sessions is expected. Co-requisite: EMS 250LAB.

**EMS 250LAB. Emergency Medical Technician Lab (3).**

The Emergency Medical Technician (EMT) lab provides instruction in the practical skills application of the EMT didactic content, including patient assessment, airway management, oxygen delivery, medication assistance, ambulance operations, lifting and moving patients, bleeding control, fracture immobilization, spinal cord injury management, emergency childbirth, and much more. Grade will either be S or U. Co-requisite: EMS 250.

**EMS 298. Special Topics (1-6).** May be repeated if subject is different.

**EMS 299. Seminar (1-5).** May be repeated if subject is different.

**EMS 335. Paramedicine I (4).** This course provides the foundational knowledge in paramedicine education in areas of preparatory elements of paramedicine, advanced airway management, history-taking, and physical examination, communications, documentation, ethics, and more. Prerequisite: admission to the paramedical major or program. Co-requisite: EMS 335LAB.

**EMS 335LAB. Advanced Clinical Practice I (2).**

This course provides practical lab instruction in paramedicine including advanced airway procedures, patient assessment, history-taking, physical examination, medication administration, intravenous therapy, and other related emergency procedures. Grade will either be S or U. Co-requisite: EMS 335 and admission to the paramedical major or program.

**EMS 336. Paramedicine II (4).**

This course provides the foundational knowledge in paramedic education in areas of emergency obstetrics and gynecology, pulmonology, neurology, endocrinology, allergies, environmental, infectious diseases, psychiatric, toxicological, and more. Prerequisites: EMS 335 and admission to the paramedical major or program. Co-requisite: EMS 336LAB.

**EMS 336LAB. Advanced Clinical Practice II (2).**

Accompanying laboratory to Paramedicine II, providing intensive training in obstetrical emergencies, pulmonary assessment and treatment, management of cardiovascular emergencies, cardiac arrest team management, and leadership development. Grade will either be S or U. Prerequisite: admission to the paramedical major or program. Co-requisite: EMS 336.

**EMS 337. Paramedicine III (3).**

This course provides the foundational knowledge in paramedic education in areas of assessment-based management, neonatology, geriatrics, pediatrics, abuse and assault, rural EMS, and more. Prerequisites: EMS 336 and admission to the paramedical major or program.

**EMS 337LAB. Advanced Clinical Practice III (2).**

Accompanies EMS 337 lecture providing practical skill education in a laboratory setting in the therapeutic paramedical interventions of pediatrics, geriatrics, and advanced medical emergencies. By permission.

Grade will either be S or U.

Prerequisite: EMS 337.

**EMS 350. Paramedicine Instructional Methodologies (2).** This course provides instruction and opportunities to learn and apply techniques and methods of instruction in principles of EMS. Students will provide practical skill instruction to EMT student under the supervision of the program faculty. Grade will be either S or U.

Prerequisite: admission to the paramedical major or program.

**EMS 396. Individual Study (1-6).** May be repeated if subject is different.

**EMS 397. Honors (1-12).** Prerequisite: admission to department honors program.

**EMS 398. Special Topics (1-6).** May be repeated for credit. Prerequisite: admission to the paramedical major or program.

**EMS 399. Seminar (1-5).** May be repeated if subject is different.

**EMS 430. Problem-Based Learning I (4).** This course introduces case-based presentation of pathology, symptomatology, presentation, and treatment of clinical scenarios through life-span development, group discussion, and research. Co-requisite: EMS 455 and admission to the paramedical major or program.

**EMS 431. Problem-based Learning II (4).** This course continues case-based presentation of pathology, symptomatology, presentation, and treatment of clinical scenarios through life-span development, group discussion, and research.

Prerequisites: EMS 430 and admission to the paramedical major or program.

**EMS 440. Medical Mathematics and Terminology (2).** This course provides instruction in various methods of medical drug calculations and dosing of medications commonly utilized in emergency settings, as well as an introduction to medical terminology. Prerequisite: admission to the paramedical major or program.

**EMS 441. General Pharmacology for Paramedics (3).** Mechanism of action, indications, and contraindications of drugs, their side effects, and dosage of administration. Prerequisites: EMS 440 and admission to the paramedical major or program.

**EMS 443. Myocardial Disease and Basic Electrocardiography (4).** This course provides instruction in the basic elements of bipolar limb-lead electrocardiography, beginning with a review of cardiovascular A and P, a brief discussion of cardiac pathologies, and focuses on EKG interpretation and

dysrhythmia recognition. Prerequisite: admission to the paramedical major or program.

**EMS 444. Twelve-lead Electrocardiography (4).** This provides instruction in the advanced elements of 12-lead EKG analysis. It begins with a review of the essentials of EKG interpretation and introduces ACLS concepts following with a comprehensive approach to 12-lead EKG analysis. Prerequisites: EMS 443 and admission to the paramedical major or program.

**EMS 450. Human Anatomy-cadaver Lab (Put on reserve 9/16/16.) (1).** This course provides instruction in the human anatomy and physiology with practical lab examination, exploration, and limited dissection of the human body. Two hours laboratory per week. By permission. (Put on reserve 9/16/16. Last taught in 2012. Will go inactive 8/24/19.)

**EMS 451. Advanced Trauma Care (3).** This course provides instruction in the advanced elements of trauma care, including trauma triage, fluid resuscitation, trauma arrest management, multi-system management, and trauma of the head, neck, thorax, abdomen, and extremity. Prerequisite: admission to the paramedical major or program.

**EMS 455. Introduction to Pathophysiology (3).** This course introduces fundamental pathologies common to all age groups. It establishes concepts and foundational basis of disease from the cellular perspective to the fully developed organism. Prerequisite: admission to the paramedical major or program.

**EMS 459. Emergencies in Pediatric/Geriatric Care (3).** Emergency training in assessing, treating, and transporting pediatric/geriatric patients. Prerequisite: admission to the paramedical major or program.

**EMS 460. Research in EMS I (3).** This course introduces research design and methodologies common to medicine and paramedicine. It establishes the foundation for EMS research projects and possible publication. Prerequisite: admission to the paramedical major or program.

**EMS 461. Research in EMS II (3).** This course continues education in research design and methodologies common to medicine and paramedicine. It provides the student the opportunity to complete EMS research projects and possible publication. Prerequisites: EMS 460

and admission to the paramedical major or program.

**EMS 465. Educational Methodologies in EMS (3).** This course introduces common educational methodologies applied in EMS education with focuses on didactic, psychomotor, and affective education domains. Additional content include curricula development, evaluation methods, test construction, and critical psychometric parameters. Prerequisite: admission to the paramedical major or program.

**EMS 470. Current Topics in Emergency Medicine (3).** This course instructs students how to conduct medical literature searches and to critically review peer-reviewed articles and surveys the contemporary literature for relevant concepts and issues germane to EMS. Prerequisite: admission to the paramedical major or program.

**EMS 475. EMS Response to Terrorism (3).** This course examines contemporary thought on the philosophical basis and motivation for terrorism and discusses currently prevalent issues, principles of mitigation for EMS providers, and strategies to prevent terroristic threats. Prerequisite: admission to the paramedical major or program.

**EMS 480. Financial Analysis of EMS Systems (3).** This course introduces basic financial analytical processes as they apply to EMS, with emphasis on interpreting financial statements, assessing financial burden, cost projection, cost-benefit analysis, and formulas for evaluating financial performance. Prerequisite: admission to the paramedical major or program.

**EMS 481. Quality Improvement and Administration of EMS (3).** This course introduces elemental concepts to continuous quality improvement with application to EMS systems. It also introduces how CQI data can be used to inform EMS administration. General principles of management will be reviewed. Prerequisite: admission to the paramedical major or program.

**EMS 482. Systems Analysis of EMS (4).** This course integrates previously learned concepts into a systematic approach of EMS system problem-identification, prioritization, and solutions proposals. It incorporates research design, financial analysis, and policy analysis into an integrated approach. Prerequisites: EMS 460, EMS 480, EMS 481 and admission to the paramedic major or program.

**EMS 485. Strategic Planning for EMS (3).** This course introduces

foundational concepts of strategic planning into EMS development. It enables the student to apply strategic principles of management to real-life EMS systems. Prerequisite: admission to the paramedical major or program.

**EMS 488. Health Policy in EMS (3).**

This course introduces policy development and agenda-setting at the state and national levels. It provides basic instruction in policy analysis and surveys current health policies that may impact EMS. Prerequisite: admission to the paramedical major or program.

**EMS 489. Leadership in EMS (3).** This course examines various leadership styles, assesses student aptitude for leadership style, and develops a foundational structure to develop superior leadership abilities in EMS systems. Prerequisite: admission to the paramedical major or program.

**EMS 490. Cooperative Education**

**Internship (1-12).** An individualized field experience internship with medical agencies for the purposes of basic and advanced clinical skills development in EMS paramedicine. Each course will have an individual learning plan and faculty coordinator. Acceptance into the EMS paramedicine major.

**EMS 493A. Paramedicine Internship I**

(3). This course provides clinical and field instruction in principles of paramedicine under the supervision of clinical and field preceptors. May be repeated for credit. Grade will either be S or U. Prerequisite: admission to the paramedical major or program.

**EMS 493B. Paramedicine Internship II**

(4). This course provides clinical and field instruction in principles of paramedicine under the supervision of clinical and field preceptors. Grade will either be S or U. Prerequisite: EMS 493A.

**EMS 493C. Paramedicine Internship III**

(5). This course provides clinical and field instruction in principles of paramedicine under the supervision of clinical and field preceptors. Grade will either be S or U. Prerequisite: EMS 493B.

**EMS 496. Individual Study (1-6).** May be repeated if subject is different.

**EMS 497. Honors (1-12).** Prerequisite: admission to department honors program.

**EMS 498. Special Topics (1-6).** May be repeated if subject is different.

**EMS 499. Seminar (1-5).** May be repeated if subject is different.

**English Courses**

**ENG 100T. Transitional English (4).** A study of academic written English with review of sentence and paragraph-level skills, such as word usage, sentence structure, organization, grammar, and mechanics with a reading component to improve comprehension of academic English; students will learn to write unified, coherent paragraphs and short compositions. Credits will not be allowed toward meeting bachelor's degree requirements.

**ENG 101. Academic Writing I: Critical Reading and Responding (5).**

Develops skills necessary for academic writing, including summarizing, reading sources critically and responding to them, synthesizing multiple perspectives, and using academic writing conventions.

Required of all students except those

who have passed an exemption examination. Students must earn a minimum grade of C- or above to enroll in ENG 102. Course will be

offered every year (Fall, Winter, Spring, Summer). Prerequisite:

appropriate test scores or have satisfactorily completed ENG 100T:

Transitional English. FYE2 - Academic Writing I: Critical Reading & Responding

**ENG 102. Academic Writing II:**

**Reasoning and Research on Social**

**Justice (5).** Develops skills in research-based academic argument through assignments involving evaluation, analysis, and synthesis of multiple sources. Course will be offered every year (Fall, Winter, Spring, Summer).

Basic Skills 3 - English Comp II.

Prerequisite: ENG 101 with a grade of C- or higher. Basic Skills 3 - English Comp II. K1 - Academic Writing II: Reasoning & Research

**ENG 103. Academic Writing II:**

**Reasoning and Research on Health**

**and Current Issues (5).** Develops skills in research-based academic argument through assignments involving evaluation, analysis, and synthesis of multiple sources. Course will be offered every year (Fall, Winter, Spring). Prerequisite: ENG 101 with a grade of C- or higher. K1 - Academic Writing II: Reasoning & Research

**ENG 104. Academic Writing II:**

**Reasoning and Research on**

**Sustainability and Civic Engagement**

(5). Develops skills in research-based academic argument through assignments involving evaluation, analysis, and synthesis of multiple sources. Course will be offered every year (Fall, Winter, Spring).

Prerequisite: ENG 101 with a grade of

C- or higher. K1 - Academic Writing II: Reasoning & Research

**ENG 105. The Literary Imagination:**

**An Introduction to Literature (5).**

Human experience as it is imagined, interpreted, and made significant in poetry, prose, fiction, and drama. ENG 105, 106 and ENG 107 are equivalent courses; students may receive credit for only one. Course will be offered every year (Fall, Winter, Spring, Summer).

AH-Literature and Humanities (W). Prerequisite: ENG 101 with a grade of C- or higher. AH-Literature and Humanities (W). K5 - Humanities

**ENG 106. Literature and the**

**Environment (5).** An introduction to literature as it relates to place and the environment. ENG 105, 106 and ENG 107 are equivalent courses; students may receive credit for only one. Course will be offered every year (Spring).

Prerequisite: ENG 101 with a grade of C- or higher. K5 - Humanities

**ENG 107. Literature, Health, and**

**Well-Being (5).** An introduction to

literature exploring works about health and well-being. ENG 105, 106 and ENG 107 are equivalent courses;

students may receive credit for only one. Course will be offered every year (Spring). Prerequisite: ENG 101 with a grade of C- or higher. K5 - Humanities

**ENG 108. Literature and Social Justice**

(5). An introduction to literature as it relates to social justice issues.

Prerequisite: ENG 101. K5 - Humanities

**ENG 180. Introduction to Linguistics**

(5). Backgrounds, developments, and relation to other fields of study.

**ENG 220. Grammar for Writers (2).**

Intermediate study of English grammar and strategies for improving clarity and coherence in writing. Prerequisite: ENG 101.

**ENG 222. Multicultural Literature for**

**Teachers (5).** Prospective secondary English language arts teachers will read and respond to various genres of multicultural/world literature and develop methods and assignments for teaching texts that invite students to think critically and use evidence to support their viewpoints. Course will be offered every year (Fall).

Prerequisites: ENG 101 and ENG 102 and admission to the English/language arts teaching major.

**ENG 243. Talking Back: Power,**

**Diversity, and Social Justice (5).** This

course examines the current arguments and perspectives on issues of social justice- race, class, gender, sexuality, and ethnic diasporas--both locally and globally through analysis of

multicultural transnational texts, issues and events. Course will be offered every year (Fall, Winter, Spring, Summer). K2 - Community, Culture, & Citizenship

**ENG 247. Multicultural Literature (5).** Literary themes examined through the comparison of works from various cultures. AH-Literature and Humanities (W). Prerequisite: ENG 101 with a grade of C- or higher. AH-Literature and Humanities (W).

**ENG 250. Reading and Writing Enrichment (Put on reserve 9/16/17) (3).** This class offers sophomores and juniors augmented instruction in reading and writing, building on concepts and skills learned in ENG 101 and ENG 102. (Put on reserve 9/16/17. Will go inactive 8/24/2020.) Prerequisites: ENG 101 and ENG 102 and sophomore or junior standing and GPA less than or equal 2.5 .

**ENG 263. Introduction to Creative Writing (5).** An introduction to the creative writing genres: poetry, fiction, screenwriting, and creative nonfiction. Examines the rhetorical forms and expectations of each in a workshop format. Prerequisites: ENG 101 and ENG 102 or equivalents.

**ENG 264. Introduction to Creative Writing and the Environment (5).** An introduction to the creative writing genres: poetry, fiction, screenwriting, and creative nonfiction as they are applied to place and the environment. Examines the rhetorical forms and expectations of each in a workshop format. Course will be offered every year (Spring, Summer). Prerequisites: ENG 101 and ENG 102. K3 - Creative Expression

**ENG 265. Introduction to Creative Writing as "Mindfulness, Health and Well-Being" (5).** Students will study and write literature related to mindfulness, health and well-being, and revise their own work into a multi-genre collection including poetry, prose, drama and fiction modeled on the readings. Course will be offered every year (Fall). Prerequisites: ENG 101 and ENG 102. K3 - Creative Expression

**ENG 267. Screenwriting Fundamentals (4).** Introduction to the basic script format, the creative story and style elements, and the writing process steps for screenplays and teleplays. Focus on the narrative script development process from idea conception to first draft. COM 267 and ENG 267 are cross-listed courses, students may not receive credit for both. Prerequisites: ENG 102 or FILM 250.

**ENG 296. Individual Study (1-6).**

**ENG 298. Special Topics (1-6).**

**ENG 299. Seminar (1-5).**

**ENG 301. Rhetoric for Professional Writers (5).** Study and practice in rhetorically effective workplace writing. Includes rhetorical theory, ethics, organizational contexts, and the study and practice of professional writing genres. Prerequisites: ENG 101 and ENG 102.

**ENG 302. Poetry and Poetics (5).** Offers practice in the interpretive reading of poetry, focusing on the elements of poetry and poetic theory. Prerequisites: ENG 101 and ENG 102 or equivalents.

**ENG 303. Principles of English Studies (5).** Provides critical reading and writing strategies necessary to studies in English; introduces the expectations and requirements of the major. Prerequisite: ENG 101 and ENG 102 or equivalents.

**ENG 310. Technical Writing (4).** Students will gain practice in writing and editing a range of technical documents. Prerequisites: ENG 101, ENG 102, and at least junior standing.

**ENG 311. Business Writing (3).** Study and practice in effective business writing. Course content includes business writing genres, rhetorically effective writing in business contexts, professional writing style, and writing concisely and correctly. Prerequisites: ENG 102 or a direct transfer degree.

**ENG 315. Visual Rhetoric and Document Design (5).** This course surveys the basic theories and elements of visual rhetoric, as well as principles of document design. Students will gain practical experience using industry-specific design software. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisite: ENG 102.

**ENG 320. English Grammar (5).** A review of the concepts, terminology, and historical development of traditional grammar, the parts of speech and their functions in sentences, the elements of the sentence, and its various patterns.

**ENG 323. Writing and Editing for Publication (5).** This class addresses writing for publication, prepares students with publication strategies, as well as examines what editors look for and what their job entails. Prerequisite: ENG 320.

**ENG 330. African American Literature (5).** Study of literature by African Americans.

**ENG 331. Latina/o Literature (5).** Study of literature by Latina/o writers.

**ENG 332. American Indian Literature (5).** Study of literature by American Indians.

**ENG 333. Asian American Literature (5).** Study of literature by Chinese, Japanese, Korean, Vietnamese, and other Asian/American writers.

**ENG 334. American Indian Oral and Nonfiction Literature (5).** An examination of American Indian oral and nonfiction literature, including myth, legend, oratory, ritual and ceremony, and forms of autobiography, including coup tales, boarding school narratives, etc.

**ENG 335. Women's Literature (5).** Examines women's literature in light of contemporary feminist literary theories. Prerequisites: ENG 302 and ENG 303.

**ENG 336. Race and Literature (5).** Course reviews theory and use of "race" in the construction of knowledge and in English canonical texts. ABS 336 and ENG 336 are cross-listed courses; a student may not receive credit for both. Prerequisite: ENG 102.

**ENG 337. Gender, Sexuality, and LGBTQ+ Literatures (5).** This course investigates gender and sexuality in literature with a particular focus on LGBTQ+ writers and communities, and explores the relationship between LGBTQ+ literature, queer theory, and social movements. Course will be offered every year (Fall or Spring). Prerequisite: ENG 303 with a grade of C or higher. ENG 303 may be taken concurrently (co-requisite) with permission of the ENG 337 Instructor.

**ENG 342. Cinema Studies I: Early American Film History (4).** A history of the development of narrative film as an art form and cultural medium from the 1800s to the mid-20th century, with primary focus on Hollywood cinema. FILM 342 and ENG 342 are cross-listed courses; student may not receive credit for both. Course will not have an established scheduling pattern.

**ENG 343. Cinema Studies II: Modern American Film History (4).** A history of the development of narrative film as an art form and cultural medium from approximately 1960 to the present, with primary focus on Hollywood cinema. FILM 343 and ENG 343 are cross-listed courses; student may not receive credit for both. Course will be offered every year. Course will not have an established scheduling pattern.

**ENG 344. Cinema Studies III: Film Theory (5).** A focused study of major theories of cinema and the approaches and practice of film criticism. ENG 344 and FILM 344 are cross-listed courses; a student may not receive credit for



- both. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisite: FILM 250.
- ENG 347. Global Perspectives in Literature** (5). An introduction to contemporary non-western and postcolonial literature. Course will be offered every year (Fall, Spring, Summer). AH-Literature and Humanities (W). Prerequisites: sophomore standing or above and ENG 101 with a grade of C- or higher. AH-Literature and Humanities (W). K4 - Global Dynamics
- ENG 353. History of Narrative Film** (4). A history of the development of narrative film as an art form and cultural medium, with primary focus on Hollywood cinema. ENG 353 and COM 353 are cross-listed courses; students may not receive credit for both. Prerequisite: FILM 250.
- ENG 354. History of Television** (4). Historical survey of television as an entertainment, information, and art medium. Emphasis on understanding the cultural, social, political, technological, and economic conditions of production; the examination of television as text itself; and TV's impact on audiences. ENG 354 and FILM 354 are cross-listed courses; students may not receive credit for both. Prerequisites: either COM 201 or FILM 250.
- ENG 355. History of Documentary** (4). Survey of documentary history from 1895 to present. Focus on philosophy of documentary approach, overview of the most important topics and issues, and development of critical standards in the genre. ENG 355 and FILM 355 are cross-listed courses; students may not receive credit for both. Prerequisites: COM 201 or FILM 250.
- ENG 357. Writing for Serial Media** (4). Scriptwriting for the basic genres of serial television and the web. Includes study of serial script, structure, story, character development, and dialog. FILM 357 and ENG 357 are cross-listed classes, students may not receive credit for both. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: FILM 267 or ENG 267 and admission to the communication, English professional and creative writing or film major.
- ENG 360. Cinema Studies IV: Survey of World Cinema** (5). An overview of world cinema, with attention to the national film cultures of important film-producing countries (such as India, France, Japan), and a comparison of international films with mainstream Hollywood cinema. ENG 360 and FILM 360 are cross-listed courses; a student may not receive credit for both. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisite: FILM 344 or ENG 344.
- ENG 363. Shakespeare** (5). Intensive study of selected Shakespeare plays and poetry. May be repeated under a different subtitle up to 10 credits. Prerequisites: ENG 302 and ENG 303.
- ENG 364. Fiction Writing** (5). An introduction to the varieties of literary fiction being written today, the techniques and strategies for writing fiction, as well as developing criteria for evaluating the effectiveness of student stories. Course will be offered every year (Fall, Winter). Prerequisite: ENG 263 or ENG 264 or ENG 265.
- ENG 365. Poetry Writing** (5). A workshop that introduces the varieties of forms, styles, voices, and strategies for writing poetry. Emphasizes reading professional models and the development and application of criteria for evaluating and revising poems. Course will be offered every year (Fall, Winter). Prerequisite: ENG 263 or ENG 264 or ENG 265.
- ENG 366. Creative Nonfiction Writing** (5). A workshop that considers the varieties and forms of the creative essay and its historical evolution. Emphasizes reading professional models, the uses of research, and the development and application of criteria for evaluating and revising essays. Course will be offered every year (Spring). Prerequisite: ENG 263 or ENG 264 or ENG 265.
- ENG 368. Multi-Genre Writing Workshop** (5). This online class will build creative writing skills in fiction writing, poetry writing, and creative nonfiction writing through writing exercises, reading of focused examples of published work, and individual and group workshops using discussion board. Course will be offered on odd numbered years (Summer). Prerequisite: ENG 263 OR ENG 264 OR ENG 265.
- ENG 369. Variable Topics Writing Workshop** (5). A workshop focusing on a specific genre or topic in creative writing. Emphasizes reading professional models and the development and application of criteria for evaluating and revising texts appropriate to the topic. May be repeated up to 10 credits under a different subtitle. Course will not have an established scheduling pattern (Summer). Prerequisite: ENG 263 or ENG 264 or ENG 265.
- ENG 371. Literature and History I** (5). Historical and critical studies in literature from the classical era through the Renaissance. May be repeated up to 10 credits under a different subtitle. Prerequisites: ENG 302 and ENG 303.
- ENG 372. Literature and History II** (5). Historical and critical studies in literature from the mid-17th century through the mid-19th century. May be repeated up to 10 credits under a different subtitle. Prerequisites: ENG 302 and ENG 303.
- ENG 373. Literature and History III** (5). Historical and critical studies in literature from the nineteenth century through the mid-twentieth century. May be repeated up to 10 credits under a different subtitle. Prerequisites: ENG 302 and ENG 303.
- ENG 374. Literature and History IV** (5). Historical and critical studies in literature from the 20th century through the present. May be repeated up to 10 credits under a different subtitle. Prerequisite: ENG 302 and ENG 303.
- ENG 377. Literature and Philosophy** (5). An examination of the intellectual, cultural, and historical convergences between philosophy and literature. PHIL 377 and ENG 377 are cross-listed courses; a student may not receive credit for both. Course will not have an established scheduling pattern.
- ENG 380. Studies in Drama** (5). Intensive study of representative examples of drama. ENG 380 and TH 380 are cross-listed courses; students may not receive credit for both. May be repeated up to 15 credits. Prerequisites: ENG 302 and ENG 303.
- ENG 391. Workshop** (1-5). May be repeated for credit.
- ENG 396. Individual Study** (1-6). May be repeated if subject is different.
- ENG 397. Honors** (1-12). Prerequisite: admission to department honors program.
- ENG 398. Special Topics** (1-6).
- ENG 399. Seminar** (1-5). May be repeated if subject is different.
- ENG 404. Advanced Technical Writing** (5). Practice in designing, constructing, evaluating, and testing technical documents for specific purposes and organizational cultures. ENG 504 is taught online. ENG 404 and ENG 504 are layered courses; a student may not receive credit for both. Prerequisite: ENG 310.
- ENG 415. Critical Studies in American Literature** (5). Intensive study of a group of texts focused by theme, author, theoretical approach, or social

and historical context. Formerly ENG 411, students may not receive credit for both. May be repeated for credit under different subtitle. Prerequisites: ENG 302 and ENG 303.

**ENG 417. Critical Studies in World Literature (5).** Intensive study of a group of texts focused by theme, author, theoretical approach, or social and historical context. Formerly ENG 414, students may not receive credit for both. May be repeated for credit under a different subtitle. Prerequisites: ENG 302 and ENG 303.

**ENG 418. Literary and Critical Theory (Put on reserve 9/16/18) (5).** An investigation of the theory and practice of various critical perspectives and strategies as they inform the study of literary texts. (Put on reserve 9/16/18, will go inactive 8/24/21) Prerequisites: ENG 302 and ENG 303.

**ENG 419. Critical Studies in British Literature (5).** Intensive study of group texts focused by theme, author, theoretical approach, or social and historical context. Formerly ENG 410, students may not receive credit for both. May be repeated for credit under a different subtitle. Prerequisites: ENG 302 and ENG 303.

**ENG 420. English Linguistics (5).** Students learn to perform linguistic analysis of aspects of English and to use linguistic concepts to examine literary texts. Formerly ENG 304, students may not receive credit for both. Prerequisite: ENG 320.

**ENG 422. Teaching Young Adult Literature (5).** A study of literature written for middle-level and early-high-school students. This class is required prior to student teaching. Prerequisites: EFC 340 and PSY 314 and ENG 302 and ENG 303, and admission to the Teacher Certification Program.

**ENG 423. History of the English Language (5).** In this course, students examine the systematic, evolutionary nature of language by focusing on the development of the English language. Course will be offered on odd numbered years (Spring).

**ENG 429. Teaching Writing in Middle-level Humanities (5).** Teacher candidates prepare as teachers of writing for the middle grades. Candidates align standards, content pedagogy, and developmentally responsive teaching in middle level humanities. Course requires intensive writing in the humanities across Common Core genres.

**ENG 430. Teaching Writing in the Secondary School (5).** Theory into practice seminar on teaching writing,

including writing process strategies, content pedagogy, instructional planning, assessment, best practices, and standards-based instruction. Co-requisites: Must enroll concurrently in ENG 488 and ENG 492. Prerequisites: EFC 340, 28 credits of English courses.

**ENG 431. Principles and Practices of TESOL (5).** Focuses on research, theories, and approaches relevant to the teaching of English to speakers of other languages. ENG 431 and ENG 531 are layered courses; students may not receive credit for both. Prerequisite: ENG 420 or by permission.

**ENG 432. Phonetics and Phonology (5).** Study of English phonetics and phonology as well as pronunciation pedagogy. ENG 432 and ENG 532 are layered courses; a student may not receive credit for both. Prerequisites: ENG 320 and ENG 420.

**ENG 434. Discourse Analysis (5).** Study of discourse theory and research methodology. Prerequisite: ENG 420.

**ENG 435. Linguistics, Literature, and TESOL (5).** Linguistic approaches to literature with an emphasis on poetry and prose. ENG 435 and ENG 535 are layered courses; a student may not receive credit for both. Prerequisites: ENG 320 and ENG 420.

**ENG 437. Pedagogical Grammar and Discourse (5).** Study of English grammar, grammar instruction, and discourse analysis. ENG 437 and ENG 537 are layered courses; a student may not receive credit for both. Prerequisites: ENG 320 and ENG 420.

**ENG 453. Studies in Fiction (5).** Extensive reading and analysis of prose fiction. May be repeated up to 15 credits under a different subtitle. Prerequisites: ENG 302 and ENG 303, or permission of instructor.

**ENG 454. Studies in Nonfiction (5).** Extensive reading and analysis of literary nonfiction. May be repeated up to 15 credits under a different subtitle. Prerequisites: ENG 302, ENG 303, or permission of instructor.

**ENG 455. Studies in Poetry (5).** Extensive reading, analysis, and practice, at the professional level, in theories of poetics, and a representative sample of poetry. May be repeated up to 15 credits with different subtitles. ENG 455 and ENG 555 are layered courses; students may not receive credit for both. Prerequisites: ENG 302 and ENG 303.

**ENG 456. Studies in Rhetoric (5).** Extensive reading, analysis, and practice in rhetorical theories and approaches. ENG 456 and ENG 556 are layered courses; students may

not receive credit for both. May be repeated up to 15 credits under a different subtitle. Course will be offered every year (Fall). Prerequisite: ENG 301.

**ENG 460. Cinema Studies V: Advanced World Cinema (5).** Building on the foundation of Survey of World Cinema, this course focuses on world cinema in the transnational age, exploring recent developments in film and how they reflect global concerns and cinematic movements. FILM 460 and ENG 460 are cross-listed courses; students may not receive credit for both. Course will not have an established scheduling pattern. Prerequisite: FILM 360 or ENG 360.

**ENG 461. Studies in Film and Culture (5).** An examination of how American films construct and appropriate images of American racial, ethnic, and cultural minorities. Course explores and compares images of minorities created by the dominant culture to those created by minority filmmakers. May be repeated for up to 10 credits. ENG 461 and FILM 461 are cross-listed courses; a student may not receive credit for both.

**ENG 462. Studies in Film and/or Television Genres (5).** An examination of a film and/or television genre: history, aesthetics, cultural context, social significance, and critical methodologies. May be repeated up to 10 credits. FILM 462 and ENG 462 are cross-listed courses; student may not receive credit for both. Course will not have an established scheduling pattern. Prerequisite: FILM 250.

**ENG 463. Studies in the Film Auteur (5).** In-depth examination of the major cinematic works of a selected auteur director, such as Hitchcock, Chaplin, Kurosawa, W. Allen, Zhang Yimou, etc., with attention to major stylistic and thematic practices. May be repeated for credit. Prerequisite: FILM 250.

**ENG 464. Advanced Fiction Writing (5).** Intensive workshop further developing the techniques of writing literary fiction: weaving together character development, plot, dialogue, exposition, setting, and thematic structure. Emphasizes the development of criteria for evaluating and improving literary fiction, as well as reading professional models to learn technique. ENG 464 and ENG 564 are layered courses; a student may not receive credit for both. Prerequisite: ENG 364.

**ENG 465. Advanced Poetry Writing (5).** Intensive workshop further examining the genres within poetry, as

well as experimenting with forms, discursive structures, and voice; revising for economy and precision; exploring metrical effects. ENG 465 and ENG 565 are layered courses; a student may not receive credit for both. Prerequisite: ENG 365.

**ENG 466. Advanced Creative Nonfiction Writing (5).** Intensive workshop further developing the techniques of writing creative nonfiction: researching, editing, assimilating features of fiction and poetry, and experimenting with structure, voice, and style. Reading professional models to learn technique. ENG 466 and ENG 566 are layered courses; a student may not receive credit for both. Prerequisite: ENG 366.

**ENG 467. Advanced Narrative Screenwriting (Put on reserve 9/16/2014.) (4).** Intensive workshop oriented toward techniques for creating or rewriting an original or adapted script for film/TV. Emphasizes narrative development, detailed script analysis and character motivation. Creation of a feature-length script for film or TV using the craft of the screenwriter to convey mood, energy, character, structure, and intent. Put on reserve 9/16/2014. Last taught in 2010. Will go inactive 8/24/17. Prerequisites: either COM 309 or ENG 367.

**ENG 468. Contemporary Writers Colloquium (5).** Genre specific seminar (poetry or fiction) with writing workshop element, featuring a schedule of visiting writers. Students will read work by visiting writers, develop critical thinking about craft, attend readings, explore contemporary publishing issues, and write both analytical papers and creative work. May be repeated up to 20 credits. ENG 468 and ENG 568 are layered courses; a student may not receive credit for both. Prerequisites: ENG 364 or ENG 365.

**ENG 472. Research Methods for Workplace Writers (5).** This course introduces students to a variety of workplace writing research methods and practices. Formerly ENG 312, students may not receive credit for both. ENG 472 and ENG 572 are layered courses; a student may not receive credit for both. Prerequisites: ENG 301 and ENG 310.

**ENG 473. Grant Writing: Theory and Practice (5).** This advanced course introduces students to the theoretical and practical aspects of the grant writing process, especially as it pertains to funding opportunities for education and non-profits. ENG 473 and ENG

573 are layered courses, students may not receive credit for both. Course will not have an established scheduling pattern. Prerequisite: ENG 301 or ENG 310.

**ENG 474. Professional Writing with New Media (5).** This advanced writing course introduces students to the theoretical and practical aspects of a specific professional writing genre or specialization involving new media. Course will be offered every year. ENG 474 and ENG 574 are layered courses, students may not receive credit for both. May be repeated up to 15 credits under a different subtitle in the same career (i. e. undergraduate or graduate) . Prerequisite: ENG 310 with a grade of C or higher or ENG 315 with a grade of C or higher or by instructor permission.

**ENG 476. Integrated Humanities at the Middle-level Grades (5).** This course focuses on integrated instructional strategies and methods for working with middle-level (grades 4-9) students in the humanities (English, reading, social studies, history, civics, economics, and geography) content areas. EDEL 476 and ENG 476 are cross-listed; students may not receive credit for both. Prerequisites: ENG 320 and admission to the teacher education or hold a valid Washington teaching certificate.

**ENG 484. Manastash: Literary Editing (3).** Students will select and edit manuscripts for publication in the Manastash Literary Journal. May be repeated up to 6 credits. Prerequisites: ENG 301 and ENG 303.

**ENG 485. Manastash: Literary Design and Production (2).** Students will select and edit manuscripts for publication in, as well as design and construct, the Manastash literary journal. May be repeated up to 4 credits. Prerequisites: ENG 301 and ENG 303.

**ENG 488. Teaching Portfolio (2).** Students prepare an end-of-program E-Portfolio which illustrates their mastery of major program and professional sequence competencies. Grade will either be S or U. Prerequisite: current WSP/FBI fingerprint clearance, and admission to the Teacher Certification Program.

**ENG 489. Senior Colloquium (2).** Students prepare an end-of-major portfolio which illustrates their competence in interpreting and composing. Grade will either be S or U. Course will be offered every year (Fall, Winter, Spring). Prerequisite: 48 credits of English courses. CE - Culminating Experience

**ENG 490. Cooperative Education (1-12).** An individualized, contracted field experience with business, industry, government, or social service agencies. Requires a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for a total of 12 credits. Grade will be either S or U. Prerequisite: prior approval.

**ENG 491. Workshop (1-10).** May be repeated for credit.

**ENG 492. Practicum (3).** Practicum accompanying intensive training in the pedagogy of writing presented in ENG 429 and ENG 430. Students connect teaching, learning, and assessment strategies to current research and practice and apply ELA endorsement competencies to specific learning situations. Grade will either be S or U. Co-requisite: ENG 429 or ENG 430. Prerequisites: completed 15 ENG credits for ML majors and minors or 28 ENG credits for English LA Teach majors, and full admission to the Teacher Certification Program, and current WSP/FBI fingerprint clearance.

**ENG 493. Online Practicum (3-5).** Practical application of multi-modal writing and editing skills. Prerequisites: ENG 301 and ENG 303 and ENG 323 and permission of instructor.

**ENG 496. Individual Study (1-6).**

**ENG 497. Honors (1-12).** Prerequisite: admission to department honors program.

**ENG 498. Special Topics (1-6).**

**ENG 499. Seminar (1-5).**

#### Environmental Studies Courses

**ENST 201. Earth as an Ecosystem (5).** Introduction to the concept of our planet as a finite environment with certain properties essential for life and will explore dynamic nature of the earth's physical, chemical, geological, and biological processes and their interrelated "systems". Course will be offered every year (Fall, Spring). NS-Patterns and Connections Natural World. NS-Patterns and Connections Natural World. K7 - Physical & Natural World

**ENST 202. Environment and Society (5).** The physical and cultural dimensions of environmental problems with particular emphasis given to the interaction between ecosystems, basic resources, population dynamics, and culture. Course will be offered every year (Fall, Summer). NS-Applications Natural Science. NS-Applications Natural Science. K2 - Community, Culture, & Citizenship

**ENST 298. Special Topics (1-6).**

- ENST 299. Seminar** (1-5). May be repeated if subject is different.
- ENST 300. Applied Environmental Sciences** (5). Students will collect, analyze, and synthesize original field data in natural and social sciences on environmental issues relevant to global and local communities. Formerly ENST 210, students may not receive credit for both. Three hours lecture and three hours laboratory per week. Prerequisites: ENST 201 or ENST 202.
- ENST 303. Environmental Management** (5). Development of attitudes and perceptions of our environment. Examination of the economic, political, and legal mechanisms and philosophical perspectives useful in managing the environment. Prerequisites: ENST 201 or ENST 202.
- ENST 304. Environmental Methods and Analysis** (5). Introduction to qualitative and quantitative methods in the social and natural sciences with emphasis on practical application to a variety of examples in the environment. Three hours lecture and three hours laboratory per week. Prerequisite: ENST 300.
- ENST 310. Energy and Society** (5). Through classroom and field experience, students will examine society's use of and dependence upon energy. Students will become more discerning citizens, able to take part in local, national, and global energy discussions. Course will be offered every year (Fall). NS-Applications Natural Science (W). Prerequisite: sophomore standing or above. NS-Applications Natural Science (W). K4 - Global Dynamics
- ENST 330. Environmental Leadership and Advocacy** (5). Examines environmental groups, leadership models, and methods of environmental advocacy. Prerequisite: junior standing or above.
- ENST 360. Environmental Justice** (5). Explores the concept of environmental justice, cases of environmental injustice, and environmental justice movements. Focus on the U.S., with some attention to comparative cases in other countries and regions, and global issues. Course will be offered every year. Course will not have an established scheduling pattern. K2 - Community, Culture, & Citizenship
- ENST 396. Individual Study** (1-6). May be repeated if subject is different.
- ENST 397. Honors** (1-12). Prerequisite: admission to department honors program.
- ENST 398. Special Topics** (1-6).
- ENST 399. Seminar** (1-5). May be repeated if subject is different.
- ENST 444. Environmental Policy Formulation** (4). Students will work together in interdisciplinary teams to formulate and justify policy measures they think appropriate to meet some environmental problem investigated. Prerequisites: ENST 201 or ENST 202, and ENST 303.
- ENST 455. Environmental Literature** (3). Survey of literary works that thematically explore human relationships with place and environment. Sampling of various themes and genres, with a focus on Pacific Northwest.
- ENST 460. Environmental Law** (5). Introduction to the content of U.S. environmental law and the principal legal approaches to deal with environmental problems including common-law, statutory, regulatory, and economic-incentive systems. ENST 460 and GEOG 445 are equivalent courses; students may not receive credit for both. Prerequisite: junior standing or above.
- ENST 487. End-of-Major Capstone** (1). Portfolio review, career planning and program evaluation activities. Must have senior standing and intention to graduate in coming year. Grade will be S or U. CE - Culminating Experience
- ENST 490. Cooperative Education** (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. By permission. May be repeated for credit. Grade will either be S or U.
- ENST 491. Workshop** (1-6). May be repeated for credit.
- ENST 495. Senior Research** (1-12). Independent student research in environmental sciences project under supervision of faculty sponsor. Permission of instructor. May be repeated up to 12 credits. Course will not have an established scheduling pattern.
- ENST 496. Individual Study** (1-6).
- ENST 497. Honors** (1-12). Prerequisite: admission to department honors program.
- ENST 498. Special Topics** (1-6).
- ENST 499. Seminar** (1-5).
- Entrepreneurship Courses**
- ENTP 287. Applied Product Development** (5). This course focuses on learning the concepts and skills needed to generate a marketable innovation by taking student teams through their first four steps of product development process for their own potentially successful product/service. May be repeated up to 10 credits. Course will be offered every year (Fall, Winter, Spring). Formerly MGT 287, students may not receive credit for both. Co- or Prerequisite: MGT 200 or permission. K6 - Individual & Society
- ENTP 288. Intellectual Property and Prototype Development for Products and Services** (3). This course develops the skills for service/product prototyping and also for filing/researching patent and copyright intellectual property. Students must be 18 or older. Open to all majors. Course will be offered every year (Fall, Winter, and Spring). Formerly MGT 288, students may not receive credit for both. May be repeated up to 9 credits. Prerequisite: ENTP 287.
- ENTP 289. Business Plan Development** (3). This course develops the skills for developing, writing and presenting a business plan for profit/non-profit organizations. Students must be 18 or older. Open to all majors. Permission by instructor. Course will be offered every year (Fall, Winter, and Spring). Prerequisite: ENTP 287 or permission by instructor.
- ENTP 488. Plunge Class** (3). In ENTP 488 students will launch their ventures in completion of entrepreneurship minor. Mandatory \$250 to \$1000 funds required to file for state/federal permits/licensing depending if alone or with partner(s). May be repeated up to 12 credits. Prerequisites: (ACCT 251 or ACCT 301) and (MKT 360 or MKT 362) and ENTP 200 and ENTP 287 and ENTP 288 and (ENTP 289 or ENTP 487).
- English as a Second Language Courses**
- ESL 050C. Oral Communication 1** (4). Oral Communication 1 is a beginning level course designed to develop skills necessary to function in an academic environment. The class introduces the basics of asking and answering simple questions, naming objects, giving locations, and telling time. Students will participate in simple conversations.
- ESL 050G. Grammar 1** (4). Grammar 1 is a beginning level course to develop basic grammar skills. Students will be introduced to the simple present, present progressive, and simple past tenses, the use of contractions, and yes/no questions.
- ESL 050R. Reading 1** (4). Reading 1 is a beginning level course designed to

develop reading skills and build vocabulary.

**ESL 050W. Writing 1 (4).** Writing 1 is a beginning level course designed to introduce basic writing skills. Students will practice writing simple sentences and about self, family, and everyday routines.

**ESL 060C. Oral Communication 2 (4).** Oral Communication 2 is a high-beginning level course designed to develop skills necessary to function in an academic environment. Students practice conversations, telling stories, describing schedules, and giving directions. Students develop listening skills such as note-taking and listening for the main ideas.

**ESL 060G. Grammar 2 (4).** Grammar 2 is a high-beginning level course to develop basic grammar skills. Students will be introduced to basic verb tenses and grammatical structures, compound sentences and complex sentences.

**ESL 060R. Reading 2 (4).** Reading 2 is a high-beginning level course designed to develop reading skills and build vocabulary.

**ESL 060W. Writing 2 (4).** Writing 2 is a high beginning level course designed to introduce the structure of academic writing commonly found in American colleges and universities. Students will practice writing simple sentences, and later will begin writing short paragraphs using simple connectors and transitions to indicate the order of events.

**ESL 070C. Oral Communication 3 (4).** Oral Communication 3 is an intermediate level course designed to develop skills necessary to function in an academic environment. In addition to practicing conversations and telling stories, students give prepared and impromptu speeches. Students also develop listening skills such as note-taking and summarizing.

**ESL 070G. Grammar 3 (4).** Grammar 3 is an intermediate level course to develop basic grammar skills. Students will be introduced to more complex verb tenses and grammatical structures, compound sentences and complex sentences.

**ESL 070R. Reading 3 (4).** Reading 3 is an intermediate level course designed to develop reading skills and build vocabulary.

**ESL 070W. Writing 3 (4).** Writing 3 is an intermediate level course designed to practice the academic writing commonly found in American colleges and universities. In this class, paragraphs are practiced with focus on content, form, and editing. The

academic essay is introduced and students are expected to write simple, connected five paragraph essays on a range of topics.

**ESL 080C. Oral Communication 4 (4).** Oral Communication 4 is an upper-intermediate level course designed to develop skills necessary to function in an academic environment. Students give prepared and impromptu speeches on academic topics. Students also develop listening skills such as note-taking and summarizing of academic lectures.

**ESL 080G. Grammar 4 (4).** Grammar 4 is an upper-intermediate level course to develop more complex grammar skills. Students will be introduced to more advanced verb tenses and grammatical structures, compound sentences and complex sentences.

**ESL 080R. Reading 4 (4).** Reading 4 is an upper-intermediate level course designed to develop reading skills and build vocabulary.

**ESL 080W. Writing 4 (4).** Writing 4 is an upper intermediate level course designed to practice the academic writing commonly found in American colleges and universities. In this class the academic essay is reintroduced with focus on content, form, editing, and rhetorical style. Students are expected to write clear, detailed, well organized and well developed academic essays (cause and effect and persuasive). Students are also expected to summarize and synthesize opposing points of view and respond appropriately.

#### **ESL 090A. Academic Skills**

**Preparation (4).** Academic Skills is an advanced English as a second language course. This course provides strategies to improve speaking and listening skills necessary for college study. Students will learn to participate effectively in a variety of academic situations including discussions, lectures, and student study groups

**ESL 090C. Oral Communication 5 (4).** Oral Communication 5 is an advanced level course designed to develop skills necessary to function in an academic environment. Students give prepared and impromptu speeches on academic topics. Students also develop listening skills such as note-taking and summarizing of academic lectures.

**ESL 090R. Reading 5 (4).** Reading 5 is an advanced level course designed to develop reading skills and build vocabulary.

**ESL 090T. Test Preparation (4).** This course is to improve your performance on either the TOEFL iBT or the IELTS

test by learning test-taking strategies and improving your overall proficiency in the English language. The skills for handling each of the four areas: speaking, listening, reading, and writing will be practiced.

**ESL 090W. Writing 5 (4).** Writing 5 is an advanced level course designed to practice the academic writing commonly found in American colleges and universities. In this class the academic essay is reintroduced with increased focus on content, form, editing, and rhetorical style. Students are expected to write about complex academic topics using research methods. Students are also expected to accurately summarize and analyze opposing views, use paraphrasing, concessions and rebuttal techniques.

#### **ESL 100AR. Academic Research (2).**

This course is part of the UESL Conditional Admission for Graduate Studies program. This course will help students develop an understanding of the standards for scholarship, develop basic research skills and strategies, and understand academic honesty and digital citizenship. Students who take this class will not receive credit towards degree requirements. Permission of department. Course will not have an established scheduling pattern (Spring, Summer).

Prerequisites: Completion of the UESL Program with a recommendation (received a B or higher in ESL90R and ESL90W and ESL90OC and either ESL90T or ESL90A); or received TOEFL 71 iBT or higher; or IELTS 6.0 or higher. Co-requisites: ESL 100CC and ESL 100LS and ESL100 RW and ESL 100RV.

#### **ESL 100CC. Academic Classroom**

**Culture (1).** Academic Classroom Culture Preparation is an advanced English as a second language course. This course provides strategies to improve the skills necessary for college study. Students will learn to participate effectively in a variety of academic situations. Students who take this class will not receive credit towards degree requirements. Permission of department. Course will not have an established scheduling pattern (Spring, Summer). Prerequisites: Completion of the UESL Program with a recommendation (received a B or higher in ESL 90R and ESL 90W and ESL 90OC, and either ESL 90T or ESL 90A); or received TOEFL 71 iBT or higher; or IELTS 6.0 or higher. Corequisites: ESL 100RW and ESL 100RV and ESL 100LS and ESL 100AR.

**ESL 100LS. Academic Listening and Speaking (3).** Academic Listening and Speaking is an advanced level course designed to develop the listening and speaking skills necessary to function in an academic environment. Students who take this class will not receive credit toward degree requirements. Permission of department. Course will not have an established scheduling pattern (Spring, Summer). Prerequisites: Completion of the UESL Program with a recommendation (received a B or higher in ESL90R and ESL90W and ESL90OC and either ESL90T or ESL90A); or received TOEFL 71 iBT or higher; or IELTS 6.0 or higher. Corequisites: ESL 100CC and ESL 100RW and ESL 100RV and ESL 100AR.

**ESL 100RV. Academic Reading and Vocabulary (3).** Academic Reading and Vocabulary is an advanced level course designed to develop reading skills and build vocabulary at the college level in preparation for graduate study. Students who take this class will not receive credit towards degree requirements. Permission of department. Course will not have an established scheduling pattern (Spring, Summer). Prerequisites: Completion of the UESL Program with a recommendation (received a B or higher in ESL90R, ESL90W, ESL90OC, and either ESL90T or ESL90A); or received TOEFL 71 iBT or higher; or IELTS 6.0 or higher. Corequisites: ESL100CC, ESL100RW, ESL100LS, and ESL100AR.

**ESL 100RW. Research Writing (3).** Research Writing is a college level course designed to practice the academic writing commonly found in American colleges and universities. Students who take this class will not receive credit toward degree requirements. Permission of department. Course will not have an established scheduling pattern (Spring, Summer). Prerequisites: Completion of the UESL Program with a recommendation (received a B or higher in ESL90R, ESL90W, ESL90OC, and either ESL90T or ESL90A); or received TOEFL 71 iBT or higher; or IELTS 6.0 or higher. Corequisites: ESL100CC, ESL100RV, ESL100LS, and ESL100AR.

**ESL 492. TESOL Certificate Practicum (5).** The TESOL Certificate Practicum is designed to provide participants with a practical, hands-on teaching experience in which they will apply the linguistic and pedagogical content of their other certificate courses

in an authentic language-teaching context. Pre or Co-requisites: (ENG 320 and ENG 420 and ENG 431 and ENG 437) with a C+ or higher and admission to the TESOL Certificate Program.

#### Ethnic Studies Courses

**ETS 296. Individual Study (1-6).**

**ETS 298. Special Topics (1-6).**

**ETS 299. Seminar (1-5).**

**ETS 325. Race/Ethnicity, Class and Gender in Education (5).** An examination of the educational significance of race/ethnicity, social class, and gender. Focus on intersectionalities of race/ethnicity, social class and gender in education both historically and in contemporary contexts from sociological perspectives. Course will be offered on odd numbered years (Spring).

**ETS 339. Muslims and Muslim Americans (5).** An examination of the experiences of Muslims in America. Focus on variations within the Muslim world, the history of Muslim immigration to America, and the discrimination and prejudice experienced by Muslim Americans.

**ETS 350. Survey of Chicano Studies (Put on Reserve 9/16/16.) (5).** A historical, economic, and political survey of the Chicano experience in the U.S. from 1540 to the present with regional emphasis on the American Southwest. (Put on Reserve 9/16/16. Last taught in 2013. Will go inactive 8/24/19.)

**ETS 354. Minority Experiences (5).** Explanations will be identified for institutional racism common to the history and character of American minorities. ETS 354 and SOC 354 are cross-listed courses; students may not receive credit for both.

**ETS 369. The Social Construction of Whiteness (5).** Exploration of the social construction of Whiteness as a racial category from an historic and contemporary perspective. How and why did the idea of Whiteness emerge? How has this construct changed and evolved over time? What are the benefits of Whiteness? Course will be offered every year (Spring).

**ETS 396. Individual Study (1-6).** May be repeated if subject is different.

**ETS 397. Honors (1-12).** Prerequisite: admission to department honors program.

**ETS 398. Special Topics (1-6).**

**ETS 399. Seminar (1-5).** May be repeated if subject is different.

**ETS 446. Sociology of Immigration (5).** This course will serve sociology and

ethnic studies students by covering the topic of immigration, its impact on the people immigrating, as well as the citizens of the country they are immigrating to. ETS 446 and SOC 446 are cross-listed; students may not receive credit for both.

**ETS 490. Contracted Field Experience (1-12).** An educational plan designed to integrate classroom study with planned, supervised, and evaluated employment experience linking academic programs with students' career goals and interests. By permission. May be repeated for credit. Grade will either be S or U.

**ETS 491. Workshop (1-6).** May be repeated for credit.

**ETS 496. Individual Study (1-6).**

**ETS 497. Honors (1-12).** Prerequisite: admission to department honors program.

**ETS 498. Special Topics (1-6).**

**ETS 499. Seminar (1-5).**

#### Engineering Technologies, Safety, and Construction Courses

**ETSC 101. Modern Technology and Energy (5).** A study of how basic scientific principles are applied daily in industrial societies through a survey of transportation, energy and power, construction, and consumer product technologies. Formerly IET 101, students may not receive credit for both. NS-Applications Natural Science. Course will be offered every year (Fall, Winter, Spring, Summer). NS-Applications Natural Science. K8 - Science & Technology

**ETSC 145. Machine Woodworking (4).** Machine and tool operations, wood technology, designing and construction principles, finishing methods and materials. Two hours lecture and four hours laboratory per week. Formerly IET 145, students may not receive credit for both.

**ETSC 150. Engineering Graphics (5).** Interpretation and creation of fundamental engineering graphics, including mechanical part drawings, piping and instrumentation diagrams, and three-dimensional models. Course will be offered every year (Fall).

**ETSC 160. Computer-Aided Design and Drafting (4).** Hands-on training in the operation of AutoCAD's design and drafting software system with emphasis on features, limitations, and dimensioning strategy. Students are in class/lab 6 hours per week. Formerly IET 160, students may not receive credit for both. Course will be offered every year (Fall, Winter, and Spring).

- ETSC 161. Architectural Computer Aided Design** (3). Formerly IET 161, students may not receive credit for both.
- ETSC 201. Bio-related Technologies (Put on reserve 9/16/17)** (5). Agriculture, medicine, fuel production, waste management, and other technologies in which living organisms are used to solve problems and modify products and systems. Includes problem-solving, design, and research activities for understanding bio-related technologies. Formerly IET 201, students may not receive credit for both. (Put on reserve 9/16/17. Will go inactive 8/24/2020.)
- ETSC 215. Small Engines (Put on Reserve 9/16/16.)** (4). Maintenance and repair of one- and two-cylinder internal combustion engines. Two hours lecture and four hours laboratory per week. Formerly IET 215, students may not receive credit for both. (Put on Reserve 9/16/16. Last taught in 2013. Will go inactive 8/24/19.) Prerequisite: IET 210.
- ETSC 241. Programmable Logic Controller Applications** (4). A study of programmable logic controller concepts, components, systems, programming and applications. Formerly IET 373, students may not receive credit for both. Two hours lecture and four hours laboratory per week. Course will be offered every year (Winter and Spring).
- ETSC 242. Instrumentation** (4). Analysis of instrumentation systems including data collection, transmission and conversion, sensor operation, signal conditioning, and application techniques. Formerly IET 242, students may not receive credit for both. Three hours lecture and two hours laboratory per week. Course will be offered every year (Fall). Co- or Prerequisites: EET 221 and EET 221LAB.
- ETSC 260. NURBS Modeling** (4). Hands-on training in the production of 3-D models using Rhinoceros' NURBS (non-uniform rationale B-splines) geometry. Formerly IET 260, students may not receive credit for both. Prerequisite: ETSC 160.
- ETSC 265. Three-dimensional Modeling** (4). Design of parts, assemblies, and working drawings using 3-D solid modeling software, basic theory of threaded fasteners and gears, welding representation, geometric dimensioning, and tolerancing. Two hours lecture and four hours laboratory per week. Formerly IET 265, students may not receive credit for both. Course will be offered every year (Fall, Winter, Spring). Prerequisites: ETSC 160 or declared electronics engineering technology majors.
- ETSC 277. Introduction to Robotics** (4). An applied introduction to robotics with focus on programming pre-configured robotic systems using LabVIEW. Formerly IET 277, students may not receive credit for both. Course will be offered every year (Fall).
- ETSC 290. Cooperative Education** (1-15). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. By permission. May be repeated for credit. Grade will either be S or U. Formerly IET 290, students may not receive credit for both.
- ETSC 296. Individual Study** (1-6). Formerly IET 296, students may not receive credit for both.
- ETSC 298. Special Topics** (1-6). Formerly IET 298, students may not receive credit for both.
- ETSC 299. Seminar** (1-5). Formerly IET 299, students may not receive credit for both.
- ETSC 300. Industrial Engineering Technology Fundamentals** (2). This course provides students the opportunity to explore careers for IET majors. Instruction includes exposure to industrial careers, career planning, employability skills, terminology, professionalism, and ethics. Course will be offered every year (Fall).
- ETSC 301. Engineering Project Cost Analysis** (4). Techniques of economic cost analysis applied to engineering projects: interest, present value, annual equivalence, rate of return, payout criteria, and break even modeling. Formerly IET 301, students may not receive credit for both. Four hours of lecture per week. Course will be offered every year (Fall, Winter, Spring and Summer). Prerequisite: MATH 153 or permission of instructor.
- ETSC 311. Statics** (4). Introductory statics including forces and equilibrium. Principles of structures including trusses, beams, frames, machines and friction. This course consists of four hours of lecture each week. Formerly IET 311, students may not receive credit for both. Course will be offered every year (Fall, Winter). Prerequisites: PHYS 111 or PHYS 181. Pre or Co-requisite: MATH 173.
- ETSC 312. Strength of Materials** (4). Strength of materials, including stress analysis of axially loaded members, torsional members, beams, and indeterminate structures. Formerly IET 312, students may not receive credit for both. Prerequisite: ETSC 311.
- ETSC 341. Programmable Logic Controller Applications II** (4). Continued study of programmable logic controllers (PLCs), with emphasis on their integration into automated systems; specifically the control of actuators and incorporation into networks. Course will be offered every year (Spring). Prerequisites: ETSC 241 and EET 332.
- ETSC 380. Quality Control** (4). Provides the foundation necessary to understand and apply statistical quality control techniques, product reliability procedures, and the management aspects of quality assurance. Formerly IET 380, students may not receive credit for both. Course will be offered every year (Spring).
- ETSC 385. Product Design and Development** (4). Methodology for the design and development of industrial and commercial products from conceptual stage to product introduction into the marketplace. Project based instructional structure. Three hours lecture per week. Formerly IET 385, students may not receive credit for both.
- ETSC 389. Technical Presentations** (3). Written and oral presentations based on technical reference material utilizing the library, technical society publications, and the Internet. Formerly IET 389, students may not receive credit for both.
- ETSC 396. Individual Study** (1-6). May be repeated if subject is different.
- ETSC 397. Honors** (1-12). Prerequisite: admission to department honors program.
- ETSC 398. Special Topics** (1-6). Formerly IET 398, students may not receive credit for both.
- ETSC 399. Seminar** (1-5). May be repeated if subject is different.
- ETSC 430. Methods of Teaching Technology Education** (3). This course examines teaching techniques, content, and program requirements as they relate to teaching exploratory technology education in the public schools. Formerly IET 430, students may not receive credit for both. Prerequisite: current WSP/FBI fingerprint clearance, and conditional or full admission to the Teacher Certification Program.
- ETSC 433. Technology Education Laboratory Planning** (3). Planning, management, and safety of school shops and labs in STEM related fields.

Formerly IET 433, students may not receive credit for both. Prerequisite: current WSP/FBI fingerprint clearance

**ETSC 435. Technology Education Exit Assessment (1).** This is a senior level course designed to measure student competencies in meeting state and national standards for program exit. Students are evaluated on their portfolio as presented in LiveText. Grade will either be S or U. Formerly IET 435, students may not receive credit for both. Prerequisites: ETSC 430 and ETSC 433, and senior standing taken last quarter at CWU prior to graduation.

**ETSC 442. Alternative Energy Resources and Technology (5).** Overview of energy systems, with focus on wind, biomass, solar, biodiesel, geothermal, and sustainable energy systems. Includes energy production and conversion. Field trips. Formerly IET 442, students may not receive credit for both. Prerequisite: junior standing or above.

**ETSC 455. Engineering Project Management (4).** Project-based synthesis used in engineering project management. Topics; bidding, contract management, scheduling, cost estimating and control, logistics, conflict management, team building, negotiating, and risk assessment. ETSC 455 and ETSC 555 are layered courses; students may not receive credit for both. By permission. Formerly IET 455, students may not receive credit for both.

**ETSC 457. Advanced Foundry (4).** Two hours lecture and four hours laboratory per week. Formerly IET 457, students may not receive credit for both. Prerequisites: ETSC 353 and MET 257.

**ETSC 485. Industrial Engineering Technology Capstone (4).** Students will apply the principles of technology and engineering management to real world projects. The course will help prepare students for the transition from student life to employment as an industrial professional. By permission of instructor. Course will be offered every year (Winter).

**ETSC 490. Cooperative Education (1-12).** An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. By permission. May be repeated for credit. Grade will either be

S or U. Formerly IET 490, students may not receive credit for both.

**ETSC 491. Workshop (1-6).** Formerly IET 491, students may not receive credit for both.

**ETSC 496. Individual Study (1-6).**

Formerly IET 496, students may not receive credit for both.

**ETSC 497. Honors (1-12).** Prerequisite: admission to department honors program.

**ETSC 498. Special Topics (1-6).**

Formerly IET 498, students may not receive credit for both.

**ETSC 499. Seminar (1-5).** Formerly IET 499, students may not receive credit for both.

#### Exercise Science Courses

**EXSC 154. Science of Healthy Living (5).** Science of Healthy Living (5 credits) is a lecture (4 hours) and in-person laboratory (2 hours) course, that analyzes and evaluates current theories and practices related to healthy living, focusing on translating theory to practice. Course will be offered every year (Fall, Winter, Spring, Summer).

K7 - Physical & Natural World

**EXSC 254. Foundations of Fitness (3).** Overview of the fitness industry, components of fitness, and strategies to improve the health and well-being of the individual.

**EXSC 298. Special Topics (1-6).**

**EXSC 299. Seminar (1-5).** May be repeated if subject is different.

**EXSC 318. Aerobic Fitness (Put on reserve 9/16/18) (3).** This class provides the fitness and sports management major with an in-depth exploration of various cardiovascular exercise activities and equipment. (Put on reserve 9/16/18, will go inactive 8/24/21) Prerequisites: EXSC 350 and EXSC 350LAB.

**EXSC 350. Gross Anatomy (3).** Gross anatomy of all systems of the human.

**EXSC 350LAB. Gross Anatomy Laboratory (2).** Cadaver study of all anatomical systems of the human. Co- or prerequisite: EXSC 350.

**EXSC 351. Physiology (4).** Comprehensive study of the physiology of humans. Prerequisites: EXSC 350 and EXSC 350LAB.

**EXSC 351LAB. Physiology Laboratory (1).** Laboratory procedures that assess physiologic functioning of humans. Co- or prerequisite: EXSC 351.

**EXSC 352. Assessment and Treatment of Athletic Injuries (4).** Prevention and treatment of injuries and rehabilitation of injured athletes. Three hours lecture and two hours laboratory per week. Formerly EXSC 348,

students may not receive credit for both. Prerequisites: EXSC 350 and EXSC 350LAB.

**EXSC 353. Physical and Orthopedic Assessment (4).** Differential diagnoses of physical-orthopedic pathologies and special tests used in a range of healthcare arenas. Three hours of lecture and two hours of laboratory per week. Prerequisites: EXSC 350 and EXSC 350LAB with a grade of C or higher.

**EXSC 370. Biomechanics (5).** Physical laws and mechanical principles that govern human motion including internal and external forces and their effects, along with the measurement of kinematic, kinetic, and mechanics of movement. Prerequisites: EXSC 350 and EXSC 350LAB and PHYS 111 or PHYS 121 or PHYS 181.

**EXSC 371. Movement Analysis (5).** This course is designed to teach the student applied principles of human movement analysis. Course content includes basic motor control, basic motor learning, and applied biomechanical principles. Course will be offered every year (Fall, Winter, Spring and Summer). Prerequisite: EXSC 254 or permission of instructor.

**EXSC 396. Individual Study (1-6).** May be repeated if subject is different.

**EXSC 397. Honors (1-12).** Prerequisite: admission to department honors program.

**EXSC 398. Special Topics (1-6).**

**EXSC 399. Seminar (1-5).** May be repeated if subject is different.

**EXSC 438. Therapeutic Exercise (3).**

This course covers the understanding, design, and development of rehabilitation exercises for acute, chronic and post operative injuries. Course will be offered every year (Fall and Spring). Prerequisite: EXSC 350 and EXSC 350LAB, and (EXSC 352 or EXSC 353).

**EXSC 446. Sports Nutrition (3).**

Integration and application of scientifically based nutrition and exercise physiology principles that support and enhance performance and good health. EXSC 446 and NUTR 446 are cross-listed courses; students may not receive credit for both. Prerequisite: NUTR 101 and (CHEM 113 or EXSC 450).

**EXSC 450. Physiology of Exercise (4).** Acute and chronic responses of the metabolic, muscular, cardiovascular, pulmonary, endocrine, and thermoregulatory systems to physical work. Prerequisites: EXSC 351 and EXSC 351LAB with a grade of C or



higher, and admission to the exercise science or clinical physiology major.

**EXSC 450LAB. Physiology of Exercise Laboratory (1).** Accompanying laboratory to EXSC 450, includes data collection and laboratory write-ups on responses of the metabolic, muscular, cardiovascular, pulmonary, endocrine, and thermoregulatory systems to physical work. Prerequisites: EXSC 351 and EXSC 351LAB with a grade of C or higher, and admission to the exercise science or clinical physiology major.

**EXSC 452. Therapeutic Modalities (3).** A detailed examination of injuries, therapeutic modalities, and rehabilitation in athletic training. Course will be offered every year (Winter and Spring). Prerequisite: EXSC 352 or EXSC 353 with a grade of C or higher.

**EXSC 455. Fitness Assessment and Exercise Prescription (4).** Concepts and principles of appraising level of fitness, evaluating the results and designing physical fitness/exercise programs. Four hours lecture. Prerequisites: EXSC 351 and EXSC 351LAB.

**EXSC 455LAB. Fitness Assessment and Exercise Prescription Laboratory (1).** Accompanying laboratory to EXSC 455, includes techniques for assessing aerobic fitness, muscular strength and endurance, body composition and flexibility. Two hours laboratory. Prerequisites: EXSC 351 and EXSC 351LAB.

**EXSC 456. Clinical Physiology (5).** Pathophysiologic basis of non-communicable disease, screening procedures for severity, prescriptive guidelines. Prerequisites: EXSC 351 and EXSC 351LAB.

**EXSC 457. Exercise Adherence Strategies (Put on reserve 9/16/18) (3).** Review of psychological factors involved in the exercise treatment of normal and special populations. (Put on reserve 9/16/18, will go inactive 8/24/21)

**EXSC 461. Professionalism in Exercise Science (Put on reserve 9/16/18) (2).** Overview of professional associations and their certifications, career opportunities and critical soft skills of the professions. (Put on reserve 9/16/18, will go inactive 8/24/21)

**EXSC 463. Pediatric Issues in Exercise Science (Put on Reserve 9/16/16.) (5).** Essential principles of growth, development, and exercise science and the application of these principles to children and youth. Four hours of lecture and two hours of laboratory per

week. (Put on Reserve 9/16/16. Last taught in 2013. Will go inactive 8/24/19.) Prerequisites: EXSC 350 and EXSC 351 with grades of C or higher.

**EXSC 464. Management of Fitness Facilities and Programs (Put on reserve 9/16/18) (4).** This course covers conventional business management principles and operational guidelines to the unconventional business of health and fitness facilities. (Put on reserve 9/16/18, will go inactive 8/24/21)

**EXSC 470. Clinical Biomechanics (3).** Biomechanical characteristics in clinical populations, Investigation of specific biomechanical and clinical interventions and devises to improve functional movement abilities. Two hour lecture 2 hours lab per week. Prerequisites: EXSC 370, grade of C or higher.

**EXSC 471. Sports Biomechanics (3).** Physical laws and biomechanical principles that govern high-level human functioning: running, ballistic-power movements, striking and impacting, resistance factors, and sports engineering. Two hours lecture and two hours lab per week. Prerequisite: EXSC 370 or EXSC 371, with grade of C or higher.

**EXSC 480. Science of Resistance Exercise (4).** This course addresses the scientific and theoretical bases of program design in resistance training. Formerly EXSC 360, students may not receive credit for both. Prerequisite: EXSC 351, with a grade of C or higher.

**EXSC 490. Cooperative Education (1-12).** An individualized, contracted field experience with business, industry, government, medical, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. Prerequisites: satisfactory completion of all courses in the major and a minimum major GPA of 2.7.

**EXSC 491. Workshop (1-6).** Course content identified by title in the university class schedule. May be repeated for credit under different titles.

**EXSC 493. Clinical Field Experience (1-15).** Experience and instruction under the supervision of clinician preceptors. Completed application and required clearances must be submitted to department prior to registration. Consent required. Satisfactory completion (C or higher) of all courses in Clinical Physiology. May be repeated up to 20 credits. Prerequisite: Instructor permission.

**EXSC 495A. Practicum: Fitness Centers/Clubs (2).** Observation, monitoring, and supervised assistance of fitness assessment and exercise prescription in community fitness center/club setting. Grade will either be S or U.

**EXSC 495B. Practicum: Clinical (2).** Observation, monitoring, and supervised activity in clinical rehabilitation and athletic training setting. Grade will either be S or U.

**EXSC 495C. Practicum: Management (2).** Observation, monitoring, and supervised leadership activity in fitness, health, and sport management settings. Grade will either be S or U.

**EXSC 495D. Practicum: Laboratory Assessment (2).** Laboratory techniques for assessment of body composition, cardiovascular, strength, and flexibility components of fitness. Grade will either be S or U.

**EXSC 496. Individual Study (1-6).** Permission of instructor. May be repeated.

**EXSC 497. Honors (1-12).** Prerequisite: admission to department honors program.

**EXSC 498. Special Topics (1-6).**

**EXSC 499. Seminar (1-5).** Permission of instructor. May be repeated.

#### Family and Child Life Courses

**FCL 101. Skills for Marriage and Intimate Relationships (4).** Provides an overview of romantic relationship dynamics and common issues in relationships from inception to dissolution. Students learn strategies for their own relationships and skills to work in relationship education. Formerly FS 101, students may not receive credit for both. Course will be offered every year (Fall, Winter, Spring, Summer). K6 - Individual & Society

**FCL 232. Child Development (3).** Developmental characteristics of children with emphasis from conception to eight years. Includes observation techniques. FCL 232 and EDEC 232 are cross-listed courses; students may not receive credit for both. Formerly FS 232, students may not receive credit for both.

**FCL 234. Contemporary Families (4).** Origins and historical development of families; cultural variations, contemporary trends. Draws upon information and insight from numerous root disciplines to explore family structure and function. Formerly FS 234, students may not receive credit for both. K6 - Individual & Society

- FCL 235. Relationships and Personal Development** (3). Development of interpersonal relationships from initial encounters to stable commitments. Major focus on interaction patterns in intimate relationships. FCL 235 and PSY 235 are cross-listed courses; students may not receive credit for both. Formerly FS 235, students may not receive credit for both.
- FCL 298. Special Topics** (1-6). Formerly FS 298, students may not receive credit for both.
- FCL 299. Seminar** (1-5). May be repeated if subject is different.
- FCL 305. Junior Seminar (Put on Reserve 9/16/16.)** (1). Preparation for practicum/internship and service learning. This course is required of any family studies major in a volunteer, practicum, or internship experience. Formerly FS 305, students may not receive credit for both. (Put on Reserve 9/16/16. Last taught in 2012. Will go inactive 8/24/19.) Prerequisite: family studies majors only.
- FCL 310. Family Issues in the 21st Century** (4). An introduction to social issues that impact family life. Current issues pertaining to individual and family relationships are assessed from an interdisciplinary perspective. SB-Foundations of Human Adaptations and Behavior (W). Formerly FS 310, students may not receive credit for both. SB-Foundations of Human Adaptations and Behavior (W).
- FCL 320. Theories of Family Dynamics** (4). Internal dynamics of family functioning, including processes by which families deal with change, stress, and conflict. Major theoretical orientations to the study of family, and an introduction to the scientific process. Formerly FS 320, students may not receive credit for both. Course will be offered every year (Spring). FCL 101 and FCL 234, and admission to a Family and Child Life major.
- FCL 332. Trauma and Resilience in Children and Adolescents** (4). Examination of the impact of trauma on child development from a risk and resilience framework. Students will evaluate and develop strategies to prevent trauma and promote resilience among children and families. Course will be offered every year (Winter).
- FCL 333. Culture and Marriage** (4). The reciprocal relationships between the biophysical and cultural components in mating, nurturing and sexual access. Cross-cultural patterns in marriage. FCL 333 and ANTH 333 are cross-listed courses; students may not receive credit for both. Formerly FS 333, students may not receive credit for both.
- FCL 334. Family Problems and Mediation** (4). Problems arising out of the interaction of family members. Mediation techniques, family policy, and theories and ethics in studying families. FCL 334 and FCL 554 are equivalent courses; students may not receive credit for both. Formerly FS 334, students may not receive credit for both.
- FCL 335. Divorce and Remarriage** (3). Personal, family, and legal aspects of divorce and remarriage; historical antecedents and trends. Formerly FS 335, students may not receive credit for both.
- FCL 336. Parent Education and Guidance** (4). Study of parent education models and methods of teaching parent education in community and school settings. Formerly FS 336, students may not receive credit for both.
- FCL 337. Human Sexuality** (4). The biophysical, psychosocial, and behavioral aspects of sexuality with emphasis on making responsible sexual decisions and promoting healthy relationships. General Education: SB-Foundations of Human Adaptations and Behavior. Formerly FS 337, students may not receive credit for both. Prerequisite: sophomore standing or above. SB-Foundations of Human Adaptations and Behavior.
- FCL 339. Adolescence and Emerging Adulthood** (4). Developmental theory about the periods of adolescence (ages 12-18) and emerging adulthood (ages 18-25). Implications for practice with adolescents and emerging adults will be emphasized. Prerequisite: FCL 232 or permission of instructor.
- FCL 340. Supporting Children with Special Needs and Their Families** (4). This course introduces students to diagnosis and treatment of childhood developmental disabilities, the impact of special needs on youth and families, and the role of support professionals as advocates and caregivers. Course will be offered every year (Spring). FCL 232 and FCL 336, or instructor permission.
- FCL 344. Foundations of Marriage and Family Therapy** (4). Introduction to Marriage and Family Therapy (MFT) including systems theory, MFT as a profession, and requirements for entry into MFT graduate programs. Basic skills and interventions that can be applied in many social service settings. Formerly FS 344, students may not receive credit for both.
- FCL 345. Advanced Concepts in Child Development** (4). This course examines advanced topics in child development. Students will increase expertise in and application of child development from an empirical and culturally sensitive perspective. Course will be offered every year (Winter). FCL 232, or instructor permission.
- FCL 355. Family Financial Counseling** (4). This course will provide students with fundamental skills for working with families to achieve their financial management goals. Understanding of basic financial management concepts will be integrated with basic communication and helping skills for effective financial counseling strategies. Course will be offered every year (Winter). Prerequisite: PFP 310 or permission of instructor.
- FCL 396. Individual Study** (1-6). May be repeated if subject is different.
- FCL 397. Honors** (1-12). Prerequisite: admission to department honors program.
- FCL 398. Special Topics** (1-6). Formerly FS 398, students may not receive credit for both.
- FCL 399. Seminar** (1-5). May be repeated if subject is different.
- FCL 403. Family Communication** (4). This course is designed to provide an overview of family dynamics and the processes that influence family communication and family functioning. FCL 403, COM 403 and FCL 503 are cross-listed courses; students may not receive credit for both. Formerly FS 403, students may not receive credit for both.
- FCL 405. Professional Obligations and Responsibilities** (4). Family and Child Life students will learn legal and professional rules that govern their practice fields as well as medical ethics. They will also develop skills to respond to common issues in practice. Family and Child Life majors only. Formerly FS 405, students may not receive credit for both. Course will not have an established scheduling pattern (Winter). Prerequisite: family and child life major.
- FCL 414. Coping with Grief and Loss** (4). Theories and research about the grief process, coping, and resilience through a developmental lens. Students will learn tools to talk to adults and children about death and bereavement and to work with families experiencing loss. FCL 414 and FCL 514 are layered courses; student may not receive credit for both.

**FCL 415. Therapeutic Play (4).**

Application of play theories to intervene with children and families. Content will include classical and contemporary theories of play, play across child development, assessment using play, and skills to facilitate play sessions in various contexts. Formerly FS 415, students may not receive credit for both. FCL 415 and FCL 515 are layered courses; students may not receive credit for both. Prerequisite: FCL 232 or permission of instructor.

**FCL 416. Child Life I: Child Life**

**Scope of Practice (4).** Introduction to the child life profession including history and scope of the practice of child life; impact of stress, trauma, and hospitalization on children and families; skills for providing therapeutic intervention with medically fragile children. Formerly FS 416, students may not receive credit for both. FCL 416 and FCL 516 are layered courses; students may not receive credit for both. Course will be offered every year (Winter). FCL 232 and admission to a Family and Child Life major or minor.

**FCL 417. Pediatric Diagnoses and Medical Terminology (4).**

Understanding of common pediatric diseases and diagnoses, medical terminology, childhood hospitalization, corrective pediatric care, hospital technology, and medical documentation relevant to work as a child life specialist. Formerly FS 417, students may not receive credit for both. FCL 417 and FCL 517 are layered courses; students may not receive credit for both. Course will be offered every year (Winter). FCL 232 and admittance to a Family and Child Life major or minor.

**FCL 418. Child Life II: Impact of**

**Child Hospitalization (4).** Advanced understanding of the child life profession including ethical issues, multi-cultural perspectives, pain management, program administration and supervision, current research, and communication, and therapeutic relationships in a hospital context. Formerly FS 418, students may not receive credit for both. FCL 418 and FCL 518 are layered courses; students may not receive credit for both. Course will be offered every year (Spring). FCL 232 and FCL 416, and admission to a Family and Child Life major or minor.

**FCL 419. Research in Family and**

**Child Life (5).** Methods of research used in studying families and relationships, including measurement, research design, ethics, sampling, and

casual inference. Students will complete a research project emphasizing application of material. FCL 419 and FCL 519 are layered courses; students may not receive credit for both. Formerly FS 419, students may not receive credit for both. Course will be offered every year (Fall). Prerequisites: FCL 101 and FCL 234.

**FCL 432. Theories in Child**

**Development (3).** Assists the student in formulating his or her own general assumptions about the nature of child development through study of various theoretical viewpoints and current issues. EDEC 432 and FCL 432 are cross-listed courses, students may not receive credit for both. Formerly FS 432, students may not receive credit for both.

**FCL 433. Family Life Education (4).**

The broad objectives, trends, methods and materials of family life education programs in various settings. FCL 433 and FCL 533 are layered courses; students may not receive credit for both. Formerly FS 433, students may not receive credit for both. Course will be offered every year (Fall). Prerequisites: FCL 101 and FCL 234 and FCL 235, and admittance to a Family and Child Life major.

**FCL 434. Diversity in Families (4).**

Students will gain strategies for working with a broad range of families with diverse structures, backgrounds and circumstances. Emphasis on applying conceptual frameworks to families' situations, communicating and collaborating with families, and supporting families' goals. Formerly FS 434, students may not receive credit for both. Course will be offered every year (Spring). Prerequisite: FCL 234 and admission to a Family and Child Life major.

**FCL 435. Family Gerontology (4).**

A review of the research literature on families in later life, focusing on family interactions and building family strengths. FCL 435 and FCL 545 are layered courses; students cannot receive credit for both. Formerly FS 435, students may not receive credit for both. Course will be offered every year. Course will not have an established scheduling pattern.

**FCL 438. Attachment Theory and**

**Practice (4).** Attachment theory and strategies, parenting practices to facilitate attachment, and the impact of trauma on attachment. Reviews attachment trends and research and provides practical application of attachment in work with children and

families. Formerly FS/FCL 338, students may not receive credit for both. Course will be offered every year (Winter).

Prerequisite: FCL 232 or permission of instructor.

**FCL 439. Families and Public Policy**

(4). Impact of governmental policies on families; policy implications of changes in the structure and composition of families. Requires attendance at two events outside scheduled class time.

FCL 439 and FCL 539 are layered courses; students may not receive credit for both. Formerly FS 439, students may not receive credit for both. Course will be offered every year (Winter).

Prerequisites: FCL 101 and FCL 234.

**FCL 440. Teaching for Family and**

**Child Life (1-3).** Supervised teaching assistant experience in family and child life courses. May be repeated up to 6 credits. Formerly FS 440, students may not receive credit for both. Course will be offered every year (Fall, Winter, Spring and Summer). Prerequisite: permission of instructor.

**FCL 490. Cooperative Education (1-**

**12).** A contracted field experience with business, industry, government, or social service agency. Requires a cooperative learning agreement. May be repeated up to 20 credits. By permission. Grade will either be S or U. Formerly FS 490, students may not receive credit for both.

**FCL 491. Workshop (1-6).** Formerly FS 491, students may not receive credit for both.

**FCL 492. Family and Child Life**

**Practicum (1-6).** Supervised practicum experience in family and child life. May be repeated up to 15 credits. FCL 492 and FCL 592 are layered courses; a student may not receive credit for both. Formerly FS 492; students may not receive credit for both. Course will be offered every year (Fall, Winter, Spring, and Summer). Prerequisite: family and child life major only.

**FCL 495. Undergraduate Research (1-6).** Students work closely with faculty to complete a directed research project. By permission. May be repeated up to 6 credits.

**FCL 496. Individual Study (1-6).** May be repeated if subject is different.

**FCL 497. Honors (1-12).** Prerequisite: admission to department honors program.

**FCL 498. Special Topics (1-6).**

Formerly FS 498, students may not receive credit for both.

**FCL 499. Seminar (1-5).** Formerly FS 499, students may not receive credit for both.

## Family and Consumer Science Courses

- FCS 166. Applied Creativity (3).** The creative process; blocks to creativity, creative problem solving, principles and elements of design in housing and interiors. Formerly FCSH 166, students may not receive credit for both.
- FCS 205. FCS Entry Assessment (1).** This course consists of self-assessment and assessment by the faculty of writing skills, speaking skills, visual/graphic skills, and knowledge of theory and research. Grade will either be S or U. Formerly FSCG 205, students may not receive credit for both.
- FCS 296. Individual Study (1-6).** Formerly FSCG 296, students may not receive credit for both.
- FCS 298. Special Topics (1-6).**
- FCS 299. Seminar (1-5).** May be repeated if subject is different.
- FCS 305. Family and Consumer Sciences Student Leadership (Put on reserve 9/16/17) (1).** Students engage in leadership development through identifying, organizing, conducting and assessing course activities. Elective credit for major. May be repeated up to 6 credits. Grade will either be S or U. Formerly FSCG 305, students may not receive credit for both. (Put on reserve 9/16/17. Will go inactive 8/24/2020.)
- FCS 320. Program Management and Planning (Put on reserve 9/16/18) (4).** A holistic approach to program management. Content deals with planning, organizing, and controlling programs. For example: special events, recreation, product development, construction, and business. Formerly FSCG 320, students may not receive credit for both. (Put on reserve 9/16/18, will go inactive 8/24/21)
- FCS 366. History of Housing and Furniture I (3).** Survey of historic interiors, cabinetmakers, decorative arts, furniture from the antiquity to the middle of the 1700s. Formerly FCSH 366, students may not receive credit for both.
- FCS 367. Family Housing (3).** An evaluative study of the design, quality, and cost of housing environment. Formerly FCSH 367, students may not receive credit for both.
- FCS 371. Real World Finance (3).** This course provides, an introduction to major personal and family related consumer issues (loans, investments, credit, budgeting, fraud avoidance, advertising), rational financial decision-making, rights and responsibilities of consumers, and consumer protection.

Formerly FCSC 371, students may not receive credit for both.

- FCS 379. Professional Development and Internship Planning (3).** Students will explore career options and networks within their industry, develop materials for a job search, and acquire skills related to professionalism. Formerly FSCG 379, students may not receive credit for both.
- FCS 392. Housing Practicum (Prerequisite FCSH 265 on reserve 9/16/14.) (6-12).** Work study experience in various aspects of the housing profession. May be repeated up to 12 credits. Formerly FCSH 392, students may not receive credit for both. Prerequisite: FCSH 265 (Course on reserve).
- FCS 396. Individual Study (1-6).** May be repeated if subject is different.
- FCS 397. Honors (1-12).** Prerequisite: admission to department honors program.
- FCS 398. Special Topics (1-6).** Formerly FCSC 398 students may not receive credit for both.
- FCS 399. Seminar (1-5).** May be repeated if subject is different.
- FCS 405. FCS Exit Assessment (1).** During last quarter of their program, students are assessed on writing skills, speaking skills, visual/graphic skills, and knowledge of theory and research. Grade will either be S or U. Formerly FSCG 405, students may not receive credit for both. Prerequisite: FCS 205.
- FCS 472. Life Management (5).** Study of family in human ecosystem. Emphasis on physiological and psychological well-being and management of resources. Solve practical family problems. Formerly FCSC 472, students may not receive credit for both.
- FCS 490. Cooperative Education (1-12).** An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. By permission. May be repeated for credit. Grade will either be S or U. Formerly FSCG 490, students may not receive credit for both.
- FCS 491. Workshop (1-6).** May be repeated for credit. Formerly FCSH 491, students may not receive credit for both.
- FCS 492. Housing Practicum (Prerequisite FCSH 265 on reserve 9/16/14.) (6-12).** A work study course including practical experience in a phase of housing of the student's choice, accompanied with a seminar.

May be repeated up to 12 credits. Formerly FCSH 492, students may not receive credit for both.

- Prerequisite: FCSH 265 (Course is on reserve).
- FCS 496. Individual Study (1-6).** Formerly FSCG 496, students may not receive credit for both.
- FCS 497. Honors (1-12).** Prerequisite: admission to department honors program.
- FCS 498. Special Topics (1-6).** Formerly FCSH 498, students may not receive credit for both.
- FCS 499. Seminar (1-5).** Formerly FCSH 499, students may not receive credit for both.

## Family and Consumer Science Education Courses

- FCSE 298. Special Topics (1-6).**
- FCSE 299. Seminar (1-5).** May be repeated if subject is different.
- FCSE 326. Curriculum in Career and Technical Education for Family and Consumer Sciences (4).** Instructional organization and classroom procedure in family and consumer sciences career and technical education programs.
- FCSE 396. Individual Study (1-6).** May be repeated if subject is different.
- FCSE 397. Honors (1-12).** Prerequisite: admission to department honors program.
- FCSE 398. Special Topics (1-6).**
- FCSE 399. Seminar (1-5).** May be repeated if subject is different.
- FCSE 426. Methods and Materials of Teaching Family and Consumer Sciences (3).** Application of the philosophy, purposes, teaching techniques, and assessment of family and consumer sciences programs in the secondary schools. Prerequisites: FCSE 326 and EDCS 311.
- FCSE 451. Methods and Materials of Teaching FCS Laboratory Course Content (3).** Methods and materials for teaching family and consumer science laboratory curricula. Prerequisite: full admissions to the major and the Teacher Certification Program.
- FCSE 491. Workshop (1-6).** Course content identified by title in the university class schedule. May be repeated for credit under different titles.
- FCSE 496. Individual Study (1-6).** May be repeated if subject is different.
- FCSE 497. Honors (1-12).** Prerequisite: admission to department honors program.
- FCSE 498. Special Topics (1-6).**
- FCSE 499. Seminar (1-5).**

## Film Courses

- FILM 150. Film Appreciation (5).** Introduction to the art of film, through screenings, lectures, discussions, quizzes, and online discussion posts. Emphasis will be placed on traditional "Hollywood-style" films as well as independent, foreign, avant-garde, documentary, and short films. Course will be offered every year (Fall, Winter, Spring, Summer). K3 - Creative Expression
- FILM 214. Basic Film Equipment (1).** Specialized hands-on skills course in the proper use of basic film and television equipment. Grade will either be S or U. Course will not have an established scheduling pattern.
- FILM 215. Production Technology Skills (1).** Specialized hands-on skills course in film and television software and/or equipment. Topics may include: animation, compositing, audio techniques, video editing, image editing, production equipment, or pre-production software. May be repeated for credit up to 6 credits, under a different sub-topic. Grade will be S or U. Formerly FVS 215, students may not receive credit for both. Prerequisite: check with major advisor for topic availability.
- FILM 216. Basic Audio Technology (1).** Specialized hands-on skills course in film and television audio technology. Grade will either be S or U. Course will be offered every year (Fall, Winter, Spring).
- FILM 217. Basic Editing: Final Cut Pro (1).** Specialized hands-on skills course in editing software: Final Cut Pro. Grade will either be S or U. Course will be offered every year (Fall, Winter, Spring).
- FILM 218. Basic Editing: Premiere (1).** Specialized hands-on skills course in editing software: Premier. Grade will either be S or U. Course will be offered every year (Fall, Winter, Spring).
- FILM 219. Basic Editing: DaVinci Resolve (1).** Specialized hands-on skills course in editing software: DaVinci Resolve. Grade will either be S or U. Course will not have an established scheduling pattern.
- FILM 220. Basic After Effects (1).** Specialized hands-on skills course in animation software: After Effects. Grade will either be S or U. Course will be offered every year. Course will not have an established scheduling pattern.
- FILM 221. Color Correction (1).** Specialized hands-on skills course in motion imagery color correction and grading. Grade will either be S or U. Course will be offered every year (Fall, Winter, Spring).
- FILM 222. Advanced Equipment (1).** Specialized hands-on skills course in advanced film and television equipment. Grade will either be S or U. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisite: FILM 214 or instructor permission.
- FILM 225. Film Classics (1).** Specialized viewing course in film classics. Grade will either be S or U. Course will be offered every year (Fall, Winter, Spring, Summer).
- FILM 250. Introduction to Film (5).** Learning and applying motion picture vocabulary and aesthetic concepts through screenings, discussions, and writing. Emphasis on the social context, cultural influences, and aesthetic qualities of film. AH-Aesthetic Experience (W). Formerly FVS 250, students may not receive credit for both. Prerequisite: ENG 101 and ENG 102 with a grade of C- or higher. AH-Aesthetic Experience (W)
- FILM 256. Sound and Mixing - Aesthetics and Essentials (3).** Students will gain an understanding of how to mix on a digital console. Audio/sound aesthetics and fundamentals will also be the focus of this course. FILM 256 and TH 256 are cross-listed; students may not receive credit for both. Formerly FVS 256, students may not receive credit for both.
- FILM 267. Screenwriting Fundamentals (4).** Introduction to the basic script format, the creative story and style elements, and the writing process steps for screenplays and teleplays. Focus on the narrative script development process from idea conception to first draft. COM 321 recommended. FILM 267 and ENG 267 are cross-listed courses, students may not receive credit for both. Formerly COM 267; students may not receive credit for both. Course will be offered every year (Fall, Winter, Spring, and Summer). Prerequisites: ENG 102 or FILM 250.
- FILM 298. Special Topics (1-6).** May be repeated if subject is different.
- FILM 299. Seminar (1-5).** May be repeated if subject is different.
- FILM 327. Scriptwriter in Development and Production (4).** Combined lecture/workshop, overview of the creative, and collaborative responsibilities expected of a scriptwriter in development and production. Students explore the challenges of this profession, as well as solutions to typical problems. Formerly COM 327; students may not receive credit for both. Course will be offered every year. Course will not have an established scheduling pattern.
- FILM 330. Media Aesthetics (5).** An examination of the major aesthetic elements involved in visual storytelling for film, including light, color, 2D and 3D space, time/motion, and sound. Formerly COM 330; students may not receive credit for both. Course will not have an established scheduling pattern.
- FILM 337. Documentary Scriptwriting (Put on reserve 9/16/18) (4).** Introduction to the format, story and style elements for documentary film. Topics include narrative point-of-view, story structure, camera placement, interviewer presence, narration and voice-over commentary, re-enactment and archival materials. Formerly COM 337; students may not receive credit for both. Course will not have an established scheduling pattern. (Put on reserve 9/16/18, will go inactive 8/24/21) Prerequisites: FILM 267 or ENG 267 and admission to the communication or film major.
- FILM 340. Production I (5).** A combined lecture and skills development course that introduces students to the principles and techniques of single-camera production and visual storytelling for narrative and documentary film. Course will be offered every year. Course will not have an established scheduling pattern.
- FILM 342. Cinema Studies I: Early American Film History (4).** A history of the development of narrative film as an art form and cultural medium from the 1800s to the mid-20th century, with primary focus on Hollywood cinema. FILM 342 and ENG 342 are cross-listed courses; student may not receive credit for both. Course will not have an established scheduling pattern.
- FILM 343. Cinema Studies II: Modern American Film History (4).** A history of the development of narrative film as an art form and cultural medium from approximately 1960 to the present, with primary focus on Hollywood cinema. FILM 343 and ENG 343 are cross-listed courses; student may not receive credit for both. Formerly COM 353; students may not receive credit for both. Course will be offered every year. Course will not have an established scheduling pattern.
- FILM 344. Cinema Studies III: Film Theory (5).** A focused study of the major theories of cinema and the approaches and practice of film

criticism. FILM 344 and ENG 344 are cross-listed courses; a student may not receive credit for both. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisite: FILM 250.

**FILM 346. Producing (4).** Theory, discussion, and practical application of planning and management fundamentals during preproduction, production, and postproduction of narrative and/or documentary programs. Formerly COM 346; students may not receive credit for both. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisite: film major status.

**FILM 350. Production II (5).** A combined lecture and skills development course that introduces students to multi-camera production with emphasis on the function and operation of studio lighting, audio, and cameras. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisite: FILM 340.

**FILM 354. History of Television (4).** Historical survey of television as an entertainment, information, and art medium. Emphasis on understanding the cultural, social, political, technological, and economic conditions of production; the examination of television as text itself; and TV's impact on audiences. FILM 354 and ENG 354 are cross-listed courses, students may not receive credit for both. Formerly COM 354; students may not receive credit for both. Course will not have an established scheduling pattern. Prerequisites: either COM 201 or FILM 250.

**FILM 355. History of Documentary (4).** Survey of documentary history from 1895 to present. Focus on philosophy of documentary approach, overview of the most important topics and issues, and development of critical standards in the genre. FILM 355 and ENG 355 are cross-listed courses; students may not receive credit for both. Formerly COM 355; students may not receive credit for both. Course will not have an established scheduling pattern. Prerequisites: either COM 201 or FILM 250.

**FILM 356. Writing for Screen Genre (4).** An introduction to the story, style, and comedic or dramatic elements that distinguish major genres. Also explores the role of genre in the Hollywood production system, and the impact of genre on the viewing public as assessed by critical theories. Formerly COM

356; students may not receive credit for both. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: FILM 267 or ENG 267 and admission to the communication or film major.

**FILM 357. Writing for Serial Media (4).** Scriptwriting for the basic genres of serial television and the web. Includes study of serial script, structure, story, character development, and dialog. FILM 357 and ENG 357 are cross-listed courses, students may not receive credit for both. Formerly COM 357; students may not receive credit for both. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: FILM 267 or ENG 267 and admission to the communication, English professional and creative writing, or film major.

**FILM 360. Cinema Studies IV: Survey of World Cinema (5).** An overview of world cinema, with attention to the national film cultures of important film-producing countries (such as India, France, Japan), and a comparison of international films with mainstream Hollywood cinema. FILM 360 and ENG 360 are cross-listed courses; a student may not receive credit for both. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: FILM 344 or ENG 344.

**FILM 380. Production III (4).** An intensive hands-on skills course that offers students the opportunity to apply and demonstrate knowledge gained in earlier production courses through the creation of short films. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: FILM 250 and FILM 350 and (FILM 267 or ENG 267) and (FILM 344 or ENG 344).

**FILM 396. Individual Study (1-6).** May be repeated if subject is different.

**FILM 397. Honors (1-12).** Prerequisite: admission to department honors program.

**FILM 398. Special Topics (1-6).**

**FILM 399. Seminar (1-5).** May be repeated if subject is different.

**FILM 422. Advanced Multi-Camera Production (4).** The creative use of multi-camera techniques for studio and remote productions. Emphasis on directing, advanced lighting techniques, sound design, graphics, and remote truck equipment. Focus on dramatic formats, magazine-style, and large event productions. Formerly COM 422; students may not receive credit for both. Course will not have an

established scheduling pattern.

Prerequisites: COM 322 and admission to either the communication studies, public relations, film, or journalism major.

**FILM 430. Cinematography (4).**

Combined lecture and intensive, hands-on camera and lighting skills course focused on the art and technique of cinematic composition; technical emphasis on lighting equipment and strategies, camera systems and operation, distinctions between film and digital formats, and the cinematographer's aesthetic contribution to the story. Formerly COM 430; students may not receive credit for both. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisite: FILM 380.

**FILM 431. Advanced Editing (4).**

History, concepts, and techniques of telling cinematic stories through editing. Hands-on learning by editing diverse scenes. Combination of lecture and skills application. Formerly COM 431; students may not receive credit for both. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisite: FILM 380.

**FILM 432. Directing (4).** Examines director's role and responsibilities, process of translating the written word into image and action; basics of camera-actor blocking; editing dialogue scenes; organizing production venues and logistics of in-studio and on-location programs. Combined lecture/workshop. Formerly COM 432; students may not receive credit for both. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisite: FILM 380.

**FILM 440. Production IV (4).** A study of methods used in the conceptualization, design, and production of non-broadcast films. Consideration of management needs and training requirements. Formerly COM 440; students may not receive credit for both. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisite: FILM 380 and admission to the film major.

**FILM 447. Narrative Screenwriting I (4).** In-depth study of the theory and practice of developing a narrative screenplay. Topics include narratology, symbols and myths, cognition and storytelling, oral tradition and communication, theme, point-of-view, and voice. Formerly COM 447;

students may not receive credit for both. Course will not have an established scheduling pattern.

Prerequisites: FILM 267 or ENG 267 and admission to the communication, English professional and creative writing, or film major.

**FILM 450. Production V (4).** Detailed analysis of the creative and technical elements of documentary production. Emphasizes "hands-on" application of production techniques for documentary storytelling from concept through to final product. Combined

lecture/workshop. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: FILM 380 and admission to the film major.

**FILM 452. Applied Studio Production**

(1-2). Assist in producing newscasts, public affairs, and/or entertainment programs for Ellensburg Community Television, and KCWU-TV. May be repeated up to 6 credits. Formerly COM 452; students may not receive credit for both. Course will be offered every year (Fall, Winter, Spring, and Summer). Prerequisite: FILM 350.

**FILM 453. Wildcat Films (3).** This course allows students the opportunity to produce narrative, documentary, marketing, and commercial films in an environment that emulates a real-world production company. Advanced students have the option of filling management positions within Wildcat Films. May be repeated up to 9 credits. Formerly COM 453; students may not receive credit for both. Course will be offered every year (Fall, Winter, and Spring). Prerequisites: FILM 350 and film major status.

**FILM 456. Advanced Concepts in Sound for Film and Stage (4).**

Creation of sound content for film and stage via software tools. FILM 456 and TH 456 are cross-listed courses; students may not receive credit for both. Course will be offered on even numbered years (Spring). Prerequisite: TH 256 or permission of instructor.

**FILM 457. Narrative Screenwriting II**

(5). Combined lecture/workshop providing in-depth study of the theory and practice of developing a screenplay and teleplay writing style. Topics include mood and tone, scene structure and description, gender, age, subgroup communication and dialog techniques, non-verbal communication, and rewriting. Formerly COM 457; students may not receive credit for both. Prerequisites: FILM 447 or permission of instructor.

**FILM 460. Cinema Studies V:**

**Advanced World Cinema (5).**

Building on the foundation of Survey of World Cinema, this course focuses on world cinema in the transnational age, exploring recent developments in film and how they reflect global concerns and cinematic movements.

FILM 460 and ENG 460 are cross-listed courses; students may not receive credit for both. Course will not have an established scheduling pattern.

Prerequisite: FILM 360 or ENG 360.

**FILM 461. Studies in Film and Culture**

(5). A critical examination of how American films both construct and appropriate images of American racial, ethnic, and cultural minorities and compares these constructions to those created by minority filmmakers. May be repeated for credit under different subtitles for up to 10 credits. FILM 461 and ENG 461 are cross-listed courses; a student may not receive credit for both. Course will not have an established scheduling pattern.

**FILM 462. Studies in Film and/or**

**Television Genres (5).** An examination of a film and/or television genre:

history, aesthetics, cultural context, social significance, and critical methodologies. May be repeated for credit under different subtitle. FILM 462 and ENG 462 are cross-listed courses; student may not receive credit for both. May be repeated up to 10 credits. Course will not have an established scheduling pattern.

Prerequisite: FILM 250.

**FILM 463. Studies in the Film Auteur**

(5). In-depth examination of major cinematic works of an auteur director, such as Hitchcock, Chaplin, Kurosawa, W. Allen, Zhang Yimou, etc., with attention to major stylistic and thematic practices. May be repeated for credit under different subtitles. FILM 463 and ENG 463 are cross-listed courses; students may not receive credit for both. Course will not have an established scheduling pattern.

Prerequisite: FILM 250.

**FILM 467. Narrative Screenwriting III**

(5). Combined lecture/workshop providing in-depth study of the theory and practice of adaptations and alternative plots for screenplays and teleplays. Formerly COM 457, students may not receive credit for both. Course will not have an established scheduling pattern. Prerequisites: FILM 457 and admission to the English professional and creative writing or film majors.

**FILM 470. The Writer's Room (5).**

This repeatable workshop course helps students develop the skills, techniques,

and work ethic of a professional screenwriter. Students will pitch ideas, create outlines, write and rewrite short screenplays, and critique the work of others. May be repeated up to 15 credits. Course will be offered every year. Course will not have an established scheduling pattern.

Prerequisite: FILM 267 or ENG 267.

**FILM 480. Production VI (5).** Through

the creative participation in one substantial film project this capstone course offers students the opportunity to demonstrate command of all the fundamental principles learned during their time in the Film Program. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: FILM 440 and FILM 450.

**FILM 489. Film Career Seminar (1).**

Students prepare end-of-major portfolios, demonstrating achievement of film program outcomes and skills appropriate to their specialization. Grade will either be S or U. Permission by instructor. Course will be offered every year. Course will not have an established scheduling pattern.

Prerequisite: film major status and instructor permission. CE - Culminating Experience

**FILM 490. Cooperative Education (1-**

12). Practical experience in film-related careers. Individual contract field experience with business, industry, government, or non-profit organization. Requires a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for a total of 12 credits. Grade will either be S or U. Prerequisite: Film major status and permission of program director.

**FILM 491. Workshop (1-6).**

**FILM 492. Practicum (2).** Focused, practical application of classroom skills-sets to the production of film projects under faculty direction and/or supervision, and/or practice planning instruction, teaching and assessing learning in film-related course(s). May be repeated up to 6 credits. Grade will either be S or U. Prerequisites: film major status and permission of program director.

**FILM 496. Individual Study (1-6).**

**FILM 497. Honors (1-12).** Prerequisite: admission to department honors program.

**FILM 498. Special Topics (1-6).**

**FILM 499. Seminar (1-6).**

### Finance Courses

**FIN 101. Financial Literacy (5).** An introduction to financial concepts

relevant to everyday savers. Topics include stocks, bonds, indexes, mutual funds, the power of compounding, investing in stocks, valuation of stocks, behavioral finance, the effects of the macroeconomy on investments, and stock market valuation. Course will be offered every year. Course will not have an established scheduling pattern.  
K8 - Science & Technology

**FIN 174. Personal Finance (5).** This course addresses the broad spectrum of financial issues encountered by individuals throughout their lives. Topics include but are not limited to: Preparing a personal budget, money management, investments, retirement planning, educational planning and insurance. Course will be offered every year (Fall, Winter, Spring, Summer). Prerequisites: either at least 500 on the SAT, 19 on the ACT, a Compass test score of either 50-Pre-Algebra, a 26-Algebra, 31-College Algebra, or 31-Trigonometry, or an Accuplacer score in Elementary Algebra of 60+ or Arithmetic of 100+, or completed MATH 100B or a higher level math class. FYE3 - Quantitative Reasoning

**FIN 298. Special Topics (1-6).** May be repeated if subject is different.

**FIN 299. Seminar (1-5).** May be repeated if subject is different.

**FIN 370. Introductory Financial Management (5).** An introduction to financial decision making. Topics include financial statement analysis, time value of money, risk and return, securities valuation, capital budgeting, cost of capital, and capital structure. Prerequisites: (ACCT 251 and BUS 221 and ECON 201 and admission to a college of business major; or admission to a College of Business Graduate Program); or (ACCT 301 and BUS 221 and ECON 201 and admission to the bachelor of science, personal financial planning major or the bachelor of applied science in supply chain management major); or (admission to an actuarial science major who has completed ACCT 251 or ACCT 301 and ECON 201 and MATH 172 and MATH 173 and BUS 221 or MATH 211 with grades no lower than a C (2.0). MATH 211 may be taken concurrently.

**FIN 396. Individual Study (1-6).** May be repeated if subject is different.

**FIN 397. Honors (1-12).** Prerequisite: admission to department honors program.

**FIN 398. Special Topics (1-6).** May be repeated if subject is different.

**FIN 399. Seminar (1-5).** May be repeated if subject is different.

#### **FIN 466. Working Capital**

**Management (5).** Course covers the management of current assets and current liabilities, describes the nature and types of short-term credit instruments, and incorporates a significant use of Excel. Prerequisite: a grade of C or higher in FIN 370 and admission to a College of Business major AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25.

#### **FIN 470. Intermediate Financial**

**Management (5).** A review, consolidation, and extension of the FIN 370 class. Additional focus on the theory, practice, and analysis of the firm's investing and financing activities as these activities relate to the value creation process. Course will be offered every year (Fall and Spring).

Prerequisites: (a grade of C or higher in FIN 370 and admission to a College of Business major AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25) Or (FIN 370 with a minimum grade of C AND declaration of a Finance Minor) OR (FIN 370 with a minimum grade of C AND admission to an Actuarial Science major).

#### **FIN 474. Personal Financial Planning**

(5). Introduction to full range of financial planning decisions, including: budgeting, investing, tax planning, risk management, employee benefits, retirement, and estate planning. Prerequisites: a grade of C or higher in FIN 370 and admission to a College of Business major AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25.

**FIN 475. Investments (5).** Principles of investment valuation. Topics include a survey of securities and securities markets, analysis of risk, expected return, timing, and selection of stocks and bonds in a portfolio context. Course will be offered on odd numbered years (Fall and Winter).

Prerequisites: (a grade of C or higher in FIN 370 and admission to a College of Business major AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25) OR FIN 370 and admission to the Bachelor of Science in Personal Financial Planning major AND completion of BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25) OR (FIN 370 with a minimum grade of C AND declaration of a Finance Minor) OR (FIN 370 with a minimum grade of C AND admission to an Actuarial Science major).

#### **FIN 477. International Finance (5).**

Financial decision making in an international setting. Explores both traditional areas of finance and recent innovations in financial management from the perspective of the multinational corporation. Prerequisites: a grade of C or higher in FIN 370 and admission to a College of Business major AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25.

#### **FIN 478. Management of Financial Institutions (Put on Reserve 9/16/16.)**

(5). Asset-liability management process; investment and financing activities of banks, savings and loans, and credit unions. (Put on Reserve 9/16/16. Last taught in 2011. Will go inactive 8/24/19.) Prerequisites: a grade of C or higher in FIN 370 and admission to a College of Business major AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25.

#### **FIN 479. Derivative Securities and Risk Management (Put on Reserve 9/16/16.)**

(5). Survey of characteristics, markets, and pricing of options, futures, and other derivative securities and their use in managing risk for large and



small businesses and investors, domestically and internationally. (Put on Reserve 9/16/16. Last taught in 2011. Will go inactive 8/24/19.) Prerequisites: a grade of C or higher in FIN 370 and admission to a College of Business major AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25.

- FIN 493. Finance Boot Camp (1-6).** Supervised field experience seminar focused on finance related organizations and processes. On-location industry engagement. Education, training, and business skills application in industry setting. Grade will either be S or U. Permission of instructor. May be repeated up to 6 credits. Course will not have an established scheduling pattern.
- FIN 496. Individual Study (1-6).** May be repeated if subject is different.
- FIN 497. Honors (1-12).** Prerequisite: admission to department honors program.
- FIN 498. Special Topics (1-6).** May be repeated if subject is different.
- FIN 499. Seminar (1-5).** May be repeated if subject is different.

### French Courses

- FR 151. First-year French (5).** Conversational approach with intensive oral-aural drill. Firm foundation in the basic structural principles of the language. Courses must be taken in sequence.
- FR 152. First-year French (5).** Conversational approach with intensive oral-aural drill. Firm foundation in the basic structural principles of the language. Courses must be taken in sequence. Prerequisite: FR 151.
- FR 153. First-year French (5).** Conversational approach with intensive oral-aural drill. Firm foundation in the basic structural principles of the language. Courses must be taken in sequence. Prerequisite: FR 152.
- FR 181. Rapid Review of First Year French (Put on reserve 9/16/17) (5).** Intense review of first-year French for people with the equivalent for two years of school French who wish to hone their listening, speaking, reading, writing, and cultural skills and possibly continue with second-year French. (Put on reserve 9/16/17. Will go inactive 8/24/2020.) Prerequisite: two years of high school French or equivalent.
- FR 200. Introduction to French Culture (5).** This course examines major historical events, social movements, and debates that situate contemporary French culture in historical perspective through a variety of cultural artifacts. Taught in English. Course will be offered every year. Course will not have an established scheduling pattern. K2 - Community, Culture, & Citizenship
- FR 201. Appreciation of French Cuisine (5).** Appreciation of French cuisine through the aesthetic theories of French gastronomy, in-class tastings, and consideration of French culture, history, and dietary habits. Taught in English. Course will not have an established scheduling pattern. K3 - Creative Expression
- FR 251. Second-year French (5).** Thorough review of French grammar and graduated readings in modern French prose with discussions conducted in French. Courses must be taken in sequence.
- FR 252. Second-year French (5).** Thorough review of French grammar and graduated readings in modern French prose with discussions conducted in French. Courses must be taken in sequence. Prerequisite: FR 251.
- FR 253. Second-year French (5).** Thorough review of French grammar and graduated readings in modern French prose with discussions conducted in French. Courses must be taken in sequence. Prerequisite: FR 252
- FR 298. Special Topics (1-6).**
- FR 299. Seminar (1-5).** May be repeated if subject is different.
- FR 301. Introduction to French Literature (3).** This course is designed as a transition course to prepare students for the advanced literature courses. Appreciation of literature and methods of analysis will be taught on a basic level through the careful examination of specific texts. Prerequisite: FR 253.
- FR 351. French Civilization I: Pre-history to the Revolution (4).** An overview of continental French history and culture from pre-history to the 1789. Prerequisite: FR 253.
- FR 352. French Civilization II: Revolution to 1968. (4).** An overview of continental French history and culture from the French Revolution to cultural revolution of 1968. Prerequisite: FR 253.
- FR 353. French Civilization III: Contemporary France (4).** An overview of contemporary French culture through readings and viewings of French media with emphasis on topics such as immigration, religion, globalization, and politics of the family. Prerequisite: FR 253.
- FR 361. Cultures of the French Caribbean (4).** A survey of the history and cultures of the French Caribbean from the colonial era to the present. Prerequisite: FR 253.
- FR 362. Cultures in French Canada (Put on reserve 9/16/18) (4).** A survey of the history and cultures of francophone Canada from the colonial era to the present. (Put on reserve 9/16/18, will go inactive 8/24/21) Prerequisite: FR 253.
- FR 363. Cultures of Francophone Africa (4).** A survey of the history and cultures of francophone Africa, including the Maghreb and Sub-Saharan Africa, from the colonial era to the present. Prerequisite: FR 253.
- FR 380. Topics in French Language, Literature and Culture (4).** This course will offer different topics on a rotating basis: these topics will include French language (grammar and conversation), French and Francophone literature and cinema, and French and Francophone cultures. May be repeated up to 12 credits. Prerequisite: FR 253 or by permission of instructor.
- FR 384. Defying Nazism: German and French Resistance during WWII (5).** Course focuses on the Resistance movements in Germany and France as people from both countries struggled to come to terms with Hitler and Nazism. FR 384 and GERM 384 are cross-listed courses; a student may not receive credit for both. Course will not have an established scheduling pattern.
- FR 396. Individual Study (1-6).** May be repeated if subject is different.
- FR 397. Honors (1-12).** Prerequisite: admission to department honors program.
- FR 398. Special Topics (1-6).**
- FR 399. Seminar (1-5).** May be repeated if subject is different.
- FR 460. French Cinema (Put on reserve 9/16/18) (4).** Students will view and analyze French films as a backdrop to the discussion of the history of French cinema. (Put on reserve 9/16/18, will go inactive 8/24/21)
- FR 491. Workshop (1-6).** May be repeated for credit.
- FR 496. Individual Study (1-6).**
- FR 497. Honors (1-12).** Prerequisite: admission to department honors program.
- FR 498. Special Topics (1-6).**

**FR 499. Seminar** (1-5). May be repeated if subject is different.

### **Geography Courses**

#### **GEOG 101. World Regional**

**Geography** (5). An introduction to the dynamic landscapes of the world's major regions, examining socioeconomic, political, demographic, cultural and environmental patterns, processes, and issues. SB-Perspectives on World Cultures. Course will be offered every year (Fall, Winter, Spring and Summer). SB-Perspectives on World Cultures. K4 - Global Dynamics

#### **GEOG 107. Our Dynamic Earth** (5).

The complex weather, climate, water, landforms, soils, and vegetation comprising Earth's physical environments over space and time. Incorporates map interpretation and scientific analysis in understanding various landscapes and human impacts upon those landscapes. NS-Patterns and Connections Natural World. Course will be offered every year (Fall, Winter, Spring and Summer). NS-Patterns and Connections Natural World. K7 - Physical & Natural World

#### **GEOG 111. The Power of Maps** (4).

Investigates the problem-solving potential and societal implications of maps and location technologies, including online maps, GPS, geographic information systems (GIS), Google Earth, and virtual reality. Discusses critical map reading, privacy, and mapping for social justice. Course will be offered every year (Fall and Winter). K8 - Science & Technology

#### **GEOG 208. Our Human World** (5).

Explores the historical diffusion and contemporary spatial distribution of cultures, religions, and languages. Evaluates how these features interact with economic and political systems to create distinctive places at scales ranging from local to global. Formerly GEOG 108, student may not receive credit for both. SB-Foundations of Human Adaptations and Behavior. Course will be offered every year (Fall, Spring and Summer). SB-Foundations of Human Adaptations and Behavior. K6 - Individual & Society

#### **GEOG 250. Resource Exploitation and Conservation** (4).

Explores the historical, cultural, political, socio-economic perspectives of natural resource use, extraction, and sustainability at local to global scales. Students will examine resources and decision-making as citizens of campus, the Pacific Northwest, and the World. Course will be offered every

year (Fall, Spring, Summer). K2 -

#### **Community, Culture, & Citizenship GEOG 273. Geography of Rivers** (5).

Drawing on local, regional, and global case studies, this course examines rivers as bio-physical systems, impacted by natural and anthropogenic forces. Focus is placed on human development of floodplains and ecosystem functioning within riparian areas. Course will be offered every year (Fall, Winter, Spring, Summer). NS-Applications Natural Science. K6 - Individual & Society

#### **GEOG 279. Geography of the West** (1-

12). In-depth field examination of the complex, physical, human, and resource issues of one or more of the varied sub regions of western North America. May be repeated for up to 12 credits under a different topic.

#### **GEOG 290. Cooperative Education**

**Field Experience** (1-5). Individualized field experience with business, industry, government, or other agency. Requires a student learning plan, cooperating employer supervisors, and faculty coordinator. By permission. May be repeated for up to 10 credits. Grade will either be S or U. Prerequisite: sophomore standing or above.

#### **GEOG 298. Special Topics** (1-6). May be repeated if subject is different.

#### **GEOG 299. Seminar** (1-5). May be repeated if subject is different.

**GEOG 301. Introduction to GIS and Maps** (4). Introduction to Geographic Information Systems (GIS) with an emphasis on cartographic communication, map use in a digital environment, and the basics of ESRI GIS software. Formerly GEOG 203, students may not receive credit for both. Course will be offered every year (Fall, Winter, and Spring).

#### **GEOG 303. GIS and Data**

**Management** (5). Geographic Information Systems (GIS), focusing on data acquisition, data management, data errors, classification, and implementation considerations. Applied experience using GIS software. Course will be offered every year (Fall and Winter). Prerequisites: GEOG 301 (Formerly GEOG 203).

#### **GEOG 304. Economic Geography** (5).

Geographic survey of human livelihood and interaction with the environment. Agriculture, industry, and urbanization are examined in the context of an increasingly interdependent world system. Course will be offered on even numbered years (Winter).

#### **GEOG 305. Introduction to Land Use Planning** (5). Investigation into the

process and practice of urban and regional planning. Emphasis on historical development, legal foundations, and techniques of planning in the United States. Course will be offered every year (Winter).

#### **GEOG 306. Transportation**

##### **Geography and Planning** (4).

Introduction to the planning and spatial analysis of transportation networks. Evaluation of the economic, environmental, and social consequences of major transportation modes. Application of transportation planning principles at the local, regional, and national scales. Course will be offered on odd numbered years (Fall).

#### **GEOG 308. Cultural Geography** (4).

Spatial aspects of human cultures and landscapes. Course will be offered on odd numbered years (Spring).

Prerequisites: GEOG 208 (Formerly GEOG 108) or instructor permission.

#### **GEOG 311. Qualitative Methods in Geography (Put on reserve 9/16/17)**

(4). Introduces students with qualitative research methods in geography with particular attention to participatory observation, interviews, data transcription, oral histories, focus groups, descriptive narrative, archival research, document analysis, data coding and interpretation strategies. (Put on reserve 9/16/17. Will go inactive 8/24/2020.)

#### **GEOG 315. Geography of Oceania (Put on Reserve 9/16/16.)** (4).

Examination of the physical and cultural geography, human-environment interactions, landscapes, and regional diversity of Australia, New Zealand, and the Pacific Islands. Formerly GEOG 415, students may not receive credit for both. (Put on Reserve 9/16/16. Last taught in 2013. Will go inactive 8/24/19.)

#### **GEOG 325. Field Methods in Geography** (5).

Introduction to geographic field research. Survey and application of techniques and methods in physical and/or human geography. Includes research design, data collection and organization, interpretation and analysis of results. Permission of instructor. Course will not have an established scheduling pattern.

#### **GEOG 330. Airphoto Interpretation**

(5). Introduction to airborne photography and the tools and techniques to apply this photography to geographical issues. Three hours lecture and two hours laboratory per week. Course fee required. Formerly GEOG 410, students may not receive

- credit for both. Course will be offered every year (Fall). Corequisite: GEOG 301 (Formerly GEOG 203).
- GEOG 346. Political Geography (4).** The spatial structure of political units. The effect of political, economic, social, and Earth resource factors on the areas, shapes, and boundaries of these units, and on the distribution of populations and institutions. Course will be offered every year (Winter).
- GEOG 352. Geography of North America (4).** Examination of the physical and cultural geography, human-environment interactions, landscapes, and regional diversity of the United States, Canada, and Mexico. Course will be offered on even numbered years (Winter).
- GEOG 355. Geography of the Pacific Northwest (4).** Examination of the physical and cultural geography, human-environment interactions, landscapes, and regional diversity of the Pacific Northwest. Course will not have an established scheduling pattern.
- GEOG 361. Soils (5).** Properties, factors, processes, and classification of Earth's soils, past and present. Four hours lecture and three hours of laboratory or field trips each week. GEOG 361 and GEOG 461 are layered courses; students may not receive credit for both. Course will be offered every year (Spring). Prerequisite: GEOG 107.
- GEOG 366. Geography of the Middle East (4).** Examination of the physical and cultural geography, human-environment interactions, landscapes, and regional diversity of the Middle East. Course will be offered on even numbered years (Fall).
- GEOG 368. Geography of Middle America (4).** Examination of the physical and cultural geography, human-environment interactions, landscapes, and regional diversity of Mexico, Central America, and the Caribbean. Course will not have an established scheduling pattern.
- GEOG 370. Geography of South America (4).** Examination of the physical and cultural geography, human-environment interactions, landscapes, and regional diversity of South America. Course will be offered on odd numbered years (Fall).
- GEOG 371. Geography of Europe (4).** Examination of the physical and cultural geography, human-environment interactions, landscapes, and regional diversity of Europe. Course will be offered on odd numbered years (Winter).
- GEOG 372. Geography of Russia (4).** Examination of the physical and cultural geography, human-environment interactions, landscapes, and regional diversity of Russia. Course will be offered on odd numbered years (Fall).
- GEOG 373. Water Resources (4).** Foundation course for understanding the physical and social dimensions of water resource use on a global scale. Special attention paid to issues in the American West. GEOG 107 is recommended. Course will be offered every year (Winter).
- GEOG 375. Geography of Asia (4).** Examination of the physical and cultural geography, human-environment interactions, landscapes, and regional diversity of Asia. Formerly GEOG 475, students may not receive credit for both. Course will be offered on even numbered years (Spring).
- GEOG 379. Geography of the West (1-12).** In-depth field examination of the complex physical, human, and resource issues of one or more of the varied sub-regions of western North America. May be repeated for up to 12 credits under a different topic.
- GEOG 381. Urban Geography (4).** The spatial and size distribution of cities as explained by their historical development and major functions. Analysis of the internal structure of cities and the results of urban growth. Formerly GEOG 481, students may not receive credit for both. Course will be offered on even numbered years (Fall).
- GEOG 382. Hydrology (5).** Provides a comprehensive introduction to both the global and local hydrologic cycle. Covers constituent processes, their measurements and quantitative relationships, plus basic water quality parameters. GEOG 382 and GEOG 482 are layered courses; students may not receive credit for both. Course will be offered every year (Fall). Prerequisite: GEOG 107.
- GEOG 386. Geomorphology (5).** Descriptive and interpretive examination of the Earth's landforms and the processes and factors that shape these features over space and time. Four lectures and three hours laboratory or field trips each week. GEOG 386, GEOG 486, and GEOL 386 are cross-listed courses; students may not receive credit for more than one. Course will be offered every year (Spring). Prerequisites: (GEOL 101 or GEOL 102 or GEOL 103 and GEOL 101LAB) or GEOG 107.
- GEOG 387. Biogeography (5).** Investigates the functional relationships between biophysical processes and their spatial and temporal patterns at various scales. Introduces approaches to land systems analysis focusing upon ecosystems. GEOG 387 and GEOG 487 are layered courses, students may not receive credit for both. Course will be offered every year (Spring). Prerequisite: GEOG 107.
- GEOG 388. Weather and Climate (5).** Elements, factors and processes affecting Earth's climates, present, past, and future. Four hours lecture and two hours laboratory/field per week. Course fee required. GEOG 388 and GEOG 488 are equivalent courses, students may not receive credit for both. Course will be offered on even numbered years (Winter). Prerequisite: GEOG 107.
- GEOG 396. Individual Study (1-6).** May be repeated if subject is different.
- GEOG 397. Honors (1-12).** Prerequisite: admission to department honors program.
- GEOG 398. Special Topics (1-6).**
- GEOG 399. Seminar (1-5).**
- GEOG 401. Advanced Topics in Regional Geography (Put on reserve 9/16/17) (3).** Detailed examination of selected topics in regional geography. Topics will vary; consult with instructor. May be repeated up to 6 credits. (Put on reserve 9/16/17. Will go inactive 8/24/2020.) Prerequisite: 300-level regional geography course in area of course emphasis or permission of instructor.
- GEOG 404. GIS Analysis (5).** This course development of Geographic Information Systems (GIS) use; emphasis is placed on analysis of geospatial datasets. Lecture and practical applications. GEOG 404 and GEOL 404 are cross-listed courses; students may not receive credit for both. Course will be offered every year (Winter and Spring).
- GEOG 405. Advanced Topics in Land Use Planning (3).** Selected issues and problems in land use planning and environmental control. Topics may include growth management, small town and rural planning, or coastal zone management. May be repeated for credit under a different subtitle. Course will be offered on odd numbered years (Spring). Prerequisite: GEOG 305.
- GEOG 407. Advanced Topics in Physical Geography (Put on Reserve 9/16/16.) (3).** Topics will vary; consult with instructor. May be repeated for credit under a different topic up to 6 credits. (Put on Reserve 9/16/16. Last taught in 2013. Will go inactive 8/24/19.)
- GEOG 408. Advanced Topics in Human Geography (Put on reserve**

- 9/16/18) (3). Focuses on the content of GEOG 308 in greater detail with particular emphasis on land use in non industrial societies. Topics will vary; consult with instructor. (Put on reserve 9/16/18, will go inactive 8/24/21)
- GEOG 409. Quantitative Methods in Geography** (5). Quantitative analysis assessment in geography and resource management. Emphasis on spatial statistics. Formerly GEOG 309, students may not receive credit for both. Course will be offered every year (Winter). Prerequisite: MATH 130 or post-baccalaureate/graduate student standing.
- GEOG 411. GIS Programming** (5). Customization and automation of geographic information systems (GIS) software using programming in the Python language. Previous programming experience is helpful, but not required. Course will be offered every year (Spring). Prerequisite: GEOG 303.
- GEOG 417. Advanced GIS** (4). Advanced GIS principles, techniques, analysis, and application. Lecture and practical hands-on experience. Applied experience using GIS software. GEOG 417 and GEOL 417 are cross-listed courses; students may not receive credit for both. Course will be offered every year (Fall and Spring). Prerequisites: GEOG 404 or GEOL 404.
- GEOG 422. Geography of Food and Agriculture** (4). Overview of food and agriculture as it relates to specific geographic regions, production regimes, trade, and cuisine. Domestic and international issues explored through lecture and field study. Course will be offered on even numbered years (Spring). Prerequisite: junior standing or above.
- GEOG 427. Environmental Archaeology** (4). Analyses of sediments and plant and animal remains from archaeological sites are used to explore relationships between humans and their environments. Case studies combine natural and physical sciences to study long-term change in landscapes and ecosystems. ANTH427/527 AND GEOG427/527 are cross-listed courses. Graduate credit requires an additional research paper to be specified in syllabus. Prerequisites: ANTH 120 or GEOG 107.
- GEOG 430. Remote Sensing** (5). Principles of acquisition, processing, analysis, and use of remotely sensed data from airborne and satellite systems (Landsat, SPOT, Ikonos, LiDAR, etc.). Applied experience using image processing software. Four hours lecture and two hours laboratory per week. GEOG 430, GEOL 430, and GEOL 530 are cross-listed courses; students may not receive credit for more than one course. Course will be offered every year (Spring). Prerequisites: GEOG 330 or GEOL 210.
- GEOG 432. Heritage Preservation** (4). Students will discuss the merits of preserving heritage buildings and landscapes, and question what is deemed worth of heritage designation. Techniques will be developed for investigating a building's history and experience gained in writing proposals and policies to preserve heritage resources. ANTH 432 and GEOG 432 are cross-listed courses; students may not receive credit for both. Course will not have an established scheduling pattern. Prerequisite: GEOG 305 or enrollment in REM Program or permission of instructor.
- GEOG 440. Ecology and Culture** (4). Investigation into interdependent environmental and human cultural systems. Traditional agroecologies and subsistence strategies; contemporary problems of resource management, social equity, political ecology, and sustainable development. GEOG 440 and ANTH 440 are cross-listed courses; students may not receive credit for both. Course will be offered every year (Spring).
- GEOG 441. Climate Change: Human and Biophysical Dimensions (Put on reserve 9/16/18)** (4). A critical analysis and examination of past, contemporary and future scenarios of climate change with a particular focus on the biophysical environment and human societies. Course will not have an established scheduling pattern. (Put on reserve 9/16/18, will go inactive 8/24/21)
- GEOG 442. Alternative Energy** (5). Critical understanding of alternative energy resources from a geographical perspective, with focus on wind, biomass, solar, biofuels, geothermal, and sustainable energy systems. The course includes energy production, transition, conversion, and consumption. Field trips. Course will be offered every year (Winter). Prerequisite: junior standing or above.
- GEOG 443. Energy Policy** (5). Legal, institutional, and economic frameworks for regional, national, and international energy decisions. Course will be offered on odd numbered years (Fall).
- GEOG 444. Mineral Resources (Put on reserve 9/16/18)** (4). Foundation course for understanding the physical, social, economic, and legal dimensions of mineral resource use on a global scale. Emphasis paid to issues in the American West. Course will not have an established scheduling pattern. (Put on reserve 9/16/18, will go inactive 8/24/21) Prerequisite: GEOG 107 or GEOL 101 or GEOL 103 or ENST 201.
- GEOG 445. Environmental Law** (5). This course explores the key state and federal laws governing environmental management, their formation, and the legal boundaries of these acts and the ancillary administrative rules. ENST 460 and GEOG 445 are equivalent courses; students may not receive credit for both. Course will be offered on even numbered years (Spring).
- GEOG 448. Geographic Approaches to Environmental Resource Analysis (Put on reserve 9/16/17)** (5). Examination of the techniques and methodologies used for the evaluation and sustainable management of environmental resources from a variety of perspectives. (Put on reserve 9/16/17. Will go inactive 8/24/2020.) Course will not have an established scheduling pattern. Prerequisites: GEOG 107 and GEOG 250.
- GEOG 449. Environmental Hazard Analysis and Management** (5). Physical, human and resource geography of environmental hazards. Includes examination of the techniques and methodologies used for the assessment, and management of environmental hazards from a variety of perspectives. Course will be offered on even numbered years (Fall). Prerequisite: GEOG 107.
- GEOG 450. Arid Environments** (5). Physical, human, and resource geography of Earth's arid settings. Course will be offered on odd numbered years (Fall). Prerequisite: GEOG 107.
- GEOG 451. Mountain Environments** (5). Physical, human, and resource geography of mountain settings. Course will be offered on odd numbered years (Winter). Prerequisite: GEOG 107.
- GEOG 452. Coastal Environments** (5). Physical, human, and resource geography of coastal environments. Emphasis on physical processes, resource issues, and environmental management of coastal environments. Course will be offered on odd numbered years (Spring). Prerequisite: GEOG 107.
- GEOG 453. Riparian and Wetlands Analysis** (5). Physical, human, and resource geography of wetland environments. Emphasis on physical processes, resource issues, and

environmental evaluation and management of wetland environments. Course will be offered on even numbered years (Spring). Prerequisite: GEOG 107.

**GEOG 454. Forest Environments (5).** Examinations of topics related to global forest including forest ecology, disturbance regimes, biogeography, and management issues. Case studies will focus on western U.S. forest and highlight the use of geospatial techniques to study forest change. Course will be offered on even numbered years (Spring). Prerequisites: GEOG 107.

**GEOG 455. Pyrogeography (4).** An investigation of patterns of fire on Earth: past, present, and future. Topics covered include fire ecology, the history of fire, ecosystem impacts, human use of fire, fire management, and fire and climate change. Course will be offered on odd numbered years (Fall). Prerequisites: GEOG 107 and upper-division standing, or permission of instructor.

**GEOG 456. Recreation Geography (5).** Provides a geographically-based understanding of recreational resource use and management in diverse outdoor environments. Includes study of factors influencing supply and demand of recreational resources, recreational land use, socio-economic and ecological impacts, and introduction to resource management and analytical techniques. Course will be offered on odd numbered years (Fall). Prerequisite: GEOG 250 or permission by instructor.

**GEOG 458. People, Parks, and Protected Areas (4).** This course explores historical and contemporary, scientific, and socio-ecological principles associated with parks and protected areas in the world. Concepts explored will include: biodiversity, sustainability, resilience, conservation techniques and methodologies for establishing protected area boundaries, adaptive management, and park-people conflicts. Course will be offered on even numbered years (Spring).

**GEOG 461. Soils (5).** Properties, factors, processes, and classification of Earth's soils, past and present. Four hours lecture and three hours of laboratory or field trips each week. GEOG 361 and GEOG 461 are layered courses; students may not receive credit for both. Course will be offered every year (Spring). Prerequisite: GEOG 107.

**GEOG 479. Geography of the West (1-12).** In-depth field examination of the complex physical, human, and resource issues of one or more of the varied sub

regions of western North America. May be repeated for credit under a different title by permission of department chair. Course will not have an established scheduling pattern.

**GEOG 482. Hydrology (5).** Provides a comprehensive introduction to both the global and local hydrologic cycle. Covers constituent processes, their measurements and quantitative relationships, plus basic water quality parameters. GEOG 382 and GEOG 482 are layered courses; students may not receive credit for both. Course will be offered every year (Fall). Prerequisite: GEOG 107.

**GEOG 483. Snow (5).** Processes and factors resulting in snowfall, snowfall patterns over space and time, snowpack development and metamorphosis, snowfall and snowpack measurement, impacts of snowfall and snowpack on avalanches, landforms, vegetation, and runoff, and snowfall and snowpack in a warming world. GEOG 483 and GEOG 583 are layered courses; a student may not receive credit for both. Formerly GEOG 383, students may not receive credit for both. Course will be offered on even numbered years (Winter). Prerequisite: GEOG 107 or permission of instructor.

**GEOG 485. Topics in GIS or Remote Sensing (1-5).** Variable topics in GIS or remote sensing. Applied experience using GIS or image processing software. May be repeated up to 12 credits. Permission by instructor. Course will not have an established scheduling pattern. Prerequisite: permission of instructor.

**GEOG 486. Geomorphology (5).** Descriptive and interpretive examination of Earth's landforms, and the processes and factors that shape these features over space and time. Four lectures and three hours laboratory or field trips each week. GEOG 386, GEOG 486, and GEOL 386 are cross-listed courses; students may not receive credit for more than one. By permission only. Course will be offered every year (Spring).

**GEOG 487. Biogeography (5).** Investigates the functional relationships between biophysical processes and their spatial and temporal patterns at various scales. Introduces approaches to land systems analysis focusing upon ecosystems. GEOG 387 and GEOG 487 are layered courses, students may not receive credit for both. Course will be offered every year (Spring). Prerequisite: GEOG 107.

**GEOG 488. Weather and Climate (5).** Elements, factors and processes

affecting Earth's climates, present, past, and future. Four hours lecture and two hours laboratory/field per week. Course fee required. GEOG 388 and GEOG 488 are equivalent courses, students may not receive credit for both. Course will be offered every year (Winter). Prerequisite: GEOG 107.

**GEOG 489. Geography Capstone (2).** Assessment of past coursework in Geography and related fields and the General Education program and exploration of future opportunities in Geography and related fields. Course will be offered every year (Fall and Spring). Prerequisites: senior standing and admission to a geography major. CE - Culminating Experience

**GEOG 490. Cooperative Education (1-12).** An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. Prerequisite: prior approval required.

**GEOG 491. Workshop (1-6).**

**GEOG 492. Geography Teaching Experience (1-3).** Experience in classroom, laboratory, and/or field teaching. May be repeated for credit with permission of department chair.

**GEOG 493. Geography Field Experience (1-12).** Individual or group off-campus experience in the field study of geographical phenomena. May be taken more than once by permission of department chair under a different title.

**GEOG 494. Applied GIS Project (2-6).** GIS projects in anthropology, biology, geography, geology, and resource management. ANTH 494, GEOL 494 and GEOG 494 are cross-listed courses; students may not receive credit for more than one.

**GEOG 496. Individual Study (1-6).**

**GEOG 497. Honors (1-12).** Prerequisite: admission to department honors program.

**GEOG 498. Special Topics (1-6).**

**GEOG 499. Seminar (1-5).**

#### Geological Sciences Courses

**GEOL 101. Introduction to Geology (4).** An introduction to geology emphasizing the origin and nature of the common rocks, plate tectonic theory, earthquake and volcanoes, and geologic time. Course will be offered every year (Fall, Winter, Spring, Summer). NS-Fund Disc Phys and Biological Sciences. Co- or prerequisite: GEOL 101LAB. NS-Fund

Disc Phys and Biological Sciences. K7 - Physical & Natural World

**GEOL 101LAB. Introductory Geology Laboratory** (1). Application of map study to geological processes and land forms, identification of rocks and minerals, and local field trips. Two hours laboratory per week. NS-Fund Disc Phys and Biological Sciences (L) or NS-Patterns and Connections Natural World (L). NS-Fund Disc Phys and Biological Sciences (L).

**GEOL 102. Geology of National Parks (On reserve as of 9/16/15)** (4). Fundamentals of geology applied to selected national parks in North America. Four lectures per week. Put on reserve as of 9/16/15. Will go inactive 8/24/18. Co- or prerequisite: GEOL 101LAB.

**GEOL 103. Geology of Washington** (4). Fundamentals of geology applied to the state of Washington. Topics include Washington's volcanic, earthquake, tectonic, and glacial activity. Four lectures per week. Course will be offered every year (Fall, Winter). NS-Patterns and Connections Natural World. Corequisite: GEOL 101LAB. NS-Patterns and Connections Natural World. K7 - Physical & Natural World

**GEOL 107. Earth's Changing Surface** (4). The role of natural geologic processes in shaping the earth's surface; includes hydrologic cycle, rivers and flooding, landslides, coastal processes, and climate cycles. Four hour lecture per week plus required field trips. Course will be offered every year (Fall, Winter, Spring). General Education: NS-Patterns and Connections Natural World. NS-Patterns and Connections Natural World. K7 - Physical & Natural World

**GEOL 108. Earth and Energy Resources** (4). Exploration of the earth's mineral and energy resources, how they are formed, harnessed, and the environmental impacts of their extraction and use. Course will be offered every year (Fall, Winter, Spring, Summer). NS-Applications Natural Science. NS-Applications Natural Science. K8 - Science & Technology

**GEOL 188. Geology and Environmental Geology Field Trips** (1). Afternoon and weekend field trips to introduce students to the geology and environment of the Pacific Northwest as well as the breadth of study options in the geological sciences. May be repeated up to 3 credits. Grade will either be S or U. Course will be offered every year (Fall, Spring).

**GEOL 200. Earth's Evolution and Global Change** (5). Evolution of Earth, plate tectonics, life, and climate over the last 4.5 billion years. Three lectures, four hours laboratory per week. Course will be offered every year (Winter). Prerequisites: (either GEOL 101 OR GEOL 103 OR GEOL 107 OR GEOL 108) and GEOL101LAB, OR SCED 102.

**GEOL 210. Introduction to Geologic Field Methods** (4). Introduction to geologic field investigation, emphasizing geologic mapping. Class comprises two weeks in the field during summer or as arranged by the instructor; credits are carried during the subsequent academic year quarter. Extra fees required. Course will be offered every year (Fall). Prerequisites: (GEOL 101, or GEOL 103, or GEOL 107, or GEOL 108) and GEOL101LAB, or SCED 102, or instructor permission. GEOL 200 recommended.

**GEOL 296. Individual Study** (1-6).

**GEOL 298. Special Topics** (1-6).

**GEOL 299. Seminar** (1-5). May be repeated if subject is different.

**GEOL 302. Oceans and Atmosphere** (4). Introduction to Earth's climate and the hydrologic cycle through study of the ocean-atmosphere system. Chemical and physical changes will be studied over time scales ranging from millions of years to days. Will include a field trip. Course will be offered every year (Fall, Winter, Spring, Summer). NS-Patterns and Connections Natural World. Prerequisite: sophomore standing or above. NS-Patterns and Connections Natural World. K8 - Science & Technology

**GEOL 303. Water: Science and Society** (5). An investigation of the importance of water to the existence of life on Earth. This course will provide a basic scientific background on water and examine the relationships between water and human activities. Course will be offered every year (Spring). K7 - Physical & Natural World

**GEOL 305. Quantitative Reasoning for Geoscientists** (4). An introduction to quantitative methods commonly used for observation, analysis, and interpretation of geologic features and processes. Prerequisites: (either GEOL 101 OR GEOL 102, OR GEOL 103) and GEOL101LAB, and MATH 100C or above.

**GEOL 306. Communicating Geoscience** (4). Exploration of effective communication skills in the geosciences. Includes readings from the primary and popular literature, writing,

making figures, and oral presentation. Emphasis on peer review and revision. Prerequisites: (GEOL 101 or GEOL 103) and GEOL101LAB and ENG 102.

**GEOL 320. Rocks and Minerals** (5). Identification, classification, and evolution of common igneous and metamorphic rocks. Includes recognition and interpretation of rocks in typical field exposures. Three hours lecture and three hours laboratory per week plus required field trips. Prerequisites: (GEOL 101 or GEOL 103) and GEOL101LAB and CHEM 111 or CHEM 181.

**GEOL 346. Mineralogy** (5). Physical, chemical, and crystallographic properties, and occurrence of minerals. Examination and description of hand specimens and crystal models. Theory and practice in optical mineralogy and X-ray diffraction. Four lectures and three hours laboratory per week. Prerequisites: GEOL 305, and GEOL 320, and MATH 154. Co-requisite: MATH 154 or instructor permission.

**GEOL 351. Geology of the Pacific Northwest** (3). Fundamentals of geology applied to the Pacific Northwest. Case studies in lecture will build toward extended field experiences. Two lectures per week. Field trips required. Prerequisites: (GEOL 101 or GEOL 103), and GEOL 101LAB, and GEOL 200.

**GEOL 360. Structural Geology** (5). Introduction to the basic principles of rock deformation with an emphasis on the geometry, styles, and mechanics of faulting and folding and the stereographic projection and analysis of geologic structures. Three lectures and four hours laboratory per week. Field trips required. Prerequisites: GEOL 200 and GEOL 305 and GEOL 320 and MATH 154.

**GEOL 370. Sedimentology and Stratigraphy** (5). Origin of sedimentary rocks, physical processes and stratigraphic principles. Identification of sedimentary rocks. Recognition of depositional environments represented in the geologic record. Field trip required. Prerequisite: GEOL 200, and GEOL 305, and MATH 153. Co-requisite: MATH 153.

**GEOL 371. Paleobiology** (4). Using fossils in the geologic record to explore evolution and extinction, ancient ecology and environments, and the geographical distribution of plants and animals. BIOL 371 and GEOL 371 are cross-listed courses; students may not receive credit for both. Course will be offered on odd numbered years

(Winter). Prerequisite: BIOL 181 or GEOL 101 or GEOL 103 or GEOL 107 or GEOL 108 or SCED 102.

**GEOL 377. Regional Natural History** (2). Classroom study of the natural history of a selected region as preparation for a one- or two-week field trip. Emphasis will be on developing background skills to undertake a field exploration over the quarter (winter, spring, summer) break. Subtitles will identify the selected geographical region (e.g. Baja California Natural History). GEOL 377 and BIOL 377 are cross-listed courses. May be repeated for credit under a different subtitle (region). Prerequisite: permission of instructor.

**GEOL 377LAB. Regional Natural History** (3). One- or two-week field trip to explore biological and physical patterns and processes in selected regions of North America. Emphasis will be on recording field observations, keeping a field journal, field study techniques, and performing investigations chosen and developed by student participants. Subtitles will identify the region studied. BIOL 377LAB and GEOL377LAB are cross-listed courses. Special fees required. May be repeated for credit under a different subtitle.

**GEOL 380. Natural Hazards** (5). Environmental concerns of earth processes and natural hazards including earthquakes, volcanic activity, flooding, landslides, etc. Three hours lecture plus one three-hour lab per week. Prerequisites: (either GEOL 101 or GEOL 102, or GEOL 103) and GEOL101LAB, or instructor permission.

**GEOL 382. Earth Resources and Pollution** (4). Human impact on the Earth through use of its resources, including pollution and remediation strategies. Two 2-hour lecture/lab sessions per week. Prerequisites: GEOL 101 or GEOL 102 or GEOL 108 and GEOL101LAB or permission of instructor.

**GEOL 384. Ocean, Atmosphere and Climate Interactions** (4). The characteristics and circulation of Earth's ocean and atmosphere are examined in the context of investigating the Earth's energy balance and climate. Both natural and anthropogenic causes of climate variability are explored. Prerequisites: (GEOL 101 or GEOL 103) and GEOL 101LAB, and GEOL 305.

**GEOL 386. Geomorphology** (5). Descriptive and interpretive examination of the Earth's landforms,

and the processes and factors that shape these features over space and time. Four lectures and three hours laboratory or field trips each week. GEOG 386, GEOG 486, and GEOL 386 are cross-listed courses; students may not receive credit for both. Prerequisites: (GEOL 101 or GEOL 102 or GEOL 103 and GEOL 101LAB) or GEOG 107.

**GEOL 388. Field Trips** (1-3). Intensive study of geological phenomena on field trips up to two weeks in length. Three days field work for each credit. Extra fees required. Course may be repeated for areas of significantly different geologic content. Grade will either be S or U. Prerequisite: permission of instructor.

**GEOL 392. Lab Experience Teaching Physical Geology** (1). May be repeated up to 2 credits. Grade will either be S or U. Prerequisites: (either GEOL 101 OR GEOL 102, OR GEOL 103) and GEOL101LAB.

**GEOL 395. Junior Research** (1-6). May be repeated for up to 12 credits. Prerequisite: by permission only.

**GEOL 396. Individual Study** (1-6).

**GEOL 397. Honors** (1-12). Prerequisite: admission to department honors program.

**GEOL 398. Special Topics** (1-6).

**GEOL 399. Seminar** (1-5). May be repeated if subject is different.

**GEOL 404. GIS Analysis** (5). This course development of Geographic Information Systems (GIS) use; emphasis is placed on analysis of geospatial datasets. Lecture and practical applications. GEOG 404 and GEOL 404 are cross-listed courses; students may not receive credit for both.

**GEOL 415. Earthquake Geology and Neotectonics** (5). Geomorphology, stratigraphy, and structural geology applied to the study of active faults and folds in a variety of tectonic settings. Relation of seismicity and geodetic measurements to geologic structure and active tectonic processes, including case studies of selected earthquakes. Three hours lecture and four hours laboratory per week. GEOL 415 and GEOL 515 are layered courses; students may not receive credit for both. Prerequisites: (either GEOL 101 OR GEOL 103) and GEOL101LAB and GEOL 386 and MATH 154.

**GEOL 417. Advanced GIS** (4). Advanced GIS principles, techniques, analysis, and application. Lecture and practical hands-on experience. GEOG 417 and GEOL 417 are cross-listed courses; students may not receive credit

for both. Prerequisites: GEOG 404 or GEOL 404.

**GEOL 423. The Cryosphere** (5).

Components of the cryosphere (ice sheets, mountain glaciers, ice shelves, global snow cover, sea ice extent, and permafrost/frozen ground) will be examined, including anticipated changes in the cryosphere due to changing climate. GEOL 423 and GEOL 523 are layered courses; students may not receive credit for both. Course will be offered on even numbered years (Winter). Prerequisites: (either GEOL 101 or GEOL 102 or GEOL 103) and GEOL 101LAB, and GEOL 200, and GEOL 210, and CHEM 181 and CHEM 182.

**GEOL 425. Environmental**

**Geochemistry** (5). Global geochemical cycles, influences of rocks and soils on water chemistry, behavior of isotopes and trace elements. Includes class project studying local environmental geochemistry topic. Three lectures plus one three-hour lab per week. GEOL 425 and GEOL 525 are layered courses; students may not receive credit for both. Prerequisites: CHEM 181, and CHEM 181LAB, and CHEM 182, and CHEM 182LAB and MATH 153.

**GEOL 430. Remote Sensing** (5).

Principles of acquisition, analysis, and use of remotely sensed data (LANDSAT, SPOT, Ikonos, etc.). Applied experience using image processing software. Three hours lecture and three hours laboratory per week. GEOL 430, GEOG 430, and GEOL 530 are cross-listed courses; students may not receive credit for more than one. Prerequisites: GEOG 410 or GEOL 210.

**GEOL 432. Field Geodetic Techniques**

(3). Training in field geodetic techniques, including scientific application of two or more precision surveying instruments: geodetic GPS, differential GPS, and electronic distance meter. Three hours a week and field project, or one-week field course. GEOL 432 and GEOL 532 are layered courses; students may not receive credit for both. Prerequisites: (either GEOL 101 OR GEOL 102, OR GEOL 103) and GEOL101LAB, and GEOL 200 and GEOL 210.

**GEOL 434. Petroleum Geology** (5).

Petroleum geology delivers a comprehensive introduction to the application of geology in the oil and gas industry, including the origin and occurrence of petroleum, application of geology in exploration and production, and the evolution of the industry in the context of global demand. GEOL 434

and GEOL 534 are layered courses; students may not receive credit for both. Prerequisite: GEOL 210 or permission of instructor.

**GEOL 441. Climate Variability and Climate Change (5).** Examine past, present, and future changes in climate, and the factors that contribute to climate change over various timescales. GEOL 441 and GEOL 541 are equivalent courses; students may not receive credit for both. Prerequisite: GEOL 200.

**GEOL 445. Hydrogeology (5).** Study of the occurrence and movement of ground water using geology, hydrology, and geochemistry, with an emphasis on practical problems in water management. Three hours lecture and three hours laboratory per week. GEOL 445 and GEOL 545 are layered courses; students may not receive credit for both. Prerequisites: (either GEOL 101 OR GEOL 102, OR GEOL 103) and GEOL101LAB, and MATH 154.

**GEOL 453. Seismology (5).** Elasticity theory, the wave equation, ray theory, diffraction, waveform modeling, travel time inversion. Data analysis. Three hours lecture per week plus four hours of scientific computing lab. Offered alternate years. GEOL 453 and GEOL 553 are equivalent courses; students may not receive credit for both. Prerequisite: MATH 173.

**GEOL 456. Geodynamics (5).** Study of plate tectonics and mountain building processes that shape Earth. Lab includes introduction to Matlab software for analysis and visualization. Required field trip. GEOL 456 and GEOL 556 are layered courses; students may not receive credit for both. Prerequisite: (either GEOL 101 OR GEOL 102, OR GEOL 103) and GEOL101LAB. Corequisite: MATH 172.

**GEOL 474. Quaternary Geology (4).** Study of geological processes affecting Earth's most recent history. Course emphasizes marine and continental quaternary environmental change, glacial epochs, paleoclimatic methods, and dating techniques. GEOL 474 and GEOL 574 are layered courses; students may not receive credit for both. Prerequisites: either GEOG 386 or GEOL 386 or GEOL 370.

**GEOL 475. Petrography and Petrogenesis (5).** Petrogenetic, hand specimen, and thin section study of igneous, metamorphic, or sedimentary rocks. Three hours lecture and four hours laboratory or field work per week plus required field trips. GEOL 475 and GEOL 575 are layered courses;

students may not receive credit for both. Offered in alternate years. Prerequisite: GEOL 346.

**GEOL 476. Advanced Sedimentology (4).** Sediments, sedimentary rocks, and advanced lab and field techniques for students interested in conducting research or working in sedimentology-related fields. Required field trips. GEOL 476 and GEOL 576 are layered courses; students may not receive credit for both. Prerequisite: GEOL 370.

**GEOL 477. Tsunami Geology and Geophysics (2).** Course will cover the current science of paleotsunami research, an overview of modern survey observations, the basic physics of tsunami generation and propagation, and introduce students to tsunami modeling methodologies. GEOL 477 and GEOL 577 are cross-listed; students may not receive credit for both. Prerequisite: GEOL 370.

**GEOL 478. Volcanology (5).** Study of volcanoes and associated deposits, styles of eruption, physical and chemical controls on eruption mechanisms, and volcanic hazards and hazard mitigation. Three hours lecture and four hours laboratory per week plus required field trips. GEOL 478 and GEOL 578 are layered courses; students may not receive credit for both. Offered in alternate years.

**GEOL 483. Isotope Geochemistry (5).** Covers principles of isotope geochemistry and applications to studies of geological processes such as hydrologic cycling, volcanic petrogenesis, and climate change. Three hours lecture per week plus required laboratory work and field trips. GEOL 483 and GEOL 583 are layered course; students may not receive credit for both. Offered in alternate years. Prerequisites: CHEM 182, CHEM 182LAB, and MATH 154.

**GEOL 484. Geochronology (5).** Principles, analytical methods, and interpretation of several of the most widely applied geochronological methods. Computer-based data analysis of problems in igneous and metamorphic petrology, structural geology, sedimentary geology, geomorphology, paleoseismology, and planetary science. GEOL 484 and GEOL 584 are layered courses; students may not receive credit for both. Prerequisites: MATH 172 and GEOL 346 or permission of the instructor.

**GEOL 487. End-of-major Review Seminar (1).** Students must be familiar with the language of geology and possess certain basic geologic skills.

Coordinates student participation in program assessment activities and provides a structured avenue for student input into program goals. Grade will either be S or U. Prerequisite: senior status and intention to graduate during the current year.

**GEOL 489. Geologic Field Methods (6-12).** Emphasis is placed on observation and recording of lithologic and structural features, measurement of stratigraphic and structural sections, applications of various survey methods, and plotting geologic data on topographic and aerial photographs in the field. The class will be offered during summer break, or as arranged by the instructor. Credits will be carried in concurrent or immediately adjacent academic year quarter. Extra fees required. Permission of instructor. Course will be offered every year (Summer). Prerequisites: GEOL 210 and GEOL 346 and GEOL 360 and GEOL 370. CE - Culminating Experience

**GEOL 490. Cooperative Education (1-12).** An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. Prerequisite: prior approval required.

**GEOL 491. Workshop (1-6).**

**GEOL 492A. Experience Teaching Upper-level Geology (2).** Assisting with instruction in upper-level geology major lab or field courses. May be repeated up to four times for a total of 8 credits. Grade will either be S or U.

**GEOL 492B. Laboratory Experience Teaching Earth Science (2).** Course designed for future Earth science teachers in secondary schools. Assist teaching one laboratory section of GEOL 101LAB and discuss laboratory-teaching methods. Grade will either be S or U.

**GEOL 493. Field Methods in Environmental Geology (4).** In this two-week field course, students will apply field methods in environmental geology to a local or regional environmental geology research question. Permission by instructor. Course will be offered on an odd numbered years (Spring). Prerequisites: GEOL 386. CE - Culminating Experience

**GEOL 494. Applied GIS Project (2-6).** GIS projects in anthropology, biology, geography, geology, and resource management. ANTH 494, GEOL 494



and GEOG 494 are cross-listed courses; students may not receive credit for more than one.

**GEOL 495. Senior Research** (1-6). By permission only. May be repeated up to 12 credits.

**GEOL 496. Individual Study** (1-6).

**GEOL 497. Honors** (1-12). Prerequisite: admission to department honors program.

**GEOL 498. Special Topics** (1-6).

**GEOL 499. Seminar** (1-5).

### German Courses

**GERM 151. First-year German** (5).

Conversational approach with intensive oral-aural drill. Firm foundation in the basic structural principles of the language. Courses must be taken in sequence.

**GERM 152. First-year German** (5).

Conversational approach with intensive oral-aural drill. Firm foundation in the basic structural principles of the language. Courses must be taken in sequence. Prerequisite: GERM 151.

**GERM 153. First-year German** (5).

Conversational approach with intensive oral-aural drill. Firm foundation in the basic structural principles of the language. Courses must be taken in sequence. Prerequisite: GERM 152.

**GERM 251. Second-year German** (5).

Graduated readings in modern German prose with discussion conducted in German. Thorough review of German grammar. Courses must be taken in sequence.

**GERM 252. Second-year German** (5).

Graduated readings in modern German prose with discussion conducted in German. Thorough review of German grammar. Courses must be taken in sequence. Prerequisite: GERM 251.

**GERM 253. Second-year German** (5).

Graduated readings in modern German prose with discussion conducted in German. Thorough review of German grammar. Courses must be taken in sequence. Prerequisite: GERM 252.

**GERM 298. Special Topics** (1-6).

**GERM 299. Seminar** (1-5). May be repeated if subject is different.

**GERM 301. Introduction to German Literature** (Put on reserve 9/16/18)

(3). Selected pieces of German literature characteristic of the Middle Ages to the present. (Put on reserve 9/16/18, will go inactive 8/24/21) Prerequisite: GERM 253.

**GERM 350. Advanced Conversation** (Put on reserve 9/16/17) (4). The

course will broaden students'

communicative strategies and develop their speaking and listening skills through exposure to a variety of media.

Films, visual art, and music will provide the basis for general class participation and small group discussion. (Put on reserve 9/16/17.

Will go inactive 8/24/2020.)

Prerequisite: GERM 253.

**GERM 352. Advanced Reading and**

**Expression** (4). Texts culled from a variety of sources and time periods will form the basis of this course, allowing students a broad exposure to German written expression in order to broaden and develop their reading skills and strategies. Prerequisite: GERM 253.

**GERM 354. Advanced Grammar and Composition** (Put on reserve 9/16/17)

(4). The course focuses on the development of writing skills through the analysis and practice of grammar, vocabulary, and rhetorical devices. (Put on reserve 9/16/17. Will go inactive 8/24/2020.) Prerequisite: GERM 253.

**GERM 384. Defying Nazism: German and French Resistance during WWII**

(5). Course focuses on the Resistance movements in Germany and France as people from both countries struggled to come to terms with Hitler and Nazism. FR 384 and GERM 384 are cross-listed courses; a student may not receive credit for both. Course will not have an established scheduling pattern.

**GERM 396. Individual Study** (1-6).

May be repeated if subject is different.

**GERM 397. Honors** (1-12).

Prerequisite: admission to department honors program.

**GERM 398. Special Topics** (1-6).

**GERM 399. Seminar** (1-5). May be repeated if subject is different.

**GERM 491. Workshop** (1-6).

**GERM 496. Individual Study** (1-6).

**GERM 497. Honors** (1-12).

Prerequisite: admission to department honors program.

**GERM 498. Special Topics** (1-6).

**GERM 499. Seminar** (1-5). May be repeated if subject is different.

### Health Education Courses

**HED 101. Essentials for Healthy**

**Living** (4). Essentials for Healthy Living is a survey course designed to give the student the practical and theoretical knowledge necessary to apply principles of overall wellness in the pursuit of a healthier lifestyle. Course will be offered every year (Fall, Winter, Spring, Summer). SB-Foundations of Human Adaptations and Behavior. SB-Foundations of Human Adaptations and Behavior. K6 - Individual & Society

**HED 205. Drugs and Sport** (3). Survey of the potential hazards of recreational, ergogenic, and restorative drugs commonly used by athletes. Course will be offered every year (Fall, Winter, and Spring).

**HED 210. Drugs and Health** (3). Uses and abuses of drugs. Special emphasis will be on psycho-physiological effects upon human health and responsible drug use.

**HED 296. Individual Study** (1-6).

**HED 298. Special Topics** (1-6).

**HED 299. Seminar** (1-5).

**HED 318. The Politics of Food and Health** (3). Exploration of the politics of food from farm to table, and the implications for human and environmental health. HED 318 and NUTR 318 are cross-listed courses; students may not receive credit for both.

**HED 387. Principles of Fitness and Stress Management** (3). The theory and practice of health enhancement through fitness and stress management.

**HED 396. Individual Study** (1-6). May be repeated if subject is different.

**HED 397. Honors** (1-12). Prerequisite: admission to department honors program.

**HED 398. Special Topics** (1-6).

**HED 399. Seminar** (1-5). May be repeated if subject is different.

**HED 411. Public Health Emergency Preparedness and Management** (3).

This course introduces students to the principles of emergency public health preparedness and management. Students will learn about natural and unnatural emergencies/disasters and the processes of preparedness, response, and mitigation in local, state, federal and global settings.

**HED 422. Methods for Health**

**Promotion** (4). Prerequisites: HED 101 and PUBH 230, and current WSP/FBI fingerprint clearance .

**HED 442. Field Work and Experience in Health Education** (1-15).

Observation and participation in health programs, and/or HED 101. May be repeated to a maximum of 15 credits.

**HED 446. Health Education**

**Curriculum for Elementary Teachers** (3). Examination of available curricula and teaching materials in health education for elementary school teachers. Students must develop an elementary health education curriculum. Prerequisite: current WSP/FBI fingerprint clearance, and admission to the Teacher Certification Program.

**HED 491. Workshop** (1-6).

**HED 492. Practicum** (4). Practical experience and application of responsibilities and competencies necessary for practicing health education. Prerequisites: HED 345 or 472.

**HED 496. Individual Study** (1-6).

**HED 497. Honors** (1-12). Prerequisite: admission to department honors program.

**HED 498. Special Topics** (1-6).

**HED 499. Seminar** (1-5).

### History Courses

**HIST 101. World History to 1500** (5). Origins and development of the major world civilizations to the 15th century.

A comparative study of their political, social, and economic institutions, and their religious and intellectual backgrounds. Course will be offered every year (Fall, Winter, Spring). SB-Perspectives on World Cultures (W). SB-Perspectives on World Cultures (W). K4 - Global Dynamics

**HIST 102. World History: 1500-1815**

(5). A comparative survey of political, social, economic, and cultural developments in world history from 1500-1815. Course will be offered every year (Fall, Winter, Spring, Summer). SB-Perspectives on World Cultures (W). SB-Perspectives on World Cultures (W). K5 - Humanities

**HIST 103. World History Since 1815**

(5). A comparative survey of political, social, economic, and cultural developments in world history since 1815. Course will be offered every year (Fall, Winter, Spring, Summer). SB-Perspectives on World Cultures (W). SB-Perspectives on World Cultures (W). K4 - Global Dynamics

**HIST 143. United States History to 1865** (5).

Survey of U.S. history from before contact to Civil War. Themes include pre-Columbian societies; colonization; epidemics and environmental change; slavery; the American Revolution and Constitution; the market revolution; Manifest Destiny; and the Civil War. Course will be offered every year (Fall, Winter, Spring, Summer). SB-Perspectives on Cultures and Experiences of U.S. (W). SB-Perspectives on Cultures and Experiences of U.S. (W). K2 - Community, Culture, & Citizenship

**HIST 144. United States History Since 1865** (5).

U.S. history from Reconstruction to the present. Themes include Imperialism, Progressivism, World War I, Great Depression, World War II, the Civil Rights and Women's Movements, the Vietnam War, recent

U.S. foreign policy and political movements. Course will be offered every year (Fall, Winter, Spring, Summer). SB-Perspectives on Cultures and Experiences of U.S. (W). SB-Perspectives on Cultures and Experiences of U.S. (W). K2 - Community, Culture, & Citizenship

**HIST 298. Special Topics** (1-6).

**HIST 299. Seminar** (1-5). May be repeated if subject is different.

**HIST 301. Pacific Northwest History**

(5). Exploration and settlement; subsequent political, economic, and social history with particular emphasis on Washington. Course will be offered every year (Fall, Winter, Spring). K5 - Humanities

**HIST 302. Historical Methods** (5).

Exercises in historical research, critical analysis, and interpretation. Students must earn a minimum grade of C as a major requirement. Course will be offered every year (Fall, Winter, Spring). Prerequisites: sophomore or junior standing and admission to either the history large, small or social studies teaching major. K1 - Academic Writing II: Reasoning & Research

**HIST 309. American History through Film (Put on reserve 9/16/18)** (5).

Explores American history through the prism of film, how film represents the past, how filmmakers, historians, and the general public understand cinematic history, and how film can be viewed as both primary and secondary sources. (Put on reserve 9/16/18, will go inactive 8/24/21)

**HIST 313. History of Rome 500 B.C. to 500 A. D.** (5). Beginning, city-state, republican period; world empire; decline.

**HIST 314. Military History of the United States** (5).

A comprehensive and systematic survey and analysis of the American military experience from Colonial times through the Vietnam War. HIST 314 and MSL 314 are cross-listed courses; students may not receive credit for both.

**HIST 315. Muslim Middle East (Put on Reserve 9/16/16.)** (5).

The origins and spread of Islamic civilization and its interaction with Graeco-Roman, Persian, and Indian civilizations. Crusades and the rise and fall of the Ottoman Empire. (Put on Reserve 9/16/16. Last taught in 2012. Will go inactive 8/24/19.)

**HIST 320. Narcotics in World History**

(5). Explores the use of narcotics in ancient and modern world history and their relationship to warfare, commerce, public policy, human health, taxation, race, religion, gender

and power. Course will not have an established scheduling pattern.

**HIST 321. Latin America Through Film, Art, and Music** (5).

Analyzes the role of film, art, and music in understanding the social, cultural, and political history of Latin America in the colonial and modern eras.

**HIST 322. World Prehistory** (4).

Old- and New-world prehistory from late Pliocene to the early historic period, including the ecology and development of hunting-gathering, agriculture, and state-level societies. HIST 322 and ANTH 322 are cross-listed courses; students may not receive credit for both.

**HIST 323. Food and Drink in Global History** (5).

Examination of cultural, political, and economic roles food and drink have played in global history, 1400 to present. Themes: cultural exchange and globalization; national, ethnic and gender identities; empire and slavery; war; industrialization; politics of food.

**HIST 325. Renaissance and Reformation** (5).

Survey of European political, social, cultural, and economic revolutions from the 14th to 16th centuries; including medieval dissolution, humanism, overseas exploration, Protestantism, and popular culture. Course will not have an established scheduling pattern.

**HIST 328. Modern Latin America** (5).

Analyzes the history of Latin America in the past two centuries, from the Wars of Independence to the present day.

**HIST 329. The Tropics and the Modern World** (5).

Analyzes the history of the modern world through the history of tropical commodities.

**HIST 330. Africa to 1800** (5).

This course is designed to explore Africa's earliest civilizations; internal processes of change; external influences; state formation; complex societies; connections to the world economy.

**HIST 331. Colonial Africa** (5).

Africa on the eve of colonial conquest; causes of imperialism; colonial rule and African reactions and initiatives; independence and colonial legacy.

**HIST 332. History of the Black Diaspora** (5).

This course focuses on the black diaspora. It looks at the movement and impact of black people from Africa to other parts of the world. It examines their contribution to world civilizations and identities.

**HIST 333. Visual Cultures of Africa**

(5). Using painting, sculpture, performance, photography, and film, this course examines historical meaning and representations through visual

media created in and about Africa, and how these media are presented in the West. Course will be taught every other year beginning in Spring 2019.

**HIST 334. History of Gender and Sexuality in Africa from Pre-colonial Times to the Present (5).** This course examines the histories and changing aspects of gender and sexuality in different African contexts from the pre-colonial to the post-colonial eras. Topics will include marriage, politics, prestige, wealth, social cohesion, Christianity, AIDs, etc.

**HIST 339. Colonial British America (5).** Social, cultural, political, and economic life in the British colonies of North America to 1763. Course will not have an established scheduling pattern.

**HIST 341. The Constitution and the New Republic, 1783-1800 (5).** Explores the origins of American government, society and culture by examining the Articles of Confederation, the crisis of the 1780s, the Constitutional convention, ratification, the Federalists and Anti-Federalists, the creation of the first two-party system, Republican Motherhood, slavery, and the formation of American identity.

**HIST 344. American Manhood in Historical Perspective (5).** This course examines the cultural construction of masculinity in America from the colonial period to the present. Important topics include the interplay between gender and politics, sexuality, race, courtship, religion, honor, and violence.

**HIST 346. Women in American History (5).** A survey of the role of women, their treatment, and response in American society from colonial times to the present.

**HIST 352. The History of the American Family (Put on reserve 9/16/17) (3).** American family patterns from early settlement to the present; demography, gender roles, courtship, marriage, child raising, aging, ethnicity, and alternative lifestyles. (Put on reserve 9/16/17. Will go inactive 8/24/2020.)

**HIST 370. Medieval European History (5).** Survey of Western European history from late antiquity to the 16th century; political, economic, social, and religious thought and institutions.

**HIST 380. Modern East Asia (5).** A survey of the modern histories of China, Japan, and Korea from 1600 to the present. Imperialism, nationalism, and the rise of communism are covered.

**HIST 383. East Asian Civilization (5).** A general survey of the development of civilization in China, Japan, and Korea to about 1600.

**HIST 385. Aztec, Inca, Maya: Empire and City in the New World (5).** Introduces students to three key urban civilizations: the Mexica (Aztecs), Mayans, and Inca. The course focuses on political and social history as well as the "conquest" of those groups by the Spanish empire.

**HIST 386. The Latin American Colonies (5).** Analyzes the history of Latin America and the Caribbean from pre-Columbian times to the Wars of Independence.

**HIST 395. Research in Local History (1-6).** Comparative local history with emphasis on research techniques and the utilization of sources. May be repeated for credit.

**HIST 396. Individual Study (1-6).** May be repeated if subject is different.

**HIST 397. Honors (1-12).** Prerequisite: admission to department honors program.

**HIST 398. Special Topics (1-6).**

**HIST 399. Seminar (1-5).** May be repeated if subject is different.

**HIST 402. Reading in European History (Put on Reserve 9/16/16.) (5).** Readings seminar on European history. May be repeated for up to 15 credits. (Put on Reserve 9/16/16. Last taught in 2013. Will go inactive 8/24/19.)

**HIST 403. Readings in African, Asian, Middle Eastern, Latin American History (Put on reserve 9/16/17) (5).** Readings seminar on African, Asian, Middle Eastern, or Latin American history. May be repeated for up to 15 credits. (Put on reserve 9/16/17. Will go inactive 8/24/2020.)

**HIST 421. Methods and Materials in the Social Studies, Secondary (5).** Prerequisite: admission to the Teacher Certification Program. EDCS 311 is a recommended prerequisite.

**HIST 422. Roman and Medieval Britain (5).** The British Isles from Roman times to the beginnings of the Tudor dynasty. Course will cover the rise of the English monarchy, the creation of parliament, and the colonization of the British Isles. HIST 422 and HIST 522 are layered courses; students may not receive credit for both.

**HIST 423. The Irish Revolution (5).** History and historiography of the Irish revolution. Topics include the constitutional and revolutionary antecedents, the course of the revolution, and the foundation of the Irish Free State. HIST 423 and HIST

523 are layered courses; students may not receive credit for both.

**HIST 424. Modern Ireland: 1798-present (5).** The history of Ireland from the revolt of 1798 through the present. Focus will be on the varieties of Irish nationalism, the process of state-building, and the ongoing troubles in the north. HIST 424 and HIST 524 are layered courses; students may not receive credit for both.

**HIST 426. France 1789-1945 (5).** French history through the lens of revolution. Discussions of the variety of French revolutions (1789, 1792, 1830, 1848, 1870) and concluding with the National Revolution of Vichy France. HIST 426 and HIST 526 are layered courses; students may not receive credit for both.

**HIST 427. Modern Britain and the Empire since 1763 (5).** History of Britain and the Empire since the Seven Years' War. Topics include growth of empire, industrialization, political reform, world wars, decolonization, and post-war social changes. HIST 427 and HIST 527 are layered courses; students may not receive credit for both. Course will not have an established scheduling pattern.

**HIST 428. Early Modern Britain 1485-1763 (5).** History of the Britain and the Empire during the Tudor-Stuart and early Hanoverian periods. Topics covered include the origins of the British Empire, the development of the British state, the Civil War and the Glorious Revolution. HIST 428 and HIST 528 are layered courses; students may not receive credit for both. Course will not have an established scheduling pattern.

**HIST 429. Ireland and Empire (5).** Study of the interactions between Ireland and various world empires. The major emphasis will be Irish interaction with the British Empire, but there will also be discussion of Ireland's interaction with other global empires. HIST 429 and HIST 529 are layered courses; students may not receive credit for both.

**HIST 434. American Indian History to 1795 (5).** Discussion and lecture course on Native North American history from 1492 to the founding of the American Republic, and an introduction to the discipline and practice of ethnohistory, which combines traditional historical analysis with ethnographic concepts and research methodologies. HIST 434 and HIST 534 are layered courses; students may not receive credit for both.

- HIST 438. American Indian History since 1795 (5).** Examines American Indian history since the Treaty of Greenville, wherein the U.S. recognized tribal sovereignty. Themes include resistance, assimilation, cultural revitalization, federal Indian policy, sovereignty, and reservation economics. HIST 438 and HIST 538 are layered courses; students may not receive credit for both.
- HIST 440. The American Revolution (5).** Causes and consequences of the American Revolution, 1688-1789. HIST 440 and HIST 540 are layered courses; students may receive credit for both.
- HIST 442. Jefferson, Jackson, and American Growth, 1800-1848 (5).** Election of Jefferson to ratification of the Treaty of Guadalupe Hidalgo. Examines growth of political parties; development of a "working" and a "middle" class; changing gender relations; Manifest Destiny; Indian Removal; expansion of slavery; and revolutions in transportation, communication, and markets. HIST 442 and 542 are layered courses; students may not receive credit for both.
- HIST 443. The West in American History (5).** Exploration, territorial acquisition, patterns of settlement, economic development, and the influence of the frontier on American institutions. HIST 443 and HIST 543 are layered courses; students may not receive credit for both.
- HIST 444. Sectionalism, Civil War, and Reconstruction (5).** Slavery, the Old South, sectionalism, the breakdown of the Union, and secession. A military, political, and social history of North and South during the Civil War, and the aftermath of the war. HIST 444 and HIST 544 are layered courses; students may not receive credit for both.
- HIST 445. Introduction to Public History (5).** This course examines the venues through which the general public learns American history, with visits and analysis of exhibits and their interpretation.
- HIST 450. Exploring U.S. Cultural History (5).** Thematic approach to 19th century cultural transformations in U.S. Selected topics; mesmerism, utopias, true womanhood, women's rights, slave spirituals, confidence men, and gold rushes. HIST 450 and HIST 550 are layered courses; students may not receive credit for both.
- HIST 451. 20th Century U.S.: 1896-1919 (Put on reserve 9/16/17) (5).** Imperialism, progressivism, and World War I. HIST 451 and HIST 551 are layered courses; students may not receive credit for both. (Put on reserve 9/16/17. Will go inactive 8/24/2020.)
- HIST 452. 20th Century U.S.: 1919-1945 (5).** Prosperity and depression; the New Deal and its implications; World War II, origins and conclusion. HIST 452 and HIST 552 are layered courses; students may not receive credit for both.
- HIST 453. 20th Century U.S.: 1945 to the Present (Put on reserve 9/16/17) (5).** Cold War, sedentary 50s, rebellious 60s, the Watergate era. HIST 453 and HIST 553 are layered courses; students may not receive credit for both. (Put on reserve 9/16/17. Will go inactive 8/24/2020.)
- HIST 454. American Environmental History (5).** Environmental values and practices of the diverse populations of America. HIST 454 and HIST 554 are layered courses; students may not receive credit for both.
- HIST 455. The 1950s: An American Cultural History (5).** Survey of cultural and social trends found in the United States between 1945 and 1960; suburban and commercial development, the economic prosperity, changing gender roles, race, development of television, new musical genres and teenage culture. Course will not have an established scheduling pattern.
- HIST 456. The 1960s: An American Cultural History (5).** Survey of United States cultural and social trends between 1960 and 1975; environmental movements, civil rights, economy, gender and race, radical politics, new musical genres and teenagers. Course will not have an established scheduling pattern.
- HIST 460. Religion in Latin America (5).** Analyzes the relationship between individuals, religious movements, and the state from the pre-Columbian era to the present. HIST 460 and HIST 560 are layered courses; students may not receive credit for both.
- HIST 461. History of Health and Healing in Africa (5).** This course explores different African societies' approaches to the ideas of personal and social health, healing, and medicine, and how these have changed over time. HIST 461 and HIST 561 are layered courses; students may not receive credit for both.
- HIST 462. History of American Foreign Relations: 1900-1941 (5).** From the Spanish-American War to Pearl Harbor. HIST 462 and HIST 562 are layered courses; students may not receive credit for both.
- HIST 463. History of American Foreign Relations Since 1941 (Put on reserve 9/16/17) (5).** From Pearl Harbor to the present. HIST 463 and HIST 563 are layered course; students may not receive credit for both. (Put on reserve 9/16/17. Will go inactive 8/24/2020.)
- HIST 464. Latin American Revolutions (Put on Reserve 9/16/16.) (5).** Analyzes revolutions and peasant revolts in Latin America and the Caribbean from 1750 to the present. HIST 464 and HIST 564 are layered courses, students may not receive credit for both. (Put on Reserve 9/16/16. Last taught in 2013. Will go inactive 8/24/19.)
- HIST 465. History of the People's Republic of China (Put on Reserve 9/16/16.) (5).** Evaluates the historical record of the Chinese Communists in power since the establishment of the People's Republic of China in 1949. HIST 465 and HIST 565 are layered courses; students may not receive credit for both. (Put on Reserve 9/16/16. Last taught in 2013. Will go inactive 8/24/19.)
- HIST 468. Modern Japanese History: Tradition and Change (5).** This course explores Japanese history and culture from 1600 to contemporary times. Utilizing lectures, discussions, readings and projects, the focus will be on the modernization process with its concomitant political, social, economic, and intellectual changes. HIST 468 and HIST 568 are layered courses; students may not receive credit for both. Course will be offered on odd numbered years (Winter).
- HIST 473. Russia to 1881 (5).** The political, social, economic, and cultural development of Russia from ancient times to the assassination of Alexander II. HIST 473 and HIST 573 are layered courses; students may not receive credit for both.
- HIST 474. Russia Since 1881 (5).** The political, economic, social and cultural history of Russia and the Soviet Union since 1881. HIST 474 and HIST 574 are layered courses; students may not receive credit for both.
- HIST 476. History of Modern East Europe (Put on Reserve 9/16/16.) (5).** Poland, Czech, Slovak Republics, Austria, Hungary, Romania, Yugoslavia, Bulgaria, Greece, Albania, with special attention to multi-ethnicity, economic underdevelopment and modernization, political dependence, and nationalism. HIST 476 and HIST 576 are layered courses; students may not receive credit for

both. (Put on Reserve 9/16/16. Last taught in 2013. Will go inactive 8/24/19.)

**HIST 478. Russian Far East (5).**

Russian Far East history from 16th century Cossack exploration to 21st century democracy. Topics include the imperial "urge to the sea," the Trans-Siberian Railway, the Soviet gulag system, and Pacific Rim relations. HIST 478 and HIST 578 are cross-listed courses; student may not receive credit for both. Department reactivated for Fall 2016.

**HIST 481. Senior Thesis (4).** Analysis of the nature of history, of the way historians reason, and of the search for meaning in history. Students must earn a minimum grade of C as a major requirement. Course will be offered every year (Fall, Winter, Spring). Prerequisites: HIST 302 with a grade of C or higher and senior standing. CE - Culminating Experience

**HIST 483. Modern China (5).** The history of China in the 19th and 20th centuries, including the nature of China's response to the West and the Chinese Revolution of the 20th century. Emphasis on internal social and economic change. HIST 483 and HIST 583 are layered courses; students may not receive credit for both.

**HIST 488. Mexico in the Modern Era (5).** Analyzes the modern history of Mexico, from independence to the present day. HIST 488 and HIST 588 are layered courses; students may not receive credit for both.

**HIST 490. Cooperative Education (1-8).** An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student-learning plan, cooperating employer supervision, and faculty coordination. HIST 490 and HIST 590 are layered courses; students may not receive credit for both. Department consent. May be repeated for credit. Grade will either be S or U.

**HIST 496. Individual Study (1-6).**

**HIST 497. Honors Individual Study (1-6).** Open to students accepted into the departmental honors program. This course may be repeated once, but no more than an over-all total of 6 credits per quarter is permitted.

**HIST 498. Special Topics (1-6).**

**HIST 499. Seminar (1-5).** May be repeated if subject is different.

**Health and Physical Education Courses**

**HPE 298. Special Topics (1-6).** May be repeated if subject is different.

**HPE 299. Seminar (1-5).** May be repeated if subject is different.

**HPE 396. Individual Study (1-6).** May be repeated if subject is different.

**HPE 397. Honors (1-12).** Prerequisite: admission to department honors program.

**HPE 398. Special Topics (1-6).** May be repeated if subject is different.

**HPE 399. Seminar (1-5).** May be repeated if subject is different.

**HPE 443. Sex, Drugs and Going Pro: Issues in Professional Sports (3).** This course will provide students with an in-depth exploration of contemporary problems and scandals in professional sports so they can contemplate, assess and suggest methods for cultural change at the professional sports level. HPE 443 and HPE 543 are layered courses; students may not receive credit for both.

**HPE 444. The Promise and Pitfalls in Interscholastic Athletic Programs (3).** This course will provide students with an in-depth exploration of contemporary issues surrounding interscholastic athletics at the local, state and national levels. The student will contemplate and assess the critical issues in secondary school athletics and appraise possible solutions for specific case studies. HPE 444 and HPE 544 are layered courses; students may not receive credit for both.

**HPE 445. The Good, Bad and Ugly of Intercollegiate Sports (3).** This course will provide students with an in-depth exploration of current positive and negative topics surrounding intercollegiate athletics. The students will contemplate and assess critical issues through historical and contemporary case studies. HPE 445 and HPE 545 are layered courses; students may not receive credit for both.

**HPE 496. Individual Study (1-6).** May be repeated if subject is different.

**HPE 497. Honors (1-12).** Prerequisite: admission to department honors program.

**HPE 498. Special Topics (1-6).** May be repeated if subject is different.

**HPE 499. Seminar (1-5).** May be repeated if subject is different.

**Human Resource Management Courses**

**HRM 298. Special Topics (1-6).** May be repeated if subject is different.

**HRM 299. Seminar (1-5).** May be repeated if subject is different.

**HRM 381. Management of Human Resources (5).** Selection of personnel, methods of training and retraining workers, wage policy, utilization of human resources, job training, administration of labor contracts, and public relations. Course will be offered every year (Fall, Winter, Spring, Summer). K6 - Individual & Society

**HRM 396. Individual Study (1-6).** May be repeated if subject is different.

**HRM 397. Honors (1-12).** Prerequisite: admission to department honors program.

**HRM 398. Special Topics (1-6).** May be repeated if subject is different.

**HRM 399. Seminar (1-5).** May be repeated if subject is different.

**HRM 442. Training and Development (5).** Application of training and development concepts and techniques used in assessing training requirements, planning and budgeting training programs, developing and facilitating training, and evaluating results. Prerequisites: HRM 381 and admission to a College of Business major AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25 OR (HRM 381 and declaration of a Human Resource Management minor).

**HRM 445. Organizational Staffing (5).** Applied and conceptual analysis of strategic personnel planning, recruiting, selecting, negotiating, socializing, career developing, retaining, and transitioning. Prerequisites: HRM 381 and admission to a College of Business major AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25; OR (HRM 381 and declaration of a Human Resource Management minor).

**HRM 479. Employee Relations (5).** Statutory and case law governing labor relations. Contracts and negotiations. Impasse procedures. Arbitration cases and grievance procedures.

Contemporary issues and cases. Prerequisites: HRM 381 and admission to a College of Business major AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or

MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25; OR (HRM 381 and declaration of a Human Resource Management minor).

**HRM 486. Problems in Human Resource Management** (5). Analysis and research on selected topics involving contemporary issues in personnel management. This is the capstone course for the HRM specialization. Course will be offered every year (Fall, Winter, Spring). Prerequisites: HRM 381 AND two (2) approved elective courses from the Human Resource Management specialization AND admission to a College of Business major AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25.

**HRM 488. Compensation Policy and Administration** (5). Employee compensation policy and administration is studied on a broad perspective encompassing direct financial payments, employer benefits, and non-financial rewards. Prerequisites: HRM 381 AND admission to a college of business major AND completion of the college of business foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum grade of C- in each course and a minimum collegiate GPA of 2.25.

**HRM 490. Human Resources Management Internship** (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies focusing on human resources management related activities. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. By department permission. May be repeated up to 20 credits. Grade will either be S or U. Course will not have an established scheduling pattern. Prerequisite: 2.8 or higher CWU cumulative gpa.

**HRM 493. Human Resources Management Boot Camp** (1-6). Supervised field experience seminar focused on human resources management related organizations and processes. On-location industry

engagement. Education, training, and business skills application in industry setting. Grade will either be S or U. Permission of instructor. May be repeated up to 6 credits. Course will not have an established scheduling pattern.

**HRM 496. Individual Study** (1-6). May be repeated if subject is different.

**HRM 497. Honors** (1-12). Prerequisite: admission to department honors program.

**HRM 498. Special Topics** (1-6). May be repeated if subject is different.

**HRM 499. Seminar** (1-5). May be repeated if subject is different.

### Hospitality Tourism and Events Courses

**HTE 201. Introduction to Hospitality, Tourism, and Event Management** (4). This is an introduction to the foundational entities of hospitality, tourism and event operations. The course explores information on the nature, scope, and significance of these fields of study at the local, regional, and international levels. The course introduces management issues specific to HTE operations. Formerly RT/RTE 201, students may only receive credit for one.

**HTE 202. Food and Beverage Operations** (3). Introduction to food and beverage operations in a variety of service outlets. Students will earn state-mandated certifications for food and beverage establishments while learning career pathways, supply chains, cost controls, upselling, and front-of-house operations.

**HTE 230. Program and Event Budgeting** (2). Budget processes, terminology, and formats will be covered along with the preparation of basic budgets for events and programs. Formerly FSCG/RTE 230, a student may only receive credit for one. Course will be offered every year. Course will not have an established scheduling pattern.

**HTE 272. Lodging Operations I** (4). Examines the rooms division and front office functions critical to hotel operations. Includes the guest cycle, personnel supervision, sales techniques in the reservation process, and hotel organization and operation. Formerly RT/RTE 272, students may only receive credit for one.

**HTE 273. Airline Operations** (4). Examines the airline industry, its components and methods of operation; the interaction with other segments of the industry. Industry-specific coding and terminology, basic aviation principles, and aviation industry skill

sets will be the focus of the course, as well as airline legislation, risk management, airport supervision, and security. Formerly RT/RTE 473, a student may only receive credit for one.

**HTE 292. Practicum** (1-4). Forty on-the-job hours of practical experience per one credit hour earned. Four additional hours may be applied toward the hospitality tourism elective area. A minimum of one credit must be taken as a service-learning activity. May be repeated up to 12 credits.

**HTE 296. Individual Study** (1-6). May be repeated up to 10 credits. Permission of department.

**HTE 298. Special Topics** (1-6). May be repeated up to 10 credits.

**HTE 299. Seminar** (1-5). May be repeated up to 10 credits.

**HTE 303. Hospitality Leadership** (4). This course will communicate concepts that make up effective management leadership and management. Students will examine theoretical conceptualizations and established best practices in hospitality leadership (employee empowerment, setting expectations, benchmarking successes, globalization, and cross-cultural communication). Learning will focus on critical thinking, self-critique, roleplay, and negotiation of complex situations.

**HTE 309. Facility Planning, Maintenance and Safety** (4). Study of basics of site and facility development including laws and regulations, procedures, sustainable concepts, site analysis, populations, universal design, and utility of design. Formerly RT/RTE 309, a student may only receive credit for one.

**HTE 310. Customer Service Operations** (4). Introduction to food and beverage operations in a variety of service outlets. Students will earn state-mandated certifications for food and beverage establishments while learning career pathways, supply chains, cost controls, upselling, and front-of-house operations.

**HTE 313. Career Planning and Preparation** (3). Introduction to business environments specific to hospitality and tourism. The course will focus preparing students for an experiential workplace placement, including: job seeking skills; interviewing; networking; professional behavior; and crafting a social media presence.

**HTE 330. Sustainable Resources for Tourism** (3). The framework of sustainability is used to examine how values, policy, management, and

practices direct and affect the use of recreation and tourism areas that are both natural resource-based and part of the built environment. Formerly RT/RTE 330, students may not receive credit for both.

**HTE 331. Sustainable Events: Best Practices (3).** Students will explore contemporary issues, trends, and policies and practices that shape the event management field and how principles of sustainability affect planning, management and operations of special events. Course will be offered every year. Course will not have an established scheduling pattern. Formerly RTE 331, students may not receive credit for both. Prerequisite: HTE 374 or HTE 373D.

**HTE 337. Tour and Interpretive Program Development (3).** Methods, techniques, and skills used in the planning, development, and presentation of resource based interpretive programs and visitor tours. This course will include theoretical understanding of the interpretive process and practice of new skills. Formerly RT/RTE 337, students may only receive credit for one.

**HTE 351. Online and App Strategies for HTE (4).** Course will highlight the use of online media, Apps and other strategies to reach HTE customers and organizations. Formerly RTE 351, students may not receive credit for both.

**HTE 355. Sustainable Tourism (3).** Students will explore contemporary issues, trends, policies, and practices shaping the tourism field, and how principles of sustainable tourism are affecting tourism planning, management, and operations. Formerly RT/RTE 355, students may only receive credit for one.

**HTE 361. Hospitality Technology (3).** This course will focus on software being used in the hospitality industries. Student will use software utilized in the profession to schedule facilities, programs and staff, register participants and track usage and revenue. Formerly RT/RTE 361, students may only receive credit for one.

**HTE 371. Tourism Essentials (3).** Students will survey the global travel and tourism system, including consumer demand and motivations, tourism suppliers and intermediaries, modes of travel, visitor attractions, marketing and entrepreneurship, destinations, and impacts of tourism on people and communities. Formerly RT/RTE 371, students may only receive credit for one.

**HTE 373D. Convention and Meeting Management (5).** Students will be presented with the mechanics of planning and managing meetings and conventions of a business nature. Formerly RT/RTE 373D, students may only receive credit for one.

**HTE 373E. Resort Management (5).** Presentation of management topics applied to the hospitality industry. Formerly RT/RTE 373E, students may only receive credit for one.

**HTE 374. Festivals (5).** Students will learn the purposes, mechanics, and leadership skills required for planning and executing community festivals and special events of a social nature. Formerly RT/RTE 374, students may only receive credit for one.

**HTE 377. The Gaming and Casino Industry (3).** An overview of the casino industry including: traditional casinos, riverboats, historical perspective, legal, social, cultural and economic impacts, Native American gaming, regulation and control of gaming, and future trends in gaming industry. Formerly RT/RTE 377, students may only receive credit for one.

**HTE 379. Cruise Line Industry (3).** An overview of the cruise industry including: cruise lines, ships, history of cruising, human resource practices, marketing, design, terminology, and future trends. Formerly RT/RTE 379, students may only receive credit for one.

**HTE 393M. Leisure Service Agency Visitations: Community Centers (1-3).** Field visits, usually from two to three days in duration. Review of facilities, programs, and clientele with agency leader/supervisor/manager. May be repeated for credit under different subtitle. Formerly RT 393M, students may not receive credit for both.

**HTE 393N. Destination Marketing (4).** Tourism development through the process of destination marketing is studied in connection with the process of understanding a destination's development vision, while exploring the efforts of marketing, branding, tourism product development, communication strategies and evaluation tactics. Formerly RT/RTE 393N, a student may only receive credit for one.

**HTE 393Q. Leisure Service Agency Visitations: Transportation (1-3).** Field visits, usually from two to three days in duration. Review of facilities, programs, and clientele with agency leader/supervisor/manager. May be

repeated for credit under different subtitle. Formerly RT/RTE 393Q, students may not receive credit for both.

**HTE 396. Individual Study (1-6).** May be repeated if subject is different.

**HTE 398. Special Topics (1-6).** Formerly RT/RTE 398, students may only receive credit for one. May be repeated under a different topic up to 12 credits.

**HTE 399. Seminar (1-5).** May be repeated if subject is different.

**HTE 405. Hospitality Catering (3).** Basics of off-premise catering including menu planning, budgeting, logistics, and marketing. NUTR 405, HTE 405, and HTE 505 are equivalent courses; students may not receive credit for more than one. Formerly RT/RTE 405, students may only receive credit for one.

**HTE 419. Applied Research and Evaluation (3).** Basics of research design including problem identification, research and evaluation similarities and differences, sampling, survey development, methods and application, implementation, data analysis, and review of published research. Formerly FCS/FSCG/RTE 419, students may only receive credit for one. Course will be offered every year (Winter and Spring).

**HTE 420. Program Promotion, Sales and Advertising (5).** Provides students with skills through practical exercises, lectures, demonstrations, and examples to enable them to use marketing concepts and tools to develop effective campaigns. Formerly FCSG/RTE 420, students may only receive credit for one.

**HTE 430. Grants, Sponsorship, and Fundraising for HTE (5).** Students learn the art and science of grant writing, sponsorship, and fundraising within the HTE sectors. Students explore key concepts, best practices and industry standards surrounding each of the respective sector topics. Course will be offered every year. Course will not have an established scheduling pattern. Formerly RTE 430, students may not receive credit for both.

**HTE 443. Event Tourism (4).** Application of event management principles to destination tourism, with considerations for how the event tourism industry impacts, social, cultural and economic phenomenon. The study of event tourism explores how it impacts destination planning and marketing.

**HTE 452. Regional Wine Tourism (4).**

Wine tourism is an American growth industry. Unlike in Europe, support for wine tourism in the USA is regional. This course offers an academic and hands-on approach to regional wine tourism that will assist HTE and WINE graduates. HTE 452 and WINE 452 are cross-listed courses, students may not receive credit for both. Formerly RT/RTE 452, students may only receive credit for one.

**HTE 454. Wine Tourism Applications (4).**

Students conduct research on sectors of the wine tourism industry in Washington State such as wine trails, wine clubs, regional wine associations and wine festivals. The student conducts hands-on research that may be useful to these sectors. HTE 454 and WINE 454 are cross-listed; students may not receive credit for both. Formerly RT/RTE 454, students may only receive credit for one.

Prerequisite: HTE 452 or WINE 452.

**HTE 474. Lodging Operations II (3).**

Analysis of hotel performance and forecasting, with tools typically used in a lodging environment. Formerly RT/RTE 474, students may only receive credit for one.

**HTE 480. Tourism Administration**

**Capstone (5).** Contemporary problems and issues, basic applied research, organizational development, policy formulation, human resources, inventory, and program personnel evaluation processes. Formerly RT/RTE 480, students may only receive credit for one. Prerequisites: senior standing and admission to the HTE major.

**HTE 484. Hospitality Law, Negotiation, and Risk Management (5).**

Knowledge of the law as a way to sustain and develop a successful hospitality establishments, providing students with skills needed for negotiation, litigation avoidance, safety, security, risk management, and liability. Formerly RT/RTE 484, students may only receive credit for one.

**HTE 485. Events Production Capstone (5).**

This capstone course includes a study of contemporary issues within the field of event planning and coordination, basic applied evaluation, organizational development, policy formulation, human resources, inventory, and applied program and event planning. Formerly RT/RTE 485, students may only receive credit for one. Prerequisites: senior standing and a minimum of nine credits of upper

division HTE coursework or permission of instructor.

**HTE 488. Revenue Management (5).**

Best practices in revenue management including asset management and real estate purchases. Focus on application of formulas specific to asset management within hospitality industries, and mathematical computation skills needed for success in financial endeavors.

**HTE 490. Cooperative Education (1-12).**

An individualized, contracted field experience with business, industry, government, or social service agencies. A learning agreement is created by the student to identify and plan the directed and supervised study under the guidance of a tourism mentor. Forty hours required per credit. May be repeated up to 20 credits. Grade will either be S or U. Formerly RT/RTE 490, students may not receive credit for both. Prerequisites: admission to the hospitality, tourism and event management major or minor, a minimum GPA of 2.25 in the major, and permission of advisor.

**HTE 492. Senior Practicum (1-12).**

This course is an individual, contracted field experience with business, industry, government, or social service agencies. Student have a site supervisor under the guidance of a faculty mentor. May be repeated to 15 credits.

Prerequisites: admission to a hospitality, tourism and event management major or minor; a minimum GPA of 2.25, and/or permission of advisor.

**HTE 493. Field Experience (4).**

Students will travel to a major wine area OUTSIDE the Pacific Northwest, researching hotels, resorts, restaurants, wineries and distilleries. This course requires a literature review, methodical tastings, interviews with the area's hoteliers and marketing staff. Permission of department.

**HTE 496. Individual Study (1-6).**

Independent Study By Arrangement. May be repeated up to 12 credits.

**HTE 498. Special Topics (1-6).**

May be repeated for credit under a different subtitle up to 12 credits.

**HTE 499. Seminar (1-5).**

Students may sign up for multiple seminar topics for a maximum of 12 credits.

**Humanities Courses****HUM 101. Exploring Cultures in the Ancient World (5).**

An interdisciplinary exploration from literature, history, philosophy, and the arts of selected major ancient civilizations in Asia, Africa, Europe,

and/or the Americas from their beginnings through the 15th century. Course will be offered every year (Fall, Winter, Spring, Summer). AH-Literature and Humanities (W).

Prerequisites: ENG 101 with a grade of C- or higher. AH-Literature and Humanities (W). K5 - Humanities

**HUM 102. Exploring Cultures From 16th through 19th Centuries (5).**

An interdisciplinary exploration of selected literature, history, philosophy, and the arts in Asia, Africa, Europe, and the Americas from the 16th through the 19th centuries. Course will be offered every year (Fall, Winter, Spring, Summer). AH-Literature and Humanities (W). Prerequisites: ENG 101 with a grade of C- or higher. AH-Literature and Humanities (W). K5 - Humanities

**HUM 103. Exploring Cultures in Modern and Contemporary Societies (5).**

An interdisciplinary exploration of literature, history, philosophy, and the arts of selected world civilizations of the 20th and 21st centuries. Course will be offered every year (Fall, Winter, Spring, Summer). AH-Literature and Humanities (W). Prerequisites: ENG 101 with a grade of C- or higher. AH-Literature and Humanities (W). K5 - Humanities

**HUM 298. Special Topics (1-6).**

May be repeated if subject is different.

**HUM 299. Seminar (1-5).**

May be repeated if subject is different.

**HUM 396. Individual Study (1-6).**

May be repeated if subject is different.

**HUM 397. Honors (1-12).**

Prerequisite: admission to department honors program.

**HUM 398. Special Topics (1-6).**

May be repeated if subject is different.

**HUM 496. Individual Study (1-6).**

May be repeated if subject is different.

**HUM 497. Honors (1-12).**

Prerequisite: admission to department honors program.

**HUM 498. Special Topics (1-6).**

May be repeated if subject is different.

**HUM 499. Seminar (1-5).**

May be repeated if subject is different.

**Interdisciplinary Studies Courses****IDS 289. Introduction to the Major (1).**

Introduction to the interdisciplinary studies major, interdisciplinary studies degree proposal design and preparation. By permission. Grade will either be S or U.

**IDS 298. Special Topics (1-6).**

May be repeated if subject is different.

**IDS 299. Seminar (1-5).**

May be repeated if subject is different.



**IDS 305. Surviving to Thriving: An Interdisciplinary Approach to Developing Resiliency and Coping**

(3). Critical exploration of concepts, research, and techniques pertaining to resiliency and coping. Application of biopsychosocial and cultural perspectives. Students will utilize experiential exercises to understand ways to enhance optimism, decrease stressors, and improve well-being. Course will be offered every year (Winter, Summer).

**IDS 311. Don't Lie to Me:**

**Contemporary Profiling** (5). This course explores and examines the use of profiles is contemporary policing with a focus on violent crimes. The discussions and readings examine what criminal profiling is, what it accomplishes, and how it is utilized. Criminological theory and applicable research articles are used to examine the legitimacy of profiles and measures of deception. Prerequisite: PSY 101 or SOC 107.

**IDS 321. Body Image, Wellness and Popular Culture**

(5). This course focuses on body disturbances and how they affect wellness; including examination of how popular culture influences them. Various aspects, influences and assessments of body image will be used as the basis to develop an action plan to prevent and/or support individuals who experience them.

**IDS 323. Dangerous Women: Mad, Bad or Misunderstood** (5). Violent crimes are generally associated with men; however, more and more women are becoming dangerous criminals. This class examines different theories behind violent women. Material will include cases of real-life female criminals, as well as fictional representations in movies and television. Prerequisites: PSY 101 or SOC 107.

**IDS 343. Origins and Results of Food Technology: The Gluttonous Human**

(5). As food production technologies have become increasingly complex, humans are facing adverse consequences. This course explores the evolution of feeding strategies from Paleolithic until the present, including corporate farming, GMO, and diseases of novel environments. Course will be offered every year (Fall, Winter, Spring, Summer). K4 - Global Dynamics

**IDS 353. National Parks and Reserves (Put on reserve 9/16/17)** (5). This course focuses on the development of the National Parks, the Forest Services,

and other land and marine reserves in the United States, as well as policies effecting them. The course also focuses on international parks and preserves, and varied models of natural and cultural resource management. (Put on reserve 9/16/17. Will go inactive 8/24/2020.)

**IDS 354. Bedlam to Bellevue - On Being "Mad" in the US from 1960 to Present**

(3). An exploration of important developments in the treatment of mental health, focusing on the years between 1960 and today. Political decisions, advances in medication, changes in institutionalization, and individual experiences of mental illness are examined.

**IDS 357. Race, Drugs and Prohibition in the U.S.: What Makes Drug Use Criminal?**

(5). Marijuana, cocaine, coffee and sugar. Why are some drugs "good" and some "bad?" Explore the "Drug War," motivations for regulation, current dilemmas and social justice implications in the United States, from an interdisciplinary approach. Course will be offered every year (Fall, Winter, Spring, Summer). K6 - Individual & Society

**IDS 363. The Simpsons: Social Institutions and National Community**

(5). The television show, "The Simpsons", students will gain an understanding of the major themes and concepts that structure life for the members of the pluralistic American community.

**IDS 369. Living Voices of America: An Interdisciplinary Approach to Indigenous Women in the U.S.**

(5). This course will focus on Indigenous women in the United States from past to present day. There will be extensive coverage of Indigenous women's daily roles and lives, including socialization, colonization, and social service issues. The course will also focus on methods of decolonization. Prerequisites: ANTH 130 or PSY 101 or SOC 107 or SOC 301 or WGS 201 or permission of instructor.

**IDS 373. The Purpose of the United States**

(5). Is the United States just another country, acting in its own national interest? Or does the United States have some long term global purpose? This course analyzes patterns in the American experience to answer these questions.

**IDS 389. Academic and Career Exploration**

(3). This course leads IDS-social sciences students in the development of a career/graduate school plan. Students will investigate

the work world and/or graduate schools in terms of their academic and personal goals. Students will modify their IDS 289 program. Prerequisite: IDS 289 and junior status or above.

**IDS 396. Individual Study** (1-6). May be repeated if subject is different.

**IDS 397. Honors** (1-12). Prerequisite: admission to department honors program.

**IDS 398. Special Topics** (1-6).

**IDS 399. Seminar** (1-5). May be repeated if subject is different.

**IDS 405. Essentials of Project Funding in the Social Sciences**

(5). Students enrolled in this course will be introduced to essentials of project funding specific to the social sciences disciplines. Course topics include defining the purpose and identifying the need for funding, completing a needs assessment, and identifying funding resources. Students will be required to submit a funding proposal. Prerequisite: B or higher in Academic Writing II.

**IDS 489. Senior Portfolio Project**

(1). End-of-program assessment; preparation of comprehensive degree report and/or descriptive portfolio of project. Students must earn at least a C grade to pass this course. Students will enroll in IDS 489 no earlier than 2 quarters following successful completion of IDS 289. Instructor permission. Prerequisites: IDS 289, student will have completed a minimum of 165 credits, and admission to the Interdisciplinary Studies: Social Sciences major.

**IDS 490. Cooperative Education**

(1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. By permission. May be repeated for credit. Grade will either be S or U.

**IDS 496. Individual Study** (1-6). May be repeated if subject is different.

**IDS 497. Honors** (1-12). Prerequisite: admission to department honors program.

**IDS 498. Special Topics** (1-6).

**IDS 499. Seminar** (1-5). May be repeated if subject is different.

**Integrated Energy Studies Courses**

**IEM 103. Introduction to Energy and Science Inquiry**

(5). Complex global issues of regional energy and energy management impacts today's global society and is best approached by learning and applying knowledge and

skills of scientific investigation through basic life, physical, and earth sciences. Course will be offered every year

(Fall). K7 - Physical & Natural World

**IEM 198. Special Topics** (1-6).

**IEM 290. Cooperative Education** (1-10). A pre-professional apprenticeship. An individualized field experience with energy companies and relevant governmental and non-governmental organizations to develop basic and advanced skills in energy management. The course involves a student learning plan, cooperating employer supervision, and faculty coordination. Prerequisite: by permission of director of the institute for integrated energy studies.

**IEM 298. Special Topics** (1-6). May be repeated if subject is different.

**IEM 299. Seminar** (1-5). May be repeated if subject is different.

**IEM 301. Energy Management** (5). Principles and methods of energy management in residential, commercial and industrial settings, history of energy production; basics of energy supply and uses; energy conservation and efficiency in various settings; environmental, political and economic implications.

**IEM 302. Energy, Environment, and Climate Change** (4). The course examines the physical principles behind climate change science and how they relate to energy and resource use on our planet. Emphasis placed on examining how energy decisions impact past, present, and future climates. Course will be offered every year (Winter). K8 - Science & Technology

**IEM 310. Inquiry Science in Energy Management** (5). Interdisciplinary investigation of applied life, physical, and earth science concepts applicable to secondary school classrooms using integrated contexts. Applied inquiry processes are used to increase student knowledge, skills, and dispositions. Prerequisite: ECON 130 or MATH 130 or MATH 153 or MATH 154 or MATH 170 or MATH 172.

**IEM 330. Geopolitics of Fossil Fuels** (5). Critical analysis of the geopolitical characteristics of fossil fuels. Course draws upon policy, historical data, production and consumption patterns, and political processes to understand the relationship between fossil fuels and geopolitical processes around the world. Course will be offered every year (Spring). K4 - Global Dynamics

**IEM 396. Individual Study** (1-6). May be repeated if subject is different.

**IEM 397. Honors** (1-12). Prerequisite: admission to department honors program.

**IEM 398. Special Topics** (1-6).

**IEM 399. Seminar** (1-5).

**IEM 489. Integrated Energy Management Capstone** (2). Capstone course designed to assess student's mastering of fundamental knowledge of energy management through a submission of a portfolio of work collected throughout the program. Exploration of future opportunities and exit interview with program director. Grade will be S or U. Prerequisite: admitted to integrated energy management major with senior standing.

**IEM 490. Cooperative Education** (1-12). A pre-professional apprenticeship. An individualized field experience with energy companies and relevant governmental and non-governmental organizations to develop basic and advanced skills in energy management. The course involves a student learning plan, cooperating employer supervision, and faculty coordination. Prerequisite: by permission of director of the institute for integrated energy studies.

**IEM 496. Individual Study** (1-6).

**IEM 497. Honors** (1-12). Prerequisite: admission to department honors program.

**IEM 498. Special Topics** (1-6).

**IEM 499. Seminar** (1-5). May be repeated if subject is different.

#### International Courses

**INTL 110. Agriculture** (1-12). Offered only in university-approved, study-abroad/exchange programs. Courses may be offered under different titles. May be repeated for credit under different subtitle.

**INTL 115. Business or Management** (1-12). Offered only in university-approved, study-abroad/exchange programs. Courses may be offered under different titles. May be repeated for credit under different subtitle.

**INTL 120. Education** (1-12). Offered only in university-approved, study-abroad/exchange programs. Courses may be offered under different titles. May be repeated for credit under different subtitle.

**INTL 125. Engineering** (1-12). Offered only in university-approved, study-abroad/exchange programs. Courses may be offered under different titles. May be repeated for credit under different subtitle.

**INTL 130. Fine or Applied Arts** (1-12). Offered only in university-approved,

study-abroad/exchange programs. Courses may be offered under different titles. May be repeated for credit under different subtitle.

**INTL 135. Foreign Languages** (1-12).

Offered only in university-approved, study-abroad/exchange programs. Courses may be offered under different titles. May be repeated for credit under different subtitle.

**INTL 140. Health Sciences** (1-12). May be repeated for credit under different subtitle. Offered only in university-approved, study-abroad/exchange programs. Courses may be offered under different subtitle.

**INTL 145. Humanities** (1-12). Offered only in university-approved, study-abroad/exchange programs. Courses may be offered under different titles. May be repeated for credit under different subtitle.

**INTL 150. Law** (1-12). Offered only in university-approved, study-abroad/exchange programs. Courses may be offered under different titles. May be repeated for credit under different subtitle.

**INTL 155. Math or Computer Sciences** (1-12). Offered only in university-approved, study-abroad/exchange programs. Courses may be offered under different titles. May be repeated for credit under different subtitle.

**INTL 160. Physical or Life Sciences** (1-12). Offered only in university-approved, study-abroad/exchange programs. Courses may be offered under different titles. May be repeated for credit under different subtitle.

**INTL 165. Social Sciences** (1-12). Offered only in university-approved, study-abroad/exchange programs. Courses may be offered under different titles. May be repeated for credit under different subtitle.

**INTL 198. Special Topics** (1-6).

**INTL 210. Agriculture** (1-12). Offered only in university-approved, study-abroad/exchange programs. Courses may be offered under different titles. May be repeated for credit under different subtitle.

**INTL 215. Business or Management** (1-12). Offered only in university-approved, study-abroad/exchange programs. Courses may be offered under different titles. May be repeated for credit under different subtitle.

**INTL 220. Education** (1-12). Offered only in university-approved, study-abroad/exchange programs. May be repeated for credit under different subtitle.

**INTL 225. Engineering** (1-12). Offered only in university-approved, study-

abroad/exchange programs. May be repeated for credit under different subtitle.

**INTL 230. Fine or Applied Arts (1-12).** Offered only in university-approved, study-abroad/exchange programs. May be repeated for credit under different subtitle.

**INTL 235. Foreign Languages (1-12).** May be repeated for credit under different subtitle. Offered only in university-approved, study-abroad/exchange programs. Courses may be offered under different subtitle.

**INTL 240. Health Sciences (1-12).** Offered only in university-approved, study-abroad/exchange programs. May be repeated for credit under different subtitle.

**INTL 245. Humanities (1-12).** May be repeated for credit under different subtitle. Offered only in university-approved, study-abroad/exchange programs. Courses may be offered under different subtitle.

**INTL 250. Law (1-12).** Offered only in university-approved, study-abroad/exchange programs. May be repeated for credit under different subtitle.

**INTL 255. Math or Computer Sciences (1-12).** Offered only in university-approved, study-abroad/exchange programs. May be repeated for credit under different subtitle.

**INTL 260. Physical or Life Sciences (1-12).** Offered only in university-approved, study-abroad/exchange programs. May be repeated for credit under different subtitle.

**INTL 265. Social Sciences (1-12).** Offered only in university-approved, study-abroad/exchange programs. May be repeated for credit under different subtitle.

**INTL 290. Cooperative Education (1-5).** May be repeated for credit under different subtitle. Grade will either be S or U. Internship credit offered only in university-approved, study-abroad/exchange programs. Courses may be offered under different subtitle.

**INTL 298. Special Topics (1-6).**

**INTL 299. Seminar (1-5).** May be repeated if subject is different.

**INTL 310. Agriculture (1-12).** Offered only in university-approved, study-abroad/exchange programs. May be repeated for credit under different subtitle.

**INTL 315. Business or Management (1-12).** May be repeated for credit under different subtitle. Offered only in university-approved, study-abroad/exchange programs. Courses may be offered under different subtitle.

**INTL 320. Education (1-12).** May be repeated for credit under different subtitle. Offered only in university-approved, study-abroad/exchange programs. Courses may be offered under different subtitle.

**INTL 330. Fine or Applied Arts (1-12).** Offered only in university-approved, study-abroad/exchange programs. May be repeated for credit under different subtitle.

**INTL 335. Foreign Languages (1-12).** Offered only in university-approved, study-abroad/exchange programs. May be repeated for credit under different subtitle.

**INTL 340. Health Sciences (1-12).** Offered only in university-approved, study-abroad/exchange programs. May be repeated for credit under different subtitle.

**INTL 345. Humanities (1-12).** Offered only in university-approved, study-abroad/exchange programs. May be repeated for credit under different subtitle.

**INTL 350. Law (1-12).** Offered only in university-approved, study-abroad/exchange programs. May be repeated for credit under different subtitle.

**INTL 355. Math or Computer Sciences (1-12).** Offered only in university-approved, study-abroad/exchange programs. May be repeated for credit under different subtitle.

**INTL 360. Physical or Life Sciences (1-12).** Offered only in university-approved, study-abroad/exchange programs. May be repeated for credit under different subtitle.

**INTL 365. Social Sciences (1-12).** Offered only in university-approved, study-abroad/exchange programs. May be repeated for credit under different subtitle.

**INTL 396. Individual Study (1-6).** May be repeated if subject is different.

**INTL 397. Honors (1-12).** Prerequisite: admission to department honors program.

**INTL 398. Special Topics (1-6).**

**INTL 399. Seminar (1-5).** May be repeated if subject is different.

**INTL 410. Agriculture (1-12).** Offered only in university-approved, study-abroad/exchange programs. May be repeated for credit under different subtitle.

**INTL 415. Business or Management (1-12).** May be repeated for credit under different subtitle. Offered only in university-approved, study-abroad/exchange programs. Courses may be offered under different subtitle.

**INTL 420. Education (1-12).** Offered only in university-approved, study-abroad/exchange programs. May be repeated for credit under different subtitle.

**INTL 421. Student Teaching Abroad (16).** Course is available for overseas student teaching placements through an approved CWU program. Course may substitute for CWU student teaching requirement with prior permission of director of field experiences only. Department consent. Grade will either be S or U.

**INTL 425. Engineering (1-12).** May be repeated for credit under different subtitle. Offered only in university-approved, study-abroad/exchange programs. Courses may be offered under different subtitle.

**INTL 430. Fine or Applied Arts (1-12).** May be repeated for credit under different subtitle. Offered only in university-approved, study-abroad/exchange programs. Courses may be offered under different subtitle.

**INTL 435. Foreign Languages (1-12).** May be repeated for credit under different subtitle. Offered only in university-approved, study-abroad/exchange programs. Courses may be offered under different subtitle.

**INTL 440. Health Sciences (1-12).** Offered only in university-approved, study-abroad/exchange programs. May be repeated for credit under different subtitle.

**INTL 445. Humanities (1-12).** May be repeated for credit under different subtitle. Offered only in university-approved, study-abroad/exchange programs. Courses may be offered under different subtitle.

**INTL 450. Law (1-12).** May be repeated for credit under different subtitle. Offered only in university-approved, study-abroad/exchange programs. Courses may be offered under different subtitle.

**INTL 455. Math or Computer Sciences (1-12).** Offered only in university-approved, study-abroad/exchange programs. May be repeated for credit under different subtitle.

**INTL 460. Physical or Life Sciences (1-12).** Offered only in university-approved, study-abroad/exchange programs. May be repeated for credit under different subtitle.

**INTL 465. Social Sciences (1-12).** Offered only in university-approved, study-abroad/exchange programs. May be repeated for credit under different subtitle.

**INTL 490. Cooperative Education (1-12).** Internship credit offered only in

university-approved, study-abroad/exchange programs. Courses may be offered under different titles. May be repeated for credit under different subtitle. Grade will either be S or U.

**INTL 496. Individual Study** (1-6). May be repeated if subject is different.

**INTL 497. Honors** (1-12). Prerequisite: admission to department honors program.

**INTL 498. Special Topics** (1-6).

**INTL 499. Seminar** (1-5). May be repeated if subject is different.

#### Individual Studies Courses

**IS 200. Introduction to Individual Studies** (1). This course provides an introduction to the individual studies major. Students will learn the parameters for completing a individual studies degree and will develop their learning goals and course of study under the guidance of a faculty advisor. By permission. Grade will be S or U.

**IS 298. Special Topics** (1-6).

**IS 396. Individual Study** (1-6). May be repeated if subject is different.

**IS 397. Honors** (1-12). Prerequisite: admission to department honors program.

**IS 398. Special Topics** (1-6). May be repeated if subject is different.

**IS 399. Seminar** (1-5). May be repeated if subject is different.

**IS 487. End-of-Program Assessment** (1). This course will assist students in preparing their goal attainment portfolio. The final portfolio will be evaluated. Grade will either be S or U. Prerequisite: IS 200 and admission to the individual studies major.

**IS 496. Individual Study** (1-6).

**IS 497. Honors** (1-12). Prerequisite: admission to department honors program.

**IS 498. Special Topics** (1-6).

**IS 499. Seminar** (1-5). May be repeated if subject is different.

**IS 496. Individual Study** (1-6).

**IS 497. Honors** (1-12). Prerequisite: admission to department honors program.

**IS 498. Special Topics** (1-6).

**IS 499. Seminar** (1-5). May be repeated if subject is different.

**IS 496. Individual Study** (1-6).

#### Information Technology Courses

**IT 101. Computer Applications** (3).

Basic skills in Windows, word processing, spreadsheets, databases, and presentations. Basic Skills 6 - Computer Fundamentals. Basic Skills 6 - Computer Fundamentals.

**IT 105. Protecting Your Online Identity** (4). This course will expose students to the potential threats being thrust upon them daily by simply using the Internet and how to neutralize or greatly reduce these risks. Course will be offered every year (Fall, Winter, Spring, Summer). K8 - Science & Technology

**IT 101. Computer Applications** (3). Basic skills in Windows, word processing, spreadsheets, databases, and presentations. Basic Skills 6 - Computer Fundamentals. Basic Skills 6 - Computer Fundamentals.

**IT 105. Protecting Your Online Identity** (4). This course will expose students to the potential threats being thrust upon them daily by simply using the Internet and how to neutralize or greatly reduce these risks. Course will be offered every year (Fall, Winter, Spring, Summer). K8 - Science & Technology

**IT 111. Your Digital Footprint and the Web** (4). Examines impact of online activities on personal, academic, and professional lives, plus the global impact of technology and our interactions with that technology. Maintain and leverage digital footprints, critically evaluate online content, and cultivate e-professionalism. Course will be offered every year (Fall, Winter, Spring, Summer). K8 - Science & Technology

**IT 165. Seeing Through the Data** (4). This class examines the influence of big data on social media, the internet, and society. Students will acquire data sets, analyze them using basic statistical tools, and be able to present data-driven, validated results. Prerequisite: students must achieve an appropriate test score or complete the required prerequisite course/s with a C or higher. FYE3 - Quantitative Reasoning

**IT 202. Change Ready: Technology Skills for Civic and Community Leaders** (4). Learn to maximize software applications and collaborative tools to support community and civic projects. Emphasis on using technology to facilitate project design, organization, communication, presentation, and building stakeholder support. K8 - Science & Technology

**IT 228. New Innovations in IT** (2). Exploring information technology principles, practices, and applications in contemporary society. Formerly IT 388, students may not receive credit for both.

**IT 238. Introduction to Cyberwarfare** (4). This course explores the threats to national security posed by the use of cyberattacks by nation-states and terrorist groups against information and communication systems. Course will be offered every year (Fall, Winter, Spring, and Summer).

**IT 248. Web Fundamentals** (4). Development of web pages and internet skills for business, education, and training environments.

**IT 258. Spreadsheet Applications** (3). Developing spreadsheets for business and workplace environments. Not intended for ITAM majors. Formerly ADMG 358 and IT 358, students may not receive credit for both. Prerequisites: CS 101 or IT 101 or IT 202.

**IT 260. Integrated Information Technology Application Projects** (4). Developing word processing, spreadsheets, database, and presentation skills to create integrated projects for business and workplace environments. Prerequisites: CS 101 or IT 101 or IT 202.

**IT 268. Database Applications (Put on reserve as of 9/16/15.)** (3). Develop databases for business and workplace environments. Not intended for ITAM majors. Put on reserve as of 9/16/15. Will go inactive 8/24/18. Prerequisites: IT 101 or CS 101.

**IT 288. Business Presentation Applications** (2). Develop multimedia graphic presentations for business and workplace environments. Course will be offered every year. Course will not have an established scheduling pattern.

**IT 298. Special Topics** (1-6).

**IT 299. Seminar** (1-5). May be repeated if subject is different.

**IT 301. Information Technology Security, Privacy, and Ethics** (4). Examination of information technology security and privacy issues in the context of law and ethics. Prerequisite: junior standing or above.

**IT 312. Advanced Application of Web Tools** (4). Advance website construction and design using contemporary tools and techniques. Prerequisite: IT 248.

**IT 322. Innovative Design in Web** (4). Design and implementation of the information technology infrastructure needed to operate a business Web site. Prerequisite: IT 312.

**IT 336. Digital Forensics** (4). Students will learn skills in digital forensics including how to analyze a device, retrieve "deleted" information, and methods of digital concealment. Prerequisite: IT 238.

**IT 338. Cybercrime** (4). Investigate vulnerability of computer networks, systems, and computer applications. Learn methods of mitigation and/or prevention of cybercrime. Attributes of cybercrime such as virus attacks, identity theft, electronic funds transfers, and phishing will be examined. Prerequisite: IT 238.

**IT 351. Computer Networks** (4). Computer network communications including LAN and WAN Topologies, Protocols and Services, such as TCP/IP, and Ethernet, within the context of the OSI Reference Model. Formerly IT 452, students may not receive credit for both. Prerequisite: junior standing or above.

**IT 359. Advanced Spreadsheet Applications** (4). Advanced spreadsheets for business applications such as design of multiple sheet workbooks and templates, advanced functions and formulas, enhanced formats, lists, and pivot tables. Prerequisites: IT 258 or IT 260.

**IT 351. Computer Networks** (4). Computer network communications including LAN and WAN Topologies, Protocols and Services, such as TCP/IP, and Ethernet, within the context of the OSI Reference Model. Formerly IT 452, students may not receive credit for both. Prerequisite: junior standing or above.

**IT 359. Advanced Spreadsheet Applications** (4). Advanced spreadsheets for business applications such as design of multiple sheet workbooks and templates, advanced functions and formulas, enhanced formats, lists, and pivot tables. Prerequisites: IT 258 or IT 260.

- IT 362. Wireless Communications (4).** Broad introduction to wireless communications. Provides students with an exposure to a variety of technologies, standards, and concepts. Prerequisite: junior standing or above.
- IT 363. Data Mining for IT Managers (4).** Students will learn to extract data, apply learning methods, and prepare data for further analysis. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisite: IT 359.
- IT 365. Data Driven Innovation (4).** Introduction to data analysis techniques that enables real-time decision making in IT organizations. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisite: IT 363.
- IT 370. The Command Line Interface and Cybersecurity (4).** This course provides an introduction to the cybersecurity script programming paradigm, and introduces and compares a range of security scripting languages used for Linux and Web-based applications. Prerequisite: IT 238.
- IT 376. Project Management and Information Technology (3).** IT project management with a focus on facilitating project management areas; risk management, procurement management, HR management, and communication management. Microsoft Project will be used. Prerequisite: students must be junior standing or above.
- IT 381. Web Apps for M-Commerce (4).** This course will introduce concepts in developing business web apps for use in m-commerce. Web apps review and development using web app authoring/application software for various operating systems. Prerequisite: IT 322.
- IT 396. Individual Study (1-6).** May be repeated if subject is different.
- IT 397. Honors (1-12).** Prerequisite: admission to department honors program.
- IT 398. Special Topics (1-6).**
- IT 399. Seminar (1-5).** May be repeated if subject is different.
- IT 425. Reporting Data and Analytics (4).** Skills and applications in pre-processing and preparing as well as presenting and reporting data for further analysis. Prerequisite: IT 365.
- IT 426. Application of Web Languages (4).** Web languages for the non-computer science student. Prerequisite: IT 322.
- IT 428. Web Applications (Put on reserve 9/16/17) (4).** Web application design using Web software such as Dreamweaver, Fireworks, and Flash. (Put on reserve 9/16/17. Will go inactive 8/24/2020.) Prerequisite: IT 322.
- IT 436. Cyberattack/Defense (4).** Examines the techniques and technologies for penetration of networks, detection of attacks, and the prevention of attacks. This course addresses the techniques, technologies, and methodologies used by cyberintruders. Prerequisite: IT 238.
- IT 437. Mobile and Cloud Forensics (4).** Students will learn skills in mobile and cloud forensics including how to analyze a mobile device, retrieve "deleted" information, recover information from the cloud environment and methods of digital concealment. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisite: IT 336.
- IT 438. IT Risk Management (4).** Explores Networking Security from the perspective of risk management to develop strategies to mitigate and manage risks. Focuses on assessment strategies for effective mitigation measures and risk management practices in terms of cybersecurity. Prerequisite: IT 238.
- IT 456. Advanced Computer Network Management (4).** Students will analyze network requirements, design network infrastructures, and install, configure and maintain routing and switching equipment. Prerequisite: junior standing or above.
- IT 459. Workstation Administration (4).** Implementation, administration, and troubleshooting workstations as a desktop operating system in any network environment. Prerequisite: junior standing or above.
- IT 461. Systems Analysis (4).** Feasibility studies of systems, cost analysis, budgets, and tools of systems analysis. Prerequisite: senior standing.
- IT 463. Computer Network Management (4).** Develop and improve network administration and management skills within a network server environment. Prerequisite: junior standing or above.
- IT 464. Directory Services (Put on reserve 9/16/18) (4).** Students will plan, implement, and maintain directory service features including forests, sites, domains, and organizational units to meet network accessibility, performance, and security goals. (Put on reserve 9/16/18, will go inactive 8/24/21) Prerequisite: IT 463.
- IT 465. Messaging Service (Put on Reserve 9/16/16.) (4).** Provides students with the knowledge and skills needed to install and support a reliable, secure e-mail messaging infrastructure in a medium-to large-sized (250 to 5,000 users) corporate environment. (Put on Reserve 9/16/16. Last taught in 2013. Will go inactive 8/24/19.) Prerequisite: IT 463.
- IT 466. Open Source Server Management (4).** Open Source Server Management covers the concepts required for Linux/UNIX server system administration and common networking services configuration, operation, and management. Prerequisite: IT 459.
- IT 467. Network Security (4).** Analysis and design of computer network security in the business environment. Prerequisite: IT 463.
- IT 468. Projects in Database (4).** Techniques in database design and management. Prerequisite: IT 260.
- IT 469. Enterprise Database Systems: SQL (4).** Students will learn to write SQL statements, basic database administration, and report writing skills. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisite: IT 468.
- IT 470. Database and the Web Capstone (4).** Provides a culminating experience for students in the Web and Database specialization; giving the students an opportunity to use knowledge from their specialization courses to develop a data-driven website, to include the associated database. Course will be offered every year (Spring). Corequisite: IT 426. Prerequisite: IT 468. CE - Culminating Experience
- IT 481. Quality Verification and Validation (4).** System quality improvement through reviews, testing, and quality management. Prerequisite: IT 461.
- IT 482. Cybersecurity Capstone (4).** This course is to provide a culminating experience for students in the cybersecurity specializations. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: IT 336 and IT 338 and IT 436 and IT 438. CE - Culminating Experience
- IT 483. Applied Predictive Analytics for IT Managers (4).** Students will utilize the skills gained in the previous data and analytics courses for practical application to real-world IT problems. Course will be offered every year. Course will not have an established scheduling pattern. Pre or co-requisites: IT 425 and IT 469.

**IT 486. Critical Issues in Information Technology** (4). This investigative study course provides a culminating opportunity for graduating IT seniors to adopt a societal perspective, collaborating to analyze key IT issues of today and tomorrow, and to publish the solutions online. Prerequisites: IT 301 and senior standing.

**IT 487. Networking Capstone** (4). This course will provide a culminating experience for students in the Networking specialization. This project-based course will provide the students the opportunity to use knowledge from their specialization courses to build a fully-functional, heterogeneous network. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: IT 362 and IT 466 and IT 467.

**IT 490. Cooperative Education** (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student-learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. Prerequisite: RMT 379.

**IT 491. Workshop** (1-6).

**IT 496. Individual Study** (1-6). May be repeated if subject is different.

**IT 497. Honors** (1-12). Prerequisite: admission to department honors program.

**IT 498. Special Topics** (1-6).

**IT 499. Seminar** (1-5).

#### Japanese Courses

**JAPN 151. First-year Japanese** (5). Conversational approach with intensive oral-aural drill. Foundation in basic structural principles of the language. Courses must be taken in sequence.

**JAPN 152. First-year Japanese** (5). Conversational approach with intensive oral-aural drill. Foundation in basic structural principles of the language. Courses must be taken in sequence. Prerequisite: JAPN 151.

**JAPN 153. First-year Japanese** (5). Conversational approach with intensive oral-aural drill. Foundation in basic structural principles of the language. Courses must be taken in sequence. Prerequisite: JAPN 152.

**JAPN 251. Second-year Japanese** (5). Graduated readings in modern Japanese writings with discussion conducted in Japanese. Courses must be taken in sequence.

**JAPN 252. Second-year Japanese** (5). Graduated readings in modern Japanese

writings with discussion conducted in Japanese. Courses must be taken in sequence. Prerequisite: JAPN 251.

**JAPN 253. Second-year Japanese** (5). Graduated readings in modern Japanese writings with discussion conducted in Japanese. Courses must be taken in sequence. Prerequisite: JAPN 252.

**JAPN 298. Special Topics** (1-6).

**JAPN 299. Seminar** (1-5). May be repeated if subject is different.

**JAPN 311. Manga and Anime:**

**Japanese Visual Culture** (5). This course is an introduction to Japanese pop-art forms, like manga, anime, and graphic novels. Instruction is in English, and the course is open to students of all disciplines. Course will not have an established scheduling pattern.

**JAPN 361. Composition, Grammar and Conversation I** (5). This is the first in a three part series of intermediate level Japanese composition, grammar and conversation. Course must be taken in sequence. Prerequisite: JAPN 253. Declared Japanese majors and minors only.

**JAPN 362. Composition, Grammar and Conversation II** (5). This is the second in a three-part series of intermediate level Japanese composition, grammar and conversation. Courses must be taken in sequence. Prerequisite: JAPN 361. Declared Japanese majors and minors only.

**JAPN 363. Composition, Grammar and Conversation III** (5). This is the third in a three-part series of intermediate level Japanese composition, grammar and conversation. Courses must be taken in sequence. Prerequisite: JAPN 362. Declared Japanese majors and minors only.

**JAPN 396. Individual Study** (1-6). May be repeated if subject is different.

**JAPN 397. Honors** (1-12). Prerequisite: admission to department honors program.

**JAPN 398. Special Topics** (1-6).

**JAPN 399. Seminar** (1-5). May be repeated if subject is different.

**JAPN 442. Translation and Interpretation** (5). Translation into English of Japanese textual material drawn from a wide range of sources. Course will be offered on even numbered years (Spring). Prerequisite: JAPN 363.

**JAPN 462. Japanese Cinema** (5). An examination of the history, aesthetic achievements, major directors and themes, and cultural explorations of

Japanese cinema. Includes close look at Japan's leading auteur directors. Course will be offered on even numbered years (Spring).

**JAPN 496. Individual Study** (1-6).

**JAPN 497. Honors** (1-12). Prerequisite: admission to department honors program.

**JAPN 498. Special Topics** (1-6).

**JAPN 499. Seminar** (1-5). May be repeated if subject is different.

#### Korean Courses

**KRN 151. Elementary Korean I** (5). Develop Novice-Low proficiency on the ACTFL scale in listening, speaking, reading, and writing basic Korean with attention to the cultural context of everyday life in contemporary Korean society.

**KRN 152. Elementary Korean II** (5). Develop Novice-Mid proficiency on the ACTFL scale in listening, speaking, reading, and writing basic Korean with attention to the cultural context of everyday life in contemporary Korean society. Prerequisite: KRN 151 or equivalent.

**KRN 153. Elementary Korean III** (5). Develop Novice-High proficiency on the ACTFL scale in listening, speaking, reading, and writing basic Korean with attention to the cultural context of everyday life in contemporary Korean society. Prerequisite: KRN 152 or equivalent.

#### Law and Justice Courses

**LAJ 102. Introduction to Law and Justice** (5). This course will focus on the role of law in society and will examine both the criminal and civil law system, as well as, the function of law in social change and social control. Course will be offered every year (Fall, Winter, Spring). SB-Perspectives on Cultures and Experiences of U.S. SB-Perspectives on Cultures and Experiences of U.S. K2 - Community, Culture, & Citizenship

**LAJ 202. Policing in a Contemporary Society** (5). An integrated academic foundation in the impact of police interaction with the functions of policing between individuals and society as they approach the problem of crime. Real-world issues will be analyzed. Course will not have an established scheduling pattern.

**LAJ 203. Wildlife Law Enforcement** (5). An intergrated study of natural resource management, through law enforcement and conservation. Focuses on the impact on wildlife sustainability through water and range management,

regulations, and enforcement to protect our natural resources for future generations. Course will not have an established scheduling pattern (Spring).

**LAJ 210. Latinos, Law and Justice (4).**

This course explores legal issues surrounding Latinos in contemporary society within wider issues of justice. It will examine experiences of Latinos within the legal system, including Latino contributions to law. K2 - Community, Culture, & Citizenship

**LAJ 215. Law in American History (4).**

This course explores the role of law in American society from 1789 to 1939, including connections between law and violence, economics, politics, culture, gender and ethnicity.

**LAJ 216. Race, Gender and Justice (4).**

This course examines the role of race/ethnicity and gender in law and public policy with an emphasis on criminal justice. Course will be offered every year (Spring). K6 - Individual & Society

**LAJ 298. Special Topics (1-6).** May be repeated if subject is different.

**LAJ 299. Seminar (1-5).** May be repeated if subject is different.

**LAJ 300. Administration of Criminal Justice (4).** The sources of police power and authority in a democratic society, the internal organization and administration of federal, state and local agencies, their interaction with each other, and with the communities they serve.

**LAJ 302. Criminal Procedure (4).** A review of guidelines for police arrest, search, interrogation, and identification procedures based upon rules of criminal procedure derived from the U.S. Constitution. LAJ 300 is recommended. Prerequisite: admission to the major or minor.

**LAJ 303. Legal Research (4).**

Techniques of legal research; the case system, statutes, court decisions, Shepardizing. LAJ 300 is recommended. Prerequisite: admission to the major or minor.

**LAJ 310. Trial Practice and Strategy (4).**

Students will learn the structure and pace of legal trials, along with introductory trial techniques and strategies. The course provides opportunities to practice concepts and observe professional trials.

**LAJ 311. Family Law (4).** Marriage, divorce, state regulation, custody, and care and supervision of children. LAJ 300 is recommended.

**LAJ 313. Introduction to Criminal Law (4).**

Scope and nature of law; classification of offenses; act and intent; capacity to commit crime and

defenses. Elements of major criminal statutes. LAJ 300 is recommended.

**LAJ 316. Introduction to Paralegal Studies (4).**

This course provides an introduction to paralegal studies. It provides analysis of the role of the paralegal and the tasks involved in being a paralegal including interviewing clients and witnesses, legal research, writing, legal writing, and attending trials. LAJ 300 is recommended. Prerequisite: admission to the major or minor.

**LAJ 317. Introduction to Civil Practice (4).**

This course is designed to provide students with a comprehensive overview of civil litigation from investigation through discovery, trial, and appeal. LAJ 300 is recommended. Prerequisite: admission to the major or minor.

**LAJ 318. Introduction to Forensics (4).**

This course explores the subject matter and methods forensic investigators use when searching and recovering evidence from crime scenes. We examine approaches to forensics across multiple disciplines including anthropology, biological sciences, chemistry, law and justice, geological sciences, physics, psychology, and sociology. The goal is to provide a broad overview for students interested in exploring forensic careers. ANTH 318 and LAJ 318 are crosslisted courses; students may not receive credit for both.

**LAJ 324. Correctional Law (4).**

This course examines transitions in prisoner civil rights since the U.S. Supreme Court ruled that inmates hold all rights as other citizens with the exception of those necessarily taken by fact of incarceration. Constitutional issues will be analyzed, including standards for shelter and medical care, discipline, religion, and access to the courts. LAJ 300 is recommended.

**LAJ 326. Correctional Counseling (4).**

This course provides an analysis of the role of correctional counselor in rehabilitative efforts with offenders. Course focuses include criminal offender treatment methods and correctional or rehabilitative policy. LAJ 300 is recommended. Prerequisite: admission to the major or minor.

**LAJ 327. Community Corrections (4).**

Maintaining, supervising, and counseling offenders in the community-based setting. LAJ 300 is recommended. Prerequisite: admission to the major or minor.

**LAJ 331. Investigation (4).**

Function and propriety of investigations; methods of gathering evidence. LAJ

300 is recommended. Prerequisite: admission to the major or minor.

**LAJ 332. Police Community Relations (4).**

This course examines the relationship between the police and community and how to make this relationship a positive one. Analysis will be made of the history of police and friction with various groups in society. Attempts at positive police communication and community participation will also be examined. LAJ 300 is recommended. Prerequisite: admission to the major or minor.

**LAJ 333. Police Personnel Administration (4).**

History and philosophy of federal, state, and local police personnel programs; overview of personnel functions. LAJ 300 is recommended. Prerequisite: admission to the major or minor.

**LAJ 334. Issues in Policing (4).**

This course provides a comprehensive examination of the current critical issues and policy dilemmas within the American criminal justice system. LAJ 300 is recommended. Prerequisite: admission to the major or minor.

**LAJ 342. Juvenile Justice Process (4).**

Includes historical, ideological development of juvenile justice process; analyses policies, mechanisms; examines integrated network of agencies; examines juvenile law, rights, treatment; examines current research. LAJ 300 is recommended. Prerequisite: admission to the major or minor.

**LAJ 350. Criminal Justice and the Media (4).**

An exploration of media messages concerning crime and criminal justice, how these portrayals compare with the operation of the criminal justice system, and how media images influence both individual attitudes and public policy. LAJ 300 is recommended. By permission.

**LAJ 351. Preparing for a Law Enforcement Career (4).**

This course provides crucial information to help students understand, prepare, compete, and promote themselves during the competitive testing and hiring process for law enforcement positions. LAJ 300 is recommended. By permission. Prerequisite: admission to the major or minor.

**LAJ 353. Great American Trials (4).**

Famous American trials in history will be explored including the role of attorneys, trial advocacy, and whether justice has been achieved. LAJ 300 is recommended. By permission.

**LAJ 360. Sex Crime and Sexual Offending (4).**

The course examines sex offender laws (i.e. Megan's law), social reactions toward sex offenders,

and criminal justice approaches to sex offender management (i.e. sentencing, corrections/treatment, or policing).

**LAJ 396. Individual Study** (1-6). May be repeated if subject is different.

**LAJ 397. Honors** (1-12). Prerequisite: admission to department honors program.

**LAJ 398. Special Topics** (1-6).

**LAJ 399. Seminar** (1-5). May be repeated if subject is different.

**LAJ 400. Research Methods in**

**Criminal Justice** (4). This course examines current research in criminal justice and research methods and statistics. Students will critique current methods. LAJ 300 is recommended. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: Completion of the Basic Skills in the General Education requirements or DTA.

**LAJ 401. Ethics, Diversity, and Conflict in Criminal Justice** (4).

Introduce students to a multi-cultural approach to practical legal ethics within the criminal justice system. The course covers law enforcement, corrections, and Alternative Dispute Resolution. LAJ 300 is recommended. By permission. Prerequisites: Completion of the Basic Skills in the General Education requirements or DTA.

**LAJ 402. African Americans and the Constitution** (4). The law is the way a society governs itself and protects the freedom of all citizens. African Americans and the Constitution will examine legal issues engendered with dispute and division. LAJ 300 is recommended.

Prerequisites: Completion of the Basic Skills in the General Education requirements or DTA.

**LAJ 403. Sexual Minorities, the Law, and Justice** (4). This course examines sexuality, homosexuality, bisexuality, and transgender/transsexual issues related to the legal system. It provides a political and sociological overview of history, morality, law, and law enforcement practices related to sexual orientation. LAJ 300 is recommended. Prerequisites: Completion of the Basic Skills in the General Education requirements or DTA.

**LAJ 409. Forensics Capstone** (1). A capstone course designed to assess student mastery of fundamental knowledge of forensics through submission of a portfolio of work collected throughout the program, and explore future opportunities. ANTH 409 and LAJ 409 are crosslisted;

students may not receive credit for both. Prerequisite: senior standing.

**LAJ 410. Legal Writing** (4). The pre-law or paralegal student will learn fundamental legal writing tools in conjunction with basic rules on correspondence, retainer agreements, and other commonly used documents. LAJ 300 is recommended. By permission. Prerequisites: Completion of the Basic Skills in the General Education requirements or DTA.

**LAJ 420. Community and Social**

**Justice** (4). This course will examine the concepts of community justice and restorative justice in the larger context of social justice. Students will explore how community and restorative justice work with the traditional justice system. LAJ 300 is recommended. Prerequisites: Completion of the Basic Skills in the General Education requirements or DTA.

**LAJ 426. Advanced Correctional**

**Counseling** (4). This course will provide students with specialized training in theory and techniques required in the rapidly evolving practice of correctional counseling. LAJ 300 is recommended. Prerequisites: Completion of the Basic Skills in the General Education requirements or DTA.

**LAJ 440. Basic Mediation** (4). Course provides an introduction to the philosophy, practice, and skills required for basic mediation, which are explored through readings, lectures, demonstrations, and skill-building role plays. LAJ 300 is recommended. By permission. Prerequisites: Completion of the Basic Skills in the General Education requirements or DTA.

**LAJ 450. Report Writing** (4). Law enforcement and corrections students will learn basic writing in the context of specialized reports utilized in their fields. LAJ 300 is recommended. By permission. Prerequisites: Completion of the Basic Skills in the General Education requirements or DTA.

**LAJ 451. Crime in America** (4). American crime problems in historical perspectives. Social and policy factors affecting crime. Crime impact and trends, offender, and victim profiles. LAJ 300 is recommended. Prerequisites: Completion of the Basic Skills in the General Education requirements or DTA.

**LAJ 453. Domestic Violence Issues** (4).

This course provides an overview of domestic violence in our society and examines critical issues, including perspectives from the legislature, courts, police, prosecutors, and victims.

Significant emphasis on these perspectives in Washington State. LAJ 300 is recommended. May be repeated for credit. Prerequisites: Completion of the Basic Skills in the General Education requirements or DTA.

**LAJ 455. Comparative Criminal**

**Justice Systems** (4). In this course, students will revisit the U.S. system of criminal justice and learn an appreciation for the criminal justice systems of other countries. By the end of the course students will be able to compare and contrast the different systems and their application, benefits, and weaknesses. LAJ 300 is recommended.

Prerequisites: Completion of the Basic Skills in the General Education requirements or DTA.

**LAJ 459. Current Issues** (4). Current

legal, correctional, and enforcement issues will be explored. LAJ 300 is recommended. By permission. Prerequisites: Completion of the Basic Skills in the General Education requirements or DTA.

**LAJ 460. Terrorism** (4). Survey of domestic terrorism and United States interests in international terrorism, including concepts and theories of terrorism, history of terrorism, terrorist organizations, specific terrorist incidents, investigative techniques, and developing legal issues. LAJ 300 is recommended. May be repeated for credit. Prerequisites: Completion of the Basic Skills in the General Education requirements or DTA.

**LAJ 470. Victimology** (4). In this course, students will focus on victims' rights, legal issues pertaining to victims, psychological trauma of crime victims and how to appropriately respond in the field to crime victims. LAJ 300 is recommended.

Prerequisites: Completion of the Basic Skills in the General Education requirements or DTA.

**LAJ 489. Senior Seminar in Law and**

**Justice** (4). Critical examination of theory and research in the field of law and justice with an emphasis on applications to policy in law and justice. Course will be offered every year (Fall, Winter, Spring, Summer). CE - Culminating Experience

**LAJ 490. Cooperative Education** (1-12). An individualized contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. LAJ 300 is recommended. By permission. May be



repeated for credit. Grade will either be S or U.

**LAJ 491. Workshop (1-6).**

**LAJ 492. Teaching Experience in Law and Justice (1-4).** Completion of course in which teaching or assisting is to be done and approval of the instructor and department chair. By permission. May be repeated up to 8 credits. Grade will either be S or U.

**LAJ 493. Field Experience (1-12).**

Supervised internship experience in an approved agency taken during the final two years of the program. Department permission. May be repeated up to 12 credits. Course will be offered every year (Fall, Winter, Spring, Summer). Co-requisite: LAJ 499.

**LAJ 495. Directed Research (1-5).**

Individual research project. LAJ 300 is recommended. By permission. May be repeated up to 10 credits.

**LAJ 496. Individual Study (1-6).**

**LAJ 498. Special Topics (1-6).**

**LAJ 499. Field Experience Seminar (1-5).** Seminar to accompany supervised internship in an approved placement. Must be taken in conjunction with LAJ 493.

**Latin Courses**

**LAT 151. Latin (5).** Translation, declension, and conjugation approach using oral-aural drill. Firm foundation in the basic structural principles.

**Leadership Courses**

**LEAD 101. Foundations of Leadership**

(2). Simulation-heavy course purposed for developing a conceptual understanding of leadership across contexts. Knowledge acquisition of core leadership concepts (e.g., perspective-taking, decision-making, etc.) is reinforced through high-fidelity activities.

**LEAD 201. Leading Others: Essential Skills (3).**

Students examine leadership theory and principles as they relate to group leadership situations. With emphasis on developing essential leadership skills and competencies, students apply learning in simulated classroom activities and through an affiliated service-learning program. Prerequisite: LEAD 101.

**LEAD 298. Special Topics (1-6).** May be repeated if subject is different.

**LEAD 299. Seminar (1-5).** May be repeated if subject is different.

**LEAD 301. Organizational Leadership**

(5). Theory-driven, applied-oriented analysis of leadership in organizations. Prerequisites: LEAD 101 and LEAD 201 or be permission.

**LEAD 396. Individual Study (1-6).**

May be repeated if subject is different.

**LEAD 397. Honors (1-12).** Prerequisite: admission to department honors program.

**LEAD 398. Special Topics (1-6).** May be repeated if subject is different.

**LEAD 399. Seminar (1-5).** May be repeated if subject is different.

**LEAD 401. Leadership Experience (5).** Project-based review and application of effective leadership principles and skills acquired through previous leadership curriculum. Prerequisites: LEAD 101, and LEAD 201, and LEAD 301 or by permission.

**LEAD 496. Individual Study (1-6).**

May be repeated if subject is different.

**LEAD 497. Honors (1-12).** Prerequisite: admission to department honors program.

**LEAD 498. Special Topics (1-6).** May be repeated if subject is different.

**LEAD 499. Seminar (1-5).** May be repeated if subject is different.

**Library Science Courses**

**LIS 110. Research Fundamentals (1).**

Designed for students new to research at the college level. Course explores knowledge of information sources, more effective searching technique familiarity of services for researchers.

**LIS 191. Workshop (1-6).** By permission. May be repeated for credit under different subtitle. May be repeated up to 9 credits.

**LIS 201. Foundations of Library and Information Science (3).** Introductory course covering the history of libraries and information usage in contemporary society. The course will explore the role of libraries in the organization, preservation and dissemination of information and career opportunities in the discipline. Prerequisite: LIS 110.

**LIS 245. Research Methods in the Digital Age (4).** This course examines methods of information gathering and sharing in academic and social environments. Students explore applications of the research process, learn strategies for identifying and synthesizing information, and discuss research influences on scholarly conversations. Formerly LIS 345, students may not receive credit for both. Course will be offered every year (Fall, Winter, and Spring). K2 - Community, Culture, & Citizenship

**LIS 291. Workshop (1-6).** By permission. May be repeated for credit under different subtitle. May be repeated up to 9 credits.

**LIS 298. Special Topic (1-6).**

**LIS 299. Seminar (1-5).** May be repeated if subject is different.

**LIS 310. Information Literacy and User Services (3).** This course will cover information-seeking theories, methods, and user behaviors. Principles and philosophies of library reference service, information literacy, reading, listening and viewing guidance, and information resources will be explored. Co- or prerequisites: LIS 110 and LIS 201.

**LIS 314. Technology in Library and Information Science (3).** This course provides a review of the hardware and software used in libraries. Provides an introduction to technology tools, processes, and web applications that support the delivery of library services. Co- or prerequisites: LIS 110 and LIS 201.

**LIS 391. Workshop (1-6).** By permission. May be repeated for credit under different subtitle. May be repeated up to 9 credits.

**LIS 396. Individual Study (1-6).** May be repeated if subject is different.

**LIS 397. Honors (1-12).** Prerequisite: admission to department honors program.

**LIS 398. Special Topic (1-6).** Course content identified in schedule of classes. May be repeated for credit under different titles. Permission of instructor. May be repeated for credit.

**LIS 399. Seminar (1-5).** May be repeated if subject is different.

**LIS 410. Collection Development (3).** Course covering the basic components of collection development and management. Topics to be explored will include selection, planning, budgeting and maintenance of library collections. Co- or prerequisites: LIS 110 and LIS 201.

**LIS 411. Introduction to Archives (3).** Introductory course in archival studies. The history, development, and nature of work in the profession, the basics of collections management and development, intellectual control, preservation, conservation, and technological applications will be presented. Co- or prerequisites: LIS 110 and LIS 201 or permission of instructor.

**LIS 412. Library Management and Leadership (3).** Course covering policies and procedure necessary for the effective operation of a library and information centers. The course will explore the policies and procedures required for budgeting, planning, promoting and assessing library and information programs. Co- or prerequisites: LIS 110 and LIS 201.

**LIS 414. Organization of Knowledge**

(3). This course provides an introduction to the organization of print and electronic resources. Topics to be covered include cataloging and classification of resources, use of controlled vocabularies, and intellectual access to those resources. Co- or prerequisites: LIS 110 and LIS 201.

**LIS 415. Role of the School Library**

**Media Specialist** (5). This course will provide an in-depth look at the role of the school library media specialist in the P-12 environment. The course will explore reader advisory services, professional educator standards, standards based information literacy instruction and the application of previous courses outcomes specific to P-12 education settings. Prerequisites: LIS 110 and LIS 201 and LIS 310 and LIS 314 and LIS 410 and LIS 412 and LIS 414.

**LIS 490. Library and Information Science Internship**

(1-12). This course will provide students with hands-on instruction and experience in a library, archive, museum or other information center. In coordination with the library faculty internship advisor, the student plans and completes an internship. Grade will be S or U. Prerequisites: LIS 110 and LIS 201 and LIS 310 and LIS 314.

**LIS 491. Workshop**

(1-6). By permission. May be repeated for credit under different subtitle. May be repeated up to 9 credits.

**LIS 492. School Library Media**

**Clinical Experience** (4). Students will apply library and information science course work in a supervised 90-hour P-12 library media center clinical experience, as well as, produce a program portfolio. Grade will either be S or U. Permission of department. Course will be offered on an odd numbered years (Spring). Prerequisites: LIS 110 and LIS 201 and LIS 310 and LIS 314 and LIS 410 and LIS 412 and LIS 414 and LIS 415 and current WSP/FBI fingerprint clearance.

**LIS 496. Individual Study** (1-6). May be repeated if subject is different.

**LIS 497. Honors** (1-12). Prerequisite: admission to department honors program.

**LIS 498. Special Topic** (1-6). Course content identified in schedule of classes. May be repeated for credit under different titles.

**LIS 499. Seminar** (1-5). May be repeated if subject is different.

**Latino and Latin American Studies Courses****LLAS 102. An Introduction to Latino and Latin American Studies**

(5). Introduction to the history, peoples, and cultures of Latin America and of the Latino/a population in the United States. SB-Perspectives on World Cultures (W). K2 - Community, Culture, & Citizenship

**LLAS 103. Survey of Latin American Studies**

(5). A multi-disciplinary survey of Latino and Latin American studies, presented in three main components: People and the Land, The Environment and the Human Condition, and Socio-Political Spectrum. Course will be offered every year (Fall, Winter, Spring, Summer).

**LLAS 298. Special Topics** (1-6). May be repeated if subject is different.

**LLAS 299. Seminar** (1-5). May be repeated if subject is different.

**LLAS 301. Urban Society in Latin America**

(5). Explores urban identity, planning, issues and social structure in modern Latin American cities and investigates the foundations of urban society in Colonial Latin America. Course will not have an established scheduling pattern.

**LLAS 388. Mexican Cultural Studies**

(5). Mexican Cultural Studies introduces students to aspects of Mexican society at the intersection of history, race, ethnicity, gender, economics and class with cultural traditions such as music, culinary arts, popular art, public performances and celebrations, language, and religion. Course will not have an established scheduling pattern (Summer).

**LLAS 396. Individual Study** (1-6). May be repeated if subject is different.

**LLAS 397. Honors** (1-12). Prerequisite: admission to department honors program.

**LLAS 398. Special Topics** (1-6).

**LLAS 399. Seminar** (1-5). May be repeated if subject is different.

**LLAS 496. Individual Study** (1-6).

**LLAS 497. Honors** (1-12). Prerequisite: admission to department honors program.

**LLAS 498. Special Topics** (1-6). May be repeated if subject is different.

**LLAS 499. Seminar** (1-5). May be repeated if subject is different.

**Mathematics Courses**

**MATH 100A. Pre-Algebra** (5). This course is designed to prepare students for college mathematics. Symbolic, graphical, and numeric representations will be studied to understand and apply the concepts underlying algebra. Grade will be XC. Credits will not be allowed

toward meeting bachelor's degree requirements. Prerequisite: either 390 or below on SAT, 15 or below on ACT, or 38 or below on Pre-Algebra compass test.

**MATH 100B. Introductory Algebra**

(5). This course is designed to prepare students for college mathematics. Symbolic, graphical, and numeric representations will be studied to understand and apply the concepts of algebra. Grade will be XC. Credits will not be allowed toward meeting bachelor's degree requirements. Prerequisite: appropriate placement score or Math 100A with a grade of C or higher.

**MATH 100C. Intermediate Algebra**

(5). This course is designed to prepare students for college-level precalculus mathematics. Symbolic, graphical, and numeric representations will be studied to understand and apply the concepts needed to be successful in precalculus. Credits will not be allowed toward meeting bachelor's degree requirements. Prerequisite: Math 100B with a grade of C or higher or appropriate placement score.

**MATH 101. Mathematics in the Modern World**

(5). Selected topics, from the development and applications of mathematics together with their relationship to the development of our present society, designed to advance critical thinking and quantitative reasoning. Course will be offered every year (Fall, Winter, Spring, Summer). Prerequisites: students must achieve an appropriate test score or successfully complete the required prerequisite course/s before enrolling in a Quantitative Reasoning course. FYE3 - Quantitative Reasoning

**MATH 102. Mathematical Decision Making**

(5). Selected topics from probability, statistics, and mathematical decision making with real-world application. Prerequisites: students must achieve an appropriate test score or successfully complete the required prerequisite course/s before enrolling in a Quantitative Reasoning course. FYE3 - Quantitative Reasoning

**MATH 120. Mathematics as a Mirror: Cultural and Historical Approaches**

(4). Mathematics is a living field of study which has reflected cultural ideas and norms throughout the centuries. This course will explore the relationship between culture and mathematics in Europe, Africa, and Asia across time. Course will be offered on odd numbered years. Course will not have an established scheduling pattern. K6 - Individual & Society

**MATH 130. Finite Mathematics (5).**

The language of sets, counting procedures, introductory probability, decision making, and introductory descriptive statistics. Meets General Education "reasoning" requirement and prepares student for introductory statistics courses in various departments. Course will be offered every year (Fall, Winter, Spring, Summer). Prerequisites: students must achieve an appropriate test score or successfully complete the required prerequisite course/s before enrolling in a Quantitative Reasoning course. FYE3 - Quantitative Reasoning

**MATH 153. Pre-Calculus Mathematics I (5).**

A foundation course which stresses those algebraic and elementary function concepts together with the manipulative skills essential to the study of calculus. Course will be offered every year (Fall, Winter, Spring, Summer). Prerequisites: satisfactory score on math placement exam or completion of MATH 100C or higher. FYE3 - Quantitative Reasoning

**MATH 154. Pre-Calculus Mathematics II (5).**

A continuation of MATH 153 with emphasis on trigonometric functions, vectors, systems of equations, the complex numbers, and an introduction to analytic geometry. Course will be offered every year (Fall, Winter, Spring, Summer). Prerequisites: MATH 153 with a grade of C or higher or satisfactory score on math placement exam. FYE3 - Quantitative Reasoning

**MATH 155. Applied Precalculus (5).**

An accelerated review of topics necessary for success in a technology field focusing on linear, quadratic, logarithmic, exponential, and trigonometric equations and practical applications to these fields. This course will not prepare you for calculus. Prerequisite: A grade of C or higher in Math 100C or an appropriate test score on the mathematics placement exam. FYE3 - Quantitative Reasoning

**MATH 164. Foundations of Arithmetic (5).**

Structure of the real number system. Properties of and operations on integers, rationals, decimal representation, percentages, proportion, graphing, and elementary problem solving. Recommended for the prospective elementary school teacher. Prerequisites: students must achieve an appropriate test score or successfully complete the required prerequisite course/s before enrolling in a Quantitative Reasoning course. FYE3 - Quantitative Reasoning

**MATH 170. Intuitive Calculus (5).** An intuitive approach to the differential and integral calculus specifically designed for students in the behavioral, managerial, and social sciences. Not open to students with credit for MATH 172 or higher. Basic Skills 4 - Math. Course will be offered every year (Winter). Prerequisites: MATH 153 with a grade of C or higher or appropriate score on the math placement exam. Basic Skills 4 - Math.

**MATH 172. Calculus I (5).** Theory, techniques, and applications of the differentiation and integration of the elementary functions. Prerequisites: MATH 154 with a grade of C or higher, a score of 19 on the Advanced Math Placement Test, or a score of 46 or higher on the Compass Trigonometry test. FYE3 - Quantitative Reasoning

**MATH 173. Calculus II (5).** Theory, techniques, and applications of differentiation and integration of the elementary functions. Prerequisite: MATH 172 with a grade of C or higher.

**MATH 206. Mathematics for Teachers: Number and Operations (4).**

This course focuses on the conceptual and procedural understanding of number and operations including counting, place value, models for operations, set theory, algorithms, and the real number system. Concepts are taught from a problem solving perspective. Course will be offered every year (Fall, Winter, and Spring). Prerequisites: sophomore standing and an appropriate score on the SAT, ACT, or mathematics placement exam.

**MATH 207. Mathematics Honors Seminar - Lower Level (1).**

Introduction to new areas of mathematics. Exposure to open problems in mathematics, and to the practice of modern research mathematics. May be repeated up to 12 credits.

**MATH 210. Statistics, Society, and Decisions (5).**

The statistical revolution has dramatically changed how our society makes decisions. This course will examine how statistics is used in diverse fields and current ethical and social issues surrounding the use of statistics and data. Does not count towards the Mathematics minor. Course will be offered every year (Fall, Winter). Prerequisite: student must have received at least a 500 on the SAT, or a 19 on the ACT or a score of 50-Pre-Algebra or 26-Algebra or 31-College Algebra or 31-Trigonometry

on the Compass test or completed MATH 100B with a C or higher or a higher level math class. K8 - Science & Technology

**MATH 211. Statistical Concepts and Methods (5).**

An introduction to statistics for any student. Topics include exploratory data analysis, regression, sampling distributions, hypothesis testing, and confidence intervals. Course emphasizes applied data analysis and includes use of a statistical software package. Prerequisites: Satisfactory score on placement exam or completion of MATH 100B or higher.

**MATH 216. Number and Operations 2 (4).**

This course focuses on the conceptual and procedural understanding of number and operations including patterns, proportional reasoning, percentages, integer operations and models, number theory, and irrational numbers. Concepts are taught from a problem solving perspective. Prerequisites: either MATH 100C with a grade of C or higher or score of 66 or higher on the Compass Algebra test.

**MATH 226. Mathematics for Teachers: Geometry and Measurement (4).**

This course focuses on the conceptual and procedural understanding of geometry and measurement including shapes, rigid motions, similarity, congruence, spatial reasoning, proof and measurement. Concepts are taught from a problem solving perspective using appropriate technology. Course will be offered every year (Fall, Winter, and Spring). Prerequisites: 45 earned credits and an appropriate score on the SAT, ACT, or mathematics placement exam.

**MATH 232. Discrete Modeling for Middle-level Teachers (4).**

Discrete models including recurrence relations finite differences, logic, applications of graph theory, applications of linear programming, and simple combinatorics. Prerequisites: MATH 130 and MATH 154.

**MATH 237. Ciphers and Mathematics (3).**

This course will examine classical ciphers and how mathematics can be used to encipher, decipher, and cryptanalyze. Substitution and transposition ciphers will be examined in an historical context. Course will not have an established scheduling pattern (Winter). Prerequisite: MATH 100C or MATH 101 or MATH 130.

**MATH 250. Intuitive Geometry for Elementary Teachers (4).** An intuitive approach to the geometry topics relative to the elementary school

- curriculum. Prerequisite: MATH 164 with a grade of C or higher.
- MATH 251. Probability and Statistics for Elementary Teachers (Put on reserve 9/16/17)** (4). This course for elementary and middle grades preservice teachers is an introduction to probability and statistics. Concepts will be explored individually and cooperatively using manipulatives, simulations, and other appropriate methods. (Put on reserve 9/16/17. Will go inactive 8/24/2020.) Prerequisite: MATH 164.
- MATH 260. Sets and Logic** (5). Essentials of mathematical proofs, including use of quantifiers and principles of valid inference. Set theory as a mathematical system. Prerequisites: MATH 173 with a grade of C or higher or MATH 172 and CS 301 with grades of C or higher.
- MATH 265. Linear Algebra I** (4). Vector spaces, linear systems, matrices, and determinants. Prerequisite: MATH 173 with a grade of C or higher.
- MATH 272. Multivariable Calculus I** (5). Differential and integral calculus of multivariable functions and related topics. Prerequisite: MATH 173 with a grade of C or higher.
- MATH 273. Multivariable Calculus II** (5). Differential and integral calculus of multivariable functions and related topics. Prerequisite: MATH 272 with a grade of C or higher.
- MATH 298. Special Topics** (1-6).
- MATH 299. Seminar** (1-5).
- MATH 299E. Orientation Seminar: Secondary Mathematics** (2). Introductory seminar for new mathematics education students focusing on problem solving, technical presentation of solutions, and electronic portfolio preparation. Prerequisites: admission to the teaching secondary math major, and application to the Teacher Certification Program. Corequisite: EFC 210.
- MATH 299S. Seminar - Math Major Orientation** (4). Introductory seminar for new math majors, focusing on requirements and preparation for the math major. Students will learn appropriate software which will be used in future math major courses. Course will be offered every year (Fall). Prerequisite: MATH 173. Pre- or Co-requisites : MATH 260 and MATH 272.
- MATH 306. Middle-level Mathematics Standards Review** (2). This course focuses on conceptual, procedural, and pedagogical understanding of the mathematics required for the middle-level mathematics endorsement. This is an on-line course. Prerequisites: MATH 102 and MATH 153.
- MATH 314. Probability and Statistics** (5). This course is a calculus-based introduction to probability statistics. Topics include the basic rules of probability, random variables, continuous and discrete probability distributions, moments, sampling distributions for common statistics, confidence intervals, and hypothesis testing. Prerequisite: MATH 173 with a grade of C or higher.
- MATH 316. Mathematics for Teachers: Proportional Reasoning and Algebra** (4). This class focuses on children's mathematical learning and the application of developmentally appropriate best teaching practices. Mathematical topics will include number and operations, patterns, proportional reasoning, percentages, functions and models, and number theory. MATH 164 or MATH 206.
- MATH 320. History of Mathematics** (3). A study of the development of mathematics and the personalities involved. Prerequisite: MATH 260 with a grade of C or higher.
- MATH 321. Math WEST-E Prep** (2). Prerequisite: Students must be admitted into the mathematics education major or minor. Fully online course designed to prepare teacher candidates for the WEST-E in mathematics. Topics include mathematical processes, number and operation, algebra and function, measurement and geometry, statistics and probability, discrete mathematics and calculus. Grade will either be S or U. Prerequisite: MATH 265 with a C or higher.
- MATH 322. Assessment of Student Learning for Mathematics Teachers** (5). Candidates will create assessment plans organized around big ideas and essential questions from the Washington State Standards of Student Assessment. Finally, candidates will learn how to develop and implement assessment tasks to identify their student's mathematical performance and plan further instruction. Prerequisite: EFC 210, EFC 310, and MATH 299E and current WSP/FBI fingerprint clearance.
- MATH 323. Teaching Middle-level Mathematics** (4). Teacher candidates will use research-based best practices to plan, teach, and assess lessons aligned with the CCSS-Math in middle school classrooms (40 hours observation and instruction). Prerequisites: admission to the middle-level math major Teacher Certification Program, and current WSP/FBI fingerprint clearance.
- MATH 324. Methods and Materials in Mathematics-Secondary** (5). Prerequisites: EFC 320, MATH 322, current WSP/FBI fingerprint clearance, and conditional or full admission to the Teacher Certification Program. Corequisite: EFC 210.
- MATH 325. Instructional Practices for Teaching Mathematics** (4). Mathematics teacher candidates will practice planning, teaching, and assessing mathematics activities with emphasis on standard-based curriculum, problems solving, teaching for understanding, equity, and technology. Candidates will discuss and implement technology to improve their impact on student learning. Prerequisite: EFC 320, and MATH 324.
- MATH 330. Discrete Mathematics** (5). Topics from logic, combinatorics, counting techniques, graph theory, and theory of finite-state machines. Prerequisite: MATH 260 with a grade of C or higher.
- MATH 331. Continuous Models** (3). Students will use multiple integrals, line integrals, and differential equations to model physical situations. Prerequisite: MATH 272 with a grade of C or higher.
- MATH 332. Discrete Models** (4). Discrete models including graph theory, difference equations, and the models of social choice, inherent logic combinatorics, and algebra. Prerequisite: admission to the mathematics education major or minor.
- MATH 335. Combinatorics and Graph Theory** (4). An introduction to discrete mathematics and graph theory, with some applications. Emphasis will be placed on proof writing. Prerequisite: MATH 260 with a grade of C or higher.
- MATH 337. Cryptological Mathematics** (5). A mathematical look at code making and code breaking. Famous historical ciphers to be studied will include substitution, Hill, and Vigenere ciphers. Students will also investigate public key cryptography and signature authentication methods. Prerequisites: MATH 260 and MATH 265 and MATH 272.
- MATH 351. Point Set Topology** (4). Introduction to basic concepts of point-set topology: topologies, continuity, compactness, connectedness, and separation axioms. Emphasis will be placed on proof writing. Prerequisite: MATH 260 with a grade of C or higher.

**MATH 355. College Geometry I** (4).

An inductive and deductive approach to intuitive geometry, modern Euclidean geometry, history of geometry, and axiomatic systems in geometry.

Prerequisite: admission to the mathematics education major or minor.

**MATH 360. Algebraic Structures I** (3).

First course in the structure of algebraic systems includes the study of real number systems and other algebraic systems in the development of group theory. Prerequisites: MATH 260 and MATH 265 and MATH 272 with a grade of C or higher or permission of instructor.

**MATH 361. Algebraic Structures II**

(3). The second course in the structure of algebraic systems, including rings, modules, and fields, and their associated morphisms.

**MATH 365. Linear Algebra II** (4).

Topics from linear algebra, such as vector spaces, linear transformations, bilinear and quadratic forms, eigenvalues and eigenvectors, and inner products. Emphasis is placed on proof writing. Prerequisites: MATH 265, and at least one of MATH 335 or MATH 351, both with a grade of C or higher.

**MATH 371. Advanced Calculus** (4).

The basic concepts of the real numbers and calculus are presented from an axiomatic standpoint. This course also offers basic proof writing skills that are necessary for more advanced mathematics. Prerequisites: MATH 272, and at least one of MATH 335 or MATH 351, both with a grade of C or higher.

**MATH 372. Complex Analysis (Put on Reserve 9/16/16.)** (5).

Arithmetic of complex numbers and functions of a complex variable, linear fractional transformations, Cauchy-Riemann equations, contour integration, Cauchy's theorem, residue theorem, power series and applications. (Put on Reserve 9/16/16. Last taught in 2012. Will go inactive 8/24/19.)

Prerequisites: MATH 260 and MATH 273 with grades of C or higher.

**MATH 376. Differential Equations I**

(3). Elementary methods of solutions of ordinary differential equations. Some numerical methods for solving ordinary differential equations with applications. Prerequisites: MATH 265 and MATH 272 with grades of C or higher.

**MATH 377. Differential Equations II**

(3). Elementary methods of solutions of ordinary differential equations. Some numerical methods for solving ordinary differential equations with applications. Prerequisite: MATH 376 with a grade of C or higher.

**MATH 396. Individual Study** (1-6).

May be repeated if subject is different.

**MATH 397. Honors** (1-12).

Prerequisite: admission to department honors program.

**MATH 398. Special Topics** (1-6). May

be repeated if subject is different.

**MATH 399. Seminar** (1-5). May be

repeated if subject is different.

**MATH 405. Probability and Statistics**

**for Teachers** (4). This course focuses on conceptual and procedural understanding of probability and statistics including probability, graphing, measures of center and spread, distributions, and confidence intervals. Concepts are taught from a problem solving perspective using appropriate technology. Course will be offered every year (Winter).

Prerequisites: MATH 130 and MATH 154.

**MATH 406. Algebra for Teachers** (4).

This course focuses on conceptual and procedural development of algebra including logic, algebraic reasoning, equations, inequalities, patterns, sequences, functions, modeling, and polynomial algebra. Concepts are taught from a problem solving perspective using appropriate technology. Course will be offered every year (Fall). Prerequisites: MATH 130 and MATH 154.

**MATH 407. Mathematics Honors****Seminar - Upper-level** (1).

Introduction to new areas of mathematics. Exposure to open problems in mathematics, and to the practice of modern research mathematics. May be repeated up to 12 credits. Prerequisite: junior standing or higher.

**MATH 410A. Advanced Statistical**

**Methods I** (4). An introduction to generalized linear models, including multiple regression, logistic regression, and ANOVA. Emphasis on applied model evaluation and diagnostics. Course will be offered every year (Fall, Winter). Prerequisite: MATH 211 or MATH 314 with a grade of C or higher.

**MATH 410B. Advanced Statistical**

**Methods II** (4). Further topics in applied statistics, including time series analysis, principal components analysis, cluster analysis, and nonparametric statistics. Emphasis on applied model evaluation and diagnostics. Course will be offered every year (Winter). Prerequisite: MATH 410A with a grade of C or higher.

**MATH 411A. Probability Theory** (4).

Principal topics include: combinatorial

theory, conditional probability, random variables, expectation and moments, generating functions, various discrete and continuous distributions, law of large numbers, central limit theorem.

Prerequisite: MATH 273 with a grade of C or higher.

**MATH 411B. Mathematical Statistics I**

(3). Derived distributions, point and interval estimation, hypothesis testing. Correlation and regression theory. Distribution free methods. Bayesian inference. Prerequisite: MATH 411A with a grade of C or higher.

**MATH 411C. Mathematical Statistics**

**II** (3). Derived distributions, point and interval estimation, hypothesis testing. Correlation and regression theory. Distribution free methods. Bayesian inference. Prerequisite: MATH 411B with a grade of C or higher.

**MATH 414. Time Series Analysis** (3).

Model building, parameter estimation, diagnostic checking of time series data; ARIMA models and forecasting. Analysis of seasonal models. Prerequisites: MATH 410A and either MATH 411A or MATH 314, with grades of C or higher.

**MATH 416A. Actuarial Science**

**Problems II** (2). Review of topics in probability theory important for actuaries, including probabilities, random variables, moments, discrete, continuous, joint, and conditional distributions, and limit theorems. Co- or prerequisite: MATH 411B.

**MATH 416B. Actuarial Science**

**Problems III** (2). Review of topics in financial mathematics important for actuaries, including time value of money, annuities, loans, bonds, and derivatives markets. Co- or prerequisite: MATH 418C.

**MATH 417A. Short-Term Actuarial**

**Mathematics I** (4). Mathematical tools for short-term insurance, including severity models, frequency models, aggregate models, coverage modifications, and risk measures. Course will be offered on odd numbered years (Fall). Prerequisite: MATH 411C and MATH 418C with grades of C or higher.

**MATH 417B. Short-Term Actuarial**

**Mathematics II** (4). Mathematical tools for short-term insurance, including construction and selection of parametric models and credibility procedures. Course will be offered on even numbered years (Winter). Prerequisite: MATH 417A with a grade of C or higher.

**MATH 417C. Short-Term Actuarial**

**Mathematics III** (3). Mathematical tools for short-term insurance,

including insurance and reinsurance coverage, pricing, and reserving. Course will be offered on even numbered years (Spring). Prerequisite: MATH 417B with a grade of C or higher.

**MATH 418A. Financial Mathematics I** (4). Actuarial financial mathematics, including the time value of money, methods of measuring interest and discount, non-contingent annuities and cash flows, and loans and amortization. Course will be offered every year (Fall). Prerequisite: MATH 173 with a grade of C or higher.

**MATH 418B. Financial Mathematics II** (4). Actuarial financial mathematics, including bonds, returns, duration and convexity, immunization, and swaps and interest rate determinants. Course will be offered every year (Winter). Prerequisite: MATH 418A with a grade of C or higher.

**MATH 418C. Financial Mathematics III** (4). Actuarial financial mathematics, including portfolio theory, investment risk and project analysis, forwards and futures, and derivatives pricing models. Course will be offered every year (Spring). Prerequisite: MATH 418B and (MATH 314 or MATH 411A) with grades of C or higher.

**MATH 419A. Long-Term Actuarial Mathematics I** (4). Mathematical tools for long-term insurance, including key features of long-term coverage and survival models and their estimation. Course will be offered on even numbered years (Fall). Prerequisite: MATH 411C and MATH 418C with grades of C or higher.

**MATH 419B. Long-Term Actuarial Mathematics II** (4). Mathematical tools for long-term insurance, including present value random variables associated with benefits and expenses for survival models, and premium calculations for these models. Course will be offered on odd numbered years (Winter). Prerequisite: MATH 419A with a grade of C or higher.

**MATH 419C. Long-Term Actuarial Mathematics III** (3). Mathematical tools for long-term insurance, including net premium reserves, modified reserves, gross premium reserves, expense reserves, and applications of long-term insurance tools to pension plans and retirement benefits. Course will be offered on odd numbered years (Spring). Prerequisite: MATH 419B with a grade of C or higher.

**MATH 430. Introduction to Theory of Numbers** (3). Euclidean algorithm, fundamental theorem of arithmetic,

Diophantine equations, primitive roots and indices, and other number theory topics. Prerequisite: MATH 260 with a grade of C or higher.

**MATH 440. Mathematical Theory of Financial Economics** (5). Concepts, principles, and techniques needed for the professional actuarial SOA/CAS Exam MFE are covered in this course. Topics to explore include interest rate models, bond price models, rational valuation of derivative securities, and delta-hedging as risk management techniques. Prerequisites: MATH 411B and MATH 418C.

**MATH 451. Topology I** (3). An introduction to point-set and algebraic topology. Topics may include metric spaces, topological spaces, homotopy theory, and the fundamental group. Prerequisites: MATH 260 and MATH 265 with grades of C or higher.

**MATH 452. Topology II** (3). An introduction to point-set and algebraic topology. Topics may include metric spaces, topological spaces, homotopy theory, and the fundamental group. Prerequisite: MATH 451 with a grade of C or higher.

**MATH 453. Topology III** (3). An introduction to point-set and algebraic topology. Topics may include metric spaces, topological spaces, homotopy theory, and the fundamental group.

**MATH 455. College Geometry II** (3). Introduction to non-Euclidean geometry including history, deductive reasoning, and topics in hyperbolic and elliptical geometry. Prerequisites: MATH 355 and MATH 260 with grades of C or higher.

**MATH 456. Geometry for Teachers** (4). This course includes an exploration of plane, coordinate, and transformational geometry. Students will develop an understanding of mathematical structure, method, and application while exploring topics such as axiomatic systems, constructions, and transformations. Course will be offered every year (Spring). Prerequisites: MATH 130 and MATH 154.

**MATH 461. Abstract Algebra I** (4). Algebraic structures such as groupoids, groups, rings, and fields. Prerequisite: MATH 365.

**MATH 462. Abstract Algebra II** (4). Algebraic structures such as groupoids, groups, rings, and fields. Prerequisite: MATH 461 with a grade of a C or higher.

**MATH 471. Advanced Analysis I** (4). Further development of properties of calculus. Prerequisite: MATH 371, with grade of C or higher.

**MATH 472. Advanced Analysis II** (4). Further development of properties of calculus, including topics in uniform convergence, differentiation, and integration. Prerequisite: MATH 471 with a grade of C or higher.

**MATH 473. Advanced Analysis III** (3). Further development of properties of calculus. Prerequisite: MATH 472 with a grade of C or higher.

**MATH 475. Mathematical Modeling** (4). An introduction to mathematical modeling using examples from physical, chemical, biological, economic, and social systems. The use of software, critical thinking, and technical communication will be emphasized. Prerequisites: MATH 265 and MATH 272 and MATH 376 and MATH 299S with a grade of C or higher, or with consent of the instructor.

**MATH 476. Numerical Methods and Analysis I** (4). This course offers an engaging introduction to numerical methods and analysis. Topics include error propagation in mathematical algorithms, data approximation, numerical differentiation and integration. Course work requires programming experience. Prerequisites: MATH 260 and MATH 265 and MATH 299S with a grade of C or higher, or consent of instructor.

**MATH 477. Numerical Methods and Analysis II** (4). This course offers an engaging introduction to numerical methods and analysis. Topics include error propagation in mathematical algorithms, data approximation, numerical differentiation and integration. Course work requires programming experience. Prerequisite: MATH 476 with a grade of C or higher.

**MATH 486. Mathematical Modeling for Middle-level Teaching** (4). Teacher candidates will create and analyze mathematical models in relation to the CCSS-Math content domains using appropriate technology. They will design real-world math tasks that highlight the use of models for making sense of mathematics. Prerequisites: MATH 406 and admission to the middle-level math major and application to the Teacher Certification Program.

**MATH 489A. Actuarial Senior Seminar: Predictive Analytics and Actuarial Modeling** (3). The actuarial modeling process, including problem definition, model selection and validation, and communication of results and uncertainties. Includes a capstone senior project. Course will be

offered every year (Spring).

Prerequisites: MATH 410B and (MATH 417B or MATH 419B) with grades of C or higher.

**MATH 490. Cooperative Education (1-12).** An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U.

Prerequisite: prior approval required.

**MATH 491. Workshop (1-6).** The title of the workshop and the credit to be earned shall be determined at the time the workshop is approved. Designed to give an opportunity for individual and group study of problems in mathematics. May be repeated for credit.

**MATH 495. Undergraduate Research (1).** May be repeated up to 5 credits.

**MATH 496. Individual Study (1-6).**

**MATH 497. Honors (1-12).**

Prerequisite: admission to department honors program.

**MATH 498. Special Topics (1-6).**

**MATH 499. Seminar (1-5).**

**MATH 499A. Senior Seminar:**

**Actuarial Science (2).** Individualized projects using oral presentations and a written portfolio to show mastery in the program outcomes for actuarial science. Co- or prerequisites: MATH 417B or MATH 419B.

**MATH 499E. Senior Seminar:**

**Secondary Mathematics (4).**

Individualized projects using oral presentations and written electronic portfolio to show mastery in all program outcomes for teaching secondary mathematics. Prerequisite: MATH 325.

**MATH 499S. Senior Seminar (2).**

Individualized projects using oral presentations and written portfolio to show mastery in all program outcomes for mathematics. Course will be offered every year (Winter).

#### McNair Scholars Courses

**MCNA 298. Special Topics (1-6).** May be repeated if subject is different.

**MCNA 299. Seminar (1-5).** May be repeated if subject is different.

**MCNA 301. Introduction to the McNair Scholars Program (1).** A seminar designed to introduce students to the McNair Program and guide them through the steps of identifying a faculty mentor and choosing a research topic. May be repeated up to 2 credits. Prerequisite: admission into the McNair Scholar Program.

**MCNA 302. Finding a Graduate**

**School (1).** A seminar designed to assist McNair Scholar students identify prospective graduate schools in their field of study. May be repeated up to 2 credits. Prerequisite: MCNA 301 and admission into the McNair Scholars Program.

**MCNA 303. Completing the Graduate**

**School Application (1).** A seminar designed to assist McNair Scholar students to complete their graduate school application materials. May be repeated up to 2 credits. Grade will either be S or U. Prerequisite: MCNA 302 and admission into the McNair Scholars Program.

**MCNA 395. Undergraduate Research**

**Methods (2).** An introduction to the steps of writing a research proposal. Prerequisite: admission to the McNair Scholars Program.

**MCNA 396. Individual Study (1-6).**

May be repeated if subject is different.

**MCNA 397. Honors (1-12).**

Prerequisite: admission to department honors program.

**MCNA 398. Special Topics (1-6).** May be repeated if subject is different.

**MCNA 399. Seminar (1-5).** May be repeated if subject is different.

**MCNA 401. Conquering the Graduate**

**Record Exam (2).** This course is designed to prepare juniors and seniors who plan to pursue graduate programs that require GRE scores. Topics include test-taking strategies for the verbal, quantitative, and writing assessments. May be repeated up to 6 credits. Grade will be S or U. Prerequisite: junior or senior status.

**MCNA 496. Individual Study (1-6).**

May be repeated if subject is different.

**MCNA 497. Honors (1-12).**

Prerequisite: admission to department honors program.

**MCNA 498. Special Topics (1-6).** May be repeated if subject is different.

**MCNA 499. Seminar (1-5).** May be repeated if subject is different.

#### Mechanical Engineering Technology Courses

**MET 255. Machining (4).** Basic operations and technical information concerning common metal working machines and manufacturing processes.

Two hours lecture and four hours laboratory per week. Course will be offered every year (Fall, Winter, and Spring).

**MET 257. Casting Processes (4).**

Theory and practice in green sand, shell core, permanent mold, no bake, and evaporation casting processes. Two

hours lecture and four hours laboratory per week.

**MET 298. Special Topics (1-6).** May be repeated if subject is different.

**MET 299. Seminar (1-5).** May be repeated if subject is different.

**MET 310. Hydraulics/Pneumatics (4).**

A study of the application, controls, and uses of air and liquid for the transmission of power. Two hours lecture and four hours laboratory per week. Prerequisite: MATH 153 or MATH 154 or MATH 172.

**MET 314. Applied Thermodynamics**

(4). Properties of pure substances, first and second laws of thermodynamics, enthalpy and entropy, perfect gases, Carnot cycle, steam cycles, refrigeration cycles, mixtures of perfect gases, chemical reactions, and combustion. Four hours lecture per week. Prerequisites: MATH 173 and PHYS 112 or PHYS 182. Co-requisite: MET 314LAB.

**MET 314LAB. Applied**

**Thermodynamics Laboratory (1).**

Practical application of thermodynamics systems teaching First and Second Law of Thermodynamics principles. Lab work includes usage of state-of-the-art instrumentation and data systems. This course is two hours per week with an associated lecture that is four hours per week. Course will be offered every year (Fall). Prerequisites: MATH 173 and either PHYS 182 or PHYS 112.

**MET 315. Fluid Dynamics (4).** Fluid statics, continuity, Bernoulli, and the general energy equation, laminar and turbulent flow, friction losses in pipes and ducts, pump performance and selection, compressible flow, and fluid measurements. Four hours lecture per week. Co-requisite: MET 315LAB. Prerequisites: ETSC 311 and MET 314.

**MET 315LAB. Fluid Dynamics Laboratory (1).**

Practical application of fluid mechanics principles, labs include fluid properties, buoyancy forces, Bernoulli and fluid energy, fluid friction, pump performance and related measurement systems. Lab is two hours per week. Associated lecture is four hours per week. Course will be offered every year (Winter). Prerequisite: MET 314LAB.

**MET 316. Applied Heat Transfer (4).**

Steady and unsteady state heat conduction, free convection, forced convection in tubes, forced convection over exterior surfaces, radiation heat transfer, change in phase heat transfer, heat exchangers, and heat pipes. Four hours lecture per week. Co-requisite: MET 316LAB. Prerequisite: MET 315.

**MET 316LAB. Applied Heat Transfer Laboratory (1).** Practical application of heat transfer principles. Lab work includes steady and unsteady state heat conduction, free convection, forced convection in tubes, forced convection over exterior surfaces, radiation heat transfer, change in phase heat transfer, heat exchangers, and heat pipes. Two hours laboratory per week.  
Prerequisite: MET 315LAB.

**MET 320. Fundamentals of Laser Technology (Put on reserve 9/16/18) (4).** Overview of laser technology with emphasis on laser characteristics, safety, and applications. Four hours of lecture per week. (Put on reserve 9/16/18, will go inactive 8/24/21)  
Prerequisite: PHYS 113.

**MET 327. Technical Dynamics (4).** Topics: rectilinear and curvilinear motion, rotational kinematics, work, energy and power, linear impulse and momentum, angular impulse and momentum, rigid body motion, relative motion, and vibrations. This course consists of four hours of lecture each week plus an associated lab for two hours per week. Course will be offered every year (Spring). Prerequisite: ETSC 311 with a grade of 2.3, C+, or higher. Co-requisite: MET 327LAB.

**MET 327LAB. Technical Dynamics Laboratory (1).** Practical application of dynamical systems including usage of state-of-the-art instrumentation and data recording systems. This lab is two hours per week with associated lecture that is four hours per week. Course will be offered every year (Spring).  
Prerequisite: ETSC 311.

**MET 345. Lean Manufacturing (4).** The students will learn lean principles through lecture and hands-on experience manufacturing a project. Course is based on SME lean bronze standards. Two lecture and four lab hours per week. Additional lab time is required. Course will be offered every year (Fall and Spring). Prerequisites: ETSC 160 or ETSC 150 and (ETSC 145 or MET 255, or permission of instructor).

**MET 351. Metallurgy/Materials and Processes (4).** Ferrous and nonferrous metals and alloys; polymeric, ceramic, and cellular materials; use of phase diagrams, cooling curves, stress-strain diagrams, and metallography. This course consists of four hours of lecture each week plus an associated lab for two hours per week. Course will be offered every year (Fall). Prerequisites: CHEM 111 or CHEM 181.

**MET 351LAB. Metallurgy/Materials and Processes Laboratory (1).**

Ferrous and nonferrous metals and alloys; polymeric, ceramic, and cellular materials; use of phase diagrams, cooling curves, stress-strain diagrams, and metallography. This course consists of two hours of lab each week plus an associated lecture for four hours per week. Co-requisite: MET 351.  
Prerequisites: CHEM 111 or CHEM 181.

**MET 355. Advanced Machining and CNC Programming (4).** Machining of metallic and non-metallic materials on automated equipment; mass production technology; programming and operation of CNC equipment. This course will consist of two hours of lecture and four hours of lab per week. Course will be offered every year (Fall and Winter). Prerequisite: MET 255.

**MET 357. Welding/Fabrication (4).** Theory and practice in arc welding, oxyacetylene welding and cutting, MIG, TIG, and plastic welding. Two hours lecture and four hours laboratory per week.

**MET 382. Plastics and Composites (4).** Composition, characteristics, and classifications of plastics and composite materials incorporating industrial applications, processing, and fabrication. This course consists of two hours of lecture and four hours of lab per week. Course will be offered on odd numbered years (Winter).  
Prerequisites: CHEM 111 and CHEM 111LAB, or CHEM 181 and CHEM 181LAB.

**MET 387. Engineering Ethics (2).** This course applies critical thinking to effective workplace and professional performance within mechanical engineering, with ethics as a primary aspect in developing students to be successful engineers. There are two hours of lecture per week. Course will be offered every year. Course will not have an established scheduling pattern.  
Pre-requisite: MET 314.

**MET 388. Tool Design (Put on reserve 9/16/17) (4).** Principles of tool design for material removal, work holding, press working, joining and inspection processes with emphasis on inventive ability and problem solving. (Put on reserve 9/16/17. Will go inactive 8/24/2020.) Prerequisites: IET 160 or IET 265, and MET 255.

**MET 396. Individual Study (1-6).** May be repeated if subject is different.

**MET 397. Honors (1-12).** Prerequisite: admission to department honors program.

**MET 398. Special Topics (1-6).** May be repeated if subject is different.

**MET 399. Seminar (1-5).** May be repeated if subject is different.

**MET 411. Energy Systems I (4).** Power generation, energy reserves, fuels, reciprocating machines, internal combustion engines, rotating compressors, axial flow turbines, and gas turbine power. Four hours lecture per week. Co-requisite: MET 411LAB.  
Prerequisite: MET 316.

**MET 411LAB. Energy Systems I Laboratory (1).** Practical application of energy system principles. Lab work includes power generation, energy reserves, fuels, reciprocating machines, internal combustion engines, rotating compressors, axial flow turbines, and gas turbine power. Two hours laboratory per week. Prerequisite: MET 316LAB.

**MET 418. Mechanical Design I (4).** Mechanical design principles including material and device responses to complex loading and optimization of energy system and mechanical drives. This course consists of four hours of lecture each week plus an associated lab for two hours per week. Course will be offered every year (Fall).  
Prerequisite: ETSC 265 and (ETSC 312 with a grade of C+ or higher) and MET 255 and MET 327 and MET 327LAB and MET 426 and MET 426LAB.

**MET 418LAB. Mechanical Design I Laboratory (1).** Practical application of mechanical design principles. Lab work includes design and or evaluation of modern mechanical devices, concepts and systems. This course consists of two hours of lab each week plus an associated lecture for four hours per week. Course will be offered every year (Fall). Prerequisite: ETSC 265 and ETSC 312 with a grade of C+ or higher. Co-requisite: MET 418.

**MET 419. Mechanical Design II (4).** Fasteners, welds, machine frames, pressure vessels, hydraulic cylinders, electrical motors, and actuators. This course consists of four hours of lecture each week plus an associated lab for two hours per week. Course will be offered every year (Winter).  
Prerequisite: MET 418.

**MET 419LAB. Mechanical Design II Laboratory (1).** Practical application of mechanical design principles. Lab work includes mechanical design principles for optimization of energy conversion systems via machine and power elements. Course will be offered every year (Winter). Prerequisite: MET 418LAB. Co-requisite: MET 419.

**MET 420. Finite Element Analysis (4).** Computerized modeling of structural and thermal design problems. This



course consists of two hours lecture and four hours laboratory per week. Course will be offered every year (Winter).

Prerequisites: ETSC 265 and MET 426.

**MET 423. Computer-aided Design and Manufacturing (4).** Integrates Computer-aided Design (CAD) and Computer-aided Manufacturing (CAM). Three hours lecture and two hours laboratory per week.

Prerequisites: ETSC 265 and MET 355.

**MET 426. Applications in Strength of Materials (4).** Topics support stress analysis and design. Laboratory activities include material strength, hardness, impact testing, strain gage technology, photoelasticity, ultrasonics, and eddy current. This course consists of four hours of lecture each week plus an associated lab for two hours per week. Course will be offered every year (Spring). Prerequisites: ETSC 312 and MET 351.

**MET 426LAB. Applications in Strength of Materials Laboratory**

(1). Topics support stress analysis and design. Laboratory activities include material strength, hardness, impact testing, strain gage technology, photoelasticity, ultrasonics, and eddy current. This course consists of two hours of lab each week plus an associated lecture for four hours per week. Course will be offered every year (Spring). Prerequisites: ETSC 312 and MET 351. Co-requisite: MET 426.

**MET 483. Ceramics and Composites (4).** Composition, characterization, and classification of ceramics and related composite materials incorporating industrial applications, processing, and fabrication. This course consists of two hours of lecture and four hours of lab per week. Course will be offered on even numbered years (Winter). Prerequisites: CHEM 111 and CHEM 111LAB, or CHEM 181 and CHEM 181LAB.

**MET 488. Professional Certification Exam Preparation (2).** A comprehensive review of professional mechanical engineering principles and technical skills in preparation for the national certification examination. Two hours of lecture per week. Course will be offered every year (Winter). Prerequisite: MET 418.

**MET 489A. Senior Project I (4).** This capstone course includes planning, design, and analysis (A), construction (B), and test and evaluation (C). The students select an engineering problem and design a solution. Two lecture hours and four practice hours per week. Formerly MET 495A; students may not receive credit for both. Course will be

offered every year (Fall). Notes: Course must be taken in sequence. Failure to complete any course in this sequence, requires restarting the sequence at 489A. Prerequisites: MET 314 and MET 314LAB and MET 327 and MET 327LAB and MET 351 and MET 351LAB and MET 387 and MET 426 and MET 426LAB Co-requisites: MET 418 and MET 418LAB. CE - Culminating Experience

**MET 489B. Senior Project II (4).** This capstone course includes planning, design, and analysis (A), construction (B), and test and evaluation (C). The students select an engineering problem and design a solution. Two hours of lecture and four hours of practice. Formerly MET 495B; students may not receive credit for both. Course will be offered every year (Winter). Notes: Course must be taken in sequence. Failure to complete any course in this sequence, requires restarting the sequence at 489A. Prerequisite: MET 489A. CE - Culminating Experience

**MET 489C. Senior Project III (4).** This capstone course includes planning, design, and analysis (A), construction (B), and test and evaluation (C). The students select an engineering problem and design a solution. Two hours of lecture and four hours of practice. Formerly MET 495C; students may not receive credit for both. Course will be offered every year (Spring). Notes: Course must be taken in sequence. Failure to complete any course in this sequence, requires restarting the sequence at 489A. Prerequisite: MET 489B. CE - Culminating Experience

**MET 496. Individual Study (1-6).** May be repeated if subject is different.

**MET 497. Honors (1-12).** Prerequisite: admission to department honors program.

**MET 498. Special Topics (1-6).** May be repeated if subject is different.

**MET 499. Seminar (1-5).** May be repeated if subject is different.

#### Management Courses

**MGT 200. Essential Skills for Business Professionals (5).** This course develops the skills and insights necessary to effectively acquire, synthesize and disseminate knowledge as a business decision maker - skills essential for success in business school and standard abilities in high performance professionals. Course will be offered every year (Fall, Winter, Spring). K1 - Academic Writing II: Reasoning & Research

**MGT 289. Business Plan Development (3).** This course develops the skills for developing, writing and presenting a business plan for profit/non-profit organizations. Students must be 18 or older. Open to all majors.

**MGT 298. Special Topics (1-6).** May be repeated if subject is different.

**MGT 299. Seminar (1-5).** May be repeated if subject is different.

**MGT 380. Organizational Management (5).** Principles of management class for non-business majors. Introduces students to the history and development of management ideas and contemporary practice. Overview of all the major elements of the managerial functions. Course will be offered every year (Fall, Winter, Spring, Summer).

Prerequisites: this course is only available to non-business majors. K6 - Individual & Society

**MGT 382. Principles of Management (5).** This course introduces students to the macro (e.g., structure and strategy) and micro (e.g., human behaviors and leadership) principles of Management. Course will be offered every year (Fall, Winter, Spring, Summer). Prerequisite: ECON 201 and admission to a CB major; or, admission to a College of Business Graduate Program.

**MGT 384. Introduction to International Business (5).** Principles of International business in culture, diversity, ethics, sustainability, politics, economics, finance, operations, human resources, and global markets. Course will be offered every year (Fall, Winter, Spring, Summer). Prerequisites: MGT 380 or MGT 382. K4 - Global Dynamics

**MGT 386. Principles of Organizational Behavior (5).** Applied and conceptual analysis of behavior within organizations. Involves leadership, motivation, communications, group processes, decision-making, climate, and culture. K6 - Individual & Society

**MGT 389. Business and Society (5).** This course interweaves ethics into a survey of topic and issues pertinent to the business, government, and society relationship. Major themes are social responsibility, business ethics, ethical decision-making, sustainability, and ethical policy and practice. Course will be offered every year (Fall, and Spring). Prerequisites: MGT 380 or MGT 382. K6 - Individual & Society

**MGT 394. Legal Considerations in Sport Business (5).** An exploration of the relationship between sports and the law. Issues to be explored include liability, legal rights of employees and

athletes, as well as managing the legal risk in the sports profession. Course will be offered every year (Fall). Prerequisites: BUS 241 and admission to a College of Business major AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25; OR (declaration of a sports business minor or certificate); OR (declaration of a sport management major).

**MGT 395. Leadership in Business Organizations (5).** Examination of theories and practices of leadership in business organizations. Course will be offered every year (Fall, Spring). K5 - Humanities

**MGT 396. Individual Study (1-6).** May be repeated if subject is different.

**MGT 397. Honors (1-12).** Prerequisite: admission to department honors program.

**MGT 398. Special Topics (1-6).** May be repeated if subject is different.

**MGT 399. Seminar (1-5).** May be repeated if subject is different.

**MGT 477. Global Leadership and Culture (5).** Leadership and developmental relationships across cultures, cultural influences on leadership attributes, behaviors, and performance; leader development, self-assessment of leader competencies. Prerequisites: (MGT 382 and admission to a College of Business major AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25) OR (MGT 380 and admission to the Integrated Energy Management Program).

**MGT 478. Leadership Capstone (5).** Culminating learning experience that explores knowledge of effective leadership acquired through all previous leadership curriculum. Involves application and evaluation of: students' leader competencies, knowledge of leadership theory, values, and ethics. Course will be offered every year (Fall and Spring).

Prerequisites: MGT 382, MGT 395, and MGT 483 all with a grade of C or higher AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH

154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25.

**MGT 482. Advanced Organizational Behavior (5).** MGT 482 builds on the foundations and theories of MGT 386 by providing students with an advanced understanding of the field of organizational behavior. Students will be challenged to develop and improve their leadership knowledge and skills, and they will also learn to apply, integrate, and problem-solve using emerging management research. Prerequisites: MGT 386 and admission to a College of Business major AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25.

**MGT 483. Decision Making and Organizational Change (5).** This course analyzes the synergetic relationship between leadership, decision making and organizational change. It combines theory and applied practice to inform students of current studies on how effective decisions are made, how bad decisions can be avoided and how to implement change resulting from good decisions. The dual aspects of the decision-making process: intuitive and analytical will be covered, and the respective values of both will be highlighted. Prerequisites: MGT 382 and admission to a College of Business major AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25.

**MGT 484. International Management (Put on reserve 9/16/18) (5).** A comparative study of management in selected countries as well as an analysis of key managerial problems encountered in the multinational corporation. (Put on reserve 9/16/18, will go inactive 8/24/21) Prerequisites: MGT 382 and admission to a College of Business major AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each

course and a minimum collegiate GPA of 2.25.

**MGT 487. Entrepreneurism and Small Business Management (5).**

Investigation of entrepreneurship and small business management issues. Students learn to perform feasibility studies and develop business plans. Small business challenges in marketing, finance, etc., will also be addressed. Prerequisites: MGT 382 and admission to a College of Business major AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25.

**MGT 489. Strategic Management (5).**

Focuses on problem solving and decision making in the strategic management of the total enterprise. Integrates lessons from Accounting (ACCT), Economics (ECON), Finance (FIN), Information Systems (MIS), Management (MGT), Marketing (MKT), and Supply Chain (SCM). Course will be offered every year (Fall, Winter, Spring, and Summer).

Prerequisites: admission to a College of Business Major AND Completion of the College of Business Foundation Courses (ACCT251 and ACCT252 and BUS221 and BUS241 and ECON130 or MATH130 and ECON201 and MATH153 or higher) with a grade of C- or higher AND completion of College of Business Core Courses (ECON 202 and FIN 370 and SCM 310 and MIS 386 and MKT 362 and MGT 382 and COM301 and ENG311) with a minimum grade of a C- in each course and a minimum collegiate GPA of 2.25 AND senior standing AND completed application for graduation; (OR admission to a College of Business Graduate Program). CE - Culminating Experience

**MGT 490. Management Internship (1-12).** An individualized, contracted field experience with business, industry, government, or social service agencies focusing on management related activities. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. By department permission. May be repeated up to 20 credits. Grade will either be S or U. Course will not have an established scheduling pattern. Prerequisite: 2.8 or higher CWU cumulative gpa.

**MGT 493. Management Boot Camp** (1-6). Supervised field experience seminar focused on management organizations and processes. On-location industry engagement. Education, training, and business skills application in industry setting. Grade will either be S or U. Permission of instructor. May be repeated up to 6 credits. Course will not have an established scheduling pattern.

**MGT 496. Individual Study** (1-6). May be repeated if subject is different.

**MGT 497. Honors** (1-12). Prerequisite: admission to department honors program.

**MGT 498. Special Topics** (1-6). May be repeated if subject is different.

**MGT 499. Seminar** (1-5). May be repeated if subject is different.

### **Management Information System Courses**

**MIS 298. Special Topics** (1-6). May be repeated if subject is different.

**MIS 299. Seminar** (1-5). May be repeated if subject is different.

**MIS 320. Business Process Analysis and Systems** (5). Addresses the role of business processes and enterprise information systems employed by industry. Employs an industry simulation to illustrate the integrative impact of business decisions involving forecasting, operations, distribution, purchasing, finance and other traditional functions. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: BUS 102 or IT 101 or CS 101, or by permission of FSCM department chair.

**MIS 386. Management Information Systems** (5). Use of computer-based information systems in all functional areas of business. Computer and information technology, resources, management, and end-user decision making, and system development. Prerequisites: BUS 221 and admission to a college of business major; or admission to a College of Business Graduate program.

**MIS 396. Individual Study** (1-6). May be repeated if subject is different.

**MIS 397. Honors** (1-12). Prerequisite: admission to department honors program.

**MIS 398. Special Topics** (1-6). May be repeated if subject is different.

**MIS 399. Seminar** (1-5). May be repeated if subject is different.

**MIS 446. Systems Analysis and Design in Business** (5). Methods for the analysis and assessment of business processes and subsequent planning, configuration and

implementation of supporting enterprise system modules. Incorporates systems development tools, modeling, process redesign; applications configuration. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisite: MIS 320.

**MIS 460. Applied Business Analytics** (5). Application of business intelligence tools and techniques to retrieve and analyze data and implement business decisions in a dynamic simulated environment. Employs leading industry based enterprise management, business intelligence tools and simulations. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: (MIS 386 with a minimum grade of C AND admission to a college of business major) AND completion of the college of business foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25) OR (MIS 386 with a minimum grade of C AND declaration of any minor or certificate offered through the College of Business); OR (MIS 386 with a minimum grade of C AND admission to the Integrated Energy Management Program) OR (MIS 320 with a minimum grade of C and declaration of any minor or certificate offered through the College of Business).

**MIS 490. Management Information Systems Internship** (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies focusing on management information systems related activities. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. By permission. May be repeated for credit. Grade will either be S or U. Course will not have an established scheduling pattern. Prerequisite: 2.8 or higher CWU cumulative gpa.

**MIS 493. Management Information Systems Boot Camp** (1-6). Supervised field experience seminar focused on management information system related organizations and processes. On-location industry engagement. Education, training, and business skills application in industry setting. Grade will either be S or U. Permission of

instructor. May be repeated up to 6 credits. Course will not have an established scheduling pattern.

**MIS 496. Individual Study** (1-6). May be repeated if subject is different.

**MIS 497. Honors** (1-12). Prerequisite: admission to department honors program.

**MIS 498. Special Topics** (1-6). May be repeated if subject is different.

**MIS 499. Seminar** (1-5). May be repeated if subject is different.

### **Marketing Courses**

**MKT 298. Special Topics** (1-6). May be repeated if subject is different.

**MKT 299. Seminar** (1-5). May be repeated if subject is different.

**MKT 360. Principles of Marketing** (5). Principles of marketing class for non-business majors. Explores the function and processes of marketing, introducing students to the fundamental marketing concepts. Course will be offered every year (Fall, Winter, Spring, Summer). Prerequisites: this course is only available to non-business majors. K2 - Community, Culture, & Citizenship

**MKT 362. Essential Marketing Concepts** (5). Introduction to the principles of marketing, creating, communicating, and delivering superior customer value, choosing target markets, managing customer relations. Course will be offered every year (Fall, Winter, Spring, Summer). Prerequisites: ECON 201 and BUS 221 and admission to a College of Business major; OR, admission to a College of Business Graduate Program.

**MKT 364. Marketing Promotion Management** (5). Communication problems of marketing goods and services to consumers and industrial buyers; advertising management, personal selling, and sales promotion; analysis for the promotion mix; and public interest in marketing communication. Prerequisite: MKT 362 or MKT 360.

**MKT 365. International Marketing** (5). Marketing functions involved in doing business internationally, environmental conditions affecting international trade, and problems of securing employment internationally. Prerequisites: (MKT 362 and admission to a College of Business major AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each

course and a minimum collegiate GPA of 2.25) OR (MKT 360 and admission to the Integrated Energy Management Program).

**MKT 370. Sports Marketing and Sponsorship** (5).

This course takes a strong industry focus to the study of sports marketing. Work examines the range of promotional strategies and tactics used by different leagues/sport businesses to attract and retain sports fans. Additional topics include the nature of effective sports sponsorship campaigns. Course will be offered every year (Fall and Spring).

Prerequisites: (MKT 362 and admission to a College of Business major AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25) OR (MKT 360 with a minimum C- grade and declaration of a sport business minor or certificate); OR (MKT 360 with a minimum C- grade and declaration of a sport management major).

**MKT 371. Sponsorship and Promotion in Sport Business** (5).

Examination of sport sponsorship, sales, implementation, and evaluation; communication between sport sellers and consumers through advertising, sales promotion, public relations, and other forms of communication. Course will be offered every year (Summer). Prerequisites: (MKT 362 and admission to a College of Business major AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25) OR (MKT 360 with a minimum grade of C- and declaration of a sport business minor or certificate); OR (MKT 360 with a minimum grade of C- and declaration of a sport management major).

**MKT 372. Revenue Generation and Finance in Sport Business** (5).

Examination of historical and current practice in revenue generation and financing of sport organizations, including public and private sources of revenue. Course will be offered every year (Winter). Prerequisites: (MKT 362 and admission to a College of Business major AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and

BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25) OR (MKT 360 with a minimum grade of C- and declaration of a sport business minor or certificate); OR (MKT 360 with a minimum grade of C- and declaration of a sport management major).

**MKT 376. Foundations of Digital Marketing** (5).

Explores the impact of digital media on consumer behavior and marketing strategies. Provides an overview of digital metrics and analytics, online business models, future trends, and ethical implications of digital marketing. Course will be offered every year (Fall, Winter, Spring, Summer). Prerequisites: MKT 360 or MKT 362.

**MKT 396. Individual Study** (1-6). May be repeated if subject is different.

**MKT 397. Honors** (1-12). Prerequisite: admission to department honors program.

**MKT 398. Special Topics** (1-6).

**MKT 399. Seminar** (1-5). May be repeated if subject is different.

**MKT 468. Consumer Behavior** (5). An introduction to analysis of the consumer as a basis for marketing decisions. The analysis concerns who buys what, how the consumer uses the product, the significance of the product to the consumer, and the buying process. Prerequisites: MKT 362 with a grade of C or higher and admission to a College of Business major AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25.

**MKT 469. Market Research** (5).

Application of research to economic and business problems; tools of research design; planning investigations; gathering, organizing, and interpreting data; and presentation of findings. (Not open to students with credit in ECON 426.) Prerequisites: MKT 362 with a grade of C or higher and admission to a College of Business major AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25.

**MKT 470. Marketing Problems and Policy** (5).

The capstone course for the marketing specialty. Use case analysis and other techniques to develop marketing decision skills and policy determination abilities. By permission. Prerequisites: MKT 362 and MKT 468 and MKT 469 with a grade of C or higher and admission to a College of Business major AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25.

**MKT 476. Advanced Digital Marketing** (5).

Application of digital marketing theories and concepts to real-world cases and projects. Prerequisite: MKT 376.

**MKT 490. Marketing Internship** (1-12).

An individualized, contracted field experience with business, industry, government, or social service agencies focusing on marketing related activities. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. By department permission. May be repeated up to 20 credits. Grade will either be S or U. Course will not have an established scheduling pattern. Prerequisite: 2.8 or higher CWU cumulative gpa.

**MKT 493. Marketing Boot Camp** (1-6).

Supervised field experience seminar focused on marketing related organizations and processes. On-location industry engagement. Education, training, and business skills application in industry setting. Grade will either be S or U. Permission of instructor. May be repeated up to 6 credits. Course will not have an established scheduling pattern.

**MKT 496. Individual Study** (1-6). May be repeated if subject is different.

**MKT 497. Honors** (1-12). Prerequisite: admission to department honors program.

**MKT 498. Special Topics** (1-6). May be repeated if subject is different.

**MKT 499. Seminar** (1-5). May be repeated if subject is different.

**Military Science and Leadership Courses**

**MSL 101. Foundations of Officership** (1).

Introduces students to issues and competencies that are central to a commissioned officer's responsibilities. Establishes framework for

understanding officership, leadership, Army values, and life skills, such as physical fitness and time management. Open to all students.

**MSL 102. Basic Leadership (2).**

Establishes foundation of basic fundamentals such as problem solving, communications, briefings, effective writing, goal setting, techniques for improving listening and speaking skills, and an introduction to counseling. Open to all students.

**MSL 103. Advanced Leadership (2).**

Studies in problem solving, communications, effective writing, goal setting, techniques of listening, advanced speaking skills and professional counseling. Open to all students.

**MSL 201. Individual Leadership**

**Studies (2).** Students identify successful leadership characteristics through personal experience and observation of others during hands-on team building exercises. Explores persuasion techniques and the continuum of guidance to determine leadership styles. Open to all students.

**MSL 202. Leadership and Teamwork**

**(2).** Examines how to build successful teams, various methods for influencing action, effective communication in setting and achieving goals, the importance of timing the decision, creativity in the problem solving process, and obtaining team buy-in through immediate feedback. Open to all students.

**MSL 211. Land Navigation (2).**

Principles of land navigation and orienteering with practical field applications.

**MSL 212. Leadership Laboratory (1).**

Practical experience in leadership and basic military skills. May be repeated for credit.

**MSL 292. Leader's Training Course,**

**Internship (8).** Basic military skills and leadership techniques taught at Ft. Knox, Kentucky, during the summer. Qualifies the student for enrollment in the ROTC advanced course. Training emphasizes leadership development and can be taken in place of the basic course. Students receive pay, food, lodging, and travel expenses to and from Ft. Knox. By permission.

**MSL 293. Ranger Challenge Training**

**(2).** Prepares students to compete as a team member on the CWU Ranger Challenge team. Corequisite: PEF 118.

**MSL 296. Individual Studies in Military Science (1-15).**

**MSL 298. Special Topics (1-6).**

**MSL 299. Seminar (1-5).** May be repeated if subject is different.

**MSL 301. Leadership and Problem**

**Solving (3).** Students conduct self-assessment of leadership style, develop personal fitness regimen, and learn to plan and conduct individual/small unit tactical training while testing reasoning and problem solving techniques.

Students receive direct feedback on leadership abilities. Required for commissioning. Prerequisite: MSL 102.

**MSL 301LAB. Military Science and Tactics III Laboratory (1).**

Requires concurrent enrollment in MSL 301. Practical experience and application in first aid, weapons, communications, and advanced land navigation. Corequisite: MSL 301.

**MSL 302. Leadership and Ethics (3).**

Students learn small-group leadership methods with emphasis on problem solving and dealing with situational change required for commissioning. Prerequisite: MSL 301.

**MSL 302LAB. Military Science and Tactics III Laboratory (1).**

Practical experience and application in small-unit leadership techniques, and small-unit tactics. Corequisite: MSL 302.

**MSL 303. Leadership and Small**

**Group Tactics (3).** Students learn and demonstrate small-unit tactics and land navigation methods while using advanced problem-solving techniques.

Emphasis on decision making and communication skills. Required for commissioning. Prerequisite: MSL 302.

**MSL 303LAB. Military Science and Tactics III Laboratory (1).**

Practical experience integration of small-unit tactics, land navigation, techniques of fire support, and military skills. Corequisite: MSL 303.

**MSL 314. Military History of the**

**United States (5).** A comprehensive and systematic survey and analysis of the American military experience from colonial times through the Vietnam War. MSL 314 and HIST 314 are cross-listed courses; students may not receive credit for both.

**MSL 392. Leader Development and Assessment Course Preparation (2).**

Practical exercise in small-unit leadership and tactics. Prepares the student for leader development and assessment course. Prerequisite: MSL 302.

**MSL 396. Individual Study (1-6).** May be repeated if subject is different.

**MSL 397. Honors (1-12).** Prerequisite: admission to department honors program.

**MSL 398. Special Topics (1-6).** May be repeated if subject is different.

**MSL 399. Seminar (1-5).** May be repeated if subject is different.

**MSL 401. Leadership and**

**Management (4).** Develops student proficiency in planning and executing complex operations, functioning as a member of a staff, and mentoring subordinates. Students explore training management, methods of effective staff collaboration, and developmental counseling techniques. Required for commissioning. Prerequisite: MSL 303.

**MSL 402. Officership (4).**

Study includes case analysis of military culture and practical exercises on establishing a command climate. Students must complete a quarter-long Senior Leadership Project that requires them to plan, organize, collaborate, analyze, and demonstrate their leadership skills. Required for commissioning. Prerequisite: MSL 401.

**MSL 403. Officership II (2).**

Emphasis on analyzing case and situational studies which cover contemporary leadership problems. Required for commissioning. Prerequisite: MSL 402.

**MSL 492. Leader Development and Assessment Course Internship (8-15).**

Practical exercise in small-unit leadership and tactics. Five-week camp at Ft. Lewis, Washington. Required for commissioning. May be repeated for credit. Prerequisites: MSL 301, MSL 302, and MSL 303.

**MSL 496. Individual Study (1-6).** May be repeated if subject is different.

**MSL 497. Honors (1-12).** Prerequisite: admission to department honors program.

**MSL 498. Special Topics (1-6).** May be repeated if subject is different.

**MSL 499. Seminar (1-5).** May be repeated if subject is different.

**Music Courses**

**MUS 101. History of Jazz (5).** History of artistic, cultural, and technological developments in jazz, focusing on important players and performances.

Introduction to fundamental musical concepts and methods; emphasis on active listening, social justice, current issues. Course will be offered every year (Fall, Winter, Spring). AH-Aesthetic Experience. AH-Aesthetic Experience. K3 - Creative Expression

**MUS 102. Introduction to Music (5).**

Landmark composers, styles, and works of Western music history from the Middle Ages to the present. Fundamental musical concepts (melody, harmony, rhythm, form, etc.) are emphasized to develop student understanding and listening skills. Course will be offered every year (Fall, Winter, Spring). AH-Aesthetic

Experience. AH-Aesthetic Experience. K3 - Creative Expression

**MUS 103. History of Rock and Roll** (5). History of Rock and Roll, America's second indigenous musical art form, after jazz. Emphasis placed on artists, music genres, and cultural/societal forces shaping rock's evolution, 1950s to present. Extensive listening, reading; required online discussion. Course will be offered every year (Fall, Winter, Spring). AH-Aesthetic Experience. AH-Aesthetic Experience. K3 - Creative Expression

**MUS 105. Introduction to World Music** (4). An interdisciplinary exploration of the many roles played by music in traditional societies, with emphasis on music's social functions, life contexts, and influence on self-identity. Course will be offered every year (Fall, Winter, Spring). Prerequisite: ENG 101. K4 - Global Dynamics

**MUS 120. Composition 1** (3). Introduction to composition addressing such topics as phrase structure, melodic development, modulations, textures, and transitions. Small compositional projects emphasizing certain stylistic traits for piano and other genres. May be repeated up to 3 credits. Prerequisites: MUS 145 and MUS 145A with a C or higher.

**MUS 143. Introduction to Music Theory** (3). Introduction of fundamental music theory: scales, keys, meter, and rhythm, triads, ear-training, and keyboard fundamentals. Course is designed for non-majors seeking basic musical skills, and for music majors with limited theoretical backgrounds. Does not count toward a music degree.

**MUS 144. Theory 1** (3). Basic theoretical concepts dealing with fundamental elements of common-practice period melody, harmony, and rhythm. This course is the first in the six-course harmony sequence. Courses must be taken in sequence. Prerequisite: online fundamental exam with 75% or higher, or successful completion of the online fundamental course. Co-requisite: MUS 152A.

**MUS 144A. Aural Skills 1** (1). Basic fundamental concepts of common-practice period melody, harmony, and rhythm through ear training, sight-singing, dictation, rhythm, and basic keyboard applications. This course is the first in the three quarter, first year aural skills sequence. Courses must be taken in sequence. Prerequisite: online fundamental exam with 75% or higher, or successful completion of the online

fundamental course. Co-requisite: MUS 152A.

**MUS 145. Theory 2** (3). Basic theoretical concepts dealing with fundamental elements of common-practice period melody, harmony, rhythm, and voice leading as demonstrated through analytical and compositional perspectives. This course is the second in the six-course harmony sequence. Courses must be taken in sequence. Prerequisites: MUS 144 and MUS 144A with grades of C or higher. Co-requisite: MUS 145A and MUS 152A or MUS 153A.

**MUS 145A. Aural Skills 2** (1). Basic fundamental concepts of common-practice period melody, harmony, and rhythm through ear training, sight-singing, dictation, rhythm, and basic keyboard applications. This course is the second in the three quarter, first year aural skills sequence. Courses must be taken in sequence. Prerequisites: MUS 144 and MUS 144A with grades of C or higher. Co-requisite: MUS 145A and MUS 152A or MUS 153A.

**MUS 146. Theory 3** (3). Basic theoretical concepts dealing with fundamental elements of common-practice period melody, harmony, rhythm, and voice leading as demonstrated through analytical and compositional perspectives. This course is the third in the six-course harmony sequence. Courses must be taken in sequence. Prerequisite: MUS 145 and MUS 145A with grades of C or higher. Co-requisite: MUS 146A and MUS 154A or MUS 153A or MUS 154A.

**MUS 146A. Aural Skills 3** (1). Basic fundamental concepts of common-practice period melody, harmony, and rhythm through ear training, sight-singing, dictation, rhythm, and basic keyboard applications. This course is the third in the three quarter, first year aural skills sequence. Courses must be taken in sequence. Prerequisite: MUS 145 and MUS 145A with grades of C or higher. Co-requisite: MUS 146A and MUS 154A or MUS 153A or MUS 154A.

**MUS 152A. Class Piano I** (1). Group instruction providing beginning skills to prepare for the piano proficiency requirement and to reinforce music theory concepts. Grade will either be S or U. Co-requisites: MUS 144 and MUS 144A.

**MUS 153A. Class Piano II** (1). Group instruction providing beginning/intermediate skills to prepare for the piano proficiency requirement and to reinforce music theory concepts.

Grade will either be S or U. Prerequisite: MUS 152A.

**MUS 154. Class Instruction** (1). May be repeated for credit. Each course prerequisite to the next numeral (A.) Piano I, II, III; (B.) Voice I, II; (H.) Guitar I, II. Course fees do apply.

**MUS 154A. Class Piano III** (1). Group instruction providing intermediate skills to prepare for the piano proficiency requirement and to reinforce music theory concepts. May be repeated up to 3 credits. Grade will either be S or U. Prerequisite: MUS 153A.

**MUS 154B. Class Voice for the Non-major** (1). This course is designed for the non-major beginning voice student. Through group instruction the fundamentals of proper vocal production will be introduced and practiced; concepts of breathing, resonance and articulation. Students will prepare group songs and individual solos by the end of the quarter. May be repeated for credit. Prerequisite: each course prerequisite to the next numeral (A.) Piano I, II, III; (B.) Voice I, II; (H.) Guitar I, II.

**MUS 164. Major Applied Area (Individual Instruction)** (1-2). Instruction available in performance areas A-H and K. Department consent required. May be repeated for credit.

**MUS 171. Secondary Applied Area (Individual Instruction)** (1). Private study on instruments secondary to a student's major performance area. Intended particularly for beginning students who wish to develop additional skills on an instrument or in voice to enrich their total music background. Instruction available in performance areas A-I and K. May be repeated for credit. One credit any quarter, may be repeated.

**MUS 171A. Secondary Applied Area Piano** (1). Private study on instruments secondary to a student's major performance area. Intended particularly for beginning students who wish to develop additional skills on an instrument or in voice to enrich their total music background. By permission. May be repeated for credit. One credit any quarter, may be repeated.

**MUS 198. Special Topics** (1-6).

**MUS 210. Vocal Jazz Choir** (1). Must attend all scheduled rehearsals and performances. An ensemble specializing in performance of repertoire from jazz choir tradition established in the Northwest and beyond. Limited to SATB singers and rhythm-section instruments. May be repeated for credit. Prerequisite:

- student must be freshmen or sophomore standing.
- MUS 211. Women's Choir** (1). May be repeated for credit. Two hours of rehearsal per week plus all scheduled rehearsals and performances. Prerequisite: student must be freshmen or sophomore standing.
- MUS 213. Flute Choir** (1). Previous experience in flute performance and permission of instructor. Two hours of rehearsal per week plus all scheduled rehearsals and performances. May be repeated for credit. Prerequisite: students must be freshmen or sophomore standing.
- MUS 214. Brass Choir** (1). Two hours of rehearsal per week plus all scheduled rehearsals and performances. May be repeated for credit. Prerequisite: student must be freshmen or sophomore standing.
- MUS 215. Chamber Orchestra** (1). Two hours rehearsal per week plus all scheduled rehearsals and performances. By audition. May be repeated for credit. Course will be offered every year (Winter and Spring). Prerequisites: student must be freshmen or sophomore standing.
- MUS 217. Chamber Music Ensemble** (1). One hour coaching plus two hours rehearsal per week plus all scheduled rehearsals and performances. Instruction available in performance areas A-I, K, L. By audition. May be repeated for credit. Course will be offered every year (Fall and Winter).
- MUS 218. Jazz Combo** (1). Performance in jazz combos in various configurations. May be repeated for credit. Prerequisite: student must be freshmen or sophomore standing.
- MUS 220. Composition 2** (2). Intermediate study in composition. May be repeated up to 6 credits. Prerequisite: 3 credits of MUS 120.
- MUS 228. Men's Choir** (1). Two hours of rehearsal per week plus all scheduled rehearsals and performances. May be repeated for credit. Prerequisites: student must be freshmen or sophomore standing.
- MUS 229. Percussion Ensemble** (1). Two hours rehearsal per week plus all scheduled rehearsals and performances. By audition. May be repeated for credit. Course will be offered every year (Fall, Winter, and Spring). Prerequisite: student must be freshmen or sophomore standing.
- MUS 232. Big Band** (1). Must attend all scheduled rehearsals and performances. MUS 432 for juniors and seniors. By permission. May be repeated for credit.
- Prerequisites: student must be freshmen or sophomore standing.
- MUS 235. Laboratory Choir** (1). Two hours of rehearsal per week plus all scheduled rehearsals and performances. Open to all students to participate as singers. By permission. May be repeated for credit.
- MUS 240. Diction in Singers I (Intro to IPA, Italian, Latin, English)** (2). A fundamental course to teach the singer and choral director the International Phonetic Alphabet symbols, the correct execution of Italian, Latin, and English sounds, and the basic pronunciation rules of the three languages.
- MUS 241. Diction for Singers 2 (Advanced IPA and German)** (2). A course designed to teach the singer and choral director the International Phonetic Alphabet symbols as specifically applied to the German languages, the correct execution of German sounds, and the basic pronunciation rules of German. Prerequisite: MUS 240.
- MUS 242. Diction for Singers 3 (Advanced IPA and French)** (2). A course designed to teach the singer and choral director the International Phonetic Alphabet symbols as specifically applied to the French language, the correct execution of French sounds and the basic pronunciation rules of French. Prerequisite: MUS 240.
- MUS 244. Theory 4** (3). Intermediate theoretical concepts dealing with fundamental elements of common-practice period melody, harmony, rhythm, and voice leading as demonstrated through analytical and compositional perspectives. This course integrates written topics and ear training, singing, dictation, rhythm, and practical keyboard applications. This is the fourth in the six-course harmony sequence. Courses must be taken in sequence. Prerequisites: MUS 146 and MUS 146A with grades of C or higher.
- MUS 245. Theory 5** (3). Advanced theoretical concepts dealing with fundamental elements of common-practice period melody, harmony, rhythm, and voice leading as demonstrated through analytical and compositional perspectives. This course integrates written topics and ear training, singing, dictation, rhythm, and practical keyboard applications. This is the fifth in the six-course harmony sequence. Courses must be taken in sequence. Prerequisite: MUS 244 with a C or higher.
- MUS 246. Theory 6** (3). Advanced theoretical concepts dealing with fundamental elements of common-practice period melody, harmony, rhythm, and voice leading as demonstrated through analytical and compositional perspectives. This course integrates written topics and ear training, singing, dictation, rhythm, and practical keyboard applications. This is the sixth in the six-course harmony sequence. Courses must be taken in sequence. Prerequisite: MUS 245 with a C or higher.
- MUS 252D. Class Instrumental Methods: Double Reeds** (1). Techniques and methods in applied instruction in music education. May be repeated for credit.
- MUS 253C. Class Instrumental Methods Strings I** (1). Lower strings (cello and bass). Techniques and methods in applied instruction for music education. May be repeated for credit.
- MUS 253D. Class Instrumental Methods Woodwinds I** (1). Lower woodwinds (single reeds). Techniques and methods in applied instruction for music education. May be repeated for credit.
- MUS 253E. Class Instrumental Methods Brass I** (1). Lower brass (trombone and tuba). Techniques and methods in applied instruction for music education. May be repeated for credit.
- MUS 253G. Class Instrumental Methods Percussion I** (1). Techniques and methods in applied instruction for music education. May be repeated for credit.
- MUS 254B. Class Vocal Methods** (1). A course designed to teach the music education student the fundamentals of group vocal instruction: basic vocal anatomy and physiology, common approaches to vocal technique instruction, how to prepare songs in English and foreign languages, and beginning vocal performance strategies.
- MUS 254C. Class Instrumental Methods Strings II** (1). Upper strings (violin and viola). Techniques and methods in applied instruction for music education. May be repeated for credit.
- MUS 254D. Class Instrumental Methods Woodwinds II** (1). Upper woodwinds (flute). Techniques and methods in applied instruction for music education. May be repeated for credit.
- MUS 254E. Class Instrumental Methods Brass II** (1). Upper brass (horn and trumpet). Techniques and methods in applied instruction for

music education. May be repeated for credit.

**MUS 255. Jazz Harmony and**

**Keyboard (1).** For instrumental, choral, and studio teachers providing practical/working knowledge of keyboard harmony, chord voicing, bass line construction, and improvisation in jazz and pop genres. Prerequisites: MUS 146 and MUS 154A.

**MUS 261. Opera Workshop (1-2).**

A class leading to the performance of scenes and single acts from opera. By audition. May be repeated for credit. Course will be offered on even numbered years (Winter and Spring). Prerequisite: student must be freshmen or sophomore standing.

**MUS 262. Opera Production (1-3).**

A class leading to performance of a complete opera. May be repeated up to 9 credits. Prerequisite: student must be freshman or sophomore standing.

**MUS 264. Major Applied Area**

**(Individual Instruction) (1-2).** Instruction available in performance areas A-H and K. Department consent required. May be repeated for credit. Prerequisite: MUS 164 (A-H, and K) in appropriated applied area.

**MUS 266. Wind Ensemble (1-2).**

Open to students with demonstrated proficiency on band instruments by audition or permission of the instructor. Five hours of rehearsal per week plus all scheduled rehearsals and performances. One credit if offered one term only during summer session. May be repeated for credit. Prerequisite: students must be freshmen or sophomore standing.

**MUS 267. Choir (1-2).**

Open to all students by audition. Five hours rehearsal per week plus all scheduled rehearsals and performances. One credit if offered one term only during summer session. May be repeated for credit. Prerequisite: student must be freshmen or sophomore standing.

**MUS 268. Chamber Choir (2).**

Open to all students by audition. Three hours rehearsal per week plus all scheduled rehearsals and performances. May be repeated for credit. Prerequisite: student must be freshmen or sophomore standing.

**MUS 269. Symphonic Winds (2).**

Symphonic Winds studies and performs a musically diverse repertoire, ranging from traditional band literature to contemporary music for wind band. Open to all students by audition. May be repeated for credit. Course will be offered every year (Winter and Spring). Prerequisite: students must be freshmen or sophomore standing.

**MUS 271. Secondary Applied Area**

**(Individual Instruction) (1).** Private study on instruments secondary to a student's major performance area. Intended particularly for intermediate students who wish to develop additional skills on an instrument or in voice to enrich their total music background. Instruction available. One credit any quarter, may be repeated.

**MUS 277. Orchestra (1-2).**

Open to all students proficient on orchestral instruments by audition. Five hours rehearsal per week plus all scheduled rehearsals and performances. One credit if offered one term only during summer session. May be repeated for credit. Course will be offered every year (Fall, Winter, and Spring). Prerequisite: students must be freshmen or sophomore standing.

**MUS 287. Marching and Concert Band**

**(2).** Fall quarter only. Five hours of rehearsal per week plus all scheduled rehearsals and performances. This band functions as a marching band and is organized into a concert band at completion of the football season. May be repeated for credit. Prerequisite: students must be freshmen or sophomore standing.

**MUS 288. Symphonic Band (2).**

Winter and spring quarters only. Five hours of rehearsal per week plus scheduled rehearsals and performances. During winter and spring quarters the symphonic band will present several formal concert programs. May be repeated for credit. Prerequisite: students must be freshmen or sophomore standing.

**MUS 292. Accompanying Practicum**

**(1-3).** By assignment of instructor. Minimum three hours of rehearsal weekly per credit plus performances. May be repeated for credit. Prerequisite: students must be freshmen or sophomore standing.

**MUS 296. Individual Study (1-6).**

**MUS 298. Special Topics (1-6).**

**MUS 299. Seminar (1-5).**

**MUS 300. Recital Performance (1).**

Recital performance required for completion of degrees requiring 364-level applied study. Grade will either be S or U. Prerequisite: at least 1 credit of MUS 364 (any letter). Co-requisite: MUS 364. CE - Culminating Experience

**MUS 320. Composition 3 (2).**

Advanced study in composition. May be repeated up to 6 credits. Prerequisite: six units of MUS 220.

**MUS 323. Choral Music Education (3).**

Philosophy, methods, and materials. Individual research and presentation of

teaching unit in class. Prerequisite: MUS 341.

**MUS 325. Instrumental Music**

**Education (3).** Philosophy and psychology of music education through methods and materials; observation of teachers in the rehearsal, individual research. Prerequisite: admission to the Teacher Certification Program.

**MUS 326. Music in the Classroom (Put**

**on reserve 9/16/17) (3).** For the general classroom teacher. (Not for music majors or minors.). Techniques used in helping children to develop musically through singing, rhythmic activities, creative activities, listening, and playing instruments. (Put on reserve 9/16/17. Will go inactive 8/24/2020.) Prerequisite: admission to the Teacher Certification Program.

**MUS 329. General Music Methods (3).**

Materials, methods, and instructional techniques for general music, grades K-12. Prerequisites: MUS 146 and MUS 146A with grades of C or higher, and current WSP/FBI fingerprint clearance.

**MUS 340. Form and Analysis (3).**

Analysis of the structure of tonal music from both a historical and theoretical perspective. Prerequisite: MUS 246 with a grade of C or higher.

**MUS 341. Conducting I (3).**

Fundamental principles of baton techniques, practical experience in conducting. Prerequisite: MUS 146.

**MUS 342. Conducting II (3).**

A continuation of MUS 341 and conducting literature of junior-senior high school performing groups. Prerequisite: MUS 341.

**MUS 343. Counterpoint I (3).**

Independent melodic line, harmonic background, motive structure, and two-point counterpoint as practiced by the composers of the 18th and 19th centuries. Written exercises and analysis. Prerequisite: MUS 244.

**MUS 344. Theory Review (3).**

A complete review of traditional harmony from rudiments of music through chromatic harmony. Prerequisite: MUS 246.

**MUS 347. Electronic Music**

**Composition (3).** Study of contemporary technologies and techniques as used to compose music. MUS 347 and MUS 547 are layered courses; students may not receive credit for both. Prerequisite: MUS 246.

**MUS 353. Jazz Improvisation I (1).**

Beginning basic jazz improvisation techniques for upper-division wind, percussion, guitar, acoustic bass, and keyboard instruments. May be repeated



- for credit. Prerequisites: MUS 246 and MUS 255.
- MUS 354. Jazz Improvisation II (1).** Intermediate basic jazz improvisation techniques for upper-division wind, percussion, guitar, acoustic bass, and keyboard instruments. May be repeated for credit. Prerequisites: MUS 246, MUS 255, and MUS 353.
- MUS 355. Jazz Improvisation III (1).** Advanced basic jazz improvisational techniques for upper-division wind instruments, percussion, guitar, acoustic bass, and keyboard instruments. May be repeated for up to 2 credits. Prerequisite: MUS 354.
- MUS 356. Jazz Styles (3).** A survey of jazz history with regard to evolution of jazz styles. Course activities include analysis, transcription, guided listening, imitative composition, research and essay writing. Prerequisite: MUS 246.
- MUS 357. Jazz Composition and Arranging (3).** Development of skills in songwriting, melody and chord progression, construction, and arranging in the jazz idiom through student projects and score analysis. Prerequisites: MUS 246 and MUS 255.
- MUS 359. Survey of Music in Cross-cultural Perspectives (2).** An introduction to ethnomusicology: the cultural context of music with emphasis on Africa, Asia, Native North and South America, Oceania. ANTH 359 and MUS 359 are equivalent courses; students may not receive credit for both.
- MUS 364. Major-applied Area (Individual Instruction) (1-2).** Instruction available in performance areas A-H and K. May be repeated for credit. Prerequisite: MUS 264 (A-H, and K) in appropriated applied area.
- MUS 366. Applied Jazz (Individual Instruction) (1).** Private study on instruments secondary to a student's major performance area. Intended particularly for advanced students who wish to develop additional skills on an instrument or in voice to enrich their total music background. Instruction available in performance areas A-E, G and H. One credit any quarter, may be repeated. Prerequisites: at least two quarters at the MUS 264 level and admission to the BA music jazz specialization.
- MUS 370. Applied Area (Individual Instruction: Secondary or Major Supplementary) (1).** Private study in area secondary to major performance area, or supplemental instruction in major performance area. Intended for advanced students who wish to develop additional performance skills to enrich their total music background. By permission. May be repeated for credit.
- MUS 372. Music History 1 (3).** Study of music history. The first in a three-quarter sequence. Prerequisites: MUS 146 with a C or higher, and MUS 154A.
- MUS 373. Music History 2 (3).** A study of music history. The second of a three-quarter sequence. Prerequisites: MUS 244 and MUS 372.
- MUS 374. Music History 3 (3).** A study of music history. The third of a three-quarter sequence. Prerequisites: MUS 245 and MUS 373.
- MUS 379. Philosophy of Music (On reserve as of 9/16/15) (3).** Great music as a source of insights into human beings and the world. Put on reserve as of 9/16/15. Will go inactive 8/24/18.
- MUS 380. Music History Review (3).** A review of the material presented in the required undergraduate music history sequence. Specifically intended for graduate students. The final exam will be equivalent to the graduate music history diagnostic examination. May not be used to satisfy upper-division undergraduate or graduate degree requirements. Required for graduate students not passing Music History diagnostic test. Grade will either be S or U.
- MUS 382. Survey of Chamber Music (3).** Prerequisite: MUS 372.
- MUS 383. Survey of Symphonic Music (3).** Prerequisite: MUS 372.
- MUS 384. Survey of Choral Music (3).** Prerequisite: MUS 372.
- MUS 385. Survey of Opera (3).** Prerequisite: MUS 372.
- MUS 386. Survey of 20th-century Music (3).** Prerequisite: MUS 372.
- MUS 396. Individual Study (1-6).** May be repeated if subject is different.
- MUS 397. Honors (1-12).** Prerequisite: admission to department honors program.
- MUS 398. Special Topics (1-6).**
- MUS 399. Seminar (1-5).** May be repeated if subject is different.
- MUS 400. Recital Performance (1).** Recital performance required for the completion of degrees requiring MUS 464-level applied study. Grade will either be S or U. Prerequisite: 3 credits of any MUS 464. Co-requisite: any MUS 464. CE - Culminating Experience
- MUS 410. Vocal Jazz Choir (1).** An ensemble specializing in performance of repertoire from jazz choir tradition established in the Northwest and beyond. Must attend all scheduled rehearsals and performances. For juniors and seniors. Limited to SATB singers and rhythm section instruments. May be repeated for credit. Prerequisite: junior standing or above.
- MUS 411. Women's Choir (1).** May be repeated for credit. Prerequisite: junior standing or above.
- MUS 413. Flute Choir (1).** Previous experience in flute performance and permission of instructor. Two hours of rehearsal per week plus all scheduled rehearsals and performances. May be repeated for credit. Prerequisite: junior standing or above.
- MUS 414. Brass Choir (1).** See MUS 214 for description. May be repeated for credit. Prerequisite: junior standing or above.
- MUS 415. Chamber Orchestra (1).** May be repeated for credit. Two hours rehearsal per week plus all scheduled rehearsals and performances. By audition. Course will be offered every year (Winter and Spring). Prerequisite: junior standing or above.
- MUS 417. Chamber Music Ensemble (1).** One hour coaching plus two hours rehearsal per week plus all scheduled rehearsals and performances. Instruction available in performance areas A-I, K, L. By audition. May be repeated for credit. Course will be offered every year (Fall and Winter).
- MUS 418. Jazz Combo (1).** Performance in jazz combos in various configurations. May be repeated for credit. Prerequisite: junior standing or above.
- MUS 420. Composition 4 (3).** May be repeated up to 9 credits. Prerequisite: 6 credits of MUS 320. CE - Culminating Experience
- MUS 422. Orchestration (3).** Instrumentation. May be repeated for credit. Prerequisites: MUS 246 with a grade of C or higher and MUS 372.
- MUS 423. Advanced Orchestration (3).** Study of various scores and treatises. Individual projects. Prerequisite: MUS 422A.
- MUS 424. Jazz Pedagogy (3).** Jazz-specific teaching methods, strategies, literature and materials primarily for application in a public school setting, grades 6-12, vocal or instrumental. Recommended for, but not limited to, music education majors. This course is a part of the Teacher Preparation Program. Prerequisite: junior standing or above.
- MUS 425. Pedagogy (Studio) (3).** Teaching methods and materials. Instruction available in performance areas A-E,G, and H. By permission.
- MUS 425A. Pedagogy (Studio Piano) (3).** Teaching methods and materials. By permission.

- MUS 425B. Pedagogy, Vocal** (3). Teaching methods and materials. By permission.
- MUS 426. Literature (Studio)** (3). Literature related to the specific applied area for teaching and performance purposes. Instruction available in performance areas A-E, and G. By permission.
- MUS 426A. Literature (Studio Piano)** (3). Literature related to the specific applied area for teaching and performance purposes. By permission.
- MUS 426H. Literature (Studio Guitar)** (3). Literature related to the specific applied area for teaching and performance purposes. By permission.
- MUS 428. Men's Choir** (1). May be repeated for credit. Prerequisite: junior standing or above.
- MUS 429. Percussion Ensemble** (1). Two hours rehearsal per week plus all scheduled rehearsals and performances. By audition. May be repeated for credit. Course will be offered every year (Fall, Winter, and Spring). Prerequisite: junior standing or above.
- MUS 432. Big Band** (1). Must attend all scheduled rehearsals and performances. MUS 232 for freshmen and sophomores. May be repeated for credit. Prerequisite: junior standing or above.
- MUS 435. Laboratory Choir** (1). See MUS 235 for description. May be repeated for credit.
- MUS 440. Analytical Techniques II** (3). Emphasis on 20th century music, including contemporary extrapolations from Schenker's methods, pitch class, and parametric analysis techniques. Prerequisite: MUS 340.
- MUS 461. Opera Workshop** (1-2). A class leading to the performance of scenes or single acts from opera. May be repeated for credit. By audition. Course will be offered on even numbered years (Spring). Prerequisites: junior standing or above.
- MUS 462. Opera Production** (1-3). A class leading to performance of a complete opera. MUS 462 and MUS 562 are layered courses; students not receive credit for both. May be repeated for credit. Prerequisite: junior standing for above.
- MUS 464. Major Applied Area (Individual Instruction)** (3). Instruction available in performance areas A-H and K. Additional fees required. Lessons available in applied areas. May be repeated for credit. Prerequisite: MUS 364 A-E, G, H, and L.
- MUS 466. Wind Ensemble** (1-2). See MUS 266 for description. One credit if offered one term only during summer session. By permission. May be repeated for credit. Prerequisites: junior standing or above.
- MUS 467. Choir** (1-2). Open to all students by audition. Five hours rehearsal per week plus all scheduled rehearsals and performances. One credit if offered one term only during summer session. May be repeated for credit. Prerequisite: junior standing or above.
- MUS 468. Chamber Choir** (2). See MUS 268 for complete description. May be repeated for credit. Prerequisite: junior standing or above.
- MUS 469. Symphonic Winds** (2). Winter and spring quarters only. Five hours of rehearsal per week plus scheduled rehearsals and performances. During winter and spring quarters the symphonic band will present several formal concert programs. Membership is by audition only. May be repeated up to 18 credits. Course will be offered every year (Winter, Spring). Prerequisite: junior standing or above.
- MUS 477. Orchestra** (1-2). Open to all students proficient on orchestral instruments by audition. Five hours rehearsal per week plus all scheduled rehearsals and performances. One credit if offered one term only during summer session. May be repeated for credit. Course will be offered every year (Fall, Winter, and Spring). Prerequisite: junior standing or above.
- MUS 480. Reed Making for Double Reed Instruments** (1).
- MUS 484. Instrumental Arranging** (3). Course will focus on skills needed to write and arrange music for junior and senior high school instrumental ensembles. Course will be offered every year (Spring). Prerequisite: MUS 246.
- MUS 485. Choral Arranging** (3). Course will focus skills needed to write and arrange music junior and senior high school vocal ensembles.
- MUS 486. Jazz Band Arranging** (3). Orchestration/arranging techniques in the jazz band idiom, including writing for smaller jazz ensembles, specialized instrumentation, and the big band. Especially useful for music educators. Prerequisites: MUS 246 and MUS 255.
- MUS 487. Marching and Concert Band** (2). Fall quarter only. May be repeated for credit. Prerequisite: junior standing or above.
- MUS 488. Symphonic Band** (2). Winter and spring quarters only. See MUS 288 for description. May be repeated for credit. Prerequisite: junior standing or above.
- MUS 490. Cooperative Education** (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. Prerequisite: prior approval required.
- MUS 491. Workshop or Clinic** (1-6).
- MUS 492. Accompanying Practicum** (1-3). By assignment of instructor. Minimum of three hours of rehearsal weekly per credit plus performances. May be repeated for credit. Prerequisite: junior standing or above.
- MUS 495. Senior Project** (2). Students are required, as a senior project, to present a recital, composition, or piece of research. May be repeated for credit. CE - Culminating Experience
- MUS 496. Individual Study** (1-6).
- MUS 497. Honors** (1-12). Prerequisite: admission to department honors program.
- MUS 498. Special Topics** (1-6).
- MUS 499. Seminar** (1-5).

#### Nutrition Courses

- NUTR 101. Introduction to Human Nutrition** (5). Fundamental nutritional concepts as related to health. Four hours lecture and one hour discussion per week. Course will be offered every year (Fall, Winter, Spring, Summer). NS-Applications Natural Science. NS-Applications Natural Science. K8 - Science & Technology
- NUTR 240. Introduction to Foods** (2). Examination of scientific principles of food preparation, function of ingredients, effects of preparation techniques, and nutritional considerations. Two hours lecture per week. Corequisite: NUTR 240LAB.
- NUTR 240LAB. Introduction to Foods Laboratory** (2). Additional material fees. Four hours per week. Corequisite: NUTR 240.
- NUTR 298. Special Topics** (1-6).
- NUTR 299. Seminar** (1-5). May be repeated if subject is different.
- NUTR 318. The Politics of Food and Health** (3). Exploration of the politics of food from farm to table, and the implications for human and environmental health. HED 318 and NUTR 318 are cross-listed courses, students may not receive credit for both.
- NUTR 340. Management of Food Resources** (2). Food management principles involved in the planning,

- purchasing, preparing, and serving of meals in relation to nutritional needs, social needs, food preferences, and resources. Prerequisites: NUTR 101 and NUTR 240.
- NUTR 340LAB. Management of Food Resources Laboratory (1).** Demonstration of food management principles. Twenty dollars materials fee. Prerequisite: NUTR 340.
- NUTR 342. Quantity Food Production and Service (4).** Principles and techniques of food production and food safety for restaurants, health care facilities, and other institutions. Corequisite: NUTR 342LAB. Prerequisite: NUTR 240.
- NUTR 342LAB. Quantity Food Production and Service Laboratory (1).** Corequisite: NUTR 342.
- NUTR 343. Foods and Nutrition Professionalism (1).** Professional ethics, career readiness, and career research in foods and nutrition. Prerequisite: junior standing or above.
- NUTR 344. Medical Nutrition Therapy I (3).** Introduction to medical nutrition therapy including nutrition care process, diabetes, heart disease, and cancer. Prerequisites: NUTR 101 and (BIOL 201 OR BIOL 355) and (CHEM 111 OR CHEM 181).
- NUTR 345. Nutrition and the Lifecycle (5).** Effects of nutrition on development, growth, and health, from conception through the older adult. Prerequisites: NUTR 101 or NUTR 433.
- NUTR 347. Nutrition Education and Counseling (4).** Introduction to educating individuals and groups about nutrition, from theory to application. Includes techniques, procedures, and skills related to successful nutrition counseling. Prerequisite: NUTR 101.
- NUTR 350. Weight Management (3).** Study of the pathophysiology of obesity and the underlying principles of healthy weight assessment, achievement, and management. Prerequisite: NUTR 101 and declared major in food science and nutrition or by permission.
- NUTR 396. Individual Study (1-6).** May be repeated if subject is different.
- NUTR 397. Honors (1-12).** Prerequisite: admission to department honors program.
- NUTR 398. Special Topics (1-6).**
- NUTR 399. Seminar (1-5).** May be repeated if subject is different.
- NUTR 405. Hospitality Catering (3).** Basics of off-premise catering including menu planning, budgeting, logistics, and marketing. NUTR 405, RT 405, and RT 505 are equivalent courses; students may not receive credit for more than one.
- NUTR 406. Peer Nutrition Education Practicum (1).** Supervised experience as a nutrition educator at the Student Health Center and/or CWU Center for Sports Nutrition. May be repeated for credit. Prerequisite: NUTR 101, 348, and 446.
- NUTR 433. Macronutrients (3).** Nutritional aspects of carbohydrates, proteins, lipids, water, and energy. Prerequisites: CHEM 112 or CHEM 363.
- NUTR 436. Theory and Treatment of Eating Disorders (3).** This course will identify the history, theory, and treatment components of Eating Disorders. Medical, psychological, behavioral, physical and nutritional aspects of each will be addressed in addition to treatment components. Formerly NUTR 346; students may not receive credit for both. Prerequisite: NUTR 101.
- NUTR 440. Experimental Foods (2).** Physical and chemical bases of food preparation. Experiment testing result of variation in ingredients and manipulative practice. Prerequisites: (NUTR 240, and NUTR 240LAB, and CHEM 112) AND (PSY 362 or EDCS 312).
- NUTR 440LAB. Experimental Foods Laboratory (1).** Additional material fees. Co-requisite: NUTR 440.
- NUTR 442. Nutrition Assessment Laboratory (2).** Current tools for nutritional assessment with laboratory experience. One hour lecture and two hours laboratory per week. Prerequisite: NUTR 443.
- NUTR 443. Metabolism and Micronutrients (5).** Effect of nutritional and physiological state on the regulation of carbohydrate, lipid, and protein metabolism. Metabolic and physiological role of vitamins and minerals. Prerequisites: NUTR 433 and CHEM 113, or CHEM 432 and BIOL 201, or BIOL 356.
- NUTR 444. Medical Nutrition Therapy II (3).** The influence of nutrition on physiological problems; disease and medical nutritional therapy; nutrition and health management. Prerequisites: NUTR 344, NUTR 443 and CHEM 113 or CHEM 432.
- NUTR 445. Experimental Food Research (1).** Principles of experimental food research. Propose, conduct, analyze, and present original food research project. Prerequisites: NUTR 440 and NUTR 440LAB.
- NUTR 445LAB. Experimental Food Research Laboratory (1).** Product production, sensory and objective testing of experimental food research project. Co-requisite: NUTR 445.
- NUTR 446. Sports Nutrition (3).** Integration and application of scientifically based nutrition and exercise physiology principles that support and enhance performance and good health. NUTR 446 and EXSC 446 are cross-listed courses; students may not receive credit for both. Prerequisites: NUTR 101 and (CHEM 113 or EXSC 450).
- NUTR 447. Community Nutrition (3).** National and international nutritional problems and programs. Prerequisites: either NUTR 101 or NUTR 433.
- NUTR 448. Food Service Systems Management (4).** Application of organizational management and principles to food-service systems including organizing, staffing, controlling, planning, marketing, and leading. Prerequisites: NUTR 240 and NUTR 342.
- NUTR 490. Cooperative Education (1-12).** An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervisor and faculty coordination. May be repeated for credit. Grade will either be S or U. Prerequisite: prior approval required.
- NUTR 491. Workshop (1-6).**
- NUTR 492A. Dietetic Practicum (10-18).** Dietetic Internship Experience. May not be repeated. Credits may not be used to apply to the Master's degree. Grade will be S or U. Permission required. Prerequisite: permission required.
- NUTR 492B. Dietetic Practicum (10-18).** Dietetic Internship Experience. May not be repeated. Prerequisite, successful completion of 492A. Credits may not be used to apply to the Master's degree. Grade will be S or U. Prerequisite: NUTR 492A.
- NUTR 492C. Dietetic Practicum (10-18).** Dietetic Internship Experience. May not be repeated. Prerequisites, successful completion 492B. Credits may not be used to apply to the Master's degree. Grade will be S or U. Prerequisite: NUTR 492B.
- NUTR 495. Undergraduate Research (1-6).** Faculty supervised laboratory or field research experience. May be repeated up to 12 credits. Grade will be S or U. By permission of instructor. Course will be offered every year. (Fall, Winter, Spring and Summer).
- NUTR 496. Individual Study (1-6).**

- NUTR 497. Honors** (1-12). Prerequisite: admission to department honors program.
- NUTR 498. Special Topics** (1-6).
- NUTR 499. Seminar** (1-5).

#### **Occupational Education Courses**

- OCED 492. Practicum** (3-15). Grade will either be S or U. Prerequisite: permission of department chair.

#### **Physical Education Courses**

- PE 115. Beginning Climbing** (1). This course will introduce students to indoor rock climbing techniques. Including: climbing movement and top rope climbing skills. May be repeated up to 3 credits.
- PE 116. Intermediate Climbing** (1). This course will build indoor rock climbing skills learned in PE 115, beginning climbing, and introduce skills that will help students begin climbing outside. Including climbing movement, lead climbing, rappelling and anchor cleaning. May be repeated up to 3 credits. Prerequisite: PE 115 or instructor approval.
- PE 118. Climbing Wall to Rock** (1). Introduction to outdoor rock climbing by ensuring proficiency in an indoor setting over 5 weeks and to be concluded with an outdoor climbing trip to utilize skills learned. Course focuses on anchor systems, rappelling, lead climbing and belaying, and trip planning. Climbing experience and a top rope belay certification required. Prerequisites: PE 115 or PE 116 or by permission of instructor.
- PE 220. Climbing Wall Instructor** (2). This course will prepare students to instruct climbing in an indoor setting. Students will learn to instruct both technical and movement climbing skills. This course will prepare students to receive a climbing wall instructor certification through the professional climbing instructors association. May be repeated up to 6 credits. Course will not have an established scheduling pattern.
- PE 298. Special Topics** (1-6).
- PE 299. Seminar** (1-5). May be repeated if subject is different.
- PE 321. Football Coaching** (3).
- PE 323. Basketball Coaching** (3).
- PE 325. Baseball Coaching** (3).
- PE 326. Theory of Coaching Soccer** (3). This course provides an in-depth examination of the coaching of soccer at all school age levels. May be repeated up to 6 credits.

- PE 330. Volleyball Coach** (3).

#### **PE 334. Physical Education Activities for the Elementary School** (3).

Selection, organization, and presentation of physical education activities in the elementary school.

Prerequisite: current WSP/FBI fingerprint clearance, and conditional or full admission to the Teacher Certification Program.

- PE 346. Administration of Athletes** (3).

The course will provide the student with an overview of the role of the athletic director as the leader, manager, organizer, and director of the interscholastic and intercollegiate programs in public and private schools. Prerequisite: PE 365.

- PE 365. Foundations of Coaching** (3).

Introduction to principles and methods of coaching sports with children and youth.

- PE 396. Individual Study** (1-6). May be repeated if subject is different.

- PE 397. Honors** (1-12). Prerequisite:

admission to department honors program.

- PE 398. Special Topics** (1-6).

- PE 399. Seminar** (1-5). May be repeated if subject is different.

#### **PE 442. Field Work in Physical**

**Education** (1-6). Class to be arranged by college supervisor. May be repeated for credit. Grade will either be S or U.

#### **PE 448. Coaching and Competitive**

**Ethics** (3). This course is to enable the student to understand and apply ethical values as a practitioner (coach) in the realm of competitive sport. Course will be offered every year (Spring).

Prerequisite: PE 365 OR declared sport management major.

#### **PE 453. Psychological and Sociological**

#### **Foundations of Coaching** (3).

Investigation of factors affecting individual and group behavior in the coaching of interscholastic sports. Course will be offered every year (Spring). Prerequisite: PE 365 OR declared sport management major.

#### **PE 484. Legal Liability and Risk Management (Put on Reserve**

**9/16/16.)** (3). Aspects of personal law, premises liability, and risk management affecting policy, and behavior within the physical education and coaching profession. (Put on Reserve 9/16/16. Last taught in 2012. Will go inactive 8/24/19.)

- PE 491. Workshop Clinic** (1-6). Letter grades or S or U grades may be given at the option of the Department of Physical Education. May be repeated for credit.

- PE 492. Practicum** (1-4). Practical experience working with children in

physical education activities. May be repeated for credit. Four credits required in major. Prerequisite: four credits in physical education major.

#### **PE 495. Field Work in Sport Coaching**

(3). This course will provide the student with the opportunity to gain practical experience with current professionals in the field of sport coaching. By permission of instructor. Course will be offered every year (Fall, Winter, and Spring). Prerequisites: PE 365 and PE 448; students must also complete CPR certification and a background check prior to registering for PE 495.

- PE 496. Individual Study** (1-6).

- PE 497. Honors** (1-12). Prerequisite:

admission to department honors program.

- PE 498. Special Topics** (1-6).

- PE 499. Seminar** (1-5).

#### **PE: Aquatics Courses**

#### **PEAQ 110. Springboard Diving** (1).

Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded.

#### **PEAQ 111. Beginning Swimming** (1).

Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded.

#### **PEAQ 112. Swimming** (1).

Swimming is designed to refine basic swimming skills, basic swim strokes and to improve physical fitness through swimming. If you have no swimming skills, register for beginning swimming. If you are looking for fitness, register for swim conditioning. Must be able to swim 50 yards. Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded.

#### **PEAQ 113. Advanced Swimming** (1).

Refinement of standard strokes and dives. Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded. Prerequisite: ability to swim 200 yards continuously, employing at least three strokes.

#### **PEAQ 114. Swim Conditioning** (1).

Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded. Prerequisite: must be an intermediate swimmer.

#### **PEAQ 116. Water Polo (Put on reserve**

**9/16/17)** (1). Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded. (Put on reserve 9/16/17. Will go inactive

8/24/2020.) Prerequisite: must be an intermediate swimmer.

**PEAQ 118. Aquatic Conditioning (1).**

Designed for non-swimmers and swimmers who want to improve/maintain cardiovascular endurance, increase flexibility, tone muscles in the water medium. May be repeated for credit.

**PEAQ 120. Advanced Springboard**

**Diving (Put on Reserve 9/16/16.) (1).**

Advanced diving is designed to further the students' knowledge and skill in springboard diving. Students will perform dives of varying degrees of difficulty. Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded. (Put on Reserve 9/16/16. Last taught in 2013. Will go inactive 8/24/19.)

Prerequisite: PEAQ 110.

**PEAQ 122. Deep Water Fitness (1).**

High intensity deep water training program incorporating intervals, sports drills and water jogging. Uses buoyancy and resistance equipment. No swimming skills required.

**PEAQ 198. Special Topics (1).**

**PEAQ 221. Lifeguard Training (3).**

American Red Cross-approved course for which certification may be granted. The course will include rescue technique, preventative lifeguarding, and conditioning. Two hours lecture and one hour laboratory per week.

**PEAQ 298. Special Topics (1-6).** May be repeated if subject is different.

**PEAQ 299. Seminar (1-5).** May be repeated if subject is different.

**PEAQ 320. Water Safety Instructor**

(3). Students satisfactorily passing the Red Cross requirements will receive a Red Cross Water Safety Instructors Certificate. Two hours of lecture and two hours of laboratory per week.

**PEAQ 396. Individual Study (1-6).**

May be repeated if subject is different.

**PEAQ 397. Honors (1-12).** Prerequisite: admission to department honors program.

**PEAQ 398. Special Topics (1-6).** May be repeated if subject is different.

**PEAQ 399. Seminar (1-5).** May be repeated if subject is different.

**PEAQ 496. Individual Study (1-5).**

May be repeated if subject is different.

**PEAQ 497. Honors (1-12).** Prerequisite: admission to department honors program.

**PEAQ 498. Special Topics (1-6).** May be repeated if subject is different.

**PEAQ 499. Seminar (1-5).** May be repeated if subject is different.

**PE: Fitness Activity Courses**

**PEF 110. Conditioning Exercises (1).**

Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded.

**PEF 111. Intermediate Conditioning Exercises (Put on reserve 9/16/17)**

(1). Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded. (Put on reserve 9/16/17. Will go inactive 8/24/2020.)

Prerequisite: PEF 110.

**PEF 112. Ski Conditioning (Put on**

**Reserve 9/16/16.) (1).** Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded. (Put on Reserve 9/16/16. Last taught in 2013. Will go inactive 8/24/19.)

**PEF 113. Weight Training (1).**

Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded.

**PEF 114. Intermediate Weight**

**Training (1).** Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded. Prerequisite: PEF 113.

**PEF 115. Jogging (1).** Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded.

**PEF 118. Military Conditioning I (1).**

Physical conditioning activities designed to prepare the Army ROTC student for Leader Development Assessment course and active military duty. Course is work-out oriented with emphasis on physical fitness goals. Open to all CWU students. Meets three times weekly. May be repeated up to 4 credits.

**PEF 119. Military Conditioning II (1).**

Physical conditioning activities designed to prepare the Army ROTC student for Leader Development Assessment course and active military duty. Course is work-out oriented with emphasis on physical fitness goals. Open to all CWU students. Meets three times weekly. May be repeated up to 4 credits.

**PEF 120. Military Conditioning III (1).**

Physical conditioning activities designed to prepare the Army ROTC student for Leader Development Assessment course and active military duty. Course is work out oriented with emphasis on physical fitness. Open to all CWU students. Meets three times weekly. May be repeated for credit.

**PEF 121. Step Aerobics (1).** Course may be repeated up to 12 times for a

maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded.

**PEF 122. Dance Fusion (1).**

Course combines elements of traditional high- and low-impact dance aerobics with zumba, jazz, power yoga, and sport movements into basic combinations. Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded.

**PEF 123. Aerobic Walking (1).**

Assessment of present level of cardio respiratory fitness and prescription of an individualized aerobic walking exercise program for increasing and maintaining fitness. Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded.

**PEF 126. Kick/Box Aerobics (1).**

Safe, effective aerobic work-out mimicking basic self-defense, and boxing movements. Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded.

**PEF 128. Glute/Abdominal**

**Conditioning (1).** Course emphasizes abdominal conditioning, gluteal toning, and core muscle strengthening in a low impact format. Background music and various equipment is used for an effective workout. Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded.

**PEF 129. Abdominal Strength**

**Conditioning (1).** Course emphasizes strengthening and conditioning the abdominals and core muscles for appearance and for performance. Use of equipment for fun and effectiveness. Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded.

**PEF 130. Triathlon Training (1).**

Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded.

**PEF 131. Frisbee (1).**

This course encourages positive social interaction, develops eye-hand coordination skills, is recreational, and may be an avenue to encourage students to become more active in a gentle way. Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded.

**PEF 132. Women's Self Defense (1).** A program of realistic self-defense tactics and techniques for women, including education about awareness, prevention,

risk reduction, and risk avoidance of violence. Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded.

**PEF 140. Stretch and Strengthen with Fit Balls (1).** This course combines balance, stretch, and strength training using a variety of soft fitness balls. Dynamic balancing skills will be taught using the BOSU and physioball. Strength and core drills will be taught using medicine balls and sport balls. Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded.

**PEF 150. Beginning Yoga (1).** Participation in stretching and then holding a variety of yoga postures. Will include demonstrations, benefits, contraindications, precautions of each posture. Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded.

**PEF 151. Intermediate Yoga (Put on reserve 9/16/18) (1).** This class will review and refine techniques learned in the beginning yoga class, as well as further discussion and practice of yoga postures and other topics related to yoga. Course may be repeated up to 12 times for a maximum of 12 credits. (Put on reserve 9/16/18, will go inactive 8/24/21)

**PEF 152. Advanced Yoga (Put on reserve 9/16/18) (1).** In this class more advanced yoga postures will be introduced and techniques learned in previous classes will be refined. Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded. (Put on reserve 9/16/18, will go inactive 8/24/21)

**PEF 153. Mat Pilates (1).** A beginning and intermediate-level class, mat pilates is designed to increase core strength, coordination and flexibility. Formerly DNCE 150 and PED 150; combined total repeatable to 12 credits.

**PEF 155. Hot Yoga Therapy (Put on reserve 9/16/18) (1).** Students practice 26 yoga postures, using heat therapy to promote muscle recovery, increased strength and flexibility, weight loss and detoxification. This unique style of yoga is beneficial to all students and athletes. No experience necessary. May be repeated up to 12 credits. (Put on reserve 9/16/18, will go inactive 8/24/21)

**PEF 161. Challenge Course Experience (1).** An introductory course that engages students in all aspects of

challenge course activities. Students gain valuable perspective and practical skills related to leadership, communication and teamwork. Course will not have an established scheduling pattern. Formerly RTE 161, students may not receive credit for both.

**PEF 162. Backpacking (1).** This course provides basic hiking and backpacking instruction. The course focuses on proper leave-no-trace principles in every aspect of the trip. Course will not have an established scheduling pattern. Formerly RTE 162, students may not receive credit for both.

**PEF 163. Introduction to White Water Kayaking (1).** Students will learn the basics of white water kayaking through a combination of pool sessions, classroom lectures, and a field experience. Course will not have an established scheduling pattern. Formerly RTE 163, students may not receive credit for both.

**PEF 198. Special Topics (1).**

**PEF 201. Let's Move It, Move It (2).** A personal health-related fitness course that provides scheduled physical movement sessions with classroom discussions incorporating a diet and nutrition component. May be repeated up to 4 credits. Course will be offered every year (Fall, Winter, and Spring).

**PEF 298. Special Topics (1-6).** May be repeated if subject is different.

**PEF 299. Seminar (1-5).** May be repeated if subject is different.

**PEF 396. Individual Study (1-6).** May be repeated if subject is different.

**PEF 397. Honors (1-12).** Prerequisite: admission to department honors program.

**PEF 398. Special Topics (1-6).** May be repeated if subject is different.

**PEF 399. Seminar (1-5).** May be repeated if subject is different.

**PEF 496. Individual Study (1-6).** May be repeated if subject is different.

**PEF 497. Honors (1-12).** Prerequisite: admission to department honors program.

**PEF 498. Special Topics (1-6).** May be repeated if subject is different.

**PEF 499. Seminar (1-5).** May be repeated if subject is different.

#### PE: Individual and Dual Sports Courses

**PEID 110. Beginning Badminton (1).** Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded.

**PEID 113. Beginning Bowling (Put on reserve 9/16/17) (1).** Course may be repeated up to 12 times for a maximum

of 12 credits starting Spring 2016. Past repetitions will remain as coded. (Put on reserve 9/16/17. Will go inactive 8/24/2020.)

**PEID 114. Intermediate Bowling (Put on reserve 9/16/17) (1).** (Put on reserve 9/16/17. Will go inactive 8/24/2020.) Prerequisite: PEID 113.

**PEID 115. Beginning Golf (Put on reserve 9/16/18) (1).** Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded. (Put on reserve 9/16/18, will go inactive 8/24/21)

**PEID 116. Intermediate Golf (Put on reserve 9/16/18) (1).** (Put on reserve 9/16/18, will go inactive 8/24/21) Prerequisite: PEID 115.

**PEID 117. Advanced Golf (Put on reserve 9/16/18) (1).** (Put on reserve 9/16/18, will go inactive 8/24/21)

**PEID 120. Beginning Fencing (Put on Reserve 9/16/16.) (1).** Put on Reserve 9/16/16. Last taught in 2012. Will go inactive 8/24/19.

**PEID 123. Beginning Tennis (1).** Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded.

**PEID 124. Intermediate Tennis (Put on reserve 9/16/17) (1).** Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded. (Put on reserve 9/16/17. Will go inactive 8/24/2020.) Prerequisite: PEID 123.

**PEID 125. Advanced Tennis (Put on reserve 9/16/17) (1).** Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded. (Put on reserve 9/16/17. Will go inactive 8/24/2020.) Prerequisite: PEID 124.

**PEID 128. Beginning Skiing and Snowboarding (Put on Reserve 9/16/16.) (1).** Beginning skiing and snowboarding is designed to introduce the student to the basic knowledge of skiing and snowboarding techniques with the development of the physical skills necessary to participate safely. Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded. (Put on Reserve 9/16/16. Last taught in 2008. Will go inactive 8/24/19.)

**PEID 129. Intermediate Skiing (Put on Reserve 9/16/16.) (1).** Put on Reserve 9/16/16. Last taught in 2008. Will go inactive 8/24/19. Prerequisite: PEID 128.

**PEID 130. Cross Country Skiing (1).** Course may be repeated up to 12 times

for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded.

**PEID 134. Bicycling (Put on reserve 9/16/17)** (1). Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded. (Put on reserve 9/16/17. Will go inactive 8/24/2020.)

**PEID 136. Pickleball** (1). Class is designed to introduce student to basic skills, fundamentals, safety procedures and knowledge to participate in pickleball as a life long activity. Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded.

**PEID 137. Hiking and Orienteering** (1). Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded.

**PEID 138. Karate** (1). Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded.

**PEID 140. Fly Fishing** (1). Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded.

**PEID 145. Beginning Circus Arts** (1). Introduction to juggling, unicycling and similar skills involving balance and coordination. Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded.

**PEID 147. Conceptual Martial Arts (Put on Reserve 9/16/16.)** (1). This course is designed to introduce students to the techniques and motions of self-defense. Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded. (Put on Reserve 9/16/16. Last taught in 2013. Will go inactive 8/24/19.)

**PEID 150. Archery** (1). This course teaches the fundamentals of safe archery practice and basics of the archery equipment. Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded.

**PEID 198. Special Topics** (1).

**PEID 298. Special Topics** (1-6).

**PEID 299. Seminar** (1-5). May be repeated if subject is different.

**PEID 396. Individual Study** (1-6). May be repeated if subject is different.

**PEID 397. Honors** (1-12). Prerequisite: admission to department honors program.

**PEID 398. Special Topics** (1-6). May be repeated if subject is different.

**PEID 399. Seminar** (1-5). May be repeated if subject is different.

**PEID 496. Individual Study** (1-6). May be repeated if subject is different.

**PEID 497. Honors** (1-12). Prerequisite: admission to department honors program.

**PEID 498. Special Topics** (1-6). May be repeated if subject is different.

**PEID 499. Seminar** (1-5). May be repeated if subject is different.

### Physical Education and School Health Courses

**PESH 280. Foundations of Physical Education and School Health** (4).

Fundamental issues, theories, paradigms, constructs, history, and experiences necessary for an understanding of teaching Health and Physical Education as a profession and lifestyle. Prerequisite: current WSP/FBI fingerprint clearance.

**PESH 298. Special Topics** (1-6). May be repeated if subject is different.

**PESH 299. Seminar** (1-5). May be repeated if subject is different.

**PESH 300. Comprehensive School Health Education** (3). This course is designed to provide the knowledge, skills, and dispositions needed to teach comprehensive school health education with a major emphasis on consumer/community health, environmental health, and personal health/safety. Prerequisite: PESH 280.

**PESH 326. Human Diseases** (3). Introduces students to fundamental principles relating to identification, prevention, and control of non-infectious and infectious diseases in contemporary society; emphasis on physical, social, psychological, and environmental issues surrounding these diseases. Prerequisite: PESH 280.

**PESH 330. Positive Youth Development in Physical Activity** (3).

Provides philosophical and practical base for working in youth development programs. Focus on programs that serve youth through physical activity with special emphasis on goals of personal and social responsibility.

**PESH 336. Practicum 1** (3). Physical education teaching practicum.

Prerequisite: PESH 280, and current WSP/FBI fingerprint clearance .

**PESH 341. Characteristics of Effective Physical Education Teaching** (3).

Examination of selected pedagogical principles and their impact on the teaching of human movement.

Prerequisite: PESH 280 or instructor permission for students pursuing the

physical activity and recreational programming minor.

**PESH 342. Developmental Movement**

(4). Instruction in the analysis and teaching of movement concepts, locomotor, and non-locomotor skills.

Prerequisite: PESH 280.

**PESH 343. Pedagogical Application of Teaching Styles and Systematic Reflection** (3).

The purpose of this course is to expand your already-developed effective teaching skills and knowledge to include styles of teaching and systematic analysis. Prerequisites: PESH 280 and PESH 341 and PESH 342 or instructor permission for students pursuing the physical activity recreational programming minor.

**PESH 344. Applications of Technology in Teaching Fitness and Physical Activity** (3).

Introduces students to the plethora of technological advances being used to teach children about their health. Prerequisite: PESH 280, and current WSP/FBI fingerprint clearance.

Corequisite: PESH 341 .

**PESH 345. School Health Curriculum**

(3). This course is designed to expose learners to current school based health education curricula, materials, and strategies necessary to effectively teach comprehensive school health education in the K-12 setting. Formerly HED 345, students may not receive credit for both. Prerequisites: HED 210.

**PESH 348. Tactics and Skills of Striking and Net/Wall Games** (3).

This course will cover the content of tactics and striking skills in a variety of net/wall games (e.g. badminton, handball, pickleball, tennis, volleyball). Prerequisites: PESH 280, and current WSP/FBI fingerprint clearance .

**PESH 350. Utilizing Tactics and Skills for Invasion Games** (3).

This course will cover the content of invasion games and sports (e.g., basketball, soccer, lacrosse, rugby, hockey). Prerequisites: PESH 280 and current WSP/FBI fingerprint clearance.

**PESH 356. Teaching Lifelong Physical Activity Pursuits** (3).

Introduces students to methodology related to teaching nontraditional activities in traditional and nontraditional settings. Prerequisites: PESH 280, PESH 341, PESH 342, PESH 343 or instructor permission for students pursuing the physical activity and recreational programming minor.

**PESH 358. Applications of Resistance, Core, and Cardiovascular Training**

(3). Students will develop, using sound research practice, skills to deliver group exercise training programs to classes at the secondary level. Emphasis is placed

on resistance, core, and cardiovascular physical activities.

**PESH 396. Individual Study (1-6).** May be repeated if subject is different.

**PESH 397. Honors (1-12).** Prerequisite: admission to department honors program.

**PESH 398. Special Topics (1-6).** May be repeated if subject is different.

**PESH 399. Seminar (1-5).** May be repeated if subject is different.

**PESH 401. International Service Learning: Civic Engagement and Youth Development (4).** Provides philosophical and practical civic engagement opportunities at the international level through service-learning. Create and facilitate learning experiences with underserved youth in diverse settings. Permission by instructor. May be repeated up to 8 credits. Course will be offered every year (Summer). CE - Culminating Experience

**PESH 410. Health and Physical Education for Elementary Classroom Teachers (4).** This course provides integration of strategies and activities for incorporating physical education and health into the elementary school setting. Concepts and skills will be introduced for promoting a safe and healthy lifestyle. Course will be offered every year (Fall, Winter, Spring, and Summer).

**PESH 431. Principles of Sexual Health Education (3).** Principles and content for sex education in school and community settings. Formerly HED 431, students may not receive credit for both. Prerequisite: by permission .

**PESH 437. Practicum 2 (3).** Physical Education teaching practicum. Prerequisites: PESH 280, PESH 336, and current WSP/FBI fingerprint clearance .

**PESH 438. Practicum 3 (3).** Physical education teaching practicum. Prerequisites: PESH 280, PESH 336, and PESH 437.

**PESH 439. Practicum 4 (3).** This course is designed to provide physical education and school health majors the knowledge and skill needed to create and teach dynamic, school health education lessons and unit plans within the K-12 setting. Prerequisites: PESH 280 and current WSP/FBI fingerprint clearance.

**PESH 444. Professionalism in the Schools (2).** This course provides an opportunity for the learner to assess and to fine-tune student teaching and job readiness as excellent educators. To be taken one or two quarters before student teaching. Prerequisite: this class

requires admission to either the physical education or school health education major.

**PESH 445. Curriculum Development and Assessment in Physical Education (3).** Examination of specific pedagogical principles and their impact on the teaching of human movement. Prerequisites: PESH 341, PESH 342, and PESH 343.

**PESH 447. Inclusive Strategies and Activities for Diverse Learners (3).** This course will provide inclusive strategies and activities for diverse learners in physical education and school health.

**PESH 456. Facilitating and Leading Adventure Activities in the Schools (2).** Identify critical components of selected outdoor pursuits and circus arts activities. Prerequisites: PESH 280, PESH 341, PESH 342, PESH 343, PESH 350, and PESH 356 or instructor permission for students pursuing the physical activity and recreational programming minor.

**PESH 458. Diagnosis and Analysis of Human Movement (3).** Designed to teach the student applied principles of human movement diagnosis including basic motor control, motor learning sport movements, and applied biomechanical principles.

**PESH 496. Individual Study (1-6).** May be repeated if subject is different.

**PESH 497. Honors (1-12).** Prerequisite: admission to department honors program.

**PESH 498. Special Topics (1-6).** May be repeated if subject is different.

**PESH 499. Seminar (1-5).** May be repeated if subject is different.

#### PE: Team Sports Courses

**PETS 110. Basketball (1).** Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded.

**PETS 113. Soccer (1).** Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded.

**PETS 114. Softball (Slow Pitch) (1).** Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded.

**PETS 116. Volleyball (1).** Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded.

**PETS 120. Table Tennis (1).** Table tennis will teach skills used during pair and partner play that will increase the

players ability to play faster with more accuracy. Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded.

**PETS 122. Touch Rugby (1).** Touch rugby is a non-contact introduction course that will provide students with the basic skills essential to achieving success as a team player. Course may be repeated up to 12 times for a maximum of 12 credits starting Spring 2016. Past repetitions will remain as coded.

**PETS 198. Special Topics (1).**

**PETS 210. Officiating in Basketball and Volleyball (2).** This course explores the officiating components of basketball and volleyball at the middle school, high school and collegiate levels. Certification of middle and high school basketball and volleyball will be acquired at the conclusion of the course.

**PETS 211. Umpiring in Baseball and Softball (2).** This course explores the umpiring components of baseball and softball at the middle school, high school and collegiate levels. Certification of middle and high school baseball and softball will be acquired at the conclusion of the course.

**PETS 212. Officiating in Football and Soccer (2).** This course explores the officiating components of football and soccer at the middle school, high school and collegiate levels. Certification of middle and high school football and soccer will be acquired at the conclusion of this course and with passing the WOA examination.

**PETS 298. Special Topics (1-6).** May be repeated if subject is different.

**PETS 299. Seminar (1-5).** May be repeated if subject is different.

**PETS 396. Individual Study (1-6).** May be repeated if subject is different.

**PETS 397. Honors (1-12).** Prerequisite: admission to department honors program.

**PETS 398. Special Topics (1-6).** May be repeated if subject is different.

**PETS 399. Seminar (1-5).** May be repeated if subject is different.

**PETS 496. Individual Study (1-6).** May be repeated if subject is different.

**PETS 497. Honors (1-12).** Prerequisite: admission to department honors program.

**PETS 498. Special Topics (1-6).** May be repeated if subject is different.

**PETS 499. Seminar (1-5).** May be repeated if subject is different.

#### PE: Varsity Sports for Men Courses



**PEVM 110. Baseball** (1). Two or three hours activity per day plus all regularly scheduled meetings and game sessions. May be repeated for credit.

**PEVM 111. Basketball** (1). Two or three hours activity per day plus all regularly scheduled meetings and game sessions. May be repeated for credit.

**PEVM 112. Cross Country** (1). Two or three hours activity per day plus all regularly scheduled meetings and game sessions. May be repeated for credit.

**PEVM 113. Football** (1). May be repeated for credit. Two or three hours activity per day plus all regularly scheduled meetings and game sessions.

**PEVM 117. Track and Field** (1). Two or three hours activity per day plus all regularly scheduled meetings and game sessions. May be repeated for credit.

**PEVM 118. Rugby** (1). Two or three hours activity plus all regularly scheduled meetings and game sessions. May be repeated up to 15 credits.

**PEVM 298. Special Topics** (1-6). May be repeated if subject is different.

**PEVM 299. Seminar** (1-5). May be repeated if subject is different.

**PEVM 396. Individual Study** (1-6). May be repeated if subject is different.

**PEVM 397. Honors** (1-12). Prerequisite: admission to department honors program.

**PEVM 398. Special Topics** (1-6). May be repeated if subject is different.

**PEVM 399. Seminar** (1-5). May be repeated if subject is different.

**PEVM 496. Individual Study** (1-6). May be repeated if subject is different.

**PEVM 497. Honors** (1-12). Prerequisite: admission to department honors program.

**PEVM 498. Special Topics** (1-6). May be repeated if subject is different.

**PEVM 499. Seminar** (1-5). May be repeated if subject is different.

**PE: Varsity Sports for Women Courses**

**PEVW 110. Basketball** (1). Two or three hours activity per day plus all regularly scheduled meetings and game sessions. May be repeated for credit.

**PEVW 111. Cross Country** (1). Two or three hours activity per day plus all regularly scheduled meetings and game sessions. May be repeated for credit.

**PEVW 116. Track and Field** (1). Two or three hours activity per day plus all regularly scheduled meetings and game sessions. May be repeated for credit.

**PEVW 117. Volleyball** (1). Two or three hours activity per day plus all regularly scheduled meetings and game sessions. May be repeated for credit.

**PEVW 118. Soccer** (1). Two or three hours activity per day plus all regularly scheduled meetings and game sessions. May be repeated for credit.

**PEVW 119. Softball** (1). Two or three hours activity per day plus all regularly scheduled meetings and game sessions. May be repeated for credit.

**PEVW 120. Cheerleading** (1). Two or three hours activity per day plus all regularly scheduled meetings and game sessions. May be repeated for credit.

**PEVW 121. Rugby** (1). Two or three hours activity per day plus all regularly scheduled meetings and game sessions. May be repeated up to 15 credits.

**PEVW 298. Special Topics** (1-6). May be repeated if subject is different.

**PEVW 299. Seminar** (1-5). May be repeated if subject is different.

**PEVW 396. Individual Study** (1-6). May be repeated if subject is different.

**PEVW 397. Honors** (1-12). Prerequisite: admission to department honors program.

**PEVW 398. Special Topics** (1-6). May be repeated if subject is different.

**PEVW 399. Seminar** (1-5). May be repeated if subject is different.

**PEVW 496. Individual Study** (1-6). May be repeated if subject is different.

**PEVW 497. Honors** (1-12). Prerequisite: admission to department honors program.

**PEVW 498. Special Topics** (1-6). May be repeated if subject is different.

**PEVW 499. Seminar** (1-5). May be repeated if subject is different.

**Personal Financial Planning Courses**

**PFP 298. Special Topics** (1-6). May be repeated if subject is different.

**PFP 299. Seminar** (1-5). May be repeated if subject is different.

**PFP 310. Introduction to the Financial Planning Profession** (5). Introduces the processes appropriate for entry into the personal financial planning (PFP) profession. Provides an overview of the skills and knowledge sets required to be a PFP professional including an outline of business models and practice management issues within the industry. Course will be offered every year (Fall and Spring). Prerequisite: ECON 130 or MATH 130 or BUS 221 or MATH 153 with a C- or higher.

**PFP 386. Information Technologies for Financial Planning** (4). An overview of various financial planning software packages used in a modern financial planning firm. Students will study in a self-motivated environment to become proficient in the requisite software packages. Course will be offered every year. Course will not have an

established scheduling pattern. Prerequisites: a grade of C or higher in PFP 310 and BUS 102 or approved substitute and admission to a College of Business major.

**PFP 396. Individual Study** (1-6). May be repeated if subject is different.

**PFP 397. Honors** (1-12). Prerequisite: admission to department honors program.

**PFP 398. Special Topics** (1-6). May be repeated if subject is different.

**PFP 399. Seminar** (1-5). May be repeated if subject is different.

**PFP 440. Estate Planning** (5). Applies gift, estate, and generation skipping transfer taxation rules to personal financial planning scenarios. Studies financial regulations and taxation policy. Course will not have an established scheduling pattern. Prerequisites: A grade of C or higher in PFP 310 and admission to a College of Business major OR (a grade of C or higher in PFP 310 and declaration of a Personal Financial Planning Certificate).

**PFP 450. Insurance and Risk Management** (5). Examines risk management and insurance planning for individual clients as well as employers of small corporations. Teaches the development of risk management and insurance plans with economic and behavioral theory. Course will not have an established scheduling pattern. Prerequisites: A grade of C or higher in PFP 310 and admission to a College of Business major OR (a grade of C or higher in PFP 310 and declaration of a Personal Financial Planning Certificate).

**PFP 460. Retirement Planning** (5). Examines the topics of retirement planning and retirement plans from both employer and individual client settings. Uses a case study approach to apply and integrate the material. Emphasizes the evaluation of financial alternatives. Course will not have an established scheduling pattern. Prerequisites: A grade of C or higher in PFP 310 and admission to a College of Business major OR (a grade of C or higher in PFP 310 and declaration of a Personal Financial Planning Certificate).

**PFP 475. Financial Planning Investments** (5). Financial resource investment theory and financial instruments most relevant to financial planning. Focus on understanding the differences in return distribution characteristics of available financial instruments and use of financial

instruments within a household portfolio. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: A grade of C or higher in PFP 310 and admission to a College of Business major.

**PFP 480. Financial Planning Capstone**

(5). Develops the concept of a comprehensive plan. Reviews of each of the major aspects of financial planning in the context of a comprehensive case. Students will synthesize all information and create a comprehensive financial plan for a client. Analyzes the financial planning profession and the various types of financial planning models.

Prerequisites: (FIN 370 and PFP 310 and ACCT 303 with a minimum grade of C) AND FIN 475 and PFP 440 and PFP 450 and PFP 460 and admission to a College of Business major.

**PFP 490. Personal Financial Planning Internship**

(1-12). An individualized, contracted field experience with business, industry, government, or social service agencies focusing on personal financial planning related activities. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. Permission of department. May be repeated up to 20 credits. Grade will either be S or U. Course will not have an established scheduling pattern. Prerequisite: 2.8 or higher CWU cumulative gpa.

**PFP 493. Personal Financial Planning Boot Camp**

(1-6). Supervised field experience seminar focused on personal financial planning related organizations and processes. On-location industry engagement. Education, training, and business skills application in industry setting. May be repeated up to 6 credits. Grade will either be S or U. Permission by instructor. Course will not have an established scheduling pattern.

**PFP 496. Individual Study**

(1-6). May be repeated if subject is different.

**PFP 497. Honors**

(1-12). Prerequisite: admission to department honors program.

**PFP 498. Special Topics**

(1-6). May be repeated if subject is different.

**PFP 499. Seminar**

(1-5). May be repeated if subject is different.

**Philosophy Courses**

**PHIL 101. Philosophical Inquiry**

(5). Introduces students to the basic concepts, questions, and methods of philosophical inquiry. Topics may include free will and responsibility,

knowledge and skepticism, the nature of the divine, moral reasoning, and human rights and social justice. Course will be offered every year (Fall, Winter, Spring, Summer). AH-Philosophies and Culture World (W). AH-Philosophies and Culture World (W). K5 - Humanities

**PHIL 102. Knowledge, Mind and Reality**

(5). An introduction to philosophy, focusing on the core fields of epistemology, metaphysics, and philosophy of mind. Topics may include belief, rationality, skepticism, the nature of mind, free will, personal identity, and time.

**PHIL 103. What Is Enlightenment?**

(5). An introduction to the study of philosophy through the issue of how we should live, with a particular focus on how we define social justice. Course will be offered every year (Fall). K5 - Humanities

**PHIL 104. Moral Controversies**

(5). An introduction to moral reasoning through the study of current ethical problems. Topics may include abortion, capital punishment, consumerism, immigration, sexual ethics, killing in war, and/or torture. AH-Philosophies and Culture World (W). Formerly PHIL 210, students may not receive credit for both. Course will be offered every year (Fall, Winter, Spring). AH-Philosophies and Culture World (W). K5 - Humanities

**PHIL 105. The Meaning of Life**

(5). An exploration of the meaning of life from diverse philosophical traditions. Topics may include hedonism versus pessimism, theism, scientific humanism, and existentialism. Formerly PHIL 115, students may not receive credit for both. Course will not have an established scheduling pattern (Spring). K5 - Humanities

**PHIL 106. Asian Philosophy**

(5). Examination of selected classical and/or contemporary issues and questions in Chinese, Japanese and Indian philosophy. AH-Philosophies and Culture World (W). Formerly PHIL 209, students may not receive credit for both. Course will not have an established scheduling pattern (Fall, Winter, Spring). AH-Philosophies and Culture World (W). K4 - Global Dynamics

**PHIL 107. Political Philosophy and Social Democracy**

(5). A critical exploration of major cultural trends in Western social democracies through the lens of historical and contemporary political philosophies. Topics covered include immigration, the distribution of wealth and income, and multicultural

citizenship. Course will be offered every year (Winter, Spring). K2 - Community, Culture, & Citizenship

**PHIL 110. Beyond Belief? Exploring the Fringe and the Paranormal**

(5). The class will examine beliefs in fringe phenomena, such as ghosts, ESP, and alien abduction. Students will learn to consider evidence and how to recognize sources of bias in their own and others' beliefs. Course will be offered every year. Course will not have an established scheduling pattern. FYE2 - Academic Writing I: Critical Reading & Responding

**PHIL 150. Critical Thinking**

(5). This course will focus on informal logic: understanding and evaluating arguments in ordinary language. Students will learn to read, write, and think critically. Basic Skills 5 - Reasoning. Basic Skills 5 - Reasoning.

**PHIL 151. Arguments about Life and Death**

(5). This course will cultivate critical thinking skills in examining arguments about life and death: defining what death is, whether death is something to be feared, and the moral and legal issues around physician-assisted suicide. Course will be offered every year (Fall, Winter, Spring, Summer). K1 - Academic Writing II: Reasoning & Research

**PHIL 152. Arguments about Healthcare**

(5). This course will cultivate critical thinking skills through the examination of arguments about healthcare, including whether there is a right to healthcare, the social determinants of health, and public policies designed to provide healthcare. Course will be offered every year (Fall, Winter, Spring, Summer). K1 - Academic Writing II: Reasoning & Research

**PHIL 153. Arguments about Social Issues**

(5). This course will cultivate critical thinking skills through the examination of arguments about pressing social issues. Examples may include (but are not limited to) freedom of speech, environmental preservation, identity politics, and firearm laws. Course will be offered every year (Fall, Winter, Spring, Summer). K1 - Academic Writing II: Reasoning & Research

**PHIL 201. Introduction to Logic**

(5). Formal principles, methods and techniques for analyzing, constructing, and evaluating arguments. Topics include validity, soundness, truth tables, Venn diagrams, syllogisms, and logical symbolism. Basic Skills 5 - Reasoning. Basic Skills 5 - Reasoning.

**PHIL 298. Special Topics**

**PHIL 299. Seminar** (1-5).

**PHIL 302. Ethical Theory** (5). Offers an overview of the content and justification of historical approaches to ethical theory. Includes a critical assessment of those theories and a discussion of current approaches to ethical theory.

**PHIL 304. Business Ethics** (5). Ethical problems that arise in contemporary business practices and the relevance of recent ethical theory to these problems.

**PHIL 305. Philosophy of Religion** (5). Fundamental assumptions and issues in religious activity and thought; types of religious philosophy.

**PHIL 306. Environmental Ethics** (5). An examination of various positions on the human relationship with the natural environment, from ancient and contemporary, western and non-western, as well as interdisciplinary perspectives. AH-Philosophies and Culture World (W). Prerequisite: sophomore standing or above. AH-Philosophies and Culture World (W).

**PHIL 307. Introduction to Formal Logic** (5). An introduction to formal logic, focusing on propositional and predicate calculus. Logical operators, symbolization, truth functions, truth tables, natural deduction (including conditional and direct proofs), and quantifiers.

**PHIL 308. Medical Ethics** (5). Explores ethical issues arising in a medical context, such as the allocation of scarce medical resources and health care, patient confidentiality, advance directives, human experimentation, and physician-assisted suicide.

**PHIL 309. Ethics through Film (Put on reserve 9/16/17)** (5). An examination of ethical theories and themes in film, including the ethics of filmmaking. Films will be selected from a wide range of possibilities, including foreign productions. Formerly PHIL 402, students may not receive credit for both. (Put on reserve 9/16/17. Will go inactive 8/24/2020.)

**PHIL 314. American Wilderness Philosophy** (5). An exploration of the wilderness tradition in American philosophy. Topics include the value of wilderness areas, outdoor recreation, hunting, and fishing; back to the land movements; and current proposals to "rewild" built environments. Course will be offered on odd numbered years (Spring).

**PHIL 317. Philosophy of Technology** (5). An examination of philosophical approaches to contemporary technologies. Topics may include robotics, digital games, virtual worlds,

nanotechnology, human enhancement, and mobile technology. Course will be offered on even numbered years (Spring).

**PHIL 324. Philosophy and Science Fiction** (5). Covers issues in analytic philosophy via examination of science fiction works. Topics may include skepticism, free will, personal identity, artificial intelligence, machine ethics, transhumanism, genetic engineering and time travel.

**PHIL 325. Women and Philosophy** (5). An examination of what the history of philosophy has claimed about the significance of gender with particular attention to the characterization of women in those texts and the impact of this history on contemporary thought. PHIL 325 and WGSS 351 are equivalent courses; students may not receive credit for both. Course will be offered on even numbered years. Course will not have an established scheduling pattern.

**PHIL 345. Chinese Philosophy** (5). Selected philosophical topics in Chinese literature. May be repeated up to 10 credits. Formerly PHIL 445, students may not receive credit for both.

**PHIL 347. Philosophy of Law** (5). Examines theories regarding the origin and justification of legal systems, including natural law theory, legal positivism, and legal realism. Topics may include civil disobedience, religious freedom, affirmative action, pornography, the insanity defense, and punishment.

**PHIL 348. Social and Political Philosophy** (5). An examination of the philosophical foundations of major modern social and political systems such as classical conservatism, liberalism, socialism, fascism, and anarchism.

**PHIL 352. Greek and Roman Philosophy** (5). Overview of major thinkers and themes in ancient Greek and Roman philosophy. Figures/schools discussed may include the Pre-Socratics, Plato, Aristotle, Stoicism, Epicureanism, Skepticism, Cicero, and/or Plotinus.

**PHIL 353. Early Modern Philosophy** (5). A study of some of the influential philosophies of the 17th and 18th centuries: Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume and Kant. Course will be offered every year (Winter).

**PHIL 354. Kant and Nineteenth-Century Philosophy** (5). A study of European philosophers from the late 18th and 19th centuries. The course

focuses on primary texts from such philosophers as Kant, Hegel, Marx, Kierkegaard, and Nietzsche.

**PHIL 357. Philosophy of Race** (5). This course will examine the philosophical significance of race: interrogating its reality and legitimacy as a category of identity, and the political and social implications of racial identity, both historically and in contemporary contexts.

**PHIL 358. Existentialism** (5). Kierkegaard, Nietzsche, Marcel, Heidegger, Jaspers, and Sartre.

**PHIL 359. Contemporary European Philosophy** (5). A historical and critical study of contemporary European philosophy, with particular emphasis on phenomenology (including Husserl, Heidegger, and Merleau-Ponty) and how these ideas and methods have influenced recent European thought. Formerly PHIL 459, students may not receive credit for both.

**PHIL 361. Theory of Knowledge** (5). A critical study of contemporary analytic epistemology. Topics may include belief, evidence, and perception; skepticism and justification; a priori knowledge; induction; knowledge of other minds; the ethics of belief; truth and relativism. Formerly PHIL 461, students may not receive credit for both.

**PHIL 364. Philosophy of Mind** (5). A critical study of contemporary analytic philosophy of mind. Topics may include dualism, materialism, functionalism, consciousness, intentionality and representation, the computational theory of mind, artificial intelligence, and animal minds. Formerly PHIL 463, students may not receive credit for both.

**PHIL 377. Literature and Philosophy** (5). An examination of the intellectual, cultural, and historical convergences between philosophy and literature. PHIL 377 and ENG 377 are cross-listed courses; a student may not receive credit for both. Course will not have an established scheduling pattern.

**PHIL 378. Philosophy of Love** (5). A study of various concepts of love as they occur in philosophy, literature, and other cultural expressions. The nature of romantic love, eros, agape, friendship, and fellow feeling will be discussed. AH-Philosophies and Culture World (W). Prerequisite: sophomore standing or above. AH-Philosophies and Culture World (W).

**PHIL 380. Philosophy of Science** (5). A critical study of the aims, structure, and methodology of the sciences. Topics

covered may include explanation, prediction, induction, theories, scientific realism, empiricism, laws, and confirmation. Formerly PHIL 480, students may not receive credit for both.

**PHIL 396. Individual Study** (1-6). May be repeated if subject is different.

**PHIL 397. Honors** (1-12). Prerequisite: admission to department honors program.

**PHIL 398. Special Topics** (1-6).

**PHIL 399. Seminar** (1-5). May be repeated if subject is different.

**PHIL 403. Philosophy of Art** (5).

Survey of ancient, modern, and contemporary philosophy of art, with an emphasis on primary texts and application to artwork. Examination of different ways to define art and its function: art as representation, expression, and metaphor. Formerly, PHIL 303. Students may not receive credit for both.

**PHIL 459. Phenomenology** (5). A historical and critical study of phenomenology as a philosophic method. Leading phenomenologists such as Husserl, Scheler, and Merleau-Ponty.

**PHIL 465. Advanced Ethics** (5).

Advanced topics reflecting current trends and problems within philosophical ethics. May be repeated up to a maximum of 10 credits.

**PHIL 485. Capstone Project** (2).

Culminating experience (research paper, internship or creative project) to synthesize and display understanding of knowledge gained in coursework as applied to academic, professional and personal plans for the future.

**PHIL 488. Junior Seminar** (5).

Intensive study of selected philosophical theories, movements, or figures. May be repeated up to 10 credits under a different subtitle. Prerequisite: student must be a philosophy major with junior or senior standing or have permission from the instructor.

**PHIL 490. Cooperative Education** (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. Prerequisite: prior approval required.

**PHIL 494. Undergraduate Thesis Preparation** (2). Preparation for writing undergraduate thesis. Grade will be either S or U. Prerequisites:

advanced standing (junior standing or above) and permission of instructor.

**PHIL 495. Undergraduate Thesis** (3).

Produce an original substantive thesis-driven paper based on independent research. By permission. Prerequisite: PHIL 494 and advanced standing. CE - Culminating Experience

**PHIL 496. Individual Study** (1-6).

**PHIL 497. Honors Thesis** (3). Produce an original, thesis-driven honors level paper based on original research. Paper will be reviewed by a second departmental reader and presented in an open forum. Prerequisites: PHIL 494, advanced standing, and admission to the Philosophy and Religious Studies Departmental Honors Program. CE - Culminating Experience

**PHIL 498. Special Topics** (1-6).

**PHIL 499. Seminar** (5).

### Physics Courses

**PHYS 101. Introductory Astronomy I**

(5). An inquiry-based introduction to celestial motions, celestial objects, observational astronomy and the physics associated with each. Emphasis on stars and planets. NS-Patterns and Connections Natural World (L). Course will be offered every year (Fall). Prerequisite: eligible to enroll in MATH 101. Student must have received at least a 500 on the SAT, or a 19 on the ACT or a score of 50-Pre-Algebra or 26-Algebra or 31-College Algebra or 31-Trigonometry on the Compass test or completed MATH 100B or a higher level math class. NS-Patterns and Connections Natural World (L). K7 - Physical & Natural World

**PHYS 102. Introduction to Astronomy**

(4). An introduction to the physics of the bodies in our solar system with an emphasis on planets and the Sun. This course will include an emphasis how we observe the planets and Sun, current and past planetary missions, and the comparative evolution of bodies in our solar system. NS-Patterns and Connections Natural World (L). NS-Patterns and Connections Natural World (L).

**PHYS 103. Physics of Musical Sound**

(5). Basic principles of acoustics applied to the production of sound by musical instruments and the human voice. Related topics include musical scales, human hearing, sound synthesis, and recording technology. Class format emphasizes active learning. NS-Applications Natural Science (L) (W). Course will be offered every year (Winter). Prerequisite: eligible to enroll in MATH 101. NS-Applications

Natural Science (L) (W). K7 - Physical & Natural World

**PHYS 106. Physics Inquiry** (5). An introduction to fundamental physics topics highlighting applications to the world around us. There will be an emphasis on learning by inquiry and on designing and critiquing solutions to real world issues. Course will be offered every year (Fall, Winter). NS-Fund Disc Phys and Biological Sciences (L). NS-Fund Disc Phys and Biological Sciences (L). K7 - Physical & Natural World

**PHYS 108. Light and Color** (4). An introduction to topics in light and color with applications to technology in the arts. NS-Applications Natural Science (L). NS-Applications Natural Science (L).

**PHYS 109. Physics of Dance** (4). In Physics of Dance, students will explore the connections between the art of dance and the science of physics. Students will learn physics principles as they apply to the movement of the human body. During lab practice, students will move and dance, then analyze that motion from a scientific perspective. PHYS 109 and DNCE 109 are cross-listed courses; a student may not receive credit for both. Prerequisite: eligible to enroll in MATH 101.

**PHYS 110. Math for Introductory Physics** (1). Computational, algebraic, and trigonometric skills will be applied in physical situations. The skills and concepts covered are necessary for success in algebra-based introductory physics courses. Course will be offered every year. Fall and Summer and course will not have an established scheduling pattern. Prerequisite: MATH 100C or milestone for MATH 153. Co-requisite: PHYS 111 or PHYS 121.

**PHYS 111. Introductory Physics I with Laboratory** (5). An integrated experimental and analytical investigation of topics including kinematics and dynamics. This integrated lecture/laboratory course includes the analysis of physical systems using algebra and trigonometry along with inquiry-based activities and experimental investigation. NS-Fund Disc Phys and Biological Sciences (L). Course will be offered every year (Fall, Winter, and Summer). Prerequisite: PHYS 110 OR eligible to enroll in MATH 172 OR successful completion of a comprehensive year-long high school pre-calculus course, or equivalent, the year prior to enrollment in PHYS 111. Co-requisite: PHYS 110 OR concurrent enrollment in

a comprehensive year-long high school pre-calculus course, or equivalent. NS-Fund Disc Phys and Biological Sciences (L).

**PHYS 112. Introductory Physics II with Laboratory (5).** An investigation of topics in rotational dynamics, wave mechanics, and conservation principles. This integrated lecture/laboratory course includes the analysis of physical systems using algebra and trigonometry along with inquiry-based activities and experimental investigation.

Prerequisite: PHYS 111 PHYS 121.

**PHYS 113. Introductory Physics III with Laboratory (5).** An investigation of topics in electricity, magnetism, and optics. This integrated lecture/laboratory course includes the analysis of physical systems using algebra and trigonometry along with inquiry-based activities and experimental investigation.

Prerequisite: PHYS 111 or PHYS 121.

**PHYS 121. Introductory Physics for Life Sciences I (5).** An integrated lecture/laboratory course covering kinematics and dynamics with emphasis on the application of physical concepts to biological systems. Students analyze physical systems using algebra and trigonometry. Class format includes lecture, inquiry-based activities, and experimental investigation. Four class meetings of 80 minutes each. Not open to students with credit in PHYS 181. Prerequisite: PHYS 110 or eligible to enroll in MATH 172.

**PHYS 122. Introductory Physics for Life Sciences II (5).** An integrated lecture/laboratory course covering conservation principles, thermodynamics, wave mechanics and sound with an emphasis on the application of physical concepts to biological systems. Students analyze physical systems using algebra and trigonometry. Class format includes lecture, inquiry-based activities, and experimental investigation. Four class meetings of 80 minutes each. Course will be offered every year (Winter). Prerequisites: PHYS 111 or PHYS 121.

**PHYS 123. Introductory Physics for Life Sciences III (5).** An integrated lecture/laboratory course covering electricity and magnetism and optics with an emphasis on the application of physical concepts to biological systems. Students analyze physical systems using algebra and trigonometry. Class format includes lecture, inquiry-based activities, and experimental investigation. Four class meetings of 80 minutes each. Course

will be offered every year (Spring).

Prerequisites: PHYS 111 or PHYS 121.

**PHYS 181. General Physics I with Laboratory (5).** An integrated experimental and analytical investigation of topics including kinematics and dynamics. This integrated lecture/laboratory course includes the analysis of physical systems using algebra, trigonometry, and calculus along with inquiry-based activities and experimental investigation. Formerly PHYS 211, students may not receive credit for both. Course will be offered every year (Fall, Winter, Summer). Co- or prerequisite: MATH 172. FYE3 - Quantitative Reasoning

**PHYS 182. General Physics II with Laboratory (5).** An integrated experimental and analytical investigation of topics in rotational dynamics, wave mechanics, and conservation principles. This integrated lecture/laboratory course includes the analysis of physical systems using algebra, trigonometry, and calculus along with inquiry-based activities and experimental investigation. Formerly PHYS 212, students may not receive credit for both. Prerequisite: PHYS 181 and MATH 173. Corequisite: MATH 173.

**PHYS 183. General Physics III with Laboratory (5).** An integrated experimental and analytical investigation of topics in electricity and magnetism. This integrated lecture/laboratory course includes the analysis of physical systems using algebra, trigonometry, and calculus along with inquiry-based activities and experimental investigation. Formerly PHYS 213, students may not receive credit for both. Prerequisite: PHYS 181 and MATH 173. Corequisite: MATH 173.

**PHYS 201. Operation and Research Techniques for Small Observatories (3).** Students are trained to operate a small observatory, and to use CCD cameras to collect stellar photometry data. Prerequisites: PHYS 101, and either MATH 153 with a grade of C or higher or eligible for MATH 154 based on Math Placement Test.

**PHYS 289. How to Succeed as a Physics Major (1).** This course introduces second-year physics majors to the expectations and requirements of the physics program, exposes them to a variety of careers available to students with a physics background, and helps develop practical career-oriented skills. Grade will either be S or U.

Prerequisite: PHYS 113 or PHYS 123 or PHYS 183.

**PHYS 292. Exploring Physics Teaching (2).** Inquiry-based learning course that provides preparation for teaching physics using pedagogies that have been guided by physics education research. Prerequisites: PHYS 113, PHYS 123, or PHYS 183.

**PHYS 296. Individual Study (1-6).**

**PHYS 298. Special Topics (1-6).**

**PHYS 299. Seminar (1-5).** May be repeated if subject is different.

**PHYS 301. Stellar Astrophysics I (3).** Introduction to and application of physical principles, including; relativity, quantum theory, and classical physics associated with the characterization of astrophysical systems. Prerequisites: PHYS 101, PHYS 183, and MATH 173.

**PHYS 302. Stellar Astrophysics II (2).** Application of physical principles including relativity, quantum theory, classical electromagnetic fields, and classical mechanics to astrophysical processes and the evolution of astrophysical systems. Prerequisite: PHYS 301.

**PHYS 304. Astrobiology: Origins and Search for Life in the Universe (4).** This is an online interdisciplinary course focusing on life's origins and the potential for life in our solar system and beyond. It will be taught at a level suitable for non-science and non-math majors. Course will not have an established scheduling pattern. Prerequisite: Sophomore standing or above. K8 - Science & Technology

**PHYS 306. Gateway to Space (4).** Students will get a hands-on introduction to the Earth's atmosphere and space instrumentation by building a high-altitude balloon experiment. One-day field trip to launch and recover balloon payload is required. Open to all majors, no previous electronic experience required. Course will not have an established scheduling pattern. Prerequisites: PHYS 111 or PHYS 121 or PHYS 181 or permission of the instructor.

**PHYS 317. Modern Physics I (4).** Topics in physics including relativity, particle physics, and history of modern physics. Analyzing physical systems using calculus, algebra, and trigonometry. Prerequisites: MATH 173 and either PHYS 113, or PHYS 123, or PHYS 183.

**PHYS 318. Modern Physics II (4).** Topics in physics including quantum physics and atomic structure. Analyzing physical systems using

calculus, algebra, and trigonometry.  
Prerequisite: PHYS 317.

**PHYS 320. Electrical Circuits I** (5). Application of fundamental concepts of electrical science in linear circuit analysis and the use of mathematical models in the analysis of electric components and circuits. Co-requisites: MATH 376 and PHYS 321. Prerequisites: PHYS 183.

**PHYS 321. Electrical Circuits I Laboratory** (2). This laboratory course will cover topics in electrical instruments, laboratory applications of electric laws, and transient and steady-state responses of electrical signals. Prerequisite: PHYS 183. Co-requisite: MATH 376 and PHYS 320.

**PHYS 322. Molecular Biophysics** (4). Introduction to biophysics on the molecular and cellular scales. Analyzing biological systems using classical mechanics, electrostatics and statistical mechanics. Course will be offered on even numbered years (Winter). Prerequisites: (PHYS 123 or PHYS 183 or PHYS 113) and MATH 173.

**PHYS 323. Experimental Biophysics** (4). Introduction to techniques in experimental biophysics. Topics include fluorescence microscopy, image processing, computational modeling, and statistical mechanics. Prerequisite: PHYS 322.

**PHYS 331. Laboratory Practices and Techniques** (3). Topics in experimental techniques with emphasis in electronic systems. One class meeting and six hours laboratory per week. Prerequisite: PHYS 183.

**PHYS 333. Experimental Physics I** (3). Topics in experimental techniques used in physics. One class meeting and six hours laboratory per week. Prerequisites: PHYS 318 and PHYS 331.

**PHYS 334. Experimental Physics II** (3). Topics in experimental techniques used in physics. One class meeting and six hours laboratory per week. Prerequisite: PHYS 333.

**PHYS 342. Thermodynamics** (4). The laws of thermodynamics and its application to macroscopic systems. Co- or prerequisite: PHYS 318.

**PHYS 351. Analytical Mechanics I** (4). Introduction to advanced physical concepts and mathematical techniques associated with dynamic systems, including the differential form of Newton's Laws, air resistance and drag, conservation laws, equilibrium and stability, and oscillating systems. Prerequisites: PHYS 113 or PHYS

123 or PHYS 183. Pre- or co-requisites: MATH 272.

**PHYS 361. Computational Physics** (4). Numerical methods of studying physical properties of realistic systems. FORTRAN, IMSL/MATH Library, and MATHEMATICA will be introduced. MATH 265 may be taken as a pre- or co-requisite. Prerequisites: PHYS 113 or PHYS 123 or PHYS 183. Co- or pre-requisite: MATH 265.

**PHYS 363. Optics** (4). The mathematics of wave motion, electromagnetic theory, propagation of light, geometrical optics, and physical optics. Includes the experimental investigation of optical phenomena. Three class meetings and two hours laboratory per week. Prerequisites: MATH 173 and PHYS 113, or PHYS 123, or PHYS 183.

**PHYS 381. Electromagnetic Theory I** (4). Topics in electrostatics including electric fields, electric potential, Gauss' law, electrostatic energy, and multipole expansions. Prerequisites: PHYS 113 or PHYS 123 or PHYS 183 and MATH 265 and MATH 273 and PHYS 363 .

**PHYS 382. Electromagnetic Theory II** (4). Topics in electrostatics and magnetostatics including the electrostatics of polarizable media, vacuum magnetostatics, magnetostatics in matter, and introduction to the Maxwell equations. Prerequisite: PHYS 381.

**PHYS 383. Electromagnetic Theory III** (4). Topics in the Maxwell equations, electrodynamics, and electromagnetic waves. Prerequisite: PHYS 382.

**PHYS 392. Exploring Physics Teaching II** (2). Inquiry-based learning course that enhances preparation for teaching physics using best-practice pedagogies, lesson planning, and action research. May be repeated up to 6 credits. Prerequisite: PHYS 292.

**PHYS 396. Individual Study** (1-6).

**PHYS 397. Honors** (1-12). Prerequisite: admission to department honors program.

**PHYS 398. Special Topics** (1-6).

**PHYS 399. Seminar** (1-5). May be repeated if subject is different.

**PHYS 410. Mathematical Methods for the Physical Sciences and Engineering** (3). Survey of useful mathematical methods in the physical sciences and engineering. Topics are of particular relevance for students preparing for graduate studies in physical sciences or engineering. Prerequisites: MATH 376 and PHYS 318.

**PHYS 433. Experimental Atomic, Molecular, and Optical Physics** (3).

Students in the course will learn and apply some of the conceptual principles and fundamental laboratory techniques of atomic, molecular, and optical physics. May be repeated up to 6 credits. Course will be offered on even numbered years (Spring). Prerequisites: PHYS 318 and PHYS 333, or permission of instructor.

**PHYS 441. Solid State Physics** (4). Introduction to the principles of solid state physics including crystal structures and symmetries, diffraction, reciprocal space, energy bands, and thermodynamics and transport phenomena. Course will be offered on odd numbered years (in Spring). Prerequisites: MATH 272 and (PHYS 318 or CHEM 382). Co-requisite: PHYS 318 or CHEM 382.

**PHYS 451. Analytical Mechanics II** (3). Advances study of dynamic systems. Introduction to variational principles, Lagrangian and Hamiltonian methods, central force motion, rigid-body rotations, and coupled oscillators. Prerequisite: PHYS 351.

**PHYS 454. Acoustics** (4). Theory, applications, and laboratory techniques related to sound and vibration. Topics include: wave propagation, structural vibration, and interaction between sound and structures. Course will be offered on odd numbered years (Spring). Prerequisites: MATH 376 and PHYS 361 and (PHYS 351 or PHYS 342), or instructor permission.

**PHYS 461. Advanced Computational Physics** (4). Applications of standard numerical modeling techniques to physics problems involving nonlinear and/or differential equations, including wave propagation, fluid flow, thermodynamics, electrodynamics, and particle physics. PHYS 461 and PHYS 561 are layered courses; students may not receive credit for both. Prerequisites: MATH 376 and PHYS 361.

**PHYS 463. Fundamentals of Lasers (Put on reserve 9/16/18)** (4). Overview of laser technology with emphasis on laser characteristics, safety, and applications. (Put on reserve 9/16/18, will go inactive 8/24/21) Prerequisite: PHYS 363.

**PHYS 474. Quantum Mechanics I** (4). Methods of quantum mechanics and applications to physical systems. Examples from nuclear, atomic, and molecular physics. Prerequisites: PHYS 318 and MATH 376.

**PHYS 475. Quantum Mechanics II** (4). Methods of quantum mechanics and applications to physical systems. Examples from nuclear, atomic, and

molecular physics. Prerequisites: PHYS 474.

**PHYS 489. Senior Assessment (1).** An end-of-major course consisting of curriculum review and program assessment activities. By permission. Prerequisites: senior standing and admission to the physics major.

**PHYS 490. Cooperative Education (1-12).** An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. By permission. May be repeated for credit. Grade will either be S or U.

**PHYS 491. Workshop (1-6).**

**PHYS 492. Laboratory Experience in Teaching Physics (2).** By permission. May be repeated up to 6 credits.

**PHYS 495. Undergraduate Research (1-2).** By permission. May be repeated up to 12 credits. CE - Culminating Experience

**PHYS 496. Individual Study (1-6).**

**PHYS 497. Honors (1-12).** Prerequisite: admission to department honors program.

**PHYS 498. Special Topics (1-6).**

**PHYS 499. Seminar (1).**

### Political Science Courses

**POSC 101. Introduction to Politics (5).**

This course explores the meanings of power, political actors, resources of power and how they are being used for what purposes, under what ideological, institutional and policy processes affecting our quality of life. Course will be offered every year (Fall, Winter, Spring, Summer). SB-Foundations of Human Adaptations and Behavior (W). SB-Foundations of Human Adaptations and Behavior (W). K6 - Individual & Society

**POSC 210. American Politics (5).**

Origin and development of the United States government; structure, political behavior, organizations, and processes; rights and duties of citizens. Course will be offered every year (Fall, Winter, Spring, Summer). SB-Perspectives on Cultures and Experiences of U.S. SB-Perspectives on Cultures and Experiences of U.S. K2 - Community, Culture, & Citizenship

**POSC 230. State and Local Government (5).**

**POSC 250. Language and Power (5).** This course surveys political uses of language and consequences for society. It covers concepts in cultural politics, identity politics, and sociolinguistics. Students propose plans to use language

to make societies more just and sustainable. WLC 250 and POSC 250 are cross-listed courses; a student may not receive credit for both. Course will not have an established scheduling pattern.

**POSC 260. Comparative Politics (5).**

Comparative political analysis, utilizing a variety of methods and theoretical approaches; application to selected western and non-western systems. Recommended to precede other courses in comparative politics. Course will be offered every year (Fall, Winter, Spring, Summer). K6 - Individual & Society

**POSC 270. International Relations (5).**

This course explores political issues and theories in international relations. This class will focus on issues of war and peace, international law and organization, foreign policy, diplomatic history, and international political economy. Course will be offered every year (Fall, Winter, Spring, Summer). SB-Perspectives on World Cultures (W). SB-Perspectives on World Cultures (W). K4 - Global Dynamics

**POSC 280. Introduction to Western Political Thought (5).**

This course explores political thought in the West from its origins in Ancient Greece through the 20th century. This course examines concepts such as democracy, religious freedom, ethics, realism, citizenship, and human nature. Course will be offered every year (Fall, Spring, and Summer). K5 - Humanities

**POSC 298. Special Topics (1-6).**

**POSC 299. Seminar (1-5).** May be repeated if subject is different.

**POSC 311. Women and Politics (5).**

The politics of human sexuality: men's and women's rights, sex roles, sexual discrimination, laws governing sexuality, and related issues.

**POSC 313. The Legislative Process (5).**

The Congress of the United States, drafting of bills, legislative leadership, the committee system, relation to executive and judicial branches, pressure groups.

**POSC 314. American Presidency (5).**

The office of the chief executive: its constitutional, political, and administrative processes.

**POSC 315. Political Campaigns and Elections (5).** Evaluations of campaign techniques and practices; campaign financing and expenditures; voting behavior; election theory; elections and public policy.

**POSC 316. Latinos and the U.S.**

**Political System (5).** This course examines the political reality of Latinos in the United States: a diverse

population made up largely of Mexican, Puerto Rican, Cuban American, and other Latinos of Central and South American origins.

**POSC 318. Political Parties and Interest Groups (5).**

Theories of party systems; elitism and pluralism; party organization, functions, and activities; status, functions, and activities of interest groups in the public policy-making process.

**POSC 320. Public Administration (5).**

Setting, purpose, functions, and performance of public bureaucracy in the United States.

**POSC 325. Introduction to Public Policy (3).**

Institutional context, politics and processes of agenda setting and policy formulation, implementation, evaluation, change and termination in the United States.

**POSC 340. Politics and American Capitalism (5).**

A survey of the interrelationship of the worlds of politics and business enterprise in American history; analysis of relevant philosophical and ideological arguments; case studies in such areas as industrial and trade policy.

**POSC 341. Politics and Religion (5).**

The impact of religion upon American political thought and behavior.

**POSC 342. U.S. Foreign Policy (5).**

Factors, processes, and techniques in the formulation and execution of the foreign policy of the United States.

**POSC 343. The Politics of the U.S. Mexico Border (5).**

This course examines the politics of the United States and Mexico border region focusing on the important role of the state in the development of policies affecting one of the longest border regions in the world. Topics covered in the course include the politics of border regions and the national state, and the diverse policy concerns of the region from economic development and immigration, to ecological degradation, and health concerns.

**POSC 344. Environmental Politics (5).**

Introduces contemporary environmental problems and politics. Activities and projects enable students to examine how political systems, institutions, policy processes, movements, perceptions of the environment, and power account for outcomes in environmental policy, administration, and development. Course will not have an established scheduling pattern.

**POSC 350. Introduction to Public Law (5).**

Legal bases and structure of governmental organization; fundamental doctrines and principles of

constitutional, international, and administrative law.

**POSC 361. Latin American Politics (5).**

A comparative introduction to the political systems, cultures, and histories of Latin America and to prominent theories on democracy and political and economic development.

**POSC 362. European Politics (5).**

Comparative analysis of political cultures, civil societies, parties and elections, and systems of governance in a selection of European countries.

**POSC 363. Russian Politics (5).**

Evolution, patterns, and comparative analyses of the Russian polity.

**POSC 365. African Politics (5).**

Comparative analysis of the political systems of the African continent, including historical, social, economic, and international contexts.

**POSC 366. Government and Politics of East Asia (5).**

An introduction to the politics and governments of selected East Asian countries. Focus will center on China, Japan, and Korea.

**POSC 367. Politics of Japan (5).**

Investigation and analysis of politics and government in contemporary Japan.

**POSC 369. Korean Politics (5).**

Political systems, institutions, and processes of contemporary North and South Korea.

**POSC 372. Politics of Globalization (5).**

Inquiry in the nature and trends of globalization from the economical, political, and cultural perspectives, and their impacts on our way of life. Roles of government, non-government organizations, and global institutions will be examined.

**POSC 373. International Politics of the Pacific Rim (5).**

Political and economic relations of the contemporary Pacific Rim. Special focus on North America, Russia, and East Asia.

**POSC 375. The Middle East and International Politics (5).**

**POSC 376. International Organization (Put on reserve 9/16/17) (3).**

Background, concepts, structure, and functions of international organization. (Put on reserve 9/16/17. Will go inactive 8/24/2020.)

**POSC 378. International Political Economy (5).**

Political problems of management and development in the global economy and the prospects for creating improved mechanisms at the international level and for less-developed countries.

**POSC 396. Individual Study (1-6).**

May be repeated if subject is different.

**POSC 397. Honors (1-12).**

Prerequisite: admission to department honors program.

**POSC 398. Special Topics (1-6).**

**POSC 399. Seminar (1-5).** May be repeated if subject is different.

**POSC 401. Nobel Prize Winning Political Scientists (5).**

A discussion course that examines the lives and work of five Political Scientists from the American academy who have won either the Nobel Peace Prize or the prize in economics. Course will not have an established scheduling pattern.

**POSC 410. Contemporary Issues in American Politics (3-5).**

Focus on specific contemporary issues in US politics, with emphasis on in-depth analysis and utilization of available research tools. Subject matter will vary by instructor and with the changing nature of the American political scene.

**POSC 411. American Indian Politics and Sovereignty (4).**

Examines American Indians as sovereign nations and as participants in U.S. politics. Provides historical and contemporary overview of legal and political experiences of native Americans in the USA. Course will be offered on odd numbered years (Spring).

**POSC 429. Research Seminar in Public Policy (3-5).**

Review of theory and methods, proposal for policy analysis, preparation, and presentation of policy analysis. Prerequisites: POSC 320 or 325 or by permission.

**POSC 441. Politics and Film (5).**

Since its inception, film has been used to convey political ideas and ideologies, as well as offer social and political criticism. This class will examine the techniques film directors and writers use to "manipulate" the viewing audience.

**POSC 451. Introduction to Constitutional Law (5).**

Role of the United States Supreme Court in shaping governmental structure of the United States.

**POSC 452. The Constitution and Human Rights (5).**

Role of the United States Supreme Court in the development of political and social rights.

**POSC 453. The Constitution and War (5).**

Americans like to believe that the Constitution is a constant--in effect during times of peace and during times of war. The truth is more complicated. If history is our guide, the Constitution has been far more "flexible" in times of war than most Americans would like to admit. This class examines how the nation and its presidents have applied the Constitution during times of extreme crisis.

**POSC 460. Contemporary Issues in Comparative Politics (3-5).**

Focus on

a specific contemporary issue in the field of comparative politics, with an emphasis on in-depth analysis and utilization of available research tools. Subject matter will vary with the instructor and with the changing nature of world politics. May be repeated by sub-topic two times, for a maximum of 10 credits.

**POSC 470. Contemporary Issues in International Relations (3-5).**

Focus on specific contemporary issues in the field of international politics, with an emphasis on in-depth analysis and utilization of available research tools. Subject matter will vary with the instructor and with the changing nature of world politics. May be repeated by sub-topic two times, for a maximum of 10 credits.

**POSC 475. International Human Rights (5).**

A survey of internationally recognized human rights, analysis of relevant international laws, case studies in women's rights, minority rights, and humanitarian policies.

**POSC 481. Early Political Thought (5).**

Plato to Machiavelli.

**POSC 482. Early Modern Political Thought (5).**

Political thought in the 16th, 17th, and 18th centuries.

**POSC 483. Recent Political Thought (5).**

Political thought in the 19th and 20th centuries.

**POSC 485. American Political Thought and Culture (5).**

The ideas and circumstances that have shaped the political culture of the U.S., as reflected in the works of selected political theorists, politicians, and literary figures.

**POSC 488. Introduction to Political Science Methods and Research (5).**

Class will introduce students to the research methods of political scientists. Taught in a seminar format, the class will engage in an original research project culminating in a peer-reviewed article submission to an academic journal. Students will learn to write literature reviews, collect data, analyze data using SPSS, and write academic research papers. By instructor permission.

**POSC 489. Senior Assessment (2).**

A "capstone" course designed to assess students' mastery of fundamental knowledge of politics and of writing and analytical skills. Co- or prerequisites: POSC 101, POSC 210, POSC 260, POSC 270, and either POSC 481, POSC 482, POSC 483, or POSC 485 and senior standing.

**POSC 490. Cooperative Education (1-12).**

An individualized, contracted field experience with business, non-profit



organizations or government. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. By permission. May be repeated for credit up to maximum of 12 credits. Grade will either be S or U.

**POSC 496. Individual Study** (1-6).

**POSC 497. Honors** (1-12). Prerequisite: admission to department honors program.

**POSC 498. Special Topics** (1-6).

**POSC 499. Seminar** (1-5).

### Primate Studies Courses

**PRIM 220. Procedures in Captive**

**Primate Care** (1). Laboratory procedures to ensure physical, social, and psychological well-being of captive nonhuman primates: sanitation, safety, medical care, diet, USDA requirements, and socio-psychological factors.

**PRIM 298. Special Topics** (1-6). May be repeated if subject is different.

**PRIM 299. Seminar** (1-5). May be repeated if subject is different.

**PRIM 396. Individual Study** (1-6). May be repeated if subject is different.

**PRIM 397. Honors** (1-12). Prerequisite: admission to department honors program.

**PRIM 398. Special Topics** (1-6). May be repeated if subject is different.

**PRIM 399. Seminar** (1-5). May be repeated if subject is different.

**PRIM 450. Primate Behavior and Ecology Capstone** (1). A capstone course designed to assess students' mastery of fundamental knowledge of primatology through submission of a portfolio of work collected throughout the program. Includes exit interview with program director. Prerequisite: senior standing.

**PRIM 490. Cooperative Education** (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. By permission. May be repeated for credit. Grade will either be S or U.

**PRIM 495A. Directed Research in Primatology** (1-5). By permission. May be repeated for credit. Grade will be either S or U.

**PRIM 495C. CHCI Directed Research** (1-10). Directed primatological research at the Chimpanzee and Human Communication Institute. By permission. May be repeated for credit. Grade will either be S or U. Prerequisite: PRIM 220.

**PRIM 496. Individual Study** (1-6). May be repeated if subject is different.

**PRIM 497. Honors** (1-12). Prerequisite: admission to department honors program.

**PRIM 498. Special Topics** (1-6). May be repeated if subject is different.

**PRIM 499. Seminar** (1-5). May be repeated if subject is different.

### Psychology Courses

**PSY 101. General Psychology** (5). The study of the basic principles, problems and methods that underlie the science of psychology, including diversity, human development, biological bases of behavior, learning, sensation and perception, cognition, personality, and psychopathology. Course will be offered every year (Fall, Winter, Spring, Summer). SB-Foundations of Human Adaptations and Behavior. SB-Foundations of Human Adaptations and Behavior. K6 - Individual & Society

**PSY 200. Introduction to the Major**

(1). Orientation to the psychology major. Grade will either be S or U. Prerequisite: must be declared with a psychology major program.

**PSY 205. Psychology of Adjustment** (5). The nature of the adaptive process and the means by which people adjust to their environment. Course will be offered every year (Fall, Winter, Spring, Summer). SB-Foundations of Human Adaptations and Behavior (W). SB-Foundations of Human Adaptations and Behavior (W). K6 - Individual & Society

**PSY 235. Relationships and Personal Development** (3). Development of interpersonal relationships from initial encounters to stable commitments. Major focus on interaction patterns in intimate relationships. PSY 235 and FSCF 235 are cross-listed courses; students may not receive credit for both.

**PSY 242. Psychology of Video Games**

(4). This course outlines many foundational theories of psychology within the lens of video games. Students will examine psychological concepts present in video games and how knowledge of psychology can improve the gaming experience. Course will be offered every year (Fall, Spring). K6 - Individual & Society

**PSY 275. Community Development in Residence Halls** (3). Components of successful student development in residential settings. Educational philosophy of residence halls, community development, and problem solving. Credits do not apply toward

psychology degree major or minor.

Grade will either be S or U.

Prerequisite: permission of instructor.

**PSY 295. Laboratory Experience in Psychology** (1-5). Not more than 5 credits of PSY 295, PSY 295C, PSY 495, and PSY 495C combined may be applied to a 45-credit psychology major and not more than 10 credits, combined, may be applied to a 60-credit major. May be repeated up to 10 credits. Grade will either be S or U.

**PSY 295C. CHCI Laboratory**

**Experience** (1-5). Laboratory experience at the Chimpanzee and Human Communication Institute. May be repeated for credit. Grade will either be S or U. Course fee will be assessed. Not more than 5 credits of PSY295, PSY 295C, PSY 495, and PSY 495C combined may be applied to a 45-credit psychology major and not more than 10 credits, combined, may be applied to a 60-credit major. Prerequisite: permission of department chair. PSY 101 is also a recommended prerequisite.

**PSY 298. Special Topics** (1-6).

**PSY 299. Seminar in Psychology** (3).

**PSY 300. Research Methods in Psychology** (5). Addresses basic experimental and non-experimental research designs and strategies, as well as the APA-approved professional writing style. Includes both lecture and laboratory experiences. PSY 362 is a recommended co-requisite.

**PSY 301. Learning** (5). Addresses basic theory and research related to classical and operant conditioning, stimulus control, and memory. Prerequisite: PSY 300.

**PSY 303. Analysis of Everyday Behavior** (4). Environmental, cognitive, and biological influences on behavior in daily life. Prerequisite: PSY 101.

**PSY 310. Multicultural Psychology and Social Justice** (4). An examination of human behavior in cultural context emphasizing the role of culture on thought, behavior, relationships and society. Addresses the influences of identity differences on individuals and society. Examines cross-cultural theory, and methodology. Course will be offered every year (Fall, Winter, Spring, Summer). K2 - Community, Culture, & Citizenship

**PSY 312. Queer Theory and Sexuality** (4). This interdisciplinary course introduces students to the academic field of lesbian and gay studies through examination of the history, politics, theories, culture, and community of

those who identify as lesbian, bisexual, gay, transgender, and queer.

**PSY 313. Developmental Psychology**

(4). Cognitive, social-emotional, and physical development through the lifespan. Prerequisite: PSY 101 or by permission.

**PSY 314. Human Development and the Learner**

(4). Human development from conception through adolescence. Course will be offered every year (Fall, Winter, Spring, Summer).

**PSY 315. Psychology in the Schools**

(4). Psychology applied in school settings including principles of learning, instruction, and behavior management.

**PSY 333. Social Justice: The Psychology of Stereotyping, Prejudice, and Discrimination**

(4). Study phenomena and processes associated with one's beliefs about members of social groups (stereotypes), evaluations of group members (prejudice), and behaviors toward others based on their group membership (discrimination) from a psychological perspective. Course will be offered every year (Fall, Spring). K6 - Individual & Society

**PSY 340. Teaching of Psychology**

(3). May be repeated up to 6 credits. Grade will either be S or U. Prerequisites: completion of course in which teaching or assisting is to be done and approval of department chair.

**PSY 346. Social Psychology**

(4). Social influences on individual behavior.

**PSY 350. Sleep and Dreaming**

(4). Research and theory concerning the functions and dysfunctions of sleep and dreaming. Prerequisite: PSY 101.

**PSY 352. Application of Adult Development Theories**

(2). This course is designed to provide students with a broad understanding and application of theories on adult development and aging. Service-learning is integral and students will be involved with older adults through cooperating local agencies. May be repeated up to 4 credits.

**PSY 362. Introductory Statistics**

(5). Descriptive statistics and introduction to inferential statistics through one-way analysis of variance. Prior coursework in finite math is recommended. FYE3 - Quantitative Reasoning

**PSY 363. Intermediate Statistics and Research Methods**

(5). Experience with the design, execution, analysis, interpretation, and communication of psychological experiments in addition to data management and statistical software skills. Four hours lecture and two hours lab each week. Prerequisite: PSY 300 and PSY 362.

**PSY 396. Individual Study**

(1-6). **PSY 397. Honors** (1-12). Prerequisite: admission to department honors program.

**PSY 398. Special Topics**

(1-6). **PSY 399. Seminar** (1-5). May be repeated if subject is different.

**PSY 401. Psychology of Sport**

(4). Current theory and research on sports psychology; application of psychological interventions in sports and fitness. Prerequisite: PSY 101.

**PSY 413. Conservation Psychology**

(4). Interaction between thought processes, behavior, and environmental decision-making as they relate to environmental change and sustainability. PSY 413 and PSY 513 are layered courses; students may not receive credit for both.

**PSY 415. Behavioral Medicine and Health Psychology**

(4). The application of psychology to the understanding of illness and to its prevention and treatment with special emphasis on current health topics (e.g., stress, HIV/AIDS). PSY 415 and PSY 515 are layered courses; students may not receive credit for both. Formerly, PSY 455; students may not receive credit for both. Prerequisite: PSY 101.

**PSY 420. Psychology of Language**

(4). Basic principles of language, cognition of language, language development, theories of linguistic structure and brain function as it relates to language processing. PSY 420 and PSY 520 are layered courses; students may not receive credit for both. Formerly PSY 373, students may not receive credit for both. Formerly PSY 473, students may not receive credit for both.

**PSY 421. Human Neuroanatomy**

(4). An introduction to the anatomical organization and basic functional/clinical principles of the major systems of the human brain and their relations to disease and behavior. PSY 421 and PSY 521 are equivalent courses; students may not receive credit for both.

**PSY 430. Positive Psychology**

(4). Examination of the theoretical and empirical literature in the field of positive psychology with attention to topics such as happiness, mindfulness, optimism, gratitude, and forgiveness. PSY 430 and PSY 530 are layered courses; students may not receive credit for both.

**PSY 438. Substance Abuse and Dependence**

(5). Overview of substance abuse from psychological and systems perspectives. Models of addiction and problematic use are explored. Issues including dual

diagnosis, family system and cultural considerations, and theories of intervention and treatment are discussed. PSY 438 and PSY 538 are layered courses; students may not receive credit for both.

**PSY 441. Self-Injurious Behavior**

(4). This course covers the occurrence, prevalence, etiology, and treatment of self-injurious behavior in human and nonhuman primates. Course will not have an established scheduling pattern. Prerequisites: any biology or psychology course and junior standing or above.

**PSY 442. Evolutionary Psychology**

(4). Application of principles of evolution to understanding of human and non-human behavior and cognition. PSY 442 and PSY 542 are layered courses; students may not receive credit for both.

**PSY 444. Tests and Measurements**

(4). Psychological and educational tests, theory, and practice. PSY 444 and PSY 544 are layered courses; students may not receive credit for both. Course will be offered every year (Fall).

**PSY 445. Clinical, Counseling, and Community Psychology**

(5). History, current trends, fields of employment, professional ethics, methods of psychological diagnosis, and treatment. Prerequisite: PSY 101.

**PSY 447. Psychology of Adolescence**

(4). Physiological, cognitive, and social aspects of maturation; problems of vocational choice and of increasing autonomy. Prerequisite: PSY 101.

**PSY 448. Sexual Behavior**

(4). The scientific study of the learned and innate bases of sexual behavior in humans and lower animals. Prerequisite: PSY 101.

**PSY 449. Abnormal Psychology**

(4). Symptoms, etiology, and treatment of psychopathology and behavior problems. Prerequisite: PSY 101.

**PSY 450. Sensation and Perception**

(4). Research, theoretical models of sensory and perceptual processes. Prior coursework in cell function recommended. Prerequisites: PSY 300.

**PSY 452. Adult Development and Aging**

(4). Principles of adult psychological development and the aging process. Examination of adult behavior, life-styles, crises in adult development, and cognitive, personality, and intellectual changes with aging.

**PSY 453. Theories of Personality**

(5). Focus on the scientific study of how and why people differ from each other. Personality psychology addresses questions regarding shared human

nature, dimensions of individual differences, and unique patterns of individual behavior. Prerequisite: PSY 101.

**PSY 454. The Helping Interview (3).**

Theory and practice of supportive interviewing skills.

**PSY 456. Industrial and**

**Organizational Psychology (4).**

Application of psychological principles to personnel and organizational problems in labor, industry, government, education, and the military.

**PSY 460. Cognitive Psychology (5).**

Methods and theories of human cognition and information processing. Prerequisite: PSY 300.

**PSY 461. History and Systems of Psychology (5).**

Historical development and persistent theoretical problems of contemporary psychology. Prerequisite: PSY 101.

**PSY 465. Psychology and the Law (4).**

How the discipline of psychology contributes to our understanding of matters related to the law.

**PSY 467. Child Psychopathology (4).**

Identification and treatment of the child with psychological disturbances; the home, school, community, and cultural context in relation to the child's mental health; relevant resources and research. Course will be offered every year (Fall, Winter, and Summer). Prerequisites: PSY 313 or PSY 314.

**PSY 472. International Counseling and Psychology (Put on Reserve 9/16/16.)**

(3). This course immerses students within a cultural group and examines how psychological and counseling services are provided within that society. The location for the course varies by year. Students will learn about a society's available services, health care provision, relationship/child-rearing traditions, common prejudices, and economic values. PSY 472 and 572 are layered courses. May be repeated up to 6 credits. (Put on Reserve 9/16/16. Last taught in 2012. Will go inactive 8/24/19.) Prerequisite: PSY 101.

**PSY 476. Psychopharmacology (4).**

Common drugs, psychotherapeutic agents and hallucinogens. Behavioral effects and physiological mechanisms.

**PSY 478. Behavioral Neuroscience (4).**

Problems, methods, and techniques of neurophysiology and the physiology of human and infrahuman behavior patterns. Prior coursework in cell function recommended. Prerequisites: PSY 300.

**PSY 479. Comparative Psychology (4).**

Seminar in the study of behavior and

cognition across species. This course is listed under the graduate version of PSY 576; students may not receive credit for both.

**PSY 483. Psychology of Gender (4).**

The psychology of gender from a social psychological perspective, which examines implications of gender roles, schemas, and stereotypes. Prerequisite: PSY 101.

**PSY 484. Violence and Aggression (4).**

Violence and aggression directed toward self, others, and society. Problems of prevention and treatment, related ethical and legal issues. Prerequisite: PSY 101.

**PSY 489. Senior Assessment (2).** An end-of-major course. Portfolio review, career planning, and program evaluation activities. Grade will either be S or U. Course will be offered every year (Fall, Winter, Spring, Summer). Prerequisites: PSY 200 and admitted to a psychology major and senior standing. It is recommended that this class is taken in the last academic quarter. CE - Culminating Experience

**PSY 490. Cooperative Education (1-12).** An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. Prerequisite: prior approval required.

**PSY 491. Workshop (1-6).**

**PSY 495. Directed Research (1-5).** Not more than 5 credits of PSY 295, PSY295C, PSY 495, and PSY495C combined may be applied to a 45-credit psychology major and not more than 10 credits, combined, may be applied to a 60-credit major. By permission. May be repeated for credit. Grade will either be S or U. Prerequisite: PSY 101

**PSY 495C. CHCI-directed Research**

(1-5). Directed research at the Chimpanzee and Human Communication Institute. Course fee will be assessed. Not more than 5 credits of PSY 295, PSY 295C, PSY 495, and PSY 495C combined may be applied to a 45-credit psychology major, and not more than 10 hours combined may be applied to a 60-credit major. May be repeated up to 10 credits. Grade will either be S or U.

**PSY 496. Individual Study (1-6).**

**PSY 497. Undergraduate Honors Thesis (2-6).** By invitation of department chair. Research supervised by three-member committee of the department of psychology. May be repeated up to 6 credits. Prerequisite:

admission to the Departmental Honors Program.

**PSY 498. Special Topic (1-5).**

**PSY 499. Seminar (1-5).**

**Public Health Courses**

**PUBH 209. Consumer Health (4).** This course explores issues related to information, products, services, and regulation influencing the health of people as consumers. Emphases are information environment and perspectives of both consumers and health professionals. Formerly HED 209, students may not receive credit for both. Course will be offered every year (Fall, Spring). K6 - Individual & Society

**PUBH 230. Foundations of Public and Community Health (4).** This is an introductory course for students interested in public and community. The course introduces students to the core foundational concepts for continuing study in the areas of public and community health. This course surveys the history, philosophies, and underlying the practice of public health. This course involves community and campus interaction through service learning. Formerly HED 230, students may not receive credit for both.

**PUBH 240. Writing in the Health Sciences (4).** Fundamental skills and practice for effective written communication health sciences; attention to clarity and accuracy; various styles and strategies; appropriate use and citation of peer-reviewed literature; audience concern; hierarchy of evidence; APA style is a focus. Formerly HED 240, students may not receive credit for both. Prerequisite: ENG 101 and ENG 102.

**PUBH 250. Introduction to Health Policy and Systems (4).** This introductory course provides an overview of the U.S. health system, and explores the conceptual process of health policy development, the social and political environment in which policy decisions are made and their implications on the health and well-being of populations. Formerly HED 250, students may not receive credit for both.

**PUBH 298. Special Topics (1-6).** May be repeated up to 12 credits.

**PUBH 299. Seminar (1-5).** May be repeated if subject is different.

**PUBH 310. Community Health (3).** An overview of contemporary community

health programs; problems in community health at the local, national, and international levels. Formerly HED 310, students may not receive credit for both. Course will be offered every year (Winter, Summer).

**PUBH 311. Cross Cultural Practices for Health and Medicine** (4). Course examines beliefs, values, biases, and other culturally-driven variables affecting, and reflecting, societal health status and outcomes. Students will consider issues and strategies, and learn to connect with people and systems, in new ways. Course will be offered every year (Fall, Spring). K2 - Community, Culture, & Citizenship

**PUBH 317. Global Health Issues and Solutions** (4). Course examines health and social issues as a function of setting in the global community. Explores differences in experiences, resource bases, strategies, and outcomes. Introduces global policy, major initiatives, and alternative approaches and opportunities. Formerly HED 317, students may not receive credit for both. Course will be offered every year (Fall, Spring). K4 - Global Dynamics

**PUBH 318. The Politics of Food and Health** (3). Exploration of the politics of food from farm to table, and the implications for human and environmental health. PUBH 318 and NUTR 318 are cross-listed courses; students may not receive credit for both. Course will be offered every year. Course will not have an established scheduling pattern.

**PUBH 320. Environmental Health** (4). Examines environments, agents, and outcomes related to human and ecosystem health. Explores basic toxicology and environmental epidemiology principles; behavioral, social, economic, and political factors; scientific and technological advances; and sustainability issues and strategies. Course will be offered every year (Fall, Winter, Spring, Summer). K8 - Science & Technology

**PUBH 324. Infectious and Non-infectious Disease** (4). This course introduces students to the various principles related to the identification, treatment, and prevention of prevalent infectious and non-infectious diseases. Additionally, the physical, social, psychological, and economic effects of these illnesses/diseases in society are explored. Formerly HED 324, students may not receive credit for both.

**PUBH 351. Community Building Strategies for Public Health** (4). Introduces students to practical

strategies designed to engage others in creating change that matters to them. Explores ideas, evidence, examples, and possibilities from the activist to the establishment. Course offers community practice opportunities. Formerly HED 351 and HED 450, students may only receive credit for one. Course will be offered every year (Winter). Prerequisite: PUBH 230. K2 - Community, Culture, & Citizenship

**PUBH 370. Contemporary Issues in Public Health** (4). Contemporary health education topics and issues are explored through classroom and community contacts, visual, web-based, and interactive media. May be repeated for up to 8 credits, provided topic is different. Formerly HED 370, students may not receive credit for both. Course will be offered every year (Fall, Winter, Spring, Summer).

**PUBH 375. Theories of Health Behavior** (4). Provides an introduction to methods and theories of behavior change related to community and public health. Examines change process of individual and communities including motivating factors essential to maintaining positive behavior change. Formerly HED 375, students may not receive credit for both. Course will be offered every year (Fall, Spring). Prerequisites : PUBH 230 and PUBH 240 or by instructor permission .

**PUBH 376. Community Food Strategies: Campus Garden** (2). Project-centered course designed to introduce students to skills and strategies relevant for developing and sustaining campus-based community food strategies to improve health and social outcomes. May be repeated up to 12 credits. Course will be offered every year (Spring, Summer).

**PUBH 380. Epidemiology** (4). Epidemiology is the scientific study of the determinants, rates, and distribution of disease amongst populations. Formerly HED 380, students may not receive credit for both. Course will be offered every year (Winter, Spring). Prerequisites : PUBH 230 and PUBH 240 or by instructor permission .

**PUBH 396. Individual Study** (1-6). May be repeated if subject is different.  
**PUBH 397. Honors** (1-12). Prerequisite: admission to department honors program.

**PUBH 398. Special Topics** (1-6). May be repeated up to 12 credits.

**PUBH 399. Seminar** (1-5). May be repeated if subject is different.

**PUBH 409. Community Mental Health Issues and Strategies** (3). This course provides an overview of the history,

trends, and promising models of community-based mental health from a public health perspective. This includes the broad range of determinants of mental health and substance abuse, U.S. delivery system and supports, program and policy interventions, and other mental health promotion efforts from a community-based context. Prerequisite: PUBH 230.

**PUBH 412. Aging and Public Health** (3). Population aging is a major challenge facing public health. Public health professionals must be prepared to meet the social, economic, and healthcare needs of aging populations.

**PUBH 413. Health Disparities in Rural and Frontier Communities** (3). Overview of differences in health statuses, resources, and outcomes in rural and frontier communities in the U.S. from a population health perspective. PUBH 413 and PUBH 513 are layered courses. Students may not receive credit for both. Course will be offered every year (Fall, Spring and Summer Quarters).

**PUBH 420. Women's Health Issues** (4). This course examines selected women's health issues and their physical, mental, and emotional effects, as well as the political, social, and cultural climates that influence the health of women. Course will be offered every year (Winter).

**PUBH 422. Community Health Communication and Promotion** (4). Based upon the seven areas of responsibility for entry-level health educators, students will utilize best practices in prevention science to develop methods/materials to educate individuals and groups on topics that they need to remain healthy. PUBH 422 and PUBH 522 are layered courses; students may not receive credit for both. Course will be offered every year (Winter and Spring). Co- or Prerequisites: PUBH 380 and PUBH 375 or by instructor permission.

**PUBH 424. Maternal and Child Health** (3). A survey of public health issues affecting women, children, and families from a population health perspective. Prerequisite: PUBH 230.

**PUBH 440. Public Health Communication** (3). Basic theory and practice of public health communications to inform and influence individual and community decisions that enhance health. Course will be offered every year (Fall and Summer). Prerequisite: PUBH 230.

**PUBH 445. Professionalism in Public Health** (2). Professional ethics, job readiness, and job search in public

health. Students will propose their culminating experience/capstone in this course in preparation for graduation. To be taken last two quarters before internship placement. Formerly HED 445, students may not receive credit for both. Grade will either be S or U. Prerequisites: PUBH 230, and PUBH 240, and PUBH 375 and acceptance into the public health major.

**PUBH 448. Sexual Health (4).** This course surveys sexual health from a public health perspective, focusing on both individual and societal factors contributing to sexual health. Course will be offered every year (Fall and Spring).

**PUBH 460. Public Health Ethics (3).** Overview of key ethical frameworks and their application to ethical issues in public health practice. Formerly HED 460, students may not receive credit for both. Prerequisites: PUBH 230 and PUBH 240 and acceptance into public health major and senior standing.

**PUBH 465. Research Experience in Public Health (5).** This course is intended to help undergraduate students pursue research projects related to population health. The course will help prepare the learner to complete a variety of necessary steps to design, implement, and disseminate possible short-term research projects under the mentorship and guidance of faculty member(s) and with the assistance of rigorous review from peers. It is expected that students will emerge from this course with at least one scholarly product that could be presented at SOURCE or other relevant academic venues. Grade will either be S or U. Prerequisites: PUBH 375 and PUBH 380 and PUBH 445 or by instructor permission.

**PUBH 470. Public Health Programming (4).** Population health assessment. Public health program planning, implementation, and evaluation. Formerly HED 330 and HED 470, students may only receive credit for one. Course will be offered every year (Fall). Prerequisites: PUBH 230 and PUBH 240 and PUBH 375 and PUBH 380 or by instructor permission.

**PUBH 471. Program Planning (4).** Health program planning including needs assessment and goal setting. PUBH 471 and PUBH 571 are layered courses; a student may not receive credit for both. Formerly HED 471, students may not receive credit for both. Prerequisites: PUBH 470 and acceptance into public health major.

**PUBH 472. Program Implementation and Evaluation (4).** Implementation and evaluation of programs and other strategies designed to improve population health outcomes. Formerly HED 472, students may not receive credit for both. PUBH472 and PUBH572 are layered courses and cannot be taken for duplicate credit. Course will be offered every year (Spring). Prerequisites: PUBH 471 and acceptance into public health major.

**PUBH 475. Community Health Administration (3).** Understanding and application of knowledge to various administrative tasks in community health. Grants, management, and personnel issues will be covered. Formerly HED 475, students may not receive credit for both. Course will be offered every year (Spring).

**PUBH 479. Senior Seminar in Public Health (1).** This course is intended to provide students an opportunity to reflect on and synthesize coursework, academic background, and related professional development components in a topic-based and discussion-focused format. Prerequisites: senior standing, public health major, most PUBH required courses complete or permission of instructor.

**PUBH 480. Grant Seeking and Administration in Public Health (3).** This course introduces students to grant seeking, writing, and administration in the broad field of public health. PUBH 480 and PUBH 580 are layered courses; students may not receive credit for both. Course will be offered every year (Fall). Prerequisite: PUBH 230 or PUBH 240.

**PUBH 488. Culminating Experience in Public Health (3).** The public health culminating experiences provides an opportunity for students to reflect upon, integrate, and demonstrate knowledge and skills from their undergraduate experiences to a final presentation of their applied public health project . Prerequisite: PUBH 445.

**PUBH 489. Academic Service Learning in Public Health (1-12).** Student will engage in community and/or campus based academic service learning related to public health. May be repeated under a different topic. Grade will either be S or U. Course will not have an established scheduling pattern.

**PUBH 490. Cooperative Education (1-12).** An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves

a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated up to 12 credits. Grade will either be S or U. Prerequisite: prior approval required.

**PUBH 496. Individual Study (1-6).** May be repeated if subject is different.  
**PUBH 497. Honors (1-12).** Prerequisite: admission to department honors program.  
**PUBH 498. Special Topics (1-6).** May be repeated if subject is different.  
**PUBH 499. Seminar (1-5).** May be repeated if subject is different.

### Recreation Courses

**REC 150. Experience Leadership Project (1).** A unique experiential transition program held off-campus (camp/outdoors/community) designed to provide students with the skills and networks to develop leadership skills and Wildcat spirit. Formerly RT/RTE 150, students may not receive credit for both.

**REC 210. Student Leadership (1).** Provides leadership experiences in the planning/implementing of student activities and services within Recreation Programs. Students will initiate on-campus or off-campus community projects, programs, and activities. May be repeated up to 3 credits. Formerly RTE 210, students may not receive credit for both.

**REC 300. Challenge Course Leadership (4).** Students will develop leadership skills using the challenge course. Specifically, students will learn and use facilitation techniques to improve group and individual interaction. Formerly RT/RTE 300, students may only receive credit for one.

**REC 321. Leadership in Human Development (4).** This highly interactive (challenge course, community service) course focuses on developing students' leadership skills that provide a base for improved communication in both personal and professional situations. Formerly FSCG/FCS 220, students may only receive credit for one.

**REC 322. Recreation Programming and Activities (3).** The essential skill of recreation programming will be developed. Games and activities appropriate for playgrounds, camps, and community centers are learned, along with socialization, education, trust building, and outdoor adventure. Formerly RT/RTE 222, students may only receive credit for one.

**REC 333. Outdoor Adventures in Public Lands (4).** This course is

designed to provide students an experiential education in outdoor recreation within public lands. Students will explore how ideas become thoughtful practice in outdoor adventure program. Ability to hike and camp in wilderness areas. Formerly RT/RTE 333, students may not receive credit for both.

**REC 339. Recreation Enterprise**

**Development (3).** This course focuses on the Business Plan as a necessary component to beginning a small business in the fields of Recreation. It addresses facets of the business plan from determining actual content, reviewing examples to creating a comprehensive plan. Formerly RTE 339, students may not receive credit for both.

**REC 340. Introduction to Adventure**

**Programming (3).** The course is an overview of the history, evolution and implementation of adventure learning in education. Students will mix classroom time and field experience. Course will be offered on even numbered years. Course will not have an established scheduling pattern. Formerly RTE 340, students may not receive credit for both.

**REC 345. Backcountry Leadership (3).**

Prepares students to be leaders in outdoor settings by building the practical and logistical skills needed in the effective delivery of trips. Covers the teaching skills and essentials for trip leaders in the wilderness, including trip planning, logistics, risk management, and group interaction in the back-country. Course will be offered on odd numbered years. Course will not have an established scheduling pattern. Formerly RTE 345, students may not receive credit for both.

**REC 360. Outdoor Survival (3).**

Students will gain an introductory knowledge in outdoor survival. Specifically, students will gain a hands-on experience in learning to protect themselves and gain a sense of self-control in a harsh environment. Formerly RT/RTE 360, students may not receive credit for both.

**REC 381. Recreational Sports**

**Management (3).** Organization and implementation of recreational sports programs in community recreation settings. Emphasis on facilities, personnel, materials and supplies, tournament bracketing and other practical considerations. Formerly RT/RTE 381, students may not receive credit for both.

**REC 382. Community Recreation (3).**

Preparation for positions in

community-based organizations to include non-profits and municipalities, grant writing, board-staff relations, community capacity building, and social marketing. Formerly RT/RTE 382, students may not receive credit for both. Prerequisite: junior standing or above.

**REC 394. Participatory Leadership**

(1). Developing participatory leadership skills through engagement with civic activities, special events, and/or recreation activities. Emphasizing interpersonal encounters, community building, shared responsibility, and intrapersonal development. May be repeated up to 6 credits.

**REC 431. Recreation Administration of Retreats and Camps (3).**

Methods, techniques, skills, and trends in programming for longer stays at retreats, residences, and camps. Topics include socialization, education, trust-building, staffing, team-building, outdoor adventure, risk management, budgeting, equipment and facilities. Formerly RT/RTE 431, students may only receive credit for one.

**REC 487. Outdoor Recreation Issues**

(3). This course addresses recent and breaking issues in the outdoor recreation field. The course involves readings and discussions in both the classroom and field environments. Formerly RT/RTE 487, students may only receive credit for one.

**REC 488. Recreation Management (4).**

Contemporary issues, basic applied evaluation, organizational development, policy formulation, human resources, inventory, and program planning. Formerly RT/RTE 488, students may only receive credit for one. Prerequisite: senior standing.

**REC 491. Workshop (1-6).**

**REC 497. Honors (1-12).** Prerequisite: admission to department honors program.

**Religious Studies Courses**

**RELS 101. World Religions (5).** Survey of the major world religions (Judaism, Christianity, Islam, Hinduism, Buddhism, Confucianism, Daoism), including their tenets, practices, and evaluation of the human condition. AH-Philosophies and Culture World (W). AH-Philosophies and Culture World (W). K5 - Humanities

**RELS 102. Food, Sex, and the Other:**

**Everyday Religion and Morality (5).** An examination of religion in everyday life and the contemporary moral issues both affecting and being addressed by world religious traditions. Course will

not have an established scheduling pattern (Fall, Winter, Spring, Summer). K5 - Humanities

**RELS 103. World Mythologies (5).** An overview of world mythology and the contemporary study of myths: their nature, functions, symbolism, and uses; their cultural contexts, artistic expressions, and influence on contemporary life. Course will be offered every year (Fall, Winter, Spring, Summer). K4 - Global Dynamics

**RELS 298. Special Topics (1-6).** May be repeated if subject is different.

**RELS 299. Seminar (1-5).** May be repeated if subject is different.

**RELS 351. Religions of China and**

**Japan (5).** Historical development of Daoism, Confucianism, Shinto, and East Asian Buddhism within China and Japan, from their origins to the present. Analysis of beliefs, practices, symbols, and institutions.

**RELS 352. Religions of India (5).**

Historical development of Hinduism, Buddhism, Sikhism, and Jainism within India, from their origins to the present. Analysis of beliefs, practices, symbols, and institutions.

**RELS 353. Judaism (5).** Historical development of Judaism from its beginning to the present. Analysis of beliefs, practices, symbols, and institutions. Prerequisites: RELS 101 or permission of instructor.

**RELS 354. Christianity (5).** Historical development of Christianity, from its origins to the present. Analysis of beliefs, practices, symbols, and institutions.

**RELS 355. Islam (5).** Historical development of Islam, from its origins to the present. Analysis of beliefs, practices, symbols, and institutions. Prerequisites: RELS 101 or permission of instructor.

**RELS 356. Early Jewish and Christian**

**Apocalyptic Literature (5).** A study of Jewish and Christian apocalyptic literature, especially during the Second Temple period and the development of the early church from a variety of different approaches including: historical, sociological, theological, and literary.

**RELS 376. Contemporary Religious**

**Thought (5).** Explores the nature of post-modern and/or contemporary philosophic, as well as religious thought, west and east, related to such topics as the nature of religion, the idea of God, the problem of evil, inter-religious dialogue and religious pluralism. May be repeated up to 10

credits. Formerly PHIL 376, students may not receive credit for both.

**RELS 396. Individual Study** (1-6). May be repeated if subject is different.

**RELS 397. Honors** (1-12). Prerequisite: admission to department honors program.

**RELS 398. Special Topics** (1-6).

**RELS 399. Seminar** (1-5). May be repeated if subject is different.

**RELS 401. The Daoist Tradition** (5). An examination of the textual and cultural tradition associated with Daoism, China's indigenous high religion.

**RELS 402. Religion and Film** (5). An examination of religious themes in film, including the portrayal of specific religious traditions and sacred narratives. Films will be selected from a wide range of possibilities, including foreign productions.

**RELS 403. Buddhist Thought and Practice** (5). In depth study of the Buddhist tradition, including its practices, philosophy, and historical development across Asia, and its introduction to the West.

**RELS 410. The Legacy of the Hebrew Bible** (5). A multi-disciplinary exploration of the Hebrew Bible, seeking to understand both the Bible's influence on and perception in a variety of disciplines (e.g. art, literature, music, film).

**RELS 413. Varieties of Early Christianity** (5). A study of the varieties of early Christian thought and practice in the first three centuries of the Common Era, with a focus on an examination of extra-canonical literature. Course will be offered on odd numbered years. Course will not have an established scheduling pattern.

**RELS 490. Cooperative Education** (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. By permission. May be repeated for credit. Grade will either be S or U.

**RELS 491. Workshop** (1-6). May be repeated for credit.

**RELS 494. Undergraduate Thesis Preparation** (2). Preparation for writing undergraduate thesis. Grade will be either S or U. Prerequisite: junior standing or above and permission of instructor.

**RELS 495. Undergraduate Thesis** (3). Produce an original substantive thesis-driven paper based on independent research. By permission. Prerequisite:

RELS 494 and advanced standing. CE - Culminating Experience

**RELS 496. Individual Study** (1-6).

**RELS 497. Honors Thesis** (3). Produce an original, thesis-driven honors level paper based on original research. Paper will be reviewed by a second departmental reader and presented in an open forum. Prerequisites: PHIL 494, advanced standing, and admission to the Philosophy and Religious Studies Departmental Honors Program. CE - Culminating Experience

**RELS 498. Special Topics** (1-6).

**RELS 499. Seminar** (3-5).

#### Retail Management Technology Courses

**RMT 298. Special Topics** (1-6). May be repeated if subject is different.

**RMT 299. Seminar** (1-5). May be repeated if subject is different.

**RMT 320. Topics in Strategy for the Craft Brewing Industry** (5). This course is a broad overview of the key elements required to start and operate a craft brewery in the United States. Includes an introduction to topics such as financing, accounting, branding, distribution, business plan development, management, and retail specific to craft brewing. Prerequisites: admittance to the Craft Brewing Program or permission from the department.

**RMT 330. Principles of Retailing** (4). Introduction to retailing including retail stores, merchandising, operations, store location and layout, internal organization, buying, personnel management, inventory control, and sales promotion.

**RMT 335. Retail Information Technology** (4). Use of contemporary technology in collecting, analyzing, and interpreting retail management data and writing and presenting retail management reports.

**RMT 340. Principles of Selling** (4). Introduction to selling, its role in the economy, the sales process, types of selling, planning the sale, and sales organization.

**RMT 345. Sustainable Retailing** (4). This course will introduce principles and practices of sustainable retail operations. The course will enable students to provide guidance, leadership and support to retail organizations in the development, implementation, and assessment of successful sustainable operations.

**RMT 350. Omni Channel Retailing** (4). Examines the progress and application of omni channel retailing. Prerequisite: RMT 330.

**RMT 366. Customer Relationship Management** (4). Developing and maintaining strong customer relationships is paramount to a successful business. Students learn to manage prospects and current customers by using information technology. Prerequisite: junior standing or above.

**RMT 379. IT Management Career Planning** (1). Preparation of an internship experience or career advancement. Course will be offered every year. Course will not have an established scheduling pattern.

**RMT 396. Individual Study** (1-6). May be repeated if subject is different.

**RMT 397. Honors** (1-12). Prerequisite: admission to department honors program.

**RMT 398. Special Topics** (1-6). May be repeated if subject is different.

**RMT 399. Seminar** (1-5). May be repeated if subject is different.

**RMT 467. Retail Management** (4). Retail store ownership and management, including startup, location, market analysis, customer service, organization, merchandise management, human resource management, sales promotion, and financial planning. Prerequisites: RMT 330 and senior standing.

**RMT 485. International Retailing** (4). Emphasis on international retailing and global trade. Focus on cross-cultural differences, work environments, policies and regulations. RMT 485 and ATM 485 are cross-listed courses; students may not receive credit for both. Prerequisite: RMT 330.

**RMT 490. Cooperative Education** (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. Available summer only. By permission. May be repeated for credit. Grade will either be S or U. Prerequisite: RMT 379.

**RMT 492. Practicum** (5-15). Grade will either be S or U. Prerequisite: permission of department chair.

**RMT 496. Individual Study** (1-6).

**RMT 497. Honors** (1-12). Prerequisite: admission to department honors program.

**RMT 498. Special Topics** (1-6).

**RMT 499. Seminar** (1-5).

#### Recreation Tourism and Events Courses

**RTE 222A. Recreation Programming and Activities** (3). The essential

skill of recreation programming will be developed. Games and activities appropriate for playgrounds, camps, and community centers are learned, along with socialization, education, trust building and outdoor adventure. RTE 222A and RTE 222 are equivalent courses; students may not receive credit for both. Course will be offered every year. Course will not have an established scheduling pattern.

**RTE 293. Outdoor Leadership**

**Training (2).** Develop a student outdoor leader with the skill sets capable of leading groups safely in an outdoor environment pursuit. In addition, students will learn and apply group development theory. Formerly RT 293, students may not receive credit for both.

**RTE 397. Honors (1-12).** Prerequisite: admission to department honors program.

**RTE 471. Tourism Planning and Sustainable Development (Put on Reserve 9/16/16.) (3).** The planning process is studied in connection with the development of sustainable tourism, taking into consideration the impact of development on the economic, social, fiscal, environmental, and political fabric of communities. Formerly RT 471, students may not receive credit for both. (Put on Reserve 9/16/16. Last taught in 2010. Will go inactive 8/24/19.)

**Russian Courses**

**RUSS 151. First-year Russian (5).** Conversational approach with intensive oral-aural drill. Firm foundation in basic structural principles of the language. Courses must be taken in sequence.

**RUSS 152. First-year Russian (5).** Conversational approach with intensive oral-aural drill. Firm foundation in basic structural principles of the language. Courses must be taken in sequence. Prerequisite: RUSS 151.

**RUSS 153. First-year Russian (5).** Conversational approach with intensive oral-aural drill. Firm foundation in basic structural principles of the language. Courses must be taken in sequence. Prerequisite: RUSS 152.

**RUSS 200. The Art of the Protest: Censorship and Resistance in Russian Culture (5).** The course examines artistic practices that engage in political and cultural protest in Russia, with a focus on books, films, arts and media censored by the state. The course is taught in English. Course will not have an established scheduling pattern. Formerly RUSS 311, students

may not receive credit for both. K2 - Community, Culture, & Citizenship  
**RUSS 251. Second-year Russian (5).** Thorough review of Russian grammar and graduated readings in Russian prose and poetry with discussions conducted in Russian. Courses must be taken in sequence.

**RUSS 252. Second-year Russian (5).** Thorough review of Russian grammar and graduated readings in Russian prose and poetry with discussions conducted in Russian. Courses must be taken in sequence. Prerequisite: RUSS 251.

**RUSS 253. Second-year Russian (5).** Thorough review of Russian grammar and graduated readings in Russian prose and poetry with discussions conducted in Russian. Courses must be taken in sequence. Prerequisite: RUSS 252.

**RUSS 261. Heritage Russian Through Film and Media (5).** Develop communicative skills and cultural literacy using Russian film and popular media as a basis. For heritage speakers. RUSS 261 and RUSS 251 are equivalent courses; students may not receive credit for both. Course will not have an established scheduling pattern.

**RUSS 298. Special Topics (1-6).**

**RUSS 299. Seminar (1-5).** May be repeated if subject is different.

**RUSS 341. Advanced Russian I (4).** Study of Russian to target all four language skills, with emphasis on communicative competence, reading comprehension, study of grammar, composition and stylistics via written and oral analysis of authentic texts. Prerequisite: RUSS 253 or permission of instructor.

**RUSS 342. Advanced Russian II (4).** Study of Russian to target all four language skills, with emphasis on communicative competence, reading comprehension, study of grammar, composition and stylistics via written and oral analysis of authentic texts. Prerequisite: RUSS 341 or permission of the instructor.

**RUSS 351. Advanced Russian Through Literature (5).** Advanced study of Russian with emphasis on advance reading and writing skills, and mastery of spoken Russian, through study of authentic literary texts. Course will be offered on even numbered years (Fall).

**RUSS 352. Advanced Russian Through Film (5).** Advanced study of Russian with emphasis on aural skills and mastery of colloquial Russian through study of popular Russian cinema and visual

media. Course will be offered on odd numbered years (Winter).

**RUSS 396. Individual Study (1-6).** May be repeated if subject is different.

**RUSS 397. Honors (1-12).** Prerequisite: admission to department honors program.

**RUSS 398. Special Topics (1-6).**

**RUSS 399. Seminar (1-5).** May be repeated if subject is different.

**RUSS 441. Advanced Composition and Grammar (4).** Advanced study of Russian grammar, composition and stylistics via written and oral analysis of authentic texts. Prerequisite: RUSS 342 or permission of the instructor.

**RUSS 445. Topics in Russian Language (2).** This course is based on a systematic and functional approach to Russian grammar; from morphology to syntax and text. May be repeated up to 10 credits. Prerequisite: permission of instructor.

**RUSS 451. Advanced Russian Conversation and Composition (5).**

The course focuses on conversational practice and composition writing. Learning with authentic Russian materials, students will be able to advance their speaking and writing skills, express complex ideas, and achieve advanced communicative and inter-cultural competence. Course will be offered on even numbered years (Spring). Prerequisite: RUSS 342 or permission of the instructor.

**RUSS 462. Russian Cinema (4).** Explores the cultural and historical context of Soviet and post -Soviet film, including exchanges between art and politics, expressions of national identity, depictions of ethnicity, gender and class, and the development of cinematic institutions. Department reactivated winter 2016.

**RUSS 496. Individual Study (1-6).**

**RUSS 497. Honors (1-12).** Prerequisite: admission to department honors program.

**RUSS 498. Special Topics (1-6).** May be repeated if subject is different.

**RUSS 499. Seminar (1-5).** May be repeated if subject is different.

**Science Education Courses**

**SCED 101. Integrated Life Science (5).** Inquiry-based investigations into life science to help students develop understanding of fundamental concepts and the process of scientific investigation. This course is designed for prospective elementary teachers but is open to all students. Formerly BIOL 106, students may not receive credit for both. Course will be offered every year. Course will not have an established



scheduling pattern. K7 - Physical & Natural World

**SCED 102. Integrated Earth and Space Science (5).** Inquiry-based investigations in Earth and space science to help students develop understanding of fundamental concepts and the process of scientific investigation. Designed for prospective elementary and middle-level teachers, but open to all students. Course will be offered every year (Winter). K7 - Physical & Natural World

**SCED 103. Integrated Physical Science (5).** Inquiry-based investigations into physical science to help students develop understanding of fundamental concepts and the process of scientific investigation. This course is designed for prospective K-8 teachers but is suitable for all students. Course will be offered every year (Spring). K8 - Science & Technology

**SCED 201. Introduction to STEM Teaching and Learning (3).** Explore the implications of science and mathematics learning theories and practices on individual learning, classroom learning, and within the context of society. Prerequisite: one course with a prefix of ANTH, BIOL, CHEM, ENST, GEOG, GEOL, MATH, or PHYS.

**SCED 215. STEM Outreach Field Experience (1-2).** Applied field experience in communication and teaching science, technology, engineering, and mathematics (STEM) concepts to children. Involves planning and conduction demonstrations, lessons, and activities. Outreach outside of class time is required. May be repeated up to 4 credits. Prerequisites: 2 courses with a prefix of ANTH or BIOL or CHEM or ENST or GEOG or GEOL or MATH or PHYS or SCED.

**SCED 298. Special Topics (1-6).** May be repeated if subject is different.

**SCED 299. Seminar (1-5).** May be repeated if subject is different.

**SCED 301. Interdisciplinary Science and Engineering Inquiry (5).** Interdisciplinary investigation of applied life, physical, and Earth science concepts applicable to K-12 classrooms using integrated contexts. Applied inquiry processes are used to increase student knowledge, skills, and dispositions. Six lecture/lab hours per week. Prerequisite: junior standing or above.

**SCED 305. The Story of Science (5).** Study of how knowledge evolves as people interact with each other and their environment. Behaviors and

interactions will be analyzed in the context of episodes in science. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisite: Sophomore standing or above. K6 - Individual & Society

**SCED 311. Science Concepts for Teachers (5).** An in-depth examination for the science concepts applicable to K-12 classrooms using an individualized and inquiry-based approach. Online and community recourses are utilized to enhance existing science content knowledge and understanding.

**SCED 320. Genetics and Cell Biology Concepts (5).** Integrated exploration of genetics and cell biology concepts including chemical and molecular basis of life, energy transformations, cells in context, genetic patterns of inheritance, molecular genetics, and cell division. Course will be offered on even numbered years. Course will not have an established scheduling pattern. Prerequisites: (SCED 101 or BIOL 181 or BIOL 101) AND (SCED 103 or CHEM 101 or CHEM 111 or CHEM 181).

**SCED 322. Science Education in the Elementary School (4).** Techniques, selection of materials and appropriate subject matter for the various grade levels. Demonstrations and student investigative activities for use in classroom science teaching. Prerequisite: current WSP/FBI fingerprint clearance, and conditional or full admission to the Teacher Certification Program.

**SCED 324. Science Education in Middle and Secondary Schools I (3).** Methods, techniques, and materials appropriate for teaching science in secondary schools. Curriculum, planning, and experiments for use in teaching. Prerequisites: EFC 330 and SCED 301, current WSP/FBI fingerprint clearance, and admission to the Teacher Certification Program.

**SCED 325. Science Education in Middle and Secondary Schools II (3).** Applied field experience for teaching science in secondary schools. Planning, instruction, and management for teaching science. Enrollment is subject to full admission to the Professional Education Program. Prerequisites: SCED 324, admission to the Teacher Certification Program, and current WSP/FBI fingerprint clearance .

**SCED 330. Marine Science for Teachers (5).** Interdisciplinary investigation of the environments and organisms of the Pacific Northwest

Coast. Course will not have an established scheduling pattern. Prerequisites: two courses with the prefix BIOL or CHEM or ENST or GEOL or PHYS.

**SCED 354. Science, Society and the Teaching Community (3).** Teacher candidates will learn the nature and context of science, compare science with other ways of knowing, describe the relationship between science and the community, gain skills in integrating community resources with the classroom. Prerequisite: current WSP/FBI fingerprint clearance, and admission to the Teacher Certification Program.

**SCED 392. Science Teaching Practicum (1).** Clinical practice and application of skills and competencies necessary for teaching science. May be repeated up to 3 credits. Prerequisites: SCED 201 or 301; current WSP/FBI fingerprint clearance, and admission to the Teacher Certification Program. Co-requisites: SCED 324, SCED 325, or SCED 487.

**SCED 396. Individual Study (1-6).** May be repeated if subject is different.

**SCED 397. Honors (1-12).** Prerequisite: admission to department honors program.

**SCED 398. Special Topics (1-6).**

**SCED 399. Seminar (1-5).** May be repeated if subject is different.

**SCED 411. Field Experience in Communicating Science to the Public (2).** Applied field experience in communicating science to the public. Methods, techniques, materials, and practices for effective communication of scientific ideas, and methods. SCED 411 and SCED 511 are layered courses, students may not receive credit for both. May be repeated up to 4 credits. Prerequisite: senior standing.

**SCED 422. Advanced Teaching Strategies in K-8 Science (4).** Further develop knowledge and skills of K-8 science teaching with a particular emphasis on the science inquiry process, assessment of student knowledge and cross-curricular integration. Course will be offered on odd numbered years (Winter). Prerequisite: SCED 322 or ELEM 342 or STP 201 or STP 300.

**SCED 487. Teaching Middle and Secondary Science Seminar (2).** Students compile knowledge, skills, and dispositions evidence and reflect on performance relative to professional standards. Students discuss current secondary science education issues, participate in program assessment, prepare for endorsement exam, and

complete an electronic portfolio.  
Prerequisite: students must plan to teach within a year of enrolling in this course.

**SCED 491. Workshop (1-6).**

**SCED 492. Teaching Middle School Mathematics and Science (2).**

Prospective teachers will learn and use the methods and materials needed to teach middle school students mathematics and science with emphasis on the use of experiments, manipulatives, problems solving, cooperative learning, and communication of understanding. By permission. Formerly SCED 323, students may not receive credit for both. Prerequisite: MATH 324 or EDEL 323 or SCED 324 or SCED 322, current WSP/FBI fingerprint clearance, and application to the Teacher Certification Program.

**SCED 495. Science Education**

**Research (1-3).** This course introduces pre-service science teachers to qualitative and quantitative methods of action research. Course requires completion of a research project of the student's design. May be repeated up to 6 credits. Prerequisite: current WSP/FBI fingerprint clearance, and admission to the Teacher Certification Program.

**SCED 496. Individual Study (1-6).**

**SCED 497. Honors (1-12).** Prerequisite: admission to department honors program.

**SCED 498. Special Topics (1-6).** May be repeated if subject is different.

**SCED 499. Seminar (1-5).** May be repeated if subject is different.

#### Supply Chain Management Courses

**SCM 298. Special Topics (1-6).** May be repeated if subject is different.

**SCM 299. Seminar (1-5).** May be repeated if subject is different.

**SCM 302. Supply Chain Bootcamp (2).**

A detailed examination of current industry supply chains supporting manufacturing and service sectors. Includes supervised field experience, analysis education, training, and business skills application in industry setting. Grade will be S or U. May be repeated up to 4 credits. Prerequisites: pre-business declaration and 2.75 collegiate GPA or instructor permission.

**SCM 310. Supply Chain Management**

(5). Adoption of a supply chain orientation toward business management which emphasizes the inter-functional and inter-firm relationships that contribute to improving coordination of operations

and performance of organizations that participate in various types of supply chains. Supply Chain Management certificate students also need permission from the department chair to enroll. Course will be offered every year (Fall, Winter, and Spring). Prerequisites: (BUS 221 and ECON 201 and admission to a College of Business major); OR (BUS 221 and ECON 201 and declaration of a Supply Chain Management minor); OR (Declaration of Supply Chain Management certificate and permission of department chair) OR (admission to a College of Business Graduate Program); OR (BUS 221 and ECON 201 and admission to the Integrated Energy Management Program).

**SCM 310A. Enterprise Sales and**

**Distribution Systems Lab (1).** Builds on the concepts and practices associated with sales planning and distribution covered in SCM 310. SCM 310A provides a hands-on case experience with the sales and distribution applications of an industry-based ERP system. Grade will either be S or U. Course will be offered every year (Fall, Spring). Co-requisite: SCM 310.

**SCM 396. Individual Study (1-6).** May be repeated if subject is different.

**SCM 397. Honors (1-12).** Prerequisite: admission to department honors program.

**SCM 398. Special Topics (1-6).** May be repeated if subject is different.

**SCM 399. Seminar (1-5).** May be repeated if subject is different.

**SCM 420. Lean/Six Sigma Processes**

(5). Development and deployment of Lean Management and Six Sigma management techniques in a manufacturing and supply chain environment. Formerly SCM 324, students may not receive credit for both. SCM 420 and SCM 520 are layered courses; students may not receive credit for both. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisite: BUS 221 OR by permission of FSCM department chair.

**SCM 425. Procurement and Supply Management (5).**

Purchasing processes, procurement cycle analysis, research to support purchasing decisions, supplier relationship development and management, negotiations, commodity planning, costing, pricing, and value analysis related to the purchasing of products and services. Course will be offered every year (Fall and Spring).

Prerequisites: SCM 310 with a

minimum grade of C AND admission to a College of Business Major; AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25) OR (SCM 310 with a minimum grade of C AND declaration of a Supply Chain Management minor or certificate); OR (SCM 310 with a minimum grade of C and admission to the Bachelor of Applied Science in Supply Chain Management Program); OR (SCM 310 with a minimum grade of C AND admission to the Integrated Energy Management Program).

**SCM 425A. Enterprise Purchasing and Materials Management Systems Lab**

(1). Builds on the concepts and practices associated with purchasing and materials management covered in SCM 425. SCM 425A provides a hands-on experience with the purchasing and materials management applications of an industry-base ERP system. Grade will either be S or U. Course will be offered every year. Course will not have an established scheduling pattern. Co- or prerequisite: SCM 425.

**SCM 435. Supply Chain Operations**

(5). Advanced methods and models for planning, management, and decision making involving aspects of supply chain management operations including inventory, transportation, location, purchasing, and other related analyses. Emphasizes integration and coordination of resources for productivity improvement. Course will be offered every year (Fall and Winter). Prerequisites: SCM 310 with a minimum grade of C AND admission to a College of Business Major; AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25) OR (SCM 310 with a minimum grade of C AND declaration of a Supply Chain Management minor or certificate); OR (SCM 310 with a minimum grade of C and admission to the Bachelor of Applied Science in Supply Chain Management Program); OR (SCM 310 with a minimum grade of C AND admission to the Integrated Energy Management Program).

**SCM 435A. Enterprise Production Planning and Execution Systems Lab** (1). Builds on the concepts and practices associated with production planning and execution covered in SCM 435. SCM 435A provides a hands on experience with the materials management and production applications of an industry-base ERP system. Grade will either be S or U. Course will be offered every year. Course will not have an established scheduling pattern. Co- or prerequisite: SCM 435.

**SCM 450. Logistics and Transportation** (5). Logistics activities associated with warehousing and distribution of materials, sub-assemblies and finished good. Transportation mode and service assessment, selection, economics, policy and governmental regulation. Carrier selection and management. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: SCM 310 with a minimum grade of C AND admission to a College of Business Major; AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum C- grade in each course and a minimum collegiate GPA of 2.25) OR (SCM 310 with a minimum grade of C AND declaration of a Supply Chain Management minor or certificate); OR (SCM 310 with a minimum grade of C and admission to the Bachelor of Applied Science in Supply Chain Management Program); OR (SCM 310 with a minimum grade of C AND admission to the Integrated Energy Management Program).

**SCM 475. Global Trade and Supply Chain Management** (5). Global supply chain activities emphasizing integration of transportation, inventory, warehousing, facility location, customer service, materials handling, packaging, and information. Analysis of product and service delivery and the associated trade, cultural, and legal factors and influences. Course will be offered every year (Fall, Winter, and Spring). Prerequisites: SCM 310 with a minimum grade of C AND admission to a College of Business Major; AND completion of the College of Business Foundation courses (ACCT 251 and ACCT 252 and BUS 221 and BUS 241 and MATH 153 or MATH 154 or MATH 170 or MATH 172 or MATH 173 and ECON 201) with a minimum

C- grade in each course and a minimum collegiate GPA of 2.25) OR (SCM 310 with a minimum grade of C AND declaration of a Supply Chain Management minor or certificate); OR (SCM 310 with a minimum grade of C and admission to the Bachelor of Applied Science in Supply Chain Management Program); OR (SCM 310 with a minimum grade of C AND admission to the Integrated Energy Management Program).

**SCM 480. Supply Chain Strategy** (5). Integration of concepts learned throughout supply chain curriculum into a combined analysis of comprehensive cases incorporating strategic and tactical decision making throughout the supply chain planning and implementation process. Prerequisites: (SCM 310 and SCM 435 with a minimum grade of C) AND (SCM 425 and SCM 450). One of SCM 425 or SCM 450 can be taken concurrently to SCM 480. Admission to a College of Business major or declaration of a Supply Chain Management minor or certificate OR admission to the Integrated Energy Management Program.

**SCM 490. Supply Chain Management Internship** (1-12). An individualized, contracted field experience with business, industry, government, or social service agencies focusing on Supply Chain Management related activities. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. By department permission. May be repeated up to 20 credits. Grade will either be S or U. Course will not have an established scheduling pattern. Prerequisite: 2.8 or higher CWU cumulative gpa.

**SCM 492. Lean Six Sigma Practicum** (5). Applies tools and techniques for lean and six sigma process improvement in an industry project environment. Students work in teams with faculty and industry mentor to define, measure, analyze, improve and when possible implement control mechanisms. Course will be offered every year. Prerequisite: SCM 420 with a minimum grade of B.

**SCM 493. Supply Chain Boot Camp** (1-6). Supervised field experience seminar focused on supply chain related organizations and processes. On-location industry engagement. Education, training, and business skills application in industry setting. May be repeated up to 6 credits. Permission of instructor. Grade will either be S or U.

Course will not have an established scheduling pattern.

**SCM 496. Individual Study** (1-6). May be repeated if subject is different.

**SCM 497. Honors** (1-12). Prerequisite: admission to department honors program.

**SCM 498. Special Topics** (1-6). May be repeated if subject is different.

**SCM 499. Seminar** (1-5). May be repeated if subject is different.

#### Safety Education Courses

**SED 298. Special Topics** (1-6).

**SED 299. Seminar** (1-5). May be repeated if subject is different.

**SED 382. Driver Task Analysis** (3).

Introduction to traffic safety education, the highway transportation system, driver task analysis, classroom instruction techniques. Prerequisite: SED 180.

**SED 396. Individual Study** (1-6). May be repeated if subject is different.

**SED 397. Honors** (1-12). Prerequisite: admission to department honors program.

**SED 398. Special Topics** (1-6).

**SED 399. Seminar** (1-5). May be repeated if subject is different.

**SED 481. Teaching Traffic Safety**

**Education: Classroom and Simulation Instruction** (3). Methods, materials and techniques for teaching classroom and simulation. Experience in teaching beginning drivers. Prerequisite: SED 382 and current WSP/FBI fingerprint clearance.

**SED 482. Teaching Traffic Safety**

**Education: In Car** (5). Methods, materials and techniques for teaching in dual-control vehicles. Experience teaching beginning drivers. Prerequisite: SED 382 and current WSP/FBI fingerprint clearance.

**SED 484. Safety Program Supervision** (3). Development and management of a total school safety program. Prerequisite: SED 382.

**SED 491. Workshop** (1-6).

**SED 496. Individual Study** (1-6).

**SED 497. Honors** (1-12). Prerequisite: admission to department honors program.

**SED 498. Special Topics** (1-6).

**SED 499. Seminar** (1-5).

#### Safety and Health Management Courses

**SHM 101. Evolution of Workplace Safety and Health** (4). This course is designed to introduce students to the origins and development of the occupational safety and health field in the American workplace through the study of historical events (human

suffering resulting from occupational accidents, industrial disasters, workplace injuries and diseases) their social impacts, and the results of those experiences as expressed in economics, legal, behavioral, and ethical societal changes.

**SHM 102. Occupational Health (5).**

Explore the fundamental concepts of occupational health, including identification of health hazards in the work place, prevention of work place injuries and illnesses, human factors, and environmental health as it relates to the workplace. Course will be offered every year (Winter and Summer). K8 - Science & Technology

**SHM 201. Introduction to Safety and Health Management (Put on reserve 9/16/17) (1).**

Overview of safety and health management profession, credentials, societies, organizations, application of math and science. (Put on reserve 9/16/17. Will go inactive 8/24/2020.) Prerequisite: students must be freshmen or sophomore standing.

**SHM 298. Special Topics (1-6).** May be repeated if subject is different.

**SHM 299. Seminar (1-5).** May be repeated if subject is different.

**SHM 301. Fundamentals of Safety and Health Management (3).**

Course covers the fundamental aspects of safety and health, applicable standards, risk management, performance metrics, hazard recognition/controls, industrial hygiene, environmental management, fire safety, systems safety, ergonomics, hazardous materials, fleet safety, emergency management, and accident investigation. Two lecture and two lab hours. Course will be offered every year (Fall). Prerequisite: admission to the safety and health management major, (or) risk, insurance, and safety management major, (or) safety and health management minor/certificate, (or) risk management minor, (or) risk management certificate, (or) insurance management certificate, or by permission.

**SHM 302. Workplace Safety and Substance Abuse Program (3).**

Provides guidance on industry best practices and regulations to develop an effective workplace substance abuse program as part of a comprehensive environmental, health, and safety program to eliminate or minimize workplace accidents and injuries. Course will be offered every year (Winter). Prerequisite: SHM 301.

**SHM 321. Agriculture Safety (3).** A comprehensive course that covers the safety and health regulations and

practices pertaining to agriculture and the food processing industry.

**SHM 323. Construction Safety and Health (3).**

A comprehensive course that covers the safety and health regulations and practices pertaining to the construction industry. (2 lecture and 2 lab hours). Course will be offered every year (Fall, Winter, and Spring). Prerequisite: CMGT 265 or SHM 301.

**SHM 325. General Industry Safety and Health (3).**

A comprehensive course that covers OSHA policies, procedures, and standards, as well as general industry safety and health principles. Course will be offered every year (Spring). Prerequisites: SHM 301 or instructor permission or admission to technology education major or industrial engineering technology major (BAS or BS) or technology education broad area major.

**SHM 327. Research and Laboratory Safety (3).**

A comprehensive course that covers the safety and health regulations and practices pertaining to the laboratory and research industry. Course will be offered on odd numbered years (Summer).

**SHM 351. Incident Analysis (3).**

Review of accident investigation methodologies that include accident response, evidence collection, analysis techniques, developing and communicating recommendations to prevent recurrence. It includes drug/alcohol testing, claims management, return to work/rehabilitation programs, and preparation for lawsuits and deposition. Two lecture hours and two lab hours. Course will be offered every year (Spring). Prerequisites: SHM 301 and SHM 323 or SHM 325.

**SHM 352. Systems and Design (3).**

It provides an overview of system safety concepts, qualitative and quantitative system safety analysis techniques (failure mode and effect analysis, hazard and operability studies, fault tree analysis), and design for safety concepts. Prerequisites: MATH 130 and SHM 301. Co-requisite: SHM 351.

**SHM 353. Risk and Insurance (4).**

An introduction to the concept of risk management, including: risk definition, identification, assessment and management techniques. Includes the fundamentals of various insurance related to the safety and health profession, loss control techniques, and legal foundations in safety and health management. Course will be offered every year (Winter). Prerequisite: SHM 301 (or) admission into safety and health management major (or) safety

and health management minor/certificate (or) insurance management certificate, (or) by permission.

**SHM 371. Emergency Planning and Preparedness (4).**

It introduces students to: workplace hazards associated with natural and man-made disasters; the countermeasures to minimize its effects; required coordination between various government agencies; business continuity planning, and the role of emergency/disaster planning and preparedness in a workplace safety program. Prerequisite: SHM 301.

**SHM 375. Transportation and Fleet Safety (4).**

Program management relating to fleet safety including transportation systems loss control management, fleet management, and driver safety training. Prerequisite: SHM 301.

**SHM 377. Hazardous Materials Management (4).**

The management of hazardous materials, including best practices and federal regulations associated with the transportation, storage, use, and disposal of hazardous materials in the workplace. Prerequisites: SHM 351 and either CHEM 101, CHEM 111/111LAB, or CHEM 181/181LAB.

**SHM 379. Facility and Building Safety (4).**

Program management relating to facility and building safety including basic concepts of fire safety, fire prevention, fire protection, accessibility, confined spaces, indoor air quality and ventilation, and walking-working surfaces. Prerequisite: SHM 351.

**SHM 396. Individual Study (1-6).** May be repeated if subject is different.

**SHM 397. Honors (1-12).** Prerequisite: admission to department honors program.

**SHM 398. Special Topics (1-6).** May be repeated if subject is different.

**SHM 399. Seminar (1-5).** May be repeated if subject is different.

**SHM 423. Advanced Construction Safety Management (4).**

This course will cover advanced construction safety management techniques such as contractor pre-qualification, leading and lagging indicators, design for construction safety, LEED and safety, safety in contract management, 3D technology in construction safety, safety and quality, and SCSH rating system. Prerequisite: SHM 323 or permission of instructor.

**SHM 450. Commercial Property Risk Management and Insurance (3).**

Introduction to commercial property

insurance and how risk management techniques can be used to address an organization's property loss exposures, and the risk transfer of these exposures through insurance. Course will be offered every year (Spring).

Prerequisite: SHM 353 or by permission.

**SHM 451. Commercial Liability Risk Management and Insurance (3).**

Introduction to commercial liability insurance and how risk management techniques can be used to address an organization's liability loss exposures, and the risk transfer of these exposures through insurance. Course will be offered every year (Spring).

Prerequisite: SHM 353 or by permission.

**SHM 452. Risk Management for Public Entities (4).**

An overview of public entity hazard risk management administration, exposure identification, risk control, risk financing options, and claim and litigation management.

Course will be offered every year (Winter).

**SHM 453. Construction Risk and Insurance Management (4).**

An examination of the major risk (loss) exposures faced by contractors and techniques used to manage risk including risk retention, contractual risk transfer, risk control, and insurance. Course will be offered every year (Spring).

**SHM 454. Risk Management Principles and Practices (4).**

An overview of risk management, categories of risk, the loss exposures an organization may face, and tools that safety/risk management professionals can use to determine the significance of a loss exposure to an organization. SHM 454 and SHM 554 are layered courses, a student may not receive credit for both. Course will be offered every year (Fall).

**SHM 455. Risk Assessment and Treatment (4).**

This course provides students with a broad understanding of the risk assessment and treatment techniques for the major categories of risk faced by all organizations, with an emphasis on hazard risk (insurable risk). Course will be offered every year (Winter).

**SHM 456. Risk Financing for Safety and Health Management (4).**

This course provides students with a comprehensive overview of the techniques (blend of retention and transfer) used by safety, health, and risk management professionals to finance or pay for the negative consequences of

risk events. Course will be offered every year (Spring).

**SHM 471. Fundamentals of Industrial Hygiene (4).**

An introduction to the basics of industrial hygiene that includes: the anticipation, evaluation, and control of workplace environmental stressors (chemical, physical, and biological) that can impact the health, comfort, or productivity of the worker.

Prerequisite: SHM 351 and BIOL 201.

**SHM 472. Ergonomics (3).**

It provides the basics of ergonomics in the work environment: musculoskeletal disorders, assessment of ergonomic risk factors, workplace design, evaluation of lifting and material handling activities, and the role of ergonomics in a comprehensive workplace safety program. Two lecture hours and two lab hours. Course will be offered every year (Winter). Prerequisites: SHM 471.

**SHM 474. Safety and Health Management Systems (4).**

It provides a systems-based approach to managing safety programs, with the help of major consensus standards such as ANSI/AIHA Z10, OHSAS 18001, and OSHA VPP. Prerequisite: SHM 353.

**SHM 475. Management System Auditing (Put on Reserve 9/16/16.) (4).**

Procedures to externally monitor: auditing, data collection, safety and health management systems, assessment strategies, consulting and contracts. (Put on Reserve 9/16/16. Last taught in 2013. Will go inactive 8/24/19.) Prerequisites: SHM 474, either SHM 477 or IET 481, and either PSY 456 or MGT 386.

**SHM 477. Environmental Management (4).**

It provides an overview of federal environmental legislation's (CWA, CAA, RCRA, and CERCLA) and their practical application in the work environment. The course will also introduce the ISO's environmental management system 14000 series. Prerequisites: SHM 353 and SHM 377.

**SHM 480. Safety and Health Laboratory (2).**

It provides hands-on experience with various safety measurement instruments used in the profession. It includes training strategies using safety equipment/situations encountered in the workplace. Four lab hours per week. Course will be offered every year (Winter). Prerequisites: PHYS 106 and SHM 471 and SHM 490.

**SHM 481. Evolving Issues in Safety and Health Management (2).**

Presentations and case studies by practicing safety professionals on

contemporary and future safety and health management topics. Prerequisite: SHM 490.

**SHM 482. Evolving Issues in Risk Management (1).**

This course exposes students to the varied career options, evolving issues in risk management, and strategies to identify and handle ethical dilemmas faced by safety and risk management professionals using an ethical framework. Course will be offered every year (Spring).

**SHM 485. Safety and Health Management Capstone (3).**

Students will apply the principles of safety and health management to solve real world safety issues through various real world projects. The course will help prepare the students for the transition from student life to employment as a safety and health professional. By permission. Prerequisites: SHM 490 or permission of instructor. CE - Culminating Experience

**SHM 490. Cooperative Education (1-12).**

An individualized contracted field experience with business, industry, government, or social service agencies. A minimum of 67 clock-hours of field experience is required for one academic credit. May be repeated up to 6 credits. Grade will either be S or U.

Prerequisites: SHM 301, and SHM 351, and SHM 352, and SHM 353, and SHM 371 or by permission.

**SHM 491. Workshop (1-6).**

**SHM 496. Individual Study (1-6).**

**SHM 497. Honors (1-12).** Prerequisite: admission to department honors program.

**SHM 498. Special Topics (1-6).**

**SHM 499. Seminar (1-5).**

**Science Honors Program Courses**

**SHP 298. Special Topics (1-6).** May be repeated if subject is different.

**SHP 299. Seminar (1-5).** May be repeated if subject is different.

**SHP 301. Science Honors Junior Seminar: Elements of Scientific Research (2).**

The process of science from a multi-disciplinary perspective, including the historical development of scientific methods and reasoning, effective experimental design, and the interpretation of measurements.

**SHP 396. Individual Study (1-6).** May be repeated if subject is different.

**SHP 397. Honors (1-12).** Prerequisite: admission to department honors program.

**SHP 398. Special Topics (1-6).** May be repeated if subject is different.

**SHP 399. Seminar (1-5).** May be repeated if subject is different.

**SHP 401. Science Honors Capstone Seminar (2).** Skills and techniques for communicating the results of scientific research. Students prepare the final draft of their Science Honors thesis as part of the coursework.

**SHP 496. Individual Study (1-6).** May be repeated if subject is different.

**SHP 497. Science Honors Thesis (1).** Completion of Science Honors thesis. Strategies for effective oral presentation of scientific work will also be covered. Students must present results of Science Honors project at SOURCE. Grade will either be S or U. Prerequisites: SHP 401 and admission to the Science Honors Program.

**SHP 498. Special Topics (1-6).** May be repeated if subject is different.

**SHP 499. Seminar (1-5).** May be repeated if subject is different.

### Sociology Courses

**SOC 101. Social Problems (5).** An introduction to the study of contemporary issues such as poverty, military policies, families, crime, aging, racial, ethnic conflict, and the environment. Course will be offered every year (Fall, Winter, Spring, Summer). SB-Perspectives on Cultures and Experiences of U.S. (W). SB-Perspectives on Cultures and Experiences of U.S. (W). K6 - Individual & Society

**SOC 107. Principles of Sociology (5).** An introduction to the basic concepts and theories of sociology with an emphasis on the group aspects of human behavior. Course will be offered every year (Fall, Winter, Spring, Summer). SB-Foundations of Human Adaptations and Behavior (W). SB-Foundations of Human Adaptations and Behavior (W). K6 - Individual & Society

**SOC 109. Social Construction of Race (5).** Exploration of the social construction of race from antiquity to modern day. How did the idea of race come about? How did it evolve? What have been the social consequences of the idea of race? Formerly ETS 101, students may not receive credit for both. Course will be offered every year (Fall, Winter, Spring, Summer). SB-Perspectives on Cultures and Experiences of U.S. (W). SB-Perspectives on Cultures and Experiences of U.S. (W). K2 - Community, Culture, & Citizenship

**SOC 291. Workshop (1-6).**

**SOC 296. Individual Study (1-6).**

**SOC 298. Special Topics (1-6).** May be repeated if subject is different.

**SOC 299. Seminar (1-5).**

**SOC 300. Introduction to the Major (1).** This course will introduce Sociology/Social Services majors to information and resources and skills that they need to be successful and develop a plan to graduate. Students will gain knowledge about program requirements and cultivate necessary skills. Course will be offered every year (Fall, Winter and Spring). Prerequisite: students must have declared a major in sociology or social services to enroll in this class.

**SOC 301. Introduction and History of Social Service Agencies (5).** Introduction to the fields of social welfare, health services and corrections; organization and function of agencies.

**SOC 305. American Society (5).** Introduction to the social structure and processes of American society; emphasis on institutions such as government, family, schools, and religion, and processes such as conflict, change, stratification, mobility, and communication. Course will be offered every year (Fall, Winter, Spring, Summer). SB-Perspectives on Cultures and Experiences of U.S. (W).

Prerequisite: sophomore standing or above. SB-Perspectives on Cultures and Experiences of U.S. (W). K2 - Community, Culture, & Citizenship

**SOC 307. Individual and Society (5).**

An analysis of the relationship between social structure and the individual. Course will not have an established scheduling pattern. K6 - Individual & Society

**SOC 310. Social Service Methods and Casework (5).** Casework interviewing techniques and skills, traditional and contemporary methods, emphasis upon developing a personal casework style. Prerequisite: SOC 301.

**SOC 320. Death and Dying (5).** An analysis of social attitudes, practices, and institutions associated with death and dying in American society.

**SOC 322. Sociology of Food (5).** Sociological study of food, including contemporary, historical, and cross-cultural explorations. Draws on sociological theory and research to understand the significance of food for human societies. Course will not have an established scheduling pattern. Prerequisite: SOC 107. K6 - Individual & Society

**SOC 325. Aging (5).** Problems and advantages of growing old in society; post-parental families, retirement, the economics of pensions, importance of interaction in old age, residential facilities, geriatric medicine, and dying.

**SOC 326. Social Demography (5).** This course surveys major principles and methods of social demography and will cover demographic analysis of population that focuses on both U.S. and global aspects of social change: fertility, mortality and life expectancy, and migration. Course will be offered every year (Fall). FYE3 - Quantitative Reasoning

**SOC 327. Health and Society (5).** An examination of social and cultural factors impacting the distribution of health and illness across groups and individuals in society including the relationship between disparities in health care and principles of social justice and equality. Course will be offered every year (Spring). K6 - Individual & Society

**SOC 331. Sociology of Sport (5).** Sports and games as social phenomena.

**SOC 338. Political Sociology (5).** Major theories of power in society. Analysis of the political/economic structure of society as it determines the differential access to social power by different social groups.

**SOC 343. Child Abuse (5).** An analysis of the causes, consequences of and prospects for dealing with the phenomena of child abuse and neglect in American society.

**SOC 344. Juvenile Delinquency (5).** A study of social factors causing delinquency in youth; major theories, analysis of treatment and control.

**SOC 345. Deviance (5).** A survey of approaches to the field of deviance with emphasis on contemporary work and focus on the problematics of the field.

**SOC 346. Criminology (5).** A study of the adult criminal, criminal behavior, and criminality in human societies.

**SOC 348. Women and Crime (5).** This course will critically assess the current theoretical and empirical literature on female criminality and social control.

**SOC 349. Law and Society (5).** Law is studied through the major sociological perspectives by examining law and its relations with the economy, policy, family, religion, socioeconomic production, social class, gender, and race and ethnicity. Prerequisite: SOC 107.

**SOC 350. Social Theory I (5).** An introduction to social theory through study of early social thinkers, emphasizing the works of Durkheim, Marx, and Weber. Prerequisites: SOC 107 and 10 units of sociology 300-and-above level courses.

**SOC 351. Sociology of Work (5).** An historical view of the impact of technology on society and social

- change. Importance of work as an institution. How work relates to the other social institutions, to culture, and to the development of personality.
- SOC 352. Punishment and Corrections** (5). Origin, maintenance, structure, and function of institutions of punishment and correction with particular emphasis on American society; problems of change in punishment and corrections.
- SOC 354. Minority Experience** (5). Explanations will be identified for institutional racism common to the history and character of American minorities. SOC 354 and ETS 354 are cross-listed courses; students may not receive credit for both.
- SOC 356. Sociology of Gender** (5). A review and analysis of the development, maintenance, and consequences of masculine and feminine social roles.
- SOC 357. Sociology of Families** (5). Theory and research about familial interaction and society.
- SOC 358. Sociology of Sexualities** (5). Exploration of how sexualities are socially constructed and controlled. This course we use a sociological lens to examine how sexualities directly and indirectly shape our daily lives, adopting both a life-course and cross-cultural perspectives to understand the fluidity of sexuality.
- SOC 359. U.S. Feminist Movements** (5). This course analyzes the structure and dynamics of U.S. social movements based on gender, as well as the participation of women in other social movements, and the changing status of women in American society. Prerequisite: SOC 107.
- SOC 362. Social Movements** (5). Causes, organizational problems, consequences of revolutions, and political, religious and social movements.
- SOC 363. Methods of Social Research** (5). Principles and applications of social research methods. Prerequisites: SOC 107 and 5 units of sociology 300+ level courses or permission from the instructor.
- SOC 364. Data Analysis in Sociology** (5). Prerequisite: SOC 363.
- SOC 365. Minority Groups** (5). Study of the social formation of minority groups in American society, their historical development, current conditions, and issues. SOC 365 and WGSS 326 are equivalent courses; a student may not receive credit for both.
- SOC 366. Sociology of American Indians** (5). This course presents a sociological approach to Native American society. Specifically, it explores social institutions in Indian Country including political, economic, family, religious, and educational systems. Understanding the American Indian experience in relation to broader society is emphasized.
- SOC 367. Sociology of Religion (Put on reserve 9/16/18)** (5). The social organization of religious experience in small and large societies and the relationship of religious beliefs to human life. (Put on reserve 9/16/18, will go inactive 8/24/21)
- SOC 369. Mass Media and Society** (4). Relationship of the mass media to social institutions; including philosophy, responsibilities, regulations, and criticism. Variable topic, may be repeated for up to 8 credits under a different title. COM 369 and SOC 369 are cross-listed courses; students may not receive credit for both. May be repeated for credit.
- SOC 370. Social Change** (5). Social processes, institutional development and revolutions.
- SOC 371. Globalization** (5). Examines globalization and its impact on social institutions, social structures, cultures, and social relationships within and between different societies. Prerequisite: SOC 107.
- SOC 375. Sociology of Conflict** (5). Major theories of conflict in society. Applications of theories to contemporary United States. Investigation of major factors related to societal power and conflict.
- SOC 376. Sociology of the Military and Veterans in U.S. Society** (5). Sociology of the military as a societal institution, active duty military personnel, and veterans. The course surveys the structures and societal impacts of military institutions, the demographic and social patterns of military life, and the transition to civilian life.
- SOC 380. Environmental Sociology** (5). Examination of interactions between societies and their environments, such as the relationships between population, health, and the environment; the environmental movement, how people perceive environmental problems, globalization, and the mechanisms behind environmental injustice.
- SOC 382. Sociology of the Future** (5). A sociological analysis of predictions of the future. Principal questions will revolve around the effects of technology on social structure and the individual.
- SOC 386. Seminar on Racism** (5). An advanced level of study examining the nature and dynamics of social forces in American society that produce the phenomena of racism. The changing forms of racism that occur historically at the intersection of class and gender oppression.
- SOC 396. Individual Study** (1-6). May be repeated if subject is different.
- SOC 397. Honors** (1-12). Prerequisite: admission to department honors program.
- SOC 398. Special Topics** (1-6).
- SOC 399. Seminar** (1-5).
- SOC 415. Urban Sociology** (5). Growth, structure, and functions of the city; their relationships to surrounding and rural areas, urban ecological patterns, planning, and the problems of urban living. Prerequisites: SOC 107 and 10 units of sociology 300-and-above level courses.
- SOC 425. Sociology of Education** (5). Impact of culture on schools. Examination of contemporary social trends and relationships among church, school, and government; contributions of sociology to the area of education in its broadest sense.
- SOC 442. Social Welfare Policy** (5). Review of U.S. social welfare policy, emphasis on 20th century social policies influencing nature of welfare state, and delivery of social services.
- SOC 445. Social Inequality** (5). The distribution of wealth, power, and prestige in society. Prerequisite: SOC 107.
- SOC 446. Sociology of Immigration** (5). This course will serve sociology and ethnic studies students by covering the topic of immigration, it's impact on the people immigrating as well as the citizens of the country they are immigrating to. ETS 446 and SOC 446 are cross-listed; students may not receive credit for both.
- SOC 447. White-collar and Organization Crime** (5). This course explores crimes by and against social organizations. Crimes by the organization include illegal behavior by corporations, governments, and crime syndicates. Crimes against the organization include illegal acts by trusted professionals. Prerequisite: SOC 107.
- SOC 449. Contemporary Native American Cultures and Issues** (4). Analysis of contemporary Native American cultures and issues, including tribal sovereignty, resource management, education, religion, economic, and health status, and cultural continuity, and adaptation. SOC 449 and ANTH 449 are cross-listed courses; students may not receive

credit for both. Course will not have an established scheduling pattern.  
Prerequisites: AIS 103 or ANTH 341 or ANTH 347 or SOC 366 or permission of instructor.

**SOC 459. Organizations (5).** Theory and research on the structure and development of organizations.

**SOC 460. Community Structure and Organization (5).** Community formation from inner-city to rural hamlet. Changes in community institutions and organizational life related to industrialization, politics, social stratification, and ethnicity. Students will conduct field research on specific community functions and social structures. Prerequisites: SOC 107 and 10 units of sociology 300-and-above level courses.

**SOC 489. Senior Seminar (1).** A senior capstone course. Portfolio review, career planning, and program evaluation activities. Course will be offered every year (Fall, Winter, Spring, Summer). Prerequisite: senior standing and admission to the sociology major or social services major. CE - Culminating Experience

**SOC 490. Cooperative Education (1-12).** An individualized contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. May be repeated for credit. Grade will either be S or U. Prerequisite: prior approval required.

**SOC 491. Workshop (1-6).**

**SOC 492. Sociology Teaching**

**Experience (1-5).** Experience in the classroom and/or laboratory teaching. By permission. May be repeated up to 10 credits. Prerequisites: senior standing and admission to the sociology major or permission from the instructor.

**SOC 494. Research Practicum (1-5).** Supervised experience in qualitative research. May be repeated up to 10 credits.

**SOC 495. Sociological Research (1-15).** Individual research project. May be repeated up to 15 credits. Prerequisites: SOC 350, SOC 363, and SOC 364.

**SOC 496. Individual Study (1-6).**

**SOC 497. Honors Thesis (1-12).** By permission.

**SOC 498. Special Topics (1-6).**

**SOC 499. Seminar (1-5).**

### Spanish Courses

**SPAN 151. First-year Spanish (5).**

Develop elementary skills in listening, speaking, reading, and writing. For

students with the equivalent of fewer than two years high school Spanish. Courses must be taken in sequence.

**SPAN 152. First-year Spanish (5).**

Develop elementary skills in listening, speaking, reading and writing. For students with the equivalent of fewer than two years high school Spanish. Courses must be taken in sequence. Prerequisite: SPAN 151, or by placement exam.

**SPAN 153. First-year Spanish (5).**

Develop elementary skills in listening, speaking, reading, and writing. For students with the equivalent of fewer than two years high school Spanish. Courses must be taken in sequence. Prerequisite: SPAN 152, or by placement exam.

**SPAN 160. Spanish Current Events**

(5). An overview of current events in contemporary Spain through readings and viewings of contemporary news media contextualized through study of Spain's recent history, its current political system, and contemporary cultural politics. Course will be offered every year (Summer).

**SPAN 181. Intensive Review of First-year Spanish (Put on Reserve**

**9/16/16.) (5).** Intensive review of first-year Spanish for students with the equivalent of two years of high school Spanish who wish to continue with second-year Spanish. (Put on Reserve 9/16/16. Last taught in 2013. Will go inactive 8/24/19.) Prerequisite: either at least two years of high school Spanish, SPAN 151, or SPAN 152.

**SPAN 251. Second-year Spanish (5).**

Develop intermediate skills in listening, speaking, reading, and writing. Courses must be taken in sequence. Prerequisites: SPAN 153, or by placement exam.

**SPAN 252. Second-year Spanish (5).**

Develop intermediate skills in listening, speaking, reading, and writing. Courses must be taken in sequence. Prerequisite: SPAN 251, or by placement exam.

**SPAN 253. Second-year Spanish (5).**

Develop intermediate skills in listening, speaking, reading, and writing. Courses must be taken in sequence. Prerequisite: SPAN 252, or by placement exam.

**SPAN 261. Spanish for Heritage**

**Speakers I (5).** An introduction to academic Spanish for heritage speakers. This course is the first in a three quarter sequence that is designed to prepare heritage speakers of Spanish for more advanced study. Areas of focus will include grammar terminology, spelling, accentuation,

ready and writing. Advisor approval or Spanish placement test results.

Prerequisites: SPAN 153, or by placement exam.

**SPAN 262. Spanish for Heritage**

**Speakers II (5).** An introduction to academic Spanish for Heritage Speakers. This course is the second in a three quarter sequence that is designed to prepare Heritage Speakers of Spanish for more advanced study. Areas of focus will include grammar terminology, spelling, accentuation, reading and writing. Advisor approval or Spanish Placement Test results needed. Prerequisites: SPAN 261, or by placement exam.

**SPAN 263. Spanish for Heritage**

**Speakers III (5).** An introduction to academic Spanish for heritage speakers. This course is the third in a three quarter sequence that is designed to prepare heritage speakers of Spanish for more advanced study. Areas of focus will include grammar terminology, spelling, accentuation, reading and writing. Advisor approval or Spanish placement test results.

Prerequisites: SPAN 262, or by placement exam.

**SPAN 298. Special Topics (1-6).**

**SPAN 299. Seminar (1-5).** May be

repeated if subject is different.

**SPAN 301. Introduction to Spanish**

**and Latin American Literature (5).** This transitional course will prepare students for advanced literature courses by introducing the tools for analysis and critique of literary works in the various genres. Lectures, readings, and discussions will be conducted in Spanish. Course will be offered every year (Fall, Winter, and Spring). Prerequisites: SPAN 341 or SPAN 345. Declared Spanish majors and minors only.

**SPAN 310. Hispanic Civilizations and**

**Cultures (5).** This course focuses on the study of major historical and cultural events that have shaped Spanish-speaking societies. Lectures, readings, and discussions conducted in Spanish. Course will be offered every year (Fall, Winter, and Spring). Prerequisites: SPAN 341 or SPAN 345, or by permission.

**SPAN 341. Spanish Composition and**

**Grammar I (5).** Development of writing skills through the practice of grammar, vocabulary, and rhetorical devices. SPAN 341 and SPAN 345 are equivalent courses; students may not receive credit for both. Course will be offered every year (Fall). Prerequisite: SPAN 253, or by placement exam.



Declared Spanish majors and minors only.

**SPAN 342. Spanish Composition and Grammar II (5).** Further development of writing skills through the practice of grammar, vocabulary, and rhetorical devices. SPAN 342 and SPAN 346 are equivalent courses; students may not receive credit for both. Course will not have an established scheduling pattern. Prerequisite: SPAN 341.

**SPAN 343. Spanish Conversation (5).** Development of speaking and listening skills through the practice of grammar, vocabulary, and communicative strategies. Course will be offered every year (Spring). Prerequisite: SPAN 253 or SPAN 263.

**SPAN 345. Composition and Grammar for Heritage Speakers I (5).** Grammar, composition and conversation for academic purposes for heritage speakers of Spanish. SPAN 341 and SPAN 345 are equivalent courses; students may not receive credit for both. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: SPAN 263, or by placement exam. Declared Spanish majors and minors only.

**SPAN 346. Composition and Grammar for Heritage Speakers II (5).** Further development of grammar, composition, and conversation for academic purposes for heritage speakers of Spanish. SPAN 342 and SPAN 346 are equivalent courses; students may not receive credit for both. Course will not have an established scheduling pattern. Prerequisite: SPAN 345.

**SPAN 351. The Camino de Santiago (5).** This course offers an overview of the Camino de Santiago, a 9th-century pilgrimage in northern Spain. Lectures, reading, and coursework are in English and Spanish. By instructor permission. Course will be offered every year (Spring).

**SPAN 352. Spanish Boot Camp: A Language Immersion Course on the Camino de Santiago (6).** This course combines the thrill of walking the Camino de Santiago with a three-week Spanish language immersion course. Participants are required to use Spanish for communication, as well in a variety of oral and written course assignments. Permission by instructor. Course will be offered every year (Summer). Prerequisite: SPAN 351.

**SPAN 380. Contemporary Hispanic Literature and Cultures (Put on reserve 9/16/18) (5).** This course examines contemporary Hispanic poetry, short story, drama, and film.

Lectures are conducted in Spanish; most readings will be in Spanish. This course is an elective for Spanish majors, minors, and Latino and Latin American Studies minors. May be repeated up to 15 credits. Course will not have an established scheduling pattern. (Put on reserve 9/16/18, will go inactive 8/24/21) Prerequisites: SPAN 341 or SPAN 345; and SPAN 301, or by permission of the instructor.

**SPAN 381. Hispanic and U.S. Latino Literatures and Cultures (5).** This course examines Spanish American and U.S. Latino poetry, short story, drama, film, a novel, and essays. Lectures and discussions conducted in Spanish; most readings are in Spanish. Course will not have an established scheduling pattern. Prerequisites: SPAN 341 or SPAN 345, and SPAN 301, or by permission.

**SPAN 385. Spanish Phonetics (5).** Analysis of the Spanish sound system. Students will learn to describe, recognize, and produce the sounds of standard Latin American Spanish. Other dialects will also be examined. Declared Spanish majors and minors only. Course will not have an established scheduling pattern. Prerequisite: SPAN 253 or SPAN 263 or by placement exam.

**SPAN 396. Individual Study (1-6).** May be repeated if subject is different.

**SPAN 397. Honors (1-12).** Prerequisite: admission to department honors program.

**SPAN 398. Special Topics (1-6).**

**SPAN 399. Seminar (1-5).** May be repeated if subject is different.

**SPAN 432. Advanced Spanish Composition and Grammar (5).** Advanced grammar, composition, and stylistics through textual analysis and essay writing. Course will not have an established scheduling pattern. Prerequisites: SPAN 342 or SPAN 346.

**SPAN 442. Spanish Translation and Interpretation (5).** This course illustrates the specific semantic and syntactic aspects of Spanish in translation by examining a variety of texts and materials. Lectures, readings, and discussions in both English and Spanish. Course will not have an established scheduling pattern. Prerequisites: SPAN 341 or SPAN 345.

**SPAN 443. Advanced Spanish Translation (5).** This course acquaints the student with the various theories of translation, and the responsibilities involved in the act of translating. It also offers ample practice with English to Spanish translation, and Spanish to English translation in a variety of fields. Course will not have an

established scheduling pattern. Prerequisite: SPAN 442.

**SPAN 445. Spanish Medieval Literature (5).** This course analyzes the most representative works, literary genres, and movements of the Spanish Middle Ages. Lectures, readings, and discussions conducted in Spanish. Course will not have an established scheduling pattern. Prerequisite: SPAN 301.

**SPAN 446. Hispanic Cinema (5).** This course focuses on the analysis of films that represent different aesthetics and genres of Spanish, Latin American, and U.S. Latino film making. The course is offered in English to students of any discipline, and is a literature elective for Spanish majors and minors. Film critiques will be written in Spanish for Spanish majors and minors. Prerequisite: SPAN 301.

**SPAN 447. Framing Latin American Cinema (5).** This course analyses Latin American films and cultures. Instruction is offered in English and the course open to all students. It is an approved elective for Spanish majors and minors, who will perform work in Spanish, and for LLAS minors. Course will not have an established scheduling pattern. Prerequisite: SPAN 301.

**SPAN 448. Framing South American Cinema (Put on reserve 9/16/17) (5).** Course taught online to analyze films that represent the convergent roads of different aesthetics and genres of South American film making. The course is designed to provide students with knowledge of the rich and complex South American civilization and cultures. The course is offered in English to students of any discipline, and it is a literature elective for Spanish majors and minors, and Latino and Latin American minors. Course will not have an established scheduling pattern. (Put on reserve 9/16/17. Will go inactive 8/24/2020.) Prerequisite: SPAN 301.

**SPAN 449. Spanish Golden Age Literature (5).** This course studies novels, theatre, and poetry written in 16th- and 17th-century Spain, including works by Cervantes, Lope de Vega, Calderon, or Quevedo. Course will not have an established scheduling pattern. Prerequisite: SPAN 301.

**SPAN 454. Medical and Legal Spanish for Translators and Interpreters (5).** This course will acquaint students with the most common medical and legal terms in Spanish, and will teach them how to translate and interpret effectively from English to Spanish and vice versa. May be repeated up to 10

credits. Course will be offered every year (Spring). Prerequisites: SPAN 442 and SPAN 443.

- SPAN 456. The Spanish and Latin American Short Story (5).** Study of the short-story genre represented in works by major modern and contemporary Spanish and Latin American writers. Lectures, readings, and discussions conducted in Spanish. Course will not have an established scheduling pattern. Prerequisite: SPAN 301. K5 - Humanities
- SPAN 457. Latin American Theater (Put on reserve 9/16/2014.) (4).** Study of dramatic and performance theories and of theatrical pieces from Latin American playwrights. Lectures, readings, and discussions conducted in Spanish. Put on reserve 9/16/2014. Last taught in 2009. Will go inactive 8/24/17. Prerequisite: SPAN 301.
- SPAN 459. Latin American Poetry (Put on reserve 9/16/17) (5).** Study of literary conventions of poetry and the major contemporary Latin American poets. Lectures, readings, and discussions conducted in Spanish. Course will not have an established scheduling pattern. (Put on reserve 9/16/17. Will go inactive 8/24/2020.) Prerequisite: SPAN 301.
- SPAN 466. Spanish Poetry (5).** Study of poetic theories and the main developments in the poetry of Spain. Course will not have an established scheduling pattern. Prerequisite: SPAN 301 or by permission of instructor.
- SPAN 467. Spanish and Latin American Literature and Film (5).** A study of contemporary Spain and Latin America through literature and film. This course is conducted entirely in Spanish. Course will be offered every year (Spring). Prerequisite: SPAN 301.
- SPAN 491. Workshop (1-6).**
- SPAN 492. Practicum in Spanish Translation and Interpretation (5).** This is a practicum course in translation and interpretation for different settings -- including hospitals, law and police offices, and school districts -- along with regular reflective work on these experiences. May be repeated up to 10 credits. Course will be offered every year (Spring). Prerequisites: SPAN 442 and SPAN 443. Co-requisite: SPAN 454.
- SPAN 496. Individual Study (1-6).**
- SPAN 497. Honors (1-12).** Prerequisite: admission to department honors program.
- SPAN 498. Special Topics (1-6).** May be repeated if subject is different.
- SPAN 499. Seminar (1-5).** May be repeated if subject is different.

### Sport Management Courses

- SPM 101. Contemporary Sport Management (3).** This course provides students with an overview of sport management, the relevance of legal, sociocultural, historical, political, and psychological concepts to the management of sport, and ways in which the globalization of sport continues to affect sport management professions. Course will be offered every year (Fall, Winter and Spring).
- SPM 298. Special Topics (1-6).** May be repeated if subject is different.
- SPM 299. Seminar (1-5).** May be repeated if subject is different.
- SPM 315. Legal Liability and Risk Management in Sport (3).** This course will examine risk management and legal issues that affect sport and recreation organizations. Course will be offered every year (Winter). Prerequisite: SPM 101.
- SPM 355. Public Relations and Promotions in Sport (3).** This course presents an overview of the various techniques and strategies used in meeting the wants and needs of consumers in the sport industry. Course will be offered every year (Fall). Prerequisite: SPM 101.
- SPM 365. Sports Facilities and Events Management (3).** This course will allow students the opportunity to learn multiple aspects associated with the operation of sports facilities, and the management of events held at these facilities. Course will be offered every year (Winter). Prerequisite: SPM 101.
- SPM 396. Individual Study (1-6).** May be repeated if subject is different.
- SPM 397. Honors (1-12).** Prerequisite: admission to department honors program.
- SPM 398. Special Topics (1-6).** May be repeated if subject is different.
- SPM 399. Seminar (1-5).** May be repeated if subject is different.
- SPM 465. Global Perspectives in Sport (3).** This course will examine sport as a global phenomenon. Emphasis will be given to international sport competition, the globalization of sport, market dynamics, and social impact. Course will be offered every year (Fall). Prerequisite: SPM 101.
- SPM 490. Sport Management Internship (1-12).** This course will provide students with an opportunity to work in a professional setting in a sport management field of their choice. Grade will be S or U. Course will be offered every year (Fall, Winter, Spring, and Summer). Prerequisite: sport management major with senior

status, and permission of program director.

- SPM 492. Practicum in Sport Management (3).** Supervised practicum experience for sport management majors. Course will be offered every year (Fall, Winter, and Spring). Prerequisite: sport Management major with senior status, and permission of program director.
- SPM 496. Individual Study (1-6).** May be repeated if subject is different.
- SPM 497. Honors (1-12).** Prerequisite: admission to department honors program.
- SPM 498. Special Topics (1-6).** May be repeated if subject is different.
- SPM 499. Seminar (1-5).** May be repeated if subject is different.

### Science Talent Expansion Program Courses

- STEP 101. Scientific Perspectives and Experimentation I (2).** First course in a three-quarter first year science seminar series. Students develop scientific research and writing skills by using an interdisciplinary approach to investigate sustainability topics. Students must take STEP 101, 102, and 103 to receive credit for Academic Writing II. By department permission. Course will be offered every year (Fall). Prerequisite: enrollment in the STEP program or by permission. NS-Applications Natural Science. K1 - Academic Writing II: Reasoning & Research
- STEP 102. Scientific Perspectives and Experimentation II (2).** Second course in a three-quarter seminar series. Students continue developing scientific research and writing skills, study a scientific problem relevant to a current societal issue, and design and conduct laboratory, engineering, computer, and/or field investigations. Students must take STEP 101, 102, and 103 to receive credit for Academic Writing II. Course will be offered every year (Winter). Prerequisites: STEP 101. NS-Applications Natural Science. K1 - Academic Writing II: Reasoning & Research
- STEP 103. Scientific Perspectives and Experimentation III (1).** Third course in a three-quarter first year science seminar series. Students survey active research effort by CWU faculty and upper classmen in science, technology and mathematics fields and design their own research project. Students must take STEP 101, 102, and 103 to receive credit for Academic Writing II. Course will be offered every year (Spring). Prerequisite: STEP 102. NS-

Applications Natural Science (W). K1 - Academic Writing II: Reasoning & Research

**STEP 301. Bridge Seminar I: Survey of Research Opportunities (1).** First course in two-quarter sequence for incoming transfer students. Students are introduced to undergraduate research opportunities at CWU and learn to write an effective research proposal. By permission. Prerequisite: student must be enrolled in STEP Program.

**STEP 302. Bridge Seminar II (2).** Second course in a two-quarter sequence for incoming transfer students. Students develop research and critical thinking skills through careful reading of scientific publications and hands-on experiments. By permission. Prerequisites: STEP 301, and admission to the STEP program, or by permission of instructor.

### Stem Teaching Program Courses

**STP 201. Inquiry Approaches to Teaching (2).** An introduction to theory and practice for effective math and science teaching in grades K-12. This field-based career exploration course enables candidates to observe and identify essential components of content, equity, and professional practice. Course will be offered every year (Fall and Winter). Formerly STP 301, students may not receive credit for both. Prerequisite: current WSP/FBI fingerprint clearance. K8 - Science & Technology

**STP 202. Inquiry Based Lesson Design (2).** This field-based course builds on knowledge and skills developed in Inquiry Approaches to Teaching, emphasizing middle school learners. Candidates adapt and teach lessons that implement essential components of content, equity, and professional practice. Course will be offered every year (Winter and Spring). Formerly STP 302, students may not receive credit for both. Prerequisite: a grade of C or higher in STP 201 and current WSP/FBI fingerprint clearance. K8 - Science & Technology

**STP 298. Special Topics (1-6).** May be repeated if subject is different.

**STP 299. Seminar (1-5).** May be repeated if subject is different.

**STP 300. Inquiry Approaches to Teaching and Lesson Design (4).** In this field-based introductory course candidates observe and identify essential components effective math and science teaching in grades K-12. Then candidates design and teach lessons that implement essential

components of content, equity, and professional practice. Course will be offered every year(Fall). Formerly STP 302A, students may not receive credit for both. Prerequisites: sophomore standing and current WSP/FBI fingerprint clearance.

**STP 303. Knowing and Learning (4).** Examination of learning theories and research for effective STEM teaching and assessment, including implications for content literacy, language diversity, cultural responsiveness, technology, and professionalism. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisite: STP 202 or STP 300 with grade of C or higher.

**STP 304. Classroom Interactions 1 (4).** Candidates plan, instruct, and assess STEM lessons based on research-supported practices. This field-based course applies principles of student centered equitable teaching to classroom context and practice. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: STP 303 with grade of C or higher and current WSP/FBI fingerprint clearance and full admission to the Teacher Certification Program.

**STP 305. Classroom Interactions 2 (4).** Candidates plan, instruct, and assess field-based culturally responsive STEM lessons that bridge differences in language, heritage, race, socioeconomic status, and academic performance. Candidates intentionally apply culturally responsive instruction and classroom management pervasive throughout teaching. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: STP 304 with grade of C or higher and current WSP/FBI fingerprint clearance and full admission to the Teacher Certification Program.

**STP 306. Project-Based Instruction (3).** Candidates plan, instruct, and assess field-based STEM lessons using a project-based approach that engages learners in exploring authentic meaningful questions of concern to K12 students. Candidates apply principles of student-centered equitable teaching to inquiry-based projects. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: STP 305 with grade of C or higher and current WSP/FBI fingerprint clearance and full admission to the Teacher Certification Program.

**STP 307A. Functions and Modeling for STEM Teaching (3).** Engages students

in explorations and lab activities designed to strengthen and expand their understanding of functions at the secondary level. Topics of investigation may include, function properties, patterns, linear, exponential, trigonometric and logistic models. Prerequisites: STP 303 and MATH 153 or MATH 154 or MATH 170 or MATH 172.

**STP 307B. Functions and Modeling for Secondary Mathematics (3).**

Candidates will use inquiry explorations and peer collaborations to derive and explain results, models, and proofs related to important secondary math concepts. Candidates will examine the secondary math curricula relative to CCSS, math and society. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: MATH 265 and STP 303.

**STP 307C. Computer Science for STEM Teaching (3).** Candidates will engage in explorations and lab activities to strengthen and expand their understanding of software engineering development, computer science practices, and their equitable application to the K-12 classroom environment. Course will be offered on odd numbered years (Winter). Prerequisites: STP 303 and eligible for MATH 154.

**STP 308. Perspectives on Science, Mathematics and STEM Education (3).** An exploration of the history and philosophies of science and mathematics in the context of public education with an emphasis on how these ideas are related and can be applied to the STEM classroom. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisite: STP 303.

**STP 309. Research Methods (3).** Candidates experience and apply educational, scientific, and mathematical research methods by designing, carrying-out, and communicating investigations applicable in teaching middle or secondary STEM courses. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisite: STP 303.

**STP 396. Individual Study (1-6).** May be repeated if subject is different.

**STP 397. Honors (1-12).** Prerequisite: admission to department honors program.

**STP 398. Special Topics (1-6).** May be repeated if subject is different.

**STP 399. Seminar (1-5).** May be repeated if subject is different.

**STP 496. Individual Study** (1-6). May be repeated if subject is different.

**STP 497. Honors** (1-12). Prerequisite: admission to department honors program.

**STP 498. Special Topics** (1-6). May be repeated if subject is different.

**STP 499. Seminar** (1-5). May be repeated if subject is different.

#### Sustainability Courses

##### **SUST 301. Introduction to**

**Sustainability** (4). Students will learn about a variety of concepts related to sustainable development and sustainable environments. Emphasis will be placed on literature focusing on implementation of sustainability projects at local scales. Permission of instructor. Course will be offered every year (Fall).

##### **SUST 309. Sustainability Civic Engagement Experience** (1-6).

Student will engage in community and/or campus based academic service learning related to sustainability. Grade will either be S or U. May be repeated up to 12 credits. Course will be offered every year (Fall, Winter, Spring, Summer).

##### **SUST 487. Sustainability Project**

**Capstone** (1). Project review and evaluation, career planning and portfolio preparation activities. Must be enrolled in Sustainability Certificate. Grade will either be S or U. Course will be offered every year (Spring). Prerequisite: SUST 309.

#### Theatre Arts Courses

##### **TH 101. Appreciation of Theatre and**

**Film** (4). Viewing, discussing, and comparing film and live theatre performance. Course will be offered every year (Fall, Winter, Spring). AH-Aesthetic Experience. AH-Aesthetic Experience. K3 - Creative Expression

##### **TH 107. Introduction to Theatre** (4).

Overview of the basic elements of the theatre arts and dramatic structure, and the environment for production of plays. Attendance at assigned outside events is required. Course will be offered every year (Fall, Winter, Spring, Summer). AH-Aesthetic Experience (W). AH-Aesthetic Experience (W). K3 - Creative Expression

**TH 115. Class Piano I** (1). Foundations of piano for Musical Theatre majors. The first course in a three course sequence.

**TH 116. Class Piano II** (1). Foundations of piano for Musical Theatre majors. The second course in a three course

sequence. Prerequisite: TH 115, or permission of instructor.

##### **TH 117. Class Piano III** (1).

Foundations of piano for Musical Theatre majors. The third course in a three course sequence. Prerequisite: TH 116, Class Piano II, or permission of instructor.

##### **TH 140. Introduction to Theatre**

**Design** (3). An introduction to the basic elements of design used to create unified scenery, costume, lighting, makeup, and sound designs with an emphasis in research and conceptualization.

##### **TH 143. Private Voice Lessons** (1-4).

Individual vocal instruction in the musical theatre style. By permission. May be repeated for credit. Grade will either be S or U.

##### **TH 144. Foundations of Acting** (3).

Introduction to the theory and practice of acting craft, development of the actor's tools, basic acting techniques, including pantomime, vocal conditioning, improvisation, and scene study.

##### **TH 145. Foundations of Acting II** (3).

Continuation of the theory and practice of acting craft, development of the actor's tools, basic acting techniques. Prerequisite: TH 144.

##### **TH 148. Actor Conditioning -**

**Monologue** (1). Theory, technique, and practice of the acting craft with emphasis on choosing, analyzing, researching, and preparing monologues for audition and performance. May be repeated for credit. Grade will either be S or U. Prerequisite: TH 244.

##### **TH 161. Intro to Technology 1:**

**Costumes and Makeup** (3). Basic introduction to costume construction and makeup application for the theatre. Emphasis on terminology, safe operating procedures and equipment use, basic techniques, and material identification. Required Lab. Prerequisite: admission to the BFA musical theatre or BFA performance specializations.

##### **TH 162. Intro to Technology 2:**

**Scenery and Lighting** (3). Basic introduction to scenic construction and lighting systems common to the theatre. Emphasis on terminology, safe operating procedures and equipment use, basic techniques, and material identification. Required Lab. Prerequisite: admission to the BFA musical theatre or BFA performance specializations.

##### **TH 166. Theory of Play Production** (3).

Theories of production are explored through basic script analysis and the examination of protocol and procedures

in the resident production company and a variety of world theatre models.

##### **TH 201. Dance Production Application**

(1-3). Skills learned in the classroom are applied to dance production work for public presentation. May be repeated up to 12 credits. Prerequisite: admission to the theatre major.

##### **TH 202. Performance Studio** (1-3).

Skills learned in the classroom are applied to performance in studio work, which may be presented publicly. May be repeated up to 24 credits.

##### **TH 215. Music Fundamentals I** (3).

Basic concepts of the fundamentals of music theory dealing with notation, melody, rhythm and harmony as demonstrated through written and aural analysis. This course is the first in a three-course harmony sequence. Courses must be taken in sequence. Prerequisite: completion of MUS 152A with a B- or above or concurrent enrollment.

##### **TH 216. Music Fundamentals II** (3).

Basic concepts of the fundamentals of music theory dealing with notation, melody, rhythm and harmony as demonstrated through written and aural analysis. This course is the second in a three-course harmony sequence. Courses must be taken in sequence. Prerequisites: completion of TH 215 with a B- or above and MUS 153A with a B- or above, or concurrent enrollment in MUS153A.

##### **TH 217. Music Fundamentals III** (3).

Basic concepts of the fundamentals of music theory dealing with notation, melody, rhythm and harmony as demonstrated through written and aural analysis. This course is the third in a three-course harmony sequence. Courses must be taken in sequence. Prerequisites: completion of TH 216 with a B- or above, and completion of MUS 154A with a B- or above or concurrent enrollment in MUS154A.

##### **TH 243. Singing for Actors** (1). An

introduction to the mechanics of singing as applied to presentations of theatrical show music. May be repeated for up to 9 credits.

##### **TH 244. Basic Acting I** (3). Theory and

practice of essentials of acting craft-development of the actor's tools, the voice, body, and imagination. Introduction to Stanislavski method, with viewpoints and composition.

##### **TH 245. Basic Acting II** (3). Theory and

practice of essential acting craft-development of the actor's tools, the voice, body, and imagination. Physical theatre techniques, improvisation, scene study. Prerequisite: TH 244.

- TH 246. Basic Acting III** (3). Theory and practice of essential acting craft-development of the actor's tools, the voice, body, and imagination. Concentration on physical theatre techniques, scene study, and text analysis. Prerequisite: TH 245.
- TH 248. Vocal Conditioning for the Actor** (1). Study and application of the techniques used in the development of the actor's foundational vocal conditioning. Co-requisite: TH 245.
- TH 249. Vocal Conditioning for the Actor II** (1). Study and application of the techniques used in the development of the actor's foundational vocal shaping. Co-requisite: TH 246.
- TH 252. Stage Dance** (1). Dance techniques as they pertain to theatre, such as Contemporary Musical Theatre Jazz, Musical Theatre Tap, Golden Age, Fosse, and others. May be repeated up to 6 credits if topic differs.
- TH 256. Sound and Mixing - Aesthetics and Essentials** (3). Students will gain an understanding of how to mix on a digital console. Audio/sound aesthetics and fundamentals will also be the focus of this course. FILM 256 and TH 256 are cross-listed; students may not receive credit for both.
- TH 261. Costume Technology** (3). Basic theory and study of costume construction and fabrication for the theatre. Emphasis on terminology, safe operating procedures of sewing machinery, basic stitches, and fabric identification. Lab required. Prerequisite: admission to the theatre BA or BFA; or apparel design minor.
- TH 266. Theatre Drafting** (3). Supervised study and practice of drafting theatrical sets, properties, and light plots. Prerequisite: admission to the theatre major.
- TH 267. Scene Technology** (3). Scene construction, rigging, painting, and shifting techniques. Lab required. Prerequisite: admission to the theatre BA or BFA.
- TH 268. Lighting Technology** (3). Applied study of lighting instruments, lighting accessories, hanging, cabling, focusing, lighting control systems, safety, and maintenance. Lab required. Prerequisite: admission to the theatre arts BA or BFA, or film and video studies major.
- TH 270. Stage Makeup** (3). The history, functions, materials, and techniques of makeup as a theatrical art. Production application required. Prerequisite: TH 166.
- TH 278. Creative Drama in the Classroom** (3). Theories and practices of theatre and drama as an educational and social tool. Creating theatre for and with youth. Includes opportunities to create and utilize techniques in both performance and learning environments. Course will be offered every year (Summer). Prerequisite: admission to the Theatre Education BFA, or permission.
- TH 290. Cooperative Education Portfolio** (1-6). A collection of individualized contracted field experiences with the industry. This contractual arrangement involves a student learning plan, with a cooperating employer, under faculty coordination, that must be completed prior to the first experience to be included in the portfolio. By permission. May be repeated up to 6 credits. Grade will either be S or U.
- TH 294. International Theatre Experience Preparation** (1). Preparation and planning toward a significant international experience where students explore culture, art, norms and society. Attention to itinerary, visa and passport requirements. Travel fees will be assessed as part of this course in anticipation of the overall cost of the international travel. OISP fee applies. May be repeated for credit up to 5 credits as topic changes. Grade will be S or U.
- TH 295. Theatre Education Portfolio** (1). Live Text portfolio will be employed to build professional portfolios, documenting theatre training, and compliance with state certification and NCATE standards. May be repeated for credit. Grade will either be S or U.
- TH 298. Special Topics** (1-6).
- TH 299. Seminar** (1-6). May be repeated if subject is different.
- TH 300. Rehearsal and Performance** (1-2). Open only to non-majors participating in theatre arts productions. Does not satisfy any requirement for the major. Course meets with appropriate application course and instructor. May be repeated for credit.
- TH 301. Production Application** (3). Skills learned in the classroom are applied to production work for public presentation. Different sections will be offered for participants in each area of the production team. May be repeated up to 18 credits. Prerequisite: admitted to the theatre arts major or dance performance minor.
- TH 302. Performance Application** (3). Skills learned in the classroom are applied to performance work on productions for public presentation. May be repeated up to 18 credits.
- Prerequisite: admission to the theatre major.
- TH 303. Management Application** (3). Skills learned in the classroom are applied to stage management work on productions for public presentation. May be repeated up to 18 credits. Prerequisite: admission to the theatre major.
- TH 313. Writing for Theatre for Young Audiences** (3). Study, practice, and creation of original works of Theatre for Young Audiences (TYA) focusing on playwriting. Topics include TYA subcategories: Theatre for the Very Young, Children's Theatre, Young Adult Theatre, and Crossover. Course will be offered on even numbered years (Spring). May be repeated up to 6 credits. Prerequisites: TH 166, or admission to the creative writing minor.
- TH 329. Directing I** (3). Participation in and direction of fundamentals of applied directing. Prerequisites: TH 144 or TH 244 or instructor permission.
- TH 330. Introduction to Playwriting** (4). Fundamentals and practice in dramatic writing techniques and styles. May be repeated up to 8 credits. Prerequisites: TH 107 and TH 166, or admission to the English writing specialization.
- TH 332. New Play Production (Put on Reserve 9/16/16.)** (2). An exploration of the problems and techniques specific to the production of original, student-written plays. Participation in public performances of new plays, including weekend and evening activities is required. May be repeated for credit. (Put on Reserve 9/16/16. Last taught in 2013. Will go inactive 8/24/19.)
- TH 333. Stage Combat Fundamentals** (3). The study and practice of basic skills, techniques, and safety factors used in staging and performing violence for the stage and media. Focus is on falls, rolls, and unarmed combat. May include use of one historical weapon. Prerequisites: TH 144 or TH 244.
- TH 335. Movement for the Actor** (3). The study and practice of various movement disciplines, such as Laban, Suzuki, Feldenkrais, Chekhov, Lessac, or Alexander, to enhance flexibility and expressiveness of the actor's body in a variety of performance applications. May be repeated if content or title changes for up to 9 credits. Prerequisites: TH 144 or TH 244.
- TH 342. Dialects for Stage and Screen** (3). Dialect acquisition for use in stage and on-camera work. Dialects studied will include a range of material from

- British Standard, Cockney, New York, Irish, Scottish, and Southern, and will feature the implementation of phonetics and a proficient use of the vocal instrument. May be repeated up to 6 credits if topic changes. Prerequisite: TH 246.
- TH 343. Singing for Actors II** (1). An introduction to the mechanics of singing as applied to presentations of theatrical show music. May be repeated up to 9 credits. Prerequisite: TH 243.
- TH 344. Intermediate Acting I** (3). Character interpretation and scene study through script analysis and scene work. TH 344 and TH 345 to be taken in sequence. Prerequisite: TH 246.
- TH 345. Intermediate Acting II** (3). Character interpretation and scene study through script analysis and scene work. Courses are to be taken in sequence. Prerequisite: TH 344.
- TH 350. Theatre and Arts Management I** (4). Policy and practice of theatre and arts management including budgets, contracts, purchasing, staffing, and organizational development.
- TH 351. Theatre and Arts Management II** (4). Policy and practice of theatre and arts management including marketing, box office, purchasing, staffing, and audience development.
- TH 352. Stage Dance II** (2). Advanced dance technique in styles as it pertains to theatre; in topics such as contemporary musical theatre jazz, musical theatre tap, callbacks, Golden Age, Fosse, and directed practice of others. May be repeated up to 12 credits if topic differs. Prerequisites: TH 252 and permission of the instructor.
- TH 353. Stage Properties** (3). Research, methodology, design, and construction of stage props and furniture. Prerequisite: TH 267.
- TH 354. Scene Painting** (3). Study in the methodology and skills of scene painting, materials, and techniques.
- TH 356. Stage Sound** (3). Engineering and operation of the technologies for theatrical sound. Prerequisite: TH 166.
- TH 357. Entertainment Rigging** (3). Course is an introduction to the materials, equipment, methods and safety for entertainment rigging. Students will be exposed to a variety of rigging systems and their safe operation and maintenance. Prerequisite: TH 268 or permission of instructor.
- TH 360. Stage Management** (3). Techniques, communication methodology, resources, practices, and technical training for the stage manager. Prerequisite: TH 166.
- TH 361. Stage Costuming** (3). Further study of construction and fabrication for the stage. Emphasis on patterning, dyeing, and distressing costumes for the stage. Prerequisite: TH 261.
- TH 362. Costume Crafts** (3). Advanced study in fabric manipulation and the construction of costume crafts, and properties. Special focus on advanced dyeing techniques, fabric painting, distressing, millinery, jewelry, manipulation, and body padding. Prerequisite: TH 261.
- TH 363. Theatre History I** (4). From origins to the Elizabethan Era. Prerequisite: TH 107.
- TH 364. Theatre History II** (4). From the Elizabethan period to Ibsen. Prerequisite: TH 107.
- TH 365. Theatre History III** (4). From Ibsen to the present. Prerequisite: TH 107.
- TH 366. Theatre Rendering** (3). Exploration and application of various rendering styles and media for theatrical applications.
- TH 367. Stage Scenery** (3). Introduction to technical direction and auditorium management. Advanced stage scenery construction techniques are studied and applied. Prerequisite: TH 267.
- TH 368. Stage Lighting** (3). Study of electricity, color, distribution, drafting, lighting paperwork, and light programming. Prerequisites: TH 266 and TH 268.
- TH 374. Introduction to Acting for the Camera** (3). Introduction to the study and technique of acting for the camera. Topics may include the following; feature film, motion capture for animation and media, scenes and monologues on camera. Prerequisite: TH 344.
- TH 375. Asian Drama** (4). Survey of the traditional theatre, puppetry, and dance-drama forms of Asia. Historical development. Cultural and aesthetic aspects of the text in performance. Influence on contemporary world theatre. AH-Aesthetic Experience (W). Prerequisite: sophomore standing or above. AH-Aesthetic Experience (W).
- TH 377. Staging Gender** (4). Concepts of gender and their historical development are examined through analysis of dramatic literature, films, and contemporary performance culture. Prerequisite: sophomore standing or above.
- TH 378. Theatre Facilities Management** (3). The study and practice of specialized procedures for maintaining and managing theatre and auditorium stages including rigging, lighting, sound and related equipment. Permission by department. Course will be offered every year (Summer). Prerequisite: admission to the theatre education program, or permission.
- TH 380. Studies in Drama** (5). Intensive study of representative examples of drama. ENG 380 and TH 380 are cross-listed courses; students may not receive credit for both. May be repeated up to 15 credits. Prerequisites: ENG 302 and ENG 303, or admission to the theatre arts major.
- TH 382. Diverse Experiences in American Drama** (4). Study of contemporary American multi-cultural plays by people of color and other ethnic groups. AH-Aesthetic Experience (W). Prerequisite: ENG 101. AH-Aesthetic Experience (W).
- TH 384. Puppetry (Put on Reserve 9/16/16.)** (3). Survey of puppetry principles and their application to the classroom, recreational facility, and theatre. Production techniques. Analysis of literature adaptable to theatre form. (Put on Reserve 9/16/16. Last taught in 2012. Will go inactive 8/24/19.) Prerequisite: TH 166.
- TH 393. Theatre Laboratory** (1). Practical experience in all aspects of theatre production to better prepare for career opportunities. May be repeated up to 3 credits.
- TH 396. Individual Study** (1-6). May be repeated if subject is different.
- TH 397. Honors** (1-12). Prerequisite: admission to department honors program.
- TH 398. Special Topics** (1-6).
- TH 400. Rehearsal and Performance** (1-2). Open only to non-majors participating in theatre arts productions. Does not satisfy any requirement for the major. Course meets with appropriate application course and instructor. May be repeated for credit.
- TH 401. Production Application** (3). Skills learned in the classroom are applied to production work for public presentation. May be repeated up to 18 credits. Prerequisite: admission to the theatre major.
- TH 402. Performance Application** (3). Skills learned in the classroom are applied to acting work on productions for public presentation. May be repeated up to 18 credits. Prerequisite: admission to the theatre major.
- TH 403. Management Application** (3). Skills learned in the classroom are applied to stage management work on productions for public presentation. May be repeated up to 18 credits.

Prerequisite: admission to the theatre major.

- TH 415. Musical Theatre History and Literature I (3).** The history of musical theatre from the inception of this uniquely American art form through the innovations of Oklahoma! The contributions of major lyricists, composers, directors, designers, performers, and choreographers, and an analysis of the works themselves, exploring the sociological relationships, ramifications, and cultural influences of the art form. Prerequisite: TH 365.
- TH 416. Musical Theatre History and Literature II (3).** The history of musical theatre from Oklahoma! to the inception of the rock musicals in the 1960s. The contributions of major lyricists, composers, directors, designers, performers, and choreographers, and an analysis of the works themselves, exploring the sociological relationships, ramifications, and cultural influences of the art form. Prerequisite: TH 415.
- TH 417. Musical Theatre History and Literature III (Put on reserve 9/16/18) (3).** The history of musical theatre from the rock musicals of the 1960s to the present. The contributions of major lyricists, composers, directors, designers, performers, and choreographers, and an analysis of the works themselves, exploring the sociological relationships, ramifications, and cultural influences of the art form. (Put on reserve 9/16/18, will go inactive 8/24/21)
- TH 423. Theatre Pedagogy (3).** A study and practice of the curriculum, teaching methods, and materials pertinent to teaching drama/theatre in the schools. Students will apply theory, research, and practice to the planning and implementation of instruction. Course will be offered every year (Summer). Prerequisite: admission to the Theatre Education BFA, or permission of instructor.
- TH 429. Directing II (3).** Script study emphasizing the specific artistic and logistical preparation involved in directing a play. Culminates in directing selected scenes. Prerequisite: TH 329.
- TH 433. Advanced Stage Combat (3).** The study and practice of advanced skills, techniques, and safety factors used in staging and performing armed combat for the stage and media. Focus is on historical weaponry such as a single sword, rapier, and dagger, broadsword, and small sword. May be repeated for credit. Prerequisite: TH 333.

- TH 435. Advanced Movement for the Actor (3).** Advanced study in movement disciplines such as; Alexander, Fekdenkrais, Suzuki, or Rasaboxes. Repeatable if course content changes. May be repeated up to 6 credits. Prerequisite: TH 335.
- TH 440. Advance Design Problems (3).** Conceptualization, design, and application of advanced design techniques and theories through paper project or executed on mainstage productions in one of four areas: scenery, lighting, sound, or costumes. May be repeated for credit.
- TH 444. Acting Styles (4).** Performance skills applied to heightened texts and stylized comedy including Shakespeare, Wilde, Coward, and other major playwrights. May be repeated up to 8 credits if content differs. Prerequisite: TH 344.
- TH 445. Audition Techniques for the Stage (3).** Exploration and practice of advanced techniques and materials required for professional stage auditions. Prerequisite: TH 345.
- TH 446. Audition Techniques for the Camera (Put on Reserve 9/16/16.) (3).** Exploration and practice of advanced techniques for professional camera auditions. Emphasis on auditions for commercials and preparing cold readings for on-camera auditions. (Put on Reserve 9/16/16. Last taught in 2013. Will go inactive 8/24/19.) Prerequisite: TH 445.
- TH 452. History of Fashion (4).** Historical changes in fashion and costume design from Egyptian period through eastern civilization to present. Social, political, and religious influences on fashions. FCSA 452 and TH 452 are cross-listed courses; students may not receive credit for both.
- TH 456. Advanced Concepts in Sound for Film and Stage (4).** Creation of sound content for film and stage via software tools. FILM 456 and TH 456 are cross-listed courses; students may not receive credit for both. Course will be offered every year (Spring). Prerequisite: TH 256 or permission of instructor.
- TH 460. Production Management (4).** This course explores production management theory and practice, covering production estimating and budgeting, scheduling, and working with entertainment union contracts. Students will develop organization and communication skills specific to the duties of the production manager. Prerequisites: TH 166 and TH 360.

- TH 461. Costume Design (4).** Basic principles of design related to theatrical costumes. The role of the costume designer in planning and developing a sketch from the initial reading of the script through production, research, production meetings, and rendering technique. Prerequisites: either TH 361, both FCSA 388 and TH 366, or admission to the apparel design minor.
- TH 464. Wig Creation, Styling, and Maintenance (3).** The study and practice of creating, styling, and maintaining wigs for stage.
- TH 465. Costume and Fashion Drawing (3).** Sketching design ideas for theatrical costumes and street clothing in three-dimensional form with textural effects and color to present a realistic appearance on paper.
- TH 467. Scene Design (4).** Study, research, practice, and applied use of scenic design techniques and theory. Prerequisites: TH 266 and TH 340 and TH 366.
- TH 468. Lighting Design (4).** Basic principles of design related to lighting design for the theatre. This class examines the role of the lighting designer from initial reading of the script through production, research, production meetings, and creation of the light plot. Prerequisite: TH 366 and TH 368.
- TH 474. Acting for Film and Television (4).** Exploration and practice of advanced techniques in the acting of scenes for film and television. Topics may include; soap opera, feature film, and television sitcom techniques. May be repeated for credit if content changes. Prerequisite: TH 374.
- TH 481. Kennedy-Center Festival (1-2).** Participation in the annual Kennedy Center American College Theatre Festival and/or the Northwest Drama Conference. May be repeated for credit. Grade will either be S or U. Prerequisite: admission to the theatre arts major or minor.
- TH 487. Theatre Pedagogy (4).** Student will be given individualized instruction in teaching practices and will participate in journal writing, critiquing, counseling, coaching, advising, leading discussion, and grading. TH 487 and TH 587 are equivalent courses; students may not receive credit for both. May be repeated up to 8 credits.
- TH 488. Introduction to Dramaturgy (3).** An introduction to research applied to production including author, world of the play, and the socio-political influences surrounding the text and its time.

**TH 489. Career & Portfolio**

**Preparation** (3). Techniques and practice in preparation of professional portfolio, resumes, and letters of application for employment in the entertainment industry. Prerequisites: admission to the theatre arts major and junior standing or above.

**TH 490. Cooperative Education** (1-12).

An individualized contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. By permission. May be repeated for credit. Grade will either be S or U.

**TH 491. Workshop** (1-6).**TH 492. Practicum in Devising and Touring Theatre** (3-12). Advanced

study in ensemble devised theatre, techniques and practice in the production thereof, and practicum in touring such pieces to fringe festivals, and other alternate and/or educational venues. Permission of instructor. May be repeated up to 12 credits.

Prerequisite: current WSP/FBI fingerprint clearance.

**TH 493. Theatre Laboratory** (1).

Practical experience in all aspects of theatre production to better prepare for career opportunities. May be repeated up to 3 credits.

**TH 494. International Theatre Experience** (1-5). Travel and

participation (as performer or audience) at an international theatrical experience in a variety of topics such as Winnipeg Fringe, Shakespeare in the UK, Japan's Theatre Traditions, Theatre for Social Justice, Prague Quadrennial of Design, or The Theatre of Carnival. Students will apply field research to written analysis and/or presentation during the term of study. OISP fee applies. May be repeated for up to 25 credits as topic changes. Grade will be S or U.

**TH 495. Senior Research Project** (3).

Senior students shall present a research paper in a major area of interest. May be repeated for credit. Prerequisite: admission to the theatre arts major.

**TH 496. Individual Study** (1-6).**TH 497. Honors** (1-12). Prerequisite:

admission to department honors program.

**TH 498. Special Topics** (1-6).**TH 499. Seminar** (1-5). May be repeated if subject is different.**University and Enrichment Courses****UNIV 101. Transition to CWU** (1).

UNIV 101 is designed to foster a successful transition to CWU. This

course will promote a sense of belonging and discovery, stimulate engagement in curricular and co-curricular activities, and connect students to campus resources. Course will be offered every year (Fall, Winter, Spring). Basic Skills 1- Academic Advising Seminar.

**UNIV 102. Strategies for College Success** (2). Students will develop

skills and habits that foster academic success, lifelong learning, and personal growth.

**UNIV 103. Career Exploration** (2).

Designed to assist students in researching and assessing their career goals through classroom coursework and career-related interest and personality inventories.

**UNIV 109. Introduction to Civic Engagement** (2). The student will use

civic engagement to identify and explore career interests and meet community needs. May be repeated for credit.

**UNIV 201. Tutoring Strategies** (1).

Principles of tutoring strategies for effective tutorials. This course, with an additional 25 hours of tutoring, will lead to Level 1 CRLA (College Reading and Learning Association) International Tutor Training Program Certification. Grade will be S or U. Prerequisite: at least 40 college level credits with a minimum GPA of 3.25, or instructor permission.

**UNIV 202. Advanced Tutoring Strategies** (1). Principles of

individualized online instruction for student paraprofessional tutors. Structuring online tutorials, fundamental learning strategies, assessment strategies, communication skills, and integration of content mastery/learning skills. Grade will be S or U. Prerequisite: completion of UNIV 201 with a satisfactory grade.

**UNIV 203. Leadership Tutoring Strategies** (1). Principles of peer

leadership tutoring. This course, with an additional 25 hours of tutoring, will lead to Level 3 CRLA (College Reading and Learning Association) International Tutor Training Program Certification. Prerequisite: UNIV 202 with a minimum grade of B or higher.

**UNIV 205. Introduction to Interdisciplinary Research** (2). An

introduction to the research methods involved in tackling interdisciplinary topics that combine skills and knowledge from the natural and social sciences. Includes data collection and analysis for a group project. Grade will be S or U. Permission by instructor.

Course will be offered every year (Spring).

**UNIV 250. Reading and Writing Enrichment (Put on reserve 9/16/17)**

(3). This class offers sophomores and juniors augmented instruction in reading and writing, building on concepts and skills learned in English 101 and 102. (Put on reserve 9/16/17. Will go inactive 8/24/2020.) Prerequisite: ENG 101 and ENG 102 and sophomore or junior standing, and a GPA of 2.5 or less.

**UNIV 295. Introduction to Undergraduate Research** (2). This

class will prepare students to conduct faculty mentored research and creative expression projects. By permission.

**UNIV 297. Enrichment Course** (1).

Enrichment course on various topics for freshmen and sophomores to broaden their interest areas. May be repeated for credit.

**UNIV 298. Special Topics** (1-6). May be repeated if subject is different.**UNIV 299. Seminar** (1-5). May be repeated if subject is different.**UNIV 301. Career Management** (2).

Identify work suited to interests, personality, goals, and values. Maximize ability to obtain work in chosen field, manage career moves to maintain interest and growth through economic changes and life stages while minimizing economic dislocation.

**UNIV 303. Sustainable Development Matters** (2). This course offers a basic

introduction to sustainable development by exploring the question: why does sustainable development matter in the 21st century. Students will explore this question through coursework and international volunteer experiences. May be repeated up to 6 credits. Permission by department. Course will be offered every year (Spring, Summer). Prerequisite: acceptance in destination-based partner program, GIVE (Growth International Volunteer Excursion).

**UNIV 304. International Sustainable Development** (5). Introduction to the

principles by integrating academic instruction with experiential learning through volunteer excursions. Explore the principles; critically examine the contextual impacts; and utilize opportunities for personal and academic growth through cultural immersion and service. May be repeated up to 20 credits. Permission of department. Course will be offered every year (Fall, Winter, Spring, Summer). Prerequisite: acceptance into destination-based partner program,



GIVE (Growth International Volunteer Excursions).

**UNIV 308. Civic Engagement Theory and Application** (4). Student combines civic engagement theory and diversity sensitivity with real-world situations and major content to design and conduct a community project.

**UNIV 309. Civic Engagement** (2). Student will use program of study content knowledge to improve a community situation. May be repeated up to 12 credits. Grade will either be S or U.

**UNIV 395. University Research** (1-5). Research and practicum experiences in the Office of Undergraduate Research. By permission only. May be repeated up to 10 credits. Grade will be S or U.

**UNIV 396. Individual Study** (1-6). May be repeated if subject is different.

**UNIV 397. Honors** (1-12). Prerequisite: admission to department honors program.

**UNIV 398. Special Topics** (1-6). May be repeated if subject is different.

**UNIV 399. Seminar** (1-5). May be repeated if subject is different.

**UNIV 400. General Education Culminating Experience** (1-12).

Course provides opportunities to integrate, apply, and share knowledge acquired through general education. Projects focus on demonstrating communication, critical and creative thinking, reasoning, information literacy, use of evidence, and professional competencies.

Prerequisite: junior or senior standing.

**UNIV 497. Enrichment Course** (1). An enrichment course on varying topics for upper-division students to explore more deeply issues of academic interest. May be repeated for credit. Grade will either be S or U.

**UNIV 498. Special Topics** (1-6). May be repeated if subject is different.

**UNIV 499. Seminar**. May be repeated if subject is different.

**UNIV 597. Enrichment Course** (1). An enrichment course on varying topics for graduate students to explore more deeply issues in their areas of academic focus. May be repeated for credit. Grade will either be S or U.

### Women's, Gender, and Sexuality Studies Courses

**WGSS 201. Introduction to Women's, Gender, and Sexuality Studies** (5). An interdisciplinary exploration how gender and sexuality impact people's lives both historically and in contemporary society. Gender related issues are examined through social, political, economic, and cultural issues

and processes influencing societies, communities, and individuals. SB-Perspectives on Cultures and Experiences of U.S. (W). Meets the General Education writing requirement. Formerly WGS 201; students may not receive credit for both. Course will be offered every year (Fall, Winter, Spring, Summer). SB-Perspectives on Cultures and Experiences of U.S. (W). K2 - Community, Culture, & Citizenship

**WGSS 250. Introduction to Queer Studies** (5). An interdisciplinary introduction to queer studies, investigating the historical and contemporary reality of those who identify as gay, lesbian, bisexual, transgender, and/or queer. SB-Perspectives on Cultures and Experiences of U.S. (W). Formerly WGS 250; students may not receive credit for both. Course will be offered every year (Winter). SB-Perspectives on Cultures and Experiences of U.S. (W). K6 - Individual & Society

**WGSS 298. Special Topics** (1-6). May be repeated if subject is different.

**WGSS 299. Seminar** (1-5). May be repeated if subject is different.

**WGSS 326. Intersections of Gender, Race, Class, and Sexualities** (5). This course centers on the intersectionality framework. Its primary focus is on the ways gender is embedded in and intersects with race/ethnicity, class, sexuality, age, ability/disability, and other patterns of identities, groups, and institutions. Course will be offered on even numbered years (Spring). SOC 365 and WGSS 326 are equivalent courses; a student may not receive credit for both.

**WGSS 340. Gender and Sexuality in a Global Context** (5). An interdisciplinary exploration of critical perspectives on how peoples and societies around the world understand and experience gender and sexuality. The perspectives in this course range from medical to political, historical, anthropological, sociological, and artistic. Course will be offered on odd numbered years (Spring). K4 - Global Dynamics

**WGSS 351. Feminist Theory** (5). This course is designed to introduce students to feminist theory. Our study begins with the historical foundations of feminist theory, but also examines how transnational, indigenous, and queer feminisms have challenged and complicated those discourses. Course will be offered on even numbered years (Winter). WGSS 351 and PHIL 325 are

equivalent courses; students may not receive credit for both.

**WGSS 384. Language and Gender** (4).

This course is designed to guide students to explore the active and rapidly expanding field of gender studies and language research dealing with how biological and cultural awareness of sexes are reflected in speech. WGSS 384 and ANTH 384 are cross-listed courses; students may not receive credit for both. Formerly WGS 384; students may not receive credit for both.

**WGSS 396. Individual Study** (1-6). May be repeated if subject is different.

**WGSS 397. Honors** (1-12). Prerequisite: admission to department honors program.

**WGSS 398. Special Topics** (1-6). May be repeated if subject is different. Formerly WGS 398; students may not receive credit for both.

**WGSS 399. Seminar** (1-5). May be repeated if subject is different.

**WGSS 488. Capstone Project** (2). This course serves as the culminating experience for the women's and gender studies minor. Students will work with a faculty member on a service learning project, a research paper, or a creative project. Formerly WGS 488; students may not receive credit for both.

**WGSS 489. Women's, Gender, and Sexuality Studies Senior Capstone** (3). The Capstone course provides WGSS majors the opportunity to synthesize and deepen understandings of gender-related issues through reading, writing and discussion. Students participate in a seminar, complete a research project, internship and/or service learning experience. Course will be offered every year (Spring). Prerequisites: WGSS 351 and WGSS 326 or WGSS 340.

**WGSS 490. Cooperative Education** (1-12). An individualized contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. By permission. May be repeated for credit. Grade will either be S or U. Formerly WGS 490; students may not receive credit for both.

**WGSS 491. Workshop** (1-6). Formerly WGS 491; students may not receive credit for both.

**WGSS 496. Individual Study** (1-6).

**WGSS 497. Honors** (1-12). Prerequisite: admission to department honors program.

**WGSS 498. Special Topics** (1-6).

**WGSS 499. Seminar** (1-5).

### Wine Studies Courses

- WINE 201. Wine Service and Food Pairing (4).** This is a project-based course focused on formal wine service techniques, as well as, identification of classic food and wine pairings. Additional topics covered include: stemware, service etiquette and decanting. Students will earn a MAST card (mandatory alcohol servers permit). Formerly GWS/GWT 405, students may only receive credit for one. Prerequisite: WINE 303.
- WINE 202. A Social History of Beer, Wine, and Distilled Spirits (4).** Students study effects alcoholic beverages have had on past and present-day societies. Students learn and debate health, environmental and quality of life issues associated with alcohol consumption. Course will not have an established scheduling pattern. Formerly GWS/GWT 202; students may only receive credit for one.
- WINE 298. Special Topics (1-6).** May be repeated if subject is different.
- WINE 299. Seminar (1-5).** May be repeated if subject is different.
- WINE 301. Wine Distribution Management (4).** This course identifies the many entities involved the in the production, sale and distribution of wine from vineyard to bottle on the shelf, comparing the 3-tier distribution system to the direct to consumer sales route.
- WINE 302. Fundamentals of Viticulture and Enology (4).** Fundamentals of viticulture and enology, techniques and practices, wine styles, and grape varieties. Health issues associated with wine, basics of wine, and food pairing. Course will be offered every year. Course will not have an established scheduling pattern. Formerly GWS/GWT 302; students may only receive credit for one.
- WINE 303. Major Wine Regions of the World (4).** Major wine regions of the world. Identification of major grape varieties and wine styles, label regulations, and legal issues. Viticulture and winemaking regulations, climate, soils, and other factors affecting each region. Course will be offered every year. Course will not have an established scheduling pattern. Formerly GWS/GWT 303; students may only receive credit for one.
- WINE 304. Wine Marketing and Branding (4).** Regulations and legalities, marketing, branding, public relations, consumer behavior, and business planning in the wine industry.

Course will be offered every year. Course will not have an established scheduling pattern. Formerly GWS/GWT 304; students may only receive credit for one.

- WINE 315. Survey of Washington Wines (4).** History and evolution of the Washington State wine industry. Geography of vineyards, wineries and historical sites. Basic wine tasting etiquette is covered. Appropriate for students with no prior wine knowledge.
- WINE 325. Winery Administration and Budgeting (4).** Strategies for managing the financial operations of a winery. Students will explore strategies for analyzing budgets and identifying key performance indicators for successful winery management. Key concepts related to budget forecasting will be heavily emphasized.
- WINE 332. Social Media Theory and Practice (4).** The role of social media in marketing, sales and branding of wine, including theory, practice and ethics of social media advertising. E-commerce, age-verification, liability, and utilizing social media analytics for marketing analysis will be emphasized.
- WINE 353. Tasting Room and Wine Club Management (4).** Best practices for tasting room and wine club management. Students will conduct field work and complete research-based projects. Topics covered include wine club events, point-of-sale systems, customer tracking, order fulfillment, and shipping.
- WINE 396. Individual Study (1-6).** May be repeated if subject is different.
- WINE 397. Honors (1-12).** Prerequisite: admission to department honors program.
- WINE 398. Special Topics (1-6).** May be repeated if subject is different.
- WINE 399. Seminar (1-5).** May be repeated if subject is different.
- WINE 402. Issues in Viticulture and Enology (4).** This course covers advanced techniques in viticulture and enology practices, product quality control and quality assurance, and worker protection. Course will be offered every year. Course will not have an established scheduling pattern. Formerly GWS/GWT 402; students may only receive credit for one. Prerequisite: WINE 302 or permission of instructor.
- WINE 403. Advanced Topics in Wine Marketing and Branding (5).** This course focuses on the practices of wine marketing and branding as it pertains to the global market, including: identification of global marketing trends, import/export channels, market

analysis, public relations, sales, shipping and distribution. Formerly GWS/GWT 403, a student may only receive credit for one. Prerequisite: WINE 304.

- WINE 404. Wine Law and Winery Compliance (4).** History and evolution of American wine law, including current legal compliance regulations for the production, sale, marketing and distribution of alcohol. Overview of the governing bodies that enforce alcohol-related laws is also covered. Formerly GWS/GWT 404, students may only receive credit for one. Prerequisite: WINE 304.
- WINE 406. Professional Wine Analysis (3).** Evaluation and assessment of global wines. Component format for organoleptic properties including appearance, aroma and palate. Must be 21 years of age or older prior to the start of class. Course will be offered every year. Course will not have an established scheduling pattern. Formerly GWS/GWT 406; students may only receive credit for one.
- WINE 407. Beverage Management and Service for the Sommelier (Put on reserve 9/16/18) (4).** Basics of the wine and beverage cellar, menu pricing and creation of a wine and beverage list, sales techniques with a practical beverage industry approach, and service standards pertaining to the beverage industry and sommeliers. Must be 21 years of age or older prior to the start of class. Course will be offered every year. Course will not have an established scheduling pattern. Formerly GWS/GWT 407; students may only receive credit for one. (Put on reserve 9/16/18, will go inactive 8/24/21) Prerequisite: WINE 303.
- WINE 408. Advanced Sensory Analysis (4).** Assessment of viticulture and winemaking techniques in wine, identification of provenance, fraud, age and potential for investment. Must be 21 years of age or older prior to the start of class. Course will be offered every year. Course will not have an established scheduling pattern. Formerly GWS/GWT 408; students may only receive credit for one. Prerequisites: WINE 402 and WINE 406.
- WINE 409. Applied Professional Tasting Analysis (Put on Reserve 9/16/16.) (4).** This course will combine lecture and tasting for wines, beers, spirits, and liqueurs for students who are interested in a career path as sommelier to work in the dining industry. Students will learn proper tasting techniques for each beverage

along with appropriate aging and service for a dining establishment. Must be 21 years of age or older prior to the start of class. Formerly GWS/GWT 409; students may only receive credit for one. Course will be offered every year. Course will not have an established scheduling pattern. (Put on Reserve 9/16/16. Last taught in 2013. Will go inactive 8/24/19.) Prerequisite: WINE 303.

**WINE 410. Wine Faults (3).** Chemical, physical, and biological faults and flaws found in wine from the vineyard, winery, distribution, retail, and consumer. Product recalls and legalities of faulty wines. By permission. Formerly GWS/GWT 410; students may only receive credit for one. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: WINE 402 and WINE 406.

**WINE 412. Advanced Wine Regions (3).** Study of lesser known vineyard areas around the world including unusual grape varietals, regulations, quality designations, and wines made for specific markets. Formerly GWS/GWT 412; students may only receive credit for one. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisite: WINE 303.

**WINE 452. Regional Wine Tourism (4).** Wine tourism is an American growth industry. Unlike in Europe, support for wine tourism in the USA is regional. This course offers an academic and hands-on approach to regional wine tourism that will assist HTE and WINE graduates. WINE 452 and HTE 452 are cross-listed courses, students may not receive credit for both. Formerly GWS/GWT 452; students may only receive credit for one. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisites: nine credits of upper division WINE or HTE courses or permission of instructor.

**WINE 454. Wine Tourism Applications (4).** Applying what they have learned in WINE/HTE 452, students conduct research on sectors of the wine tourism industry in Washington State such as wine trails, wine clubs, regional wine associations and wine festivals. The student conducts hands-on research that may be useful to these sectors. WINE 454 and HTE 454 are cross-listed courses, students may not receive credit for both. Formerly GWS/GWT 454; students may not receive credit for both. Course will be offered every year.

Course will not have an established scheduling pattern. Prerequisite: WINE 452 or HTE 452.

**WINE 490. Cooperative Education (1-12).** An individualized contracted field experience with business, industry or government agencies in the wine industry. A learning agreement is created to identify and plan the directed and supervised study. Must be 21 years of age or older prior to the start of class. May be repeated for credit. Grade will either be S or U. Course will be offered every year. Course will not have an established scheduling pattern. Prerequisite: admission to the wine studies major.

**WINE 491. Workshop (1-6).**

**WINE 492. Field Experience (3).** The student will spend 1 to 3 weeks in a major wine area OUTSIDE the Pacific Northwest USA researching the appellation(s), the wineries, their viticulture, wine production, wine styles and marketing approaches. This course requires a literature review, methodical tastings, interviews with the area's winemakers and marketing staff. Prerequisite: permission of the instructor.

**WINE 496. Individual Study (1-6).** May be repeated if subject is different.  
**WINE 497. Honors (1-12).** Prerequisite: admission to department honors program.

**WINE 498. Special Topics (1-6).**

**WINE 499. Seminar (1-6).**

#### World Languages Courses

**WL 200. World Cultures and Globalization (4).** This course will explore the interaction and interdependence of cultures and identities in a globalized world through examination of various forms of cultural production in a number of global contexts.

**WL 298. Special Topics (1-6).**

**WL 299. Seminar (1-5).** May be repeated if subject is different.

**WL 396. Individual Study (1-6).** May be repeated if subject is different.

**WL 397. Honors (1-12).** Prerequisite: admission to department honors program.

**WL 398. Special Topics (1-6).**

**WL 399. Seminar (1-5).** May be repeated if subject is different.

**WL 401. Introduction to Romance Linguistics (3).** Analysis of the phonology, morphology, and syntax of the romance languages. Credits to be counted toward either French or Spanish major or minor. Prerequisite: two years of a romance language.

**WL 481. Methods and Materials for Language Teaching (4).** Emphasizes the practical concerns of second- and foreign-language instruction. Explores as a group the theory underlying approaches incorporated into personalized teaching styles. Prerequisites: at least two 300-level courses or equivalent in a foreign language.

**WL 482. Second- and Foreign-language Acquisition (On reserve as of 9/16/15) (4).** This course explores second and foreign language acquisition/learning from an applied linguistics perspective. Formerly FNLA 482, students may not receive credit for both. The focus of this course will be on the learner. Put on reserve as of 9/16/15. Will go inactive 8/24/18. Prerequisite: WL 481.

**WL 483. Sociolinguistics (4).** Concepts and methods of sociolinguistic analysis in first and second languages. Will examine differences among cultures in the relationship between language usage and inequality. ANTH 483 and WL 483 are cross-listed courses; students may not receive credit for both. Prerequisites: either ANTH 180, ENG 180, ANTH 381, or WL 481.

**WL 490. Cooperative Education (1-12).** An individualized, contracted field experience with business, industry, government, or social service agencies. This contractual arrangement involves a student learning plan, cooperating employer supervision, and faculty coordination. Department consent. May be repeated for credit. Grade will either be S or U.

**WL 491. Workshop (1-6).**

**WL 496. Individual Study (1-6).**

**WL 497. Honors (1-12).** Prerequisite: admission to department honors program.

**WL 498. Special Topics (1-6).**

**WL 499. Seminar (1-5).** May be repeated if subject is different.

#### World Language Cultures Courses

**WLC 250. Language and Power (5).** This course surveys political uses of language and consequences for society. It covers concepts in cultural politics, identity politics, and sociolinguistics. Students propose plans to use language to make societies more just and sustainable. WLC 250 and POSC 250 are cross-listed courses; a student may not receive credit for both. Course will not have an established scheduling pattern. K5 - Humanities

**WLC 311. Popular Cultures of the World (5).** This online course examines popular culture as a reflection

of ideologies and value systems in different societies and cultural contexts. Course will not have an established scheduling pattern. K4 - Global Dynamics

**WLC 341. Spells of Enchantment: Re-interpreting the Fairy Tale (5).** The course is an introduction to the study of German and French fairy tales in translation, concentrating on the analysis and comparison of the traditional written form with today's cinematographic and technological visual form. Course will be offered on odd numbered years (Spring). K5 - Humanities

**WLC 427. Cross-Cultural Competence in a Globalized World (5).** An overview of key disciplinary approaches to cross-cultural competence in a globalized world and their application in a variety of contexts. Course will not have an established scheduling pattern.

#### **Yearlong Experience in Social Science Courses**

**YESS 101. YESS Social Science Perspectives and Research I (2).** This first course in the sequence is designed to offer students an overview of how the social sciences explore the world and will outline opportunities the social sciences have to offer students. Permission by department. Course will be offered every year (Fall). K6 - Individual & Society

**YESS 102. YESS Social Science Perspectives and Research II (2).** In this second course, students will apply skills learned to investigate the social world, where they will develop a research question and collect data for a supervised student project. Permission by department. Course will be offered every year (Winter). Prerequisite: YESS 101. K6 - Individual & Society

**YESS 103. YESS Social Science Perspectives and Research III (1).** Within this final course, students will apply skills learned in previous courses to investigate their social world. Students will apply these skills to carrying out a research project or service learning project. Permission by department. Course will be offered every year (Spring). Prerequisites: YESS 101 and YESS 102. K6 - Individual & Society