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2023

## Dordt University 2023-24 Catalog

Dordt University. Registrar's Office


UNIVERSITY

2023-24 Catalog

This catalog is published for the faculty and students of Dordt University. We have made every effort to ensure the accuracy of information. However, the university reserves the right to make changes and apply them to registered and accepted students throughout the academic year.

## Undergraduate Academic Calendar

| 2023-24 | $2024-25$ (tentative) | Day | Activity |
| :---: | :---: | :---: | :---: |
| Aug 23-25 | Aug 21.23 | Wed-Fri | International Student Orientation |
| Aug 26-28 | Aug 24-26 | Sat-Mon | Freshman Orientation |
| Aug 28 | Aug 26 | Monday | Transfer/Returning Student Orientation |
| Aug 29 | Aug 27 | Tuesday | Classes begin - 8 a.m. |
| Aug 30 | Aug 28 | Wednesday | Convocation-11 a.m. |
| Oct 5-6 | Oct 3-4 | Thurs-Fri | Reading Days - Heartland Teachers' Conference, no classes |
| Oct 19 | Oct 17 | Thursday | End of first set of half-courses |
| Oct 20 | Oct 19 | Friday | Beginning of second set of half-courses |
| Nov 1-11 | Nov 1-11 |  | Registration for spring semester |
| Nov 22 | Nov 27 | Wednesday | Thanksgiving recess - 8 a.m. |
| Nov 28 | Dec 3 | Tuesday | Classes resume - 8 a.m. |
| Dec 14-19 | Dec 12-17 | Thurs-Tues | Testing |
| Jan 10 | Jan 8 | Wednesday | New/Transfer/Returning Student Orientation |
| Jan 11 | Jan 9 | Thursday | Spring semester begins - 8 a.m. |
| Mar 1 | Feb 28 | Friday | End of first set of half-courses |
| Mar 2 | Mar 1 | Saturday | Spring break - 8 a.m. |
| Mar 13 | Mar 12 | Wednesday | Classes resume - 8 a.m. |
| Mar 13 | Mar 12 | Wednesday | Beginning of second set of half-courses |
|  | April 3-13 |  | Registration for fall semester |
| March 29 | April 18 | Friday | Easter break - 8 a.m. |
| April 2 | April 22 | Tuesday | Classes resume - 8 a.m. |
| April 3-13 |  |  | Registration for fall semester |
| April 25 | May 1 | Thursday | Assessment Day (no classes) |
| May 6 | May 5 | Monday | Review Day - a.m. |
| May 6 | May 5 | Monday | Testing - p.m. |
| May 7-9 | May 6-8 | Tues-Thurs | Testing - a.m. and p.m. |
| May 10 | May 9 | Friday | Commencement - 10 a.m. |
| May 20 | May 19 |  | Undergraduate summer session begins |
| August 16 | August 15 |  | Undergraduate summer session ends |

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## Overview of Dordt University

## Principles and Purposes

Dordt University owes its existence to a community whose faith commitment demands obedience to biblical principles in all of life. This religious commitment, historically known as the Reformed faith, has always been the basis of education at Dordt University.

The Dordt University community confesses that the Scriptures are the Word of God. As God's infallibly and authoritatively inspired revelation, the Bible reveals the way of salvation in Jesus Christ, requires a life of obedience to the Lord, and provides the key to understanding, interpreting, and finding purpose in life.

In various documents, over its half-century of existence, Dordt has articulated its mission as an institution in the Reformed theological tradition, committed to promoting student learning for life-long Christian service. From the early statements of Dordt's founders to the university's current statement of purpose, each has consistently sounded the same theme. That theme is described most concisely in our mission statement, which guides the work of the institutional planning committee:

Dordt University is an institution of higher education committed to the Reformed Christian perspective. Its mission is to equip students, alumni, and the broader community to work effectively toward Christ-centered renewal in all aspects of contemporary life. We carry out our educational task by:

- developing a biblical understanding of creation and culture,
- discerning the pervasive effects of sin throughout our world,
- celebrating and proclaiming the redemptive rule of Christ over all of life and creation,
- nurturing a commitment to challenging the forces that distort God's good creation and all human activity,
- offering academic programs, maintaining institutional practices, and conducting social activities in a visionary, integrated, biblically informed manner,
- and fostering a climate in which discipleship becomes a practiced way of life both on and off campus.

A Kingdom Perspective Scripture and creation reveal to us a sovereign God. Nothing exists without him; all things are under his control and find their goal and purpose in his glory. The creation is God's kingdom. The Bible also tells us that God created humankind in his image. People are covenantally bound to their creator by his law that calls for loving obedience.

After Adam and Eve's fall into sin, humankind, though called to develop and care for God's world, began to treat creation as an object of exploitation. Rather than serving the King, people abandoned themselves and the rest of creation to division and strife, misery, and death. But God came to us with his Word of grace. Through the death and resurrection of Jesus Christ, God has reclaimed what was deformed and distorted by sin. Even though the effect of the fall continues, Christ has rescued creation from the curse of sin and reigns as King over all. He summons those he has redeemed to work for the expression of his kingdom everywhere.

Serviceable Insight Our mandate to be busy in Christ's kingdom requires that we study, examine, and understand his world. Christian educational institutions must work to gain and transmit insights into the created order.

The Christian's understanding of God's handiwork is distorted by centuries of secularization. Dordt University is faced with the challenge of developing genuine Christian insight - an understanding of the creation illumined by the liberating light of the Scriptures.

Christians in a technological and secular civilization need the ability to distinguish sharply, to think critically, and to judge wisely. Dordt University must provide the kind of insight that enables Christians to carry out their tasks effectively in a complicated world.

Such insight is not merely theoretical. While Christian insight reflects an understanding of the structure and workings of God's created order, it includes other dimensions as well: the practical ability to carry out one's task in loving obedience and service and the desire to function effectively as a kingdom citizen.

A Christian Curriculum The curriculum is central to the implementation of the educational task of Dordt University. It functions as a basic means for encouraging student learning and transmitting serviceable insight. Those fields of investigation form the backbone of education at Dordt University. A curriculum of various academic disciplines, such as language, natural science, and social science, make up the foundation of every student's education at Dordt.

Students at Dordt are also required to study history, philosophy, and contemporary issues in order to gain insight into how mankind has responded to God's call to service within his creation. Through this requirement, students are challenged to discern the spirits of the age and to work for genuine reformation in culture and society.

Dordt seeks to provide insight into the nature and demands of the various vocations and professions. Majors and pre-professional programs form another essential part of the curriculum.

Throughout the curriculum, students are helped to develop the analytic, communicative, artistic, and physical skills that are essential for effective Christian service.

Education for the Whole Person The co-curricular aspects of Dordt University also play a vital role in the implementation of the educational task of Dordt University. Therefore, Dordt seeks to provide a wide range of opportunities that develop and enhance serviceable insight.

Dordt University cannot count itself truly successful if its graduates possess knowledge and skill yet lack the desire to carry out their tasks in service and loving obedience. The university works to foster this attitude by promoting social and devotional activities. Such activities are not considered mere additions to the academic task; Dordt University attempts to integrate them into a total pattern of curricular and co-curricular activity, all of which provide students with serviceable insight.

## History

Dordt University began in 1953 as Midwest Christian Junior College. At the time, there was a dearth of qualified Christian school teachers in the area, and the new college sought to fill that void. The college's doors opened in 1955, with 35 enrolled students and five faculty members. The campus was comprised of a new four-classroom building; the property was set on a former mink farm and surrounded by fields of crops.

Once the institution became a four-year college, its name was changed to Dordt College in honor of the Synod of Dordt held in Dordrecht, the Netherlands, in 1618-19, a synod which emphasized the sovereignty of God through his electing grace.

Dordt's first four-year B.A. degrees were awarded to a graduating class of 58 in 1965. The college grew rapidly in the 1960s and 1970s, with enrollment climbing above 1,200. Many faculty members, intending to teach here only a few years, became committed to the college mission and remained for their entire careers.

Although it began as a college for training up Christian school teachers, Dordt has expanded its academic offerings to include programs in agriculture, nursing, engineering, business, social work, criminal justice, construction management, international business, and more.

Over the years, Dordt continued to add and deepen academic and co-curricular programs that, as Dordt's mission says, "equip students, alumni, and the broader community to work effectively toward Christ-centered renewal in all aspects of contemporary life." In doing so, Dordt began to look and act more like a university than a college; the institution prioritized robust scholarship, excellence in teaching, and increased opportunities for students and faculty to collaborate. In addition to a diverse array of traditional undergraduate programs, Dordt's academic offerings began to include online studies, graduate programs, and professional-technical associate degrees. Students came from more than 26 countries to study at Dordt, and alumni lived all over the world. In May 2018, the Board of Trustees and Dr. Erik Hoekstra announced that Dordt would become known as Dordt University. The transition to Dordt University officially took place on May 13, 2019.

## Policy of Nondiscrimination

The commitment of Dordt University to nondiscrimination on the basis of age, color, disability, gender, national or ethnic origin, or race in the administration of its admissions, education, and employment policies is consistent with the requirements of the Age Discrimination in Employment Act of 1967, Title VI of the Civil Rights Act of 1964, Title IX of the 1972 Education Amendments, Section 504 of the Vocational Rehabilitation Act of 1973, and the Iowa Civil Rights Act of 1965. Robert Taylor, Vice President for Student Success and Dean of Students, is the Title IX and Section 504 (Rehabilitation Act of 1973) Coordinator. He may be contacted regarding Title IX and Section 504 inquiries at 712-722-6076 or at robert.taylor@dordt.edu. Information regarding Title IX and Dordt University, along with a Title IX violation reporting form, may be found at www.dordt.edu/report-it.

## Accessibility for Students with Disabilities

Dordt University is committed to offering equal access to people with disabilities. The university has established the position of coordinator of services for students with disabilities (CSSD) in order to assist students with disabilities desiring to enroll at the university. A student with a disability should contact the coordinator approximately six months before the start of the semester of admission or as early as possible to ensure the accessibility of classrooms and housing and the availability of auxiliary aids. The student will be asked to provide appropriate documentation of the disability that is no more than three years old so that the current impact of the disability is addressed. The coordinator uses the documentation to develop an individual plan with each student, implementing necessary services and accommodations. Accommodations may not lower course standards or alter degree requirements but provide students with disabilities an equal opportunity to learn and demonstrate their abilities.

Certain facilities on campus are not fully accessible to people with disabilities, but Dordt University does adhere to the accessibility standards of Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 by ensuring the student's program and learning environment, when viewed in their entirety, are accessible to people with physical disabilities.

## Accreditation

Dordt University is accredited by The Higher Learning Commission (HLC) as a four-year, bachelor degree granting institution. Dordt University is also accredited by HLC to offer graduate programs leading to the master of education degree, the master of social work degree, and the master of public administration degree. Dordt's HLC accreditation dates from 1969, with the most recent renewal in 2023.

The Teacher Preparation Program has been accredited since 1957, and the Administrator Preparation Program since 2011, by the State of Iowa. The programs advisory board, along with graduates and senior students, evaluate the effectiveness of the programs. Both programs have also been accredited since 2013 by the Association of Christian Schools International (ACSI). Approval has also been granted to offer a master of education degree.

The Dordt University social work program has been accredited since 1986 by the Council on Social Work Education.
The Dordt University engineering program received initial accreditation in 1991 by the Engineering Accreditation Commission of ABET, http://www.abet.org, under the General Criteria. This letter back-dated our accreditation to 1989 to allow the graduating class of 1990 to be accredited. The applied science and technology, engineering technology, and engineering science majors have not been examined or accredited by ABET.

The Dordt University nursing major has been accredited since 2007 by the Commission on College Nursing Education (CCNE).
The university is also approved to train veterans under Public Law 550, war orphans under Public Law 634, and is authorized under Federal law to enroll non-immigrant students.

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The Higher Learning Commission
30 North LaSalle Street, Suite }240
Chicago, IL 60602-2504
Ph. (312) 263-0456
(800) 621-7440
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State of Iowa
Board of Educational Examiners Licensure
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Des Moines, IA 50319-0146
Ph. (515) 281-3245
Council on Social Work Education
1725 Duke Street, Suite 500
Alexandria, VA 22314
Ph. (703) 683-8080
Fax (703) 683-8099

## Campus Life

As a Christian institution, Dordt University strives to be a community of faculty and students committed to learning in the light of God's Word. The life of this community is social and academic, and in both areas all members of the Dordt University community seek to glorify God.

In accordance with the Christian aim of Dordt University, students are expected to express the Christian faith positively in their general conduct and lifestyle. It is not the purpose or intention of Dordt University to lay down minute regulations for the daily conduct of its students. By their application for admission and their decision to attend Dordt University, students certify that they intend to live according to the Christian aims and policies of the university. Though admission to Dordt University is the rightful privilege of its constituency, that privilege may be readily withdrawn should the student fail to maintain proper standards of conduct or scholarship.

Students are encouraged to attend church services on Sundays to find life and encouragement through intergenerational worship in the community.

Students are also encouraged to attend chapel, not out of compulsion, but out of recognition of the need for the nourishment and sustenance that God provides. Chapel is held once a week to provide opportunity for students, faculty, and staff to join in hearing God's Word and singing His praises together.

Each school year begins with All Campus Worship to introduce the engagement opportunities for students through Campus Ministries. This is followed throughout the year by small groups, mid-week praise and worship, mission opportunities, prayer, etc. Recognizing the importance of faith formation as part of student life, the university also provides pastoral care for students. Members of the student services staff meet with and help students with questions and problems that may be troubling them. The university seeks to maintain and develop a vibrant spiritual climate on campus in the context of which the work of Christian scholarship may be effectively carried on.

## Student Activities

Student Government Dordt University's Student Government consists of 16 students who represent the student body. Each of these students serves on a university committee and participates in the major decision-making processes of Dordt University. Student Government meets regularly to discuss issues that concern the Dordt University community.

Athletics Dordt University is a member of the National Association of Inter-collegiate Athletics (NAIA) and the Great Plains Athletic Conference (GPAC). As a member of the NAIA, Dordt University teams are eligible for post-season tournament play. Dordt plays a full schedule of games with colleges in Iowa, Nebraska, Minnesota, and South Dakota. Intercollegiate competition for men is scheduled in baseball, basketball, cross country, football, golf, soccer, track, and volleyball. Competition for women is scheduled in basketball, cross country, golf, soccer, softball, track, and volleyball.

Club Sports Students have organized a number of sports clubs that supplement the regular program; some allow for intercollegiate competition. Soccer, hockey, volleyball, men's and women's lacrosse, and wrestling are examples of the types of club sports that have been organized in previous years. Additional clubs may be organized as student interest demands. The club sports program is supervised by the Health and Human Performance Department.

Clubs A number of clubs are organized to provide outlets for students with special interests. Student groups apply for club status and club funding by submitting applications to Student Government. Examples of recent clubs include:

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Actuarial Science Club
Agriculture Club
American Society of Civil Engineers (ASCE)
American Society of Mechanical Engineers (ASME)
A Mission OutReach (AMOR)
Community Outreach Program (COP)
Competitive Gaming Club
Concrete Canoe
Cycling Club
Defender Capital Management Club
D'Arte Club
Disc Golf Club
Future Active Christian Teachers (FACT)
Future Leaders and Missional Entrepreneurs (FLAME)
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Institute of Electronic and Electrical
$\quad$ Engineers (IEEE)
Illusionists
Juggling Club
Lacrosse Club
Magic: The Gathering
Math Club
Mu Kappa Club (Missionary Kid Club)
Nerf Club
Pre-Health Professions Club (PHPC)
Pre-Law Club
Pre-Physical Therapy Club
Pre-Vet Club
Prison Ministries Club
Psychology Club
Putting Love Into Action (PLIA)

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Rugby Club
Round Net Club (Spikeball)
Science and Faith Club
Students Without Borders (Cross-Cultural
    Club)
Sunday Singing Club
Swing Dance Club
Table Tennis Club
Trapshooting Club
Theology Club
University Democrats
University Republicans
Wilderness Club
Women's Ministry
Writing Club
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Intramurals A year-round program of intramural sports gives all students an opportunity to take part in recreational activities. The intramural program is planned and supervised by the student intramural council. Recreation is provided through activities such as badminton, basketball, bowling, floor hockey, golf, racquetball, sand volleyball, soccer, softball, volleyball, and water sports.

Social/Cultural Activities The University schedules a variety of activities throughout the year. Students are encouraged to participate in campus events as an important part of university life.

In addition to previously listed activities, various groups plan a number of social events. Students are encouraged to attend the fine arts festivals, the university-sponsored First Mondays Speaker Series, the annual music festival, the Talent Extravaganza, the Cultural Fair, the All-Campus Block Party, or many of the other school activities organized by student representatives.

Drama Several theatrical productions are performed each year. All Dordt students have the opportunity to audition for the mainstage productions, be involved in student-directed one-acts, or work on senior student productions. Opportunities also include technical aspects of theatre.

Musical Activities Music majors and non-majors participate in a variety of ensemble, community, and church performances, in addition to those provided by Dordt ensembles. Instrumental and vocal ensembles welcome students of all ability levels.

Bella Voce-Membership is open by audition. The women's chorus presents several local concerts each year.

Campus-Community Band-All new students, as well as upperclassmen, may audition for membership in the Campus-Community Band, an organization that studies representative symphonic band literature and performs several local concerts each year.

Chamber Orchestra-The Chamber Orchestra consists of string players who study chamber music literature, perform several local concerts each year, and tour extensively. Membership is by audition.

Chorale-All new students, as well as upperclassmen, may audition for membership in the Chorale, a group that studies representative choral literature and performs several local concerts each year.

Concert Choir-Each year the Concert Choir presents a number of local concerts and tours extensively. Membership in the choir is open by audition.

Ensembles-Various small ensembles are organized each year to perform small ensemble literature. A variety of performance opportunities is available.

4th Avenue Band-Membership is by audition. Unless other arrangements are made, all players must also be members of the Campus-Community Band or Wind Symphony.

Northwest Iowa Symphony Orchestra-Chamber Orchestra members have automatic membership in this large full symphony orchestra; membership is open to wind and percussion students by audition. NISO performs three concerts each year.

Wind Symphony-Members, chosen by audition, study representative symphonic band literature, perform several local concerts each year, and tour extensively.

## Student Publications

The Diamond, the university student newspaper, published on a biweekly basis.
The Canon, the creative literary publication in the arts.

## Student Services

Campus Ministries Each week, a variety of worship venues are offered, including campus-wide chapel every Wednesday and Praise and Worship every Thursday. International and domestic short-term mission projects are offered over Christmas and spring break through programs like AMOR (A Mission OutReach) and PLIA (Putting Love Into Action). Pastoral care and guidance is always available. Plus, numerous opportunities for growth and learning are offered through Bible studies and small groups.

Career Development Center The Career Development Center encourages Dordt students and alumni in vocational and career development by equipping them with the tools necessary to find employment or enroll in graduate school as they work toward Christ-centered renewal. Staff offer critique services as requested for résumés, LinkedIn profiles, cover letters, and graduate school materials. Career coaching, mock interviews, and career exploration appointments are also offered. Career Development also sponsors several events throughout the academic year, such as career fairs and an etiquette dinner. Students can utilize Handshake (dordt.joinhandshake.com) to find job and internship opportunities as well as request appointments with Career Development staff members.

Counseling Counseling services at Dordt University are available for all full-time undergraduate students. Students are provided a limited number of counseling appointments per academic year free of charge. The Dordt University counselors seek to support students who are facing emotional and relational distress by providing quality mental health care from a Christian perspective. The counselors' goal is to help students be successful in life, in their relationships, and in their callings. Dordt's licensed therapists strive to provide services with respect for the unique needs of each client in a safe, confidential environment, seeking to glorify God in all that they do. Appointments can be made by calling the Student Health and Counseling Center at 712-722-6990 or by emailing counseling@dordt.edu. Referral services to off-campus agencies are also available through the counseling staff.

Student Health Student Health provides on-campus health care for all full-time undergraduate Dordt University students. It is available for ill visits, minor injuries, first aid, immunization records, prescriptions for medication refills, medical information, and referrals. A registered nurse is on staff daily to care for students. A nurse practitioner is available for a limited number of hours each week. The office is open Monday through Friday. Students may use walk-in services from 9 a.m.-noon or self-schedule through their online health portal or call the office at 712-722-6990 to schedule an appointment between 12:30-3:00 p.m. Visits are free of charge. A fee is incurred for purchase of medications, immunization clinics, and when the services of an outside laboratory are utilized.

All unmarried students who are not 22 years old by September 1 of the current academic year are required to live in Dordt University housing unless they live at home with a parent or guardian. Students must be 17 years of age by August 1 of the current academic year to be eligible for Dordt University housing. Those students who wish to live with other relatives must receive approval from the Associate Dean of Students and Director of Residence Life prior to making other arrangements for housing. The Student Life Committee may grant exceptions to this general policy where circumstances make it advisable. All requests for exceptions must be presented in writing to the Associate Dean of Students and Director of Residence Life prior to the academic year. Mid-year requests will not be considered unless extenuating circumstances exist.

Rooms for incoming freshmen and transfer students are reserved in advance upon receipt of the $\$ 200$ enrollment deposit that all first-time students must pay. Rooms for returning upperclassmen are reserved in advance upon receipt of a $\$ 150$ housing payment. These payments are non-refundable and non-transferable.

While the university is responsible for housing all unmarried students, such students do have a measure of choice in regard to roommates. However, the university reserves the right to make housing adjustments when necessary. Married students are expected to make their own housing arrangements. Information about available apartments for married students can be obtained from Student Services.

Housing Regulations Rooms are furnished with beds, mattresses, desks, chairs, and dressers. Students provide their own bedding and bath supplies. All residence halls are equipped with network and wireless Internet connections in individual rooms. Computers and telephones are not provided.

All students who apply for a room and pay the housing fee are obligated to residency in university housing while in attendance at Dordt. Room contracts terminate at $8 \mathrm{a} . \mathrm{m}$. on Wednesday, December 20, 2023, at the end of the fall semester and at 1 p.m. on Friday, May 10, 2024, at the end of the spring semester. Students must be out of their residence by that time. Graduating seniors must be out of their residence by 1 p.m. on Saturday, May 11, 2024.

The charges set by the university do not include Christmas and spring vacation periods, when the dining hall and the residence halls are closed. The university encourages students to either go home or to a friend's home during these vacation periods. Students who do not live in or near Sioux Center may make arrangements to pay an extra fee to stay in university housing over break.

Rooms of students in any university owned residence are open for university inspection at any time. The student is held responsible for any damage to his or her room, residence complex, or furnishings. Each residence hall is under the supervision of an area coordinator and resident assistants. Students are responsible to the residence life staff, and they are expected to abide by all universitydetermined housing regulations in addition to those listed in this catalog. For a more complete statement of policies regarding student housing and student conduct, see the student handbook, https://www.dordt.edu/student-life/student-handbook.

Meals All first and second year students and students living in non-apartment-styled residences are required to have a meal plan through the university food service unless exempted by the university. Regular cooking is not permitted in the university residence halls. All students living in apartment-styled residences with cooking facilities are required to have a five meal per week meal plan through the university food service unless exempted by the university. Commuting students wishing to enroll in a meal plan should contact the student services office.

## Admissions Requirements

Dordt University seeks applicants who want to attend a Christian university and who have demonstrated the desire to learn. All students exhibiting these characteristics will be considered for admission. Previous academic experience is a large, but not the only, factor in evaluating applications.

## Regular Admission

Standard Admission Applicants are normally granted regular admission status if their academic record demonstrates the following:

1. A minimum of 17 units of high school credit. A subject pursued for one school year of 36 weeks with five class periods per week is considered one unit. At least 10 units must be from the subjects listed under the recommended high school program. (see page 11).
2. A college-preparatory course of study with:

- English, a minimum of three units
- Mathematics (algebra and/or geometry), a minimum of two units
- Foreign language, two years in a single language with grades no lower than C in the second year. International and English as a Second Language (ESL) students meet this requirement if they receive a passing score on the Entrance Interview.

3. A cumulative high school GPA of 2.25
4. A cumulative GPA of 2.0 for any college course work
5. ACT/SAT/CLT test scores as follows:

| ACT: | English + Reading - 37 | Math - 18 | Composite - 19 |
| :--- | :--- | :--- | :--- |
| SAT: | Evidence Based Reading/Writing - 500 | Math - 500 | Composite - 1010 |
| CLT: | Verbal Reasoning + Grammar/Writing-46 |  |  |
|  | Quantitative Reasoning - 17 |  | Composite - 65 |

Students will be able to improve individual and composite scores by submitting additional scores through the ACT Superscore option. Optional writing tests are not required.

Test Optional Admission Applicants who are enrolled in an accredited public or private high school within the United States or Canada and have a cumulative GPA of 3.2 or higher will be able to apply without a test score. Homeschooled and International students will still be required to submit a test score (ACT, SAT, CLT, and/or TOEFL). Applicants who have a cumulative GPA of 3.19 or lower and no ACT/SAT/CLT score may still apply for admission but will be required to follow the Admission with Special Provision requirements.

Transfer Admission Students who have attended another accredited institution of collegiate rank may be considered for admission with advanced standing. Academic credits presented by transfer students will be evaluated in terms of the quality of the student's work and the relationship of the subject matter to the Dordt curriculum. (See page 38 for transfer credit policies details.)

## Admission with Special Provision

Applicants with incomplete admissions records or applicants with high school records or test scores that do not meet all regular admission standards may be granted admission with special provision and may be included in the Aspire Program. This program includes diagnostic testing, academic counseling, and other services designed to help students adjust to university life. (See page 12 for the Aspire Program). Students who submit missing or improved records may have their admission status changed.

Students admitted who have not had at least two years of high school foreign language in a single language may need to study foreign language at the 100 -level at Dordt - see the Core Program Requirements for the foreign language requirements for specific programs.

Applicants being considered for admission with special provision may be required to write an essay for the Provisional Admissions Committee. Approval for and status of admission is decided by the Provisional Admissions Committee. Other background deficiencies, not specifically listed here, will be handled on a case-by-case basis. Special admission may require the following:

1. A contract approved by the academic enrichment center director that may include developmental courses or workshops.
2. A limit of 15 credits for the first semester of attendance.
3. A minimum GPA requirement for the first two semesters of attendance.

## International Student Admission

In addition to meeting the requirements in the appropriate admissions section of the catalog, international students must display two levels of English proficiency - one for admission and one for course placement in the first semester of study.

Proficiency for Admission This proficiency level can be met in two ways:

1. A standardized English proficiency exam.

- TOEFL (iBT) of 79
- IELTS of 6.5
- DET of 100

2. Documented evidence of English as the primary language of instruction for seven consecutive years, and ACT or SAT scores which demonstrate a mastery of the English language.

Proficiency to Waive English for Academic Purposes Coursework This proficiency level can be met in two ways:

1. High school degree completion from an accredited English speaking Canadian, Irish, British, Australian, New Zealand, or U.S. educational system.
2. A passing entrance interview connected to International Student Orientation.

All non-U.S. and non-Canadian students are required to attend International Student Orientation, which takes place WednesdayFriday, August 23-25, 2023, immediately prior to freshman orientation days. ISO creates an opportunity for international students to experience fellowship, establish friendships, and gain successful entrance to the Dordt University community. U.S. and Canadian citizens living abroad are welcome to attend ISO with prior approval from the global education office. Students attending ISO must participate in every scheduled event.

## Special Student Admission

Students who do not plan to follow a prescribed course of study leading to a degree may register as special students for courses they wish to pursue on the basis of their qualifications. Permission to register as a special student must be obtained from the registrar.

## Recommended High School Program

The courses and programs that students select in high school will affect how well they adjust to college work. Ideally, they should take the following:

English/Language Arts ......................... 4 units
Mathematics.......................................... 3 units
One year of algebra, one year of geometry, one year of advanced algebra or advanced mathematics; four years of mathematics are recommended for students considering majors in mathematics, computer science, engineering, physics, or other science programs.
Science $\qquad$ 3 units
Including biology, chemistry, or physics; nursing and agriculture students should take chemistry; four years of science is recommended for students considering majors in science. Students considering engineering should take both chemistry and physics.
Social Science........................................ 2 units
Foreign Language .................................. 2 units
Three or more years of a single foreign language, with grades no lower than C in the final year of study, may satisfy Dordt's crosscultural requirement, provided that the student can show evidence of an appropriate cross-cultural experience. (See page 24, CrossCultural Studies.)
Electives. $\qquad$ 3 units
College preparatory courses from areas listed above. Students considering majoring in one of the technical programs should complete two years of career and technical education as part of their electives.

## How to Apply

Application for admission should be made well in advance of the semester a student wishes to enter Dordt University. To make a formal application for admission, candidates are requested to go to www.dordt.edu and fill out the online application.

Students will be considered for admission after they have submitted the following official forms:

1. Application for admission.
2. Transcript of high school record.
3. ACT, SAT, or CLT results, unless applying as Test Optional.
4. Transfer candidates must request that the Registrar at each collegiate institution attended forward an official transcript.

Accepted students are to pay a $\$ 200$ enrollment deposit. The enrollment deposit serves as a declaration of intent to enroll and reserves housing. If requested in writing, it is refundable until May 1 . This enrollment deposit becomes the student's security deposit when fully enrolled. This deposit will be refunded when the student terminates attendance at Dordt if no fines have been levied, such as overdue library books, room damage, and no outstanding bills, such as tuition, are due to the university.

Official, final transcripts of all previous academic work (high school and college) are required before students may attend classes at Dordt University. Students new to Dordt University who have not submitted standardized test scores will also be asked to complete the Guided Self-placement described in the Freshman Orientation section (see page 12).

Notification of Admission As soon as the required forms have been received, the Office of Admissions will evaluate them. Admission will be granted as follows:

General Admission- Students whose records indicate that they are able to pursue college work are granted general admission. Admission with Special Provision- Students whose records indicate that they might have serious difficulty pursuing college work or who have not met all admission requirements may be granted special admission. (See page 12 for Aspire Program.)

## Freshman Orientation

The freshman orientation program introduces incoming freshman to the Dordt University community and informs them about everything they need to know to succeed, including information on goal-setting, self-assessment, advising, campus life, learning skills and abilities, institutional expectations, available resources, and building community. As part of orientation activities, the summer before classes, all new incoming students who have not submitted a test score (ACT, SAT, CLT, or TOEFL) must complete an online Guided Self-placement module. This Guided Self-placement will assist in determining the right courses for each student. In addition to Week of Welcome at the beginning of the fall semester, freshman orientation includes peer counseling and targeted academic skills support during the first semester. Freshman students must plan to arrive on campus on Saturday, August 26, 2023, for the freshman orientation program.

## Readmission

Former students who seek readmission must initially contact the Office of Admissions. Students who have been away from college for more than one semester must meet the requirements stated in the current catalog.

## Academic Support Services

Aspire Program The Aspire Program provides an opportunity for motivated students, who have the potential to be successful at Dordt but may benefit from additional support during their first semester of college. Student placement in Aspire can be determined by the Provisional Admissions Committee as a requirement for admission. Other students can be placed in Aspire based on additional placement information received after admission. Placement in Aspire is based on (but not limited to) high school grades, high school class rankings, courses, and ACT/SAT/CLT scores. A personal essay may also be requested and considered in Aspire placement.

Students admitted to the Aspire Program are offered the following aids to academic success:

- a mandatory one-day Aspire Program Orientation immediately preceding the Week of Welcome for incoming freshmen
- automatic enrollment in AEC 100: Essentials for Academic Success
- a maximum of 15 credits in the first semester
- an individualized academic success contract
- weekly conferences with an academic coach, either an Academic Enrichment Center professional or a learning community assistant
- tutorial assistance
- placement in one or more university competency courses for students whose ACT/SAT/CLT scores in English/Reading/ Writing are below 37/500/46 and/or Mathematics are below the 18/500/17 required for general admission

Students with Special Needs Dordt University makes available academic support for students with special learning needs such as sensory impairments, physical and health problems, and learning disabilities. For more information contact the Coordinator of Services for Students with Disabilities (CSSD).

Students who believe that they need academic support should notify the CSSD as soon as possible. Ideally, this should occur during the application process. Accepted applicants will be asked to provide relevant assessment information so that appropriate academic support can be planned. If prior assessment information is not available or is more than three years old, the applicant will be encouraged to have such an assessment done. This type of assessment can usually be obtained in the student's school district, at no cost, if the student is currently enrolled in a K-12 school. Once applicants are moved to student, those seeking accommodations will need to submit the Student Accommodations Request (SAR) form to the Office of the CSSD.

Current students enrolled at Dordt University can request academic accommodations also. They will be asked to provide assessment information that confirms the existence of the special need, such as a learning disability and to submit a completed SAR form to the CSSD. The student will be encouraged to have appropriate assessment performed if assessment information is not available.

## Finances

## Expenses

The cost of attending Dordt University is kept as reasonable as possible. Tuition covers only a part of the cost of education. Each student receives the benefit of finances obtained from individual gifts, church offerings, and denominational ministry shares.

| Tuition | Per Semester | Per Year |
| :--- | ---: | ---: |
| Full time | $\$ 17,680$ | $\$ 35,360$ |
| Part time, per credit ${ }^{*}$ | 1,480 |  |
| Overload fee per credit over 18.5 credits per semester | 510 |  |
| Summer 2023 tuition rate, per credit (1-8) | 390 |  |
| On-line, per credit** | 390 |  |
| Auditing, per credit | 255 |  |
| Visitor, per credit | 50 |  |

*Students taking 8 credits or less may be eligible for a part-time learner grant. Aid for students above 8 credits is to be determined by Financial Aid.
**Normally students are limited to 8 on-line credits; exceptions must be approved by the Director of Online Education.

| Housing and Food Plans | Per Semester | Per Year |
| :--- | ---: | ---: |
| Residence hall room (semi-private) with value meal plan | 5,715 | 11,430 |
| Residence hall room (semi-private) with reduced meal plan | 5,575 | 11,150 |
| Apartmentstyle residence (5 meal plan required) | 3,785 | 7,570 |
| 5 meal plan (required for students in apartmentstyle residences) | 840 | 1,680 |

All housing and food plans at Dordt University include the Defender Dollar flexible spending account that can be used at any on-campus dining location. Residence hall rooms include a $\$ 100$ per semester Defender Dollar account, and apartment-style residences include a $\$ 200$ per semester allocation. Defender Dollars are non-refundable.

| Fees | Per Semester | Per Year |
| :--- | ---: | ---: |
| Student fee ${ }^{*}$ | 300 | 600 |
| ${\text { Enrollment deposit }{ }^{* * *}}^{\text {Housing fee*** }}$ | 200 |  |
| Offccampus program administrative fee | 300 |  |
| Music lessons, individual**** | 420 |  |
| Music lessons, group ${ }^{* * * *}$ | 210 |  |
| Service charge for returned checks |  |  |
| U.S. checks | 30 |  |
| Canadian checks | 40 |  |

*Student Fee Items included: placement, yearbook, technology, transcripts, graduation, access to student health services, athletic events, co-curricular activities, game room, intramurals, movies, music rentals (tux, formals, instruments), student teaching, vehicle registration, recreation complex use, and access to the All-Seasons Center.
**Enrollment Deposit All students who register for full-time, on-campus admission at Dordt must pay an enrollment deposit. This deposit serves as a declaration of intent to enroll and reserves housing. If requested in writing, it is refundable until May 1. This enrollment deposit becomes the student's security deposit when enrolled. The security deposit will be refunded when the student terminates attendance at Dordt University if no fines have been levied, such as parking, overdue library books, room damage, and no outstanding bills, such as tuition, are due to the university.
${ }^{* * *}$ Housing Fee Refer to page 9 for more information on the housing fee.
${ }^{* * * *}$ Music Lessons The following students qualify for individual lessons priced at half the normal fee*:

- music majors who have successfully completed 54 credits and passed Music 203
- music performance minors who have completed four discrete semesters of lessons
*Half fees do not apply to group lessons or piano proficiency lessons.
Payment of Accounts Charges for tuition, housing and food plans, and fees are due and payable the first day classes begin for each semester. A finance charge of .75 percent per month ( 9 percent annual percentage rate, accrued monthly) is charged on all unpaid accounts. A payment plan is offered each semester for the convenience of students and parents wishing to pay their university expenses in installments. For more information, see https://www.dordt.edu/tuition-payment.

Students may not register for a new academic term if their account balance is not paid in full. The university will withhold diplomas, transcripts, and grade reports until accounts are paid in full.

Related Expenses When determining the amount of financial assistance necessary, Dordt University includes the average cost of books, travel, and personal expenses. Depending on the student's grade level and chosen major, the cost of books ranges from $\$ 600$ to $\$ 1,140$ per year. Travel expenses vary from $\$ 500$ to $\$ 2,400$, depending on the number of times the student goes home, the distance of the student's home from the university, and the mode of transportation used. Personal expenses range from $\$ 700$ to $\$ 2,100$, depending on the student's lifestyle.

Part-Time Adult Learner Program Dordt University has established a special financial aid program for the adult learner. To be eligible for the program, students must be 25 years old prior to the first day of classes and classified as a part-time student. This program is not available to persons who have attained a bachelor's degree. The adult learner must not have taken a college course in the last 10 years. The Financial Aid for Part-Time Students/Adult Learner Students Form must be completed.

Students eligible to participate in the Adult Learner Program receive their first course at no cost. Per credit charges for subsequent classes are at the regular part-time student rate with the applicable part-time learner grant if taking eight credits or fewer per semester. Adult learners may also be eligible for state or federal loans and financial aid. Students should consult admissions to determine eligibility for the program and consult the registrar for evaluation of transfer credit.

Student Medical Insurance All international students, except those from Canada, are required to purchase medical insurance through Dordt University. Additional information is available from the global education office.

Withdrawals/Dismissals If a student completely terminates enrollment (i.e., cancels his/her registration, withdraws, or is dismissed) during the semester, the student's refundable charges and financial aid will be prorated if the student has been enrolled for 60 percent of the semester or less. If a student has been enrolled for more than 60 percent of the semester, the student is not eligible for a reduction in charges. This policy is also applicable if a student withdraws from one or more courses in the summer term. The following costs are refundable by the terms of this policy: tuition, room, board, and student activity fee. Credits provided for the Defender Dollar program and all other charges are nonrefundable.

The withdrawal date is the later of (1) the date the student begins the withdrawal process by providing official notification (oral or written) of the intent to withdraw; or (2) the student's last date of attendance at an academically related activity. A student who wishes to withdraw must contact the Office of Student Services to initiate and complete the appropriate paperwork. In the case of a withdrawal, the class will be listed as a "W" on the student's Dordt University transcript.

The percentage of the semester completed is calculated by dividing the number of days enrolled by the number of calendar days in the semester, including weekends and holidays, but excluding breaks of five or more consecutive days. For example, if there are 107 calendar days in a semester and a student's withdrawal date is on the 50th day, the student's refundable charges and financial aid will be prorated to reflect enrollment for 46.7 percent of the semester ( 50 days divided by 107 days). This withdrawal/dismissal policy is based upon federal guidelines.

Recipients of Federal Title IV Financial Aid If the withdrawing student is a recipient of Federal Title IV financial aid, the amount of Title IV assistance the student earned must be compared with the amount disbursed.

The amount of Title IV assistance earned is calculated as follows: Percentage of Title IV financial aid earned (percentage of semester completed) multiplied by the amount of Title IV aid disbursed (or that could have been disbursed) as of the withdrawal date equals amount of Title IV funds earned.

If the withdrawing student received less Title IV financial aid than the amount earned, the university will make a post-withdrawal disbursement as specified by the Department of Education. If the withdrawing student received more Title IV financial aid than the amount earned, the university, or the student, or both, must return the unearned funds, as required, in the following order: Unsubsidized Stafford Loan, Subsidized Stafford Loan, Perkins Loan, PLUS Loan, Pell Grant, SEOG Grant, and LEAP funds.

If the student is required to return federal grant funds, the student will have 45 days from the date of notification to pay the amount in full or to make satisfactory arrangements for repayment with the university or the Department of Education. Failure to repay or make arrangements within this time will result in a loss of eligibility for all federal aid for attendance at any college until amount is paid in full.

When a student withdraws, a copy of worksheets, showing details of the required treatment of Title IV funds, and examples of the application of withdrawal refund/repayment policy are available upon request.

## Financial Aid

In addition to the extensive scholarship program that is based on superior academic potential and performance, Dordt University has a complete program of financial assistance for students demonstrating financial need. Types of financial assistance available include grants, loans, work, and other special programs outlined below.

At Dordt, 98 percent of the student body receives some type of financial aid. Regardless of income, the only way for a student to know if they qualify for financial aid is to apply. All United States citizens who wish to apply for financial aid must submit the Free Application for Federal Student Aid (FAFSA). We also highly encourage completion of the Dordt University Supplemental Data Form. Additional information may be requested from the student during the financial aid process. All Canadian students who wish to apply for financial aid must submit the Dordt University Canadian Financial Aid Form. Student outside the United States or Canada must submit the International Student Financial Aid Form. All necessary forms may be found online on Dordt's website, the Dordt U Financial Aid student portal, or by contacting the Dordt University Financial Aid Office.

Dordt University Grants Dordt University makes grants available to students in the following groups. In most cases, no financial aid application is necessary.

Alumni Grant This grant is available to students attending full time whose mother and/or father are alumni (attended Dordt the equivalent of at least two semesters full time).

Canadian Grant Dordt University provides a grant to Canadian students in an effort to make Dordt more affordable. For all other expenses (books, personal spending, etc.) students may exchange money through the Business Office at the current university exchange rate.

Dordt Grant This grant is provided by the university to all students, regardless of citizenship, who have financial need that cannot be met with other grant programs. Grants range from $\$ 500$ to $\$ 5,000$ per year.

Founders Grant All full-time students who are members of supporting churches and denominations or who are graduates of Christian high schools or are homeschooled receive this annual grant.

International Tuition Grant Students from countries other than the United States and Canada may be eligible to receive this grant from Dordt University to help defray costs. The International Student Financial Aid Application must be completed to determine need and be considered for this grant.

Siblings Grant This grant is awarded to full-time students from families with multiple children enrolled on a full-time basis at Dordt University in a given academic year.

## Federal/State Grants

Federal Pell Grant The Federal Pell Grant Program makes funds available to students who display exceptional financial need. Grants range from $\$ 767$ to $\$ 7,395$. Application is made by completing the FAFSA. Program is available to United States citizens.

Federal Supplemental Educational Opportunity Grant The purpose of this program is to provide non-repayable grants to students who would not be able to attend college without such assistance because of exceptional financial need on the part of their family. Grants range from $\$ 500$ to $\$ 1,000$ per year. This program is available to United States citizens.

Iowa Tuition Grant The Iowa Legislature has established a state tuition grant program for the benefit of Iowa residents attending private colleges within the state. These grants are based on financial need and may be used only for educational expenses. (Application is made by filing the FAFSA prior to June 30 of the upcoming academic year.)

Century Need-Based Scholarship This aid is a combination grant/scholarship program. Two criteria must be met: good grades and financial need. This scholarship ranges from $\$ 500$ to $\$ 2,000$. Because of limited funds under this program, the money will be disbursed very selectively. Not every good student with high need will receive these funds.

## Loans

Heritage 21 Loan This loan is provided by the university to full-time students from the United States and Canada who exhibit financial need. No interest is charged while the student is enrolled as a full-time student at Dordt University or at another recognized college or university. Interest and principal payments will begin four months after the last month of attendance at Dordt or at another recognized college or university, with a maximum deferment of five years allowed for attendance at another institution. Interest rates on funds borrowed will be determined by the number of years of study completed at Dordt or completion of a Dordt University bachelor's degree. Loans to students who have completed the requirements for a bachelor's degree from Dordt University will accrue interest at a rate of three percent annually. Loans to students completing three years of study at Dordt will accrue interest at four percent annually; loans to students completing two years of study will accrue interest at five percent annually; and loans to students completing less than 2 years of study will accrue interest at a seven percent annual rate. All loans must be repaid within 10 years from the time of the last month of attendance as described above. Minimum payments will be $\$ 50$ per month and will be payable to the Business Office at Dordt University.

Federal Direct Stafford Loan (Subsidized) Allows students who demonstrate federal financial need and who are enrolled for at least six credits each term to borrow up to $\$ 3,500$ for the first year of undergraduate study, $\$ 4,500$ for the second year, and $\$ 5,500$ per year for subsequent undergraduate study. Interest rates are determined on July 1 for the upcoming school year. An origination fee will be deducted from the loan amount before the funds are applied to a student's account. Repayment does not begin on subsidized Direct Loans until termination of college enrollment on at least a half-time basis. Interest accrued during the in-school period is paid by the federal government. The standard repayment period is up to 10 years. New borrowers must complete a Federal Direct Loan electronic master promissory note and complete an online Entrance Counseling Session to borrow funds through this program.

Federal Direct Stafford Loan (Unsubsidized) Allows all students regardless of federal financial need and who are enrolled for at least six credits per term to borrow up to $\$ 5,500$ for the first year of undergraduate study, $\$ 6,500$ for the second year, and $\$ 7,500$ per year for subsequent undergraduate study less the amount of any subsidized Direct Loan received by the student. New borrowers must complete a Federal Direct Loan electronic master promissory note to borrow funds through this program. Interest rates are determined on July 1 for the upcoming school year. An origination fee will be deducted from the loan amount before the funds are applied to a student's account. Interest accrual begins immediately during in-school and deferment periods. Interest accruing during these periods may be paid or capitalized. Independent students may borrow up to an additional $\$ 4,000$ per year for the first and second years of undergraduate study and up to an additional $\$ 5,000$ per year for subsequent undergraduate study through the unsubsidized Direct Loan Program. Dependent students may borrow up to the same additional amounts through this program but only if the student's parent is denied eligibility to borrow funds through the Federal PLUS Loan Program.

Federal Direct PLUS Loan Allows parents of dependent students to apply for as much as the difference between the cost of attendance and the student's financial aid. This loan is not need based, but the parent's credit history may be reviewed to determine eligibility. Interest rates are determined on July 1 for the upcoming school year. An origination fee will be deducted from the loan amount before the funds are applied to a student's account. The PLUS loan should be used only after all other resources have been
considered because interest begins 60 days after the first disbursement. Repayment normally begins 60 days after disbursement of the full amount borrowed for an academic year.

Private/Alternative Loans Students who find that they still need additional financial aid after other aid has been applied, or students whose families do not demonstrate need, may find an alternative loan a viable option. Many private loans are available with varying terms and conditions. Most require proof of creditworthiness. You may wish to contact your local lender to see if they participate in a private or alternative loan program.

Canada Student Loan The provincial governments have loan programs that may be used by Dordt students. Information and application forms may be secured through your high school or local bank or by writing to your home province Department of Education. Contact information as follows:
ALBERTA
Alberta Student Aid
7th Floor, 9940106 St
Edmonton, Alberta T5K 2V1
Telephone: 1-855-606-2096
studentaid.alberta.ca/
BRITISH COLUMBIA
StudentAid BC
PO Box 9173
Stn Prov Gov't
Victoria, British Columbia V8W 9H7
Telephone: 1-800-561-1818
studentaidbc.ca/
MANITOBA
Manitoba Student Aid
401-1181 Portage Ave
Winnipeg, Manitoba R3G 0T3
Telephone: 204-945-6321 or 1-800-204-1685
Fax: 204-948-3421
Email: webinfo@gov.mb.ca
edu.gov.mb.ca/
NEWFOUNDLAND
Dept. of Education
PO Box 8700
St. John's, Newfoundland A1B 4J6
Telephone: 709-729-5849 or 1-888-657-0800
Fax: 709-729-2298
Email: studentaidinquiry@gov.nl.ca
aesl.gov.nl.ca/studentaid
NOVA SCOTIA
Student Assistance Office
PO Box 2290, Halifax Central
Halifax, Nova Scotia B3J 3C8
Telephone: 902-424-8420 or 1-800-565-8420
Fax: 902-424-0540
Email: stuasst@gov.ns.ca
novascotia.ca/studentassistance
ONTARIO
Ontario Student Assistance Branch
Ministry of Training, Colleges \& Universities
PO Box 4500
189 Red River Road, 4th Floor
Thunder Bay, Ontario P7B 6G9

Telephone: 807-343-7260 or 1-877-672-7411
Fax: 807-343-7278
osap.gov.on.ca
PRINCE EDWARD ISLAND
Student Financial Services
176 Great George St
PO Box 2000
2nd Floor, Atlantic Technology Centre
Charlottetown, Prince Edward Island C1A 7N8
Telephone: 902-368-4640
Email: studentloans@gov.pe.ca
studentloan.pe.ca/
SASKATCHEWAN
Student Service Centre
Ministry of Advanced Education
1120-2010 12th Ave
Regina, Saskatchewan S4P 0M3
Telephone: 306-787-1608 or 1-800-597-8278
Fax: 306-787-1608
Email: studentservices@gov.sk.ca
saskatchewan.ca/

## Student Employment

Work-Study Program Dordt University participates in the Federal Work-Study Program that creates part-time job opportunities for students with financial need. Students qualify for participation in the Work-Study Program if they are: 1) United States citizens; 2) able to meet job qualifications; 3) in need of financial aid; 4) capable of doing good academic work in college; and 5) accepted for admission as full-time students in good academic standing. Students with required skills and experiences may qualify for jobs in the following fields: clerical assistant; library assistant; custodial work; instructional assistant; dining hall assistant; agricultural help; and other miscellaneous campus positions.

Work for Institution Program On-campus employment is also available for students that do not qualify for the federal WorkStudy Program but have need for employment to assist with paying for college expenses.

## Special Programs

Veterans' Education Benefits Dordt University is approved to offer education to students who are eligible for benefits under the terms of the Veterans' Post 9/11 GI Bill. Eligible students should write to their regional Veterans' Administration Office to obtain the application information. Dordt University also participates in the Yellow Ribbon Program.

For students utilizing the GI Bill, Dordt University will not impose any penalty including: 1) the assessment of late fees; 2) the denial of access to classes, libraries or other institutional facilities and /or 3) the requirements that a Chapter 31 or Chapter 33 recipient borrow additional funds to cover the individual's inability to meet his or her financial obligations to the institution due to the delayed disbursement of a payment by the U.S. Department of Veterans Affairs.

Vocational Rehabilitation Benefits Students who, by reason of physical disabilities, are eligible for benefits under vocational rehabilitation programs should write to the Division of Rehabilitation Education and Service in their state.

Scholarship and Loan Programs-Other States Several states have scholarships or loan programs that may be used at Dordt University. Information on such programs may be obtained from high school counselors.

## Eligibility for Financial Aid

All freshmen and transfer students who are admitted to Dordt University in good academic standing are eligible for financial aid. Continued eligibility for financial aid is dependent on good academic standing and satisfactory progress toward graduation. Eligibility is monitored at the end of each semester. If either good academic standing or satisfactory progress toward graduation is not attained, a student may be limited to one more semester of financial aid. However, a student who receives less than a 1.00 GPA in any given semester is subject to suspension.

Likewise, students who are admitted on academic probation, including students readmitted after a period of academic suspension, will be limited to one semester of financial aid. Students so limited may receive additional semesters of financial aid if they make satisfactory progress toward graduation and meet a minimum semester GPA specified by the financial aid office.

Academic Standing A student is expected to maintain a minimum cumulative GPA of 2.00 to graduate. Students needing extra assistance in the form of individual tutors, study skills, time management, etc. should contact the staff of the Academic Enrichment Center, located in the lower level of the library. Students will be notified when they are not meeting the graduation minimum and will be expected to seek the necessary assistance. For a description of the various academic standings shown below, see the Academic Policies section of the catalog (page 33). Academic standing is determined by the following:

|  | Academic Alert | Academic Probation | Academic Suspension |
| :--- | :---: | :---: | :---: |
| Total Credits Earned | Cumulative GPA is below | Cumulative GPA is below | Cumulative GPA is below |
| 0 to 24 | 2.00 | 1.60 | 1.00 |
| 24 to 54 | 2.00 | 1.80 | 1.40 |
| 54 to 84 | - | 2.00 | 1.60 |
| 84 or more | - | 2.00 | 1.80 |

Satisfactory Academic Progress Federal regulations require that students maintain satisfactory progress in order to continue to receive financial aid. Dordt University also requires satisfactory progress for most institutionally controlled financial aid. Poor grades can impinge on a student's financial resources.

Satisfactory progress toward graduation is defined in terms of successfully completing 66.7 percent of the credits for which a student is enrolled in a given semester. The minimum percentage of successful completion is calculated by dividing the number of successfully completed hours (i.e., those with a grade of $\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}$, or P ) by the sum of cumulative hours enrolled (including those courses with W or F grades and late grades) and multiplying that number by 100.

A student's financial aid will be terminated if they have reached 150 percent of the number of credits necessary to complete their degree. This regulation applies to all students. For example, a student working toward their Bachelor's degree at Dordt University is required to complete 124 credits to graduate. Once the student has attempted 186 credits ( 124 credits $\times 150$ percent) they will no longer be eligible for financial aid.

The 150 percent rule also applies to students who transfer in credits from another institution. Progress will be monitored from the point he or she begins at Dordt. For example, if a student were to transfer to Dordt with 40 credits, they would need an additional 84 credits to receive their degree. They would be eligible to receive financial aid for up to 126 credits ( $84 \times 150$ percent). Beyond this point the student would be responsible to make other arrangements to pay their tuition and fees.

If a student loses financial aid eligibility due to consecutive semesters of not making satisfactory progress, the financial aid office will notify the student in writing of the specific procedures and minimum requirements necessary for reinstatement of his or her financial aid for the next semester. In some instances a student (if allowed to remain in school by the academic standing committee) will receive no financial aid for a semester until grades can prove that once again the student is making satisfactory academic progress. There may also be a situation where a student is in good academic standing or on academic probation, but will not meet the criteria for financial aid (i.e., a student who received three A's and two F's will not meet the 66.7 percent completion requirement even with a cumulative GPA of 2.40 and being considered in good academic standing).

Students may appeal the loss of financial aid to the director of financial aid when there are special circumstances such as illness or death in the family. The director may grant the appeal after consultation with at least two other staff members from the admissions, student services, or academic offices. Students should be aware that only truly extraordinary circumstances will be considered. Appeal requests must be in writing and must include a statement from a member of the admissions, student services, or academic affairs office, or a faculty advisor. The written appeal documents will be kept in the student's financial aid file. Should an appeal be granted, the student will be allowed to continue with financial aid for the semester but will remain in a probation category. There may be instances where the school requires that, before an appeal may be granted, the school and the student together develop an academic plan which ensures that the student will be making satisfactory academic progress prior to graduation.

## Scholarships

Dordt University provides scholarship programs to encourage and recognize students for merit based abilities and talents. Donorfunded endowed and annually funded scholarships are also available and growing in number every year. These scholarships financially support students who have specific career goals, are involved in leadership roles, are from specific geographical areas, or have significant financial need. Scholarships are awarded to full-time students only. One half of the scholarship funds are applied to the recipients' tuition account each semester.

## Dordt University Scholarships

Dordt University Trustees, Presidential, Honors, and Collegiate Scholarships Dordt University Trustees, Presidential, Honors, and Collegiate Scholarships are academic scholarships awarded on the basis of a student's cumulative GPA and ACT/SAT composite scores. There is no application process for these scholarships. Eligibility requirements are a minimum 2.80 cumulative GPA. Dollar amounts range from $\$ 6,000$ to $\$ 15,000$ and will be named Trustees Scholarships, Presidential Scholarships, Honors Scholarships, or Collegiate Scholarships, based on the dollar amount awarded.

Students who received Trustees, Presidential, or Honors Scholarships as incoming freshmen will have their scholarship automatically renewed if they maintain a cumulative 2.80 GPA in their Dordt University courses after their first year. Students with sophomore or junior status that received a Trustees, Presidential, or Honors Scholarship must maintain a cumulative GPA of 3.0 at the end of the academic year to have their scholarship renewed.

Students who received a Collegiate Scholarship as an incoming freshman will have their scholarship automatically renewed if they maintain a cumulative 2.50 GPA in their Dordt University courses. This 2.50 cumulative GPA must be maintained for their sophomore and junior years to continue to receive the Collegiate Scholarship.

Students who lose a Trustees, Presidential, Honors, or Collegiate Scholarship because they were not able to maintain the minimum GPA requirement may have their scholarship reinstated at the end of any following academic year, upon regaining the required GPA. Students who did not meet the minimum GPA or ACT/SAT requirements for a scholarship when they enrolled at Dordt University will be eligible for a first-time scholarship at the end of any academic year, provided they have a Dordt University minimum cumulative 3.00 GPA.

Academic Bridge Scholarships Academic Bridge Scholarships fill in the gap when students lose their Dordt University Trustees, Presidential, Honors, or Collegiate Scholarships due to their GPA falling below the required minimum. Students will receive half of their original academic scholarship amount. At the end of each academic year, students' cumulative GPAs will be reviewed and if they go above the minimum requirements for the Presidential, Honors, or Collegiate Scholarships, the original award will be reinstated.

Distinguished Scholar Awards Distinguished Scholar Awards are the most prestigious scholarships offered by Dordt University with ten students selected each year to receive this honor. These $\$ 4,500$ scholarships are in addition to the Trustees Scholarship that the student has earned and are renewable for an additional three consecutive years provided the recipient maintains a minimum 3.50 cumulative GPA. Students with a 3.75 cumulative GPA and a 32 ACT (or 1420 SAT) composite score will be invited to a Distinguished Scholar Day on campus during which a variety of activities related to academic interests will be presented. Written responses to two essay questions along with an interview will be part of the selection process for this award.

Kuyper Honors Scholarships Dordt University Kuyper Honors Scholars are automatically awarded a $\$ 2,500$ scholarship. Acceptance into the Kuyper Honors Program requires a 3.50 cumulative GPA, a 28 ACT (or 1300 SAT) composite score, a completed application form with an entrance essay, and letters of recommendation. Kuyper Honors Scholarships are renewed if recipients maintain a 3.25 cumulative GPA and successfully participate in the Kuyper Honors Program as defined by the program advisors.

Dordt University Athletic Scholarships Athletic scholarships for various sports are available to students who contributed significantly to a high school athletic program and intend to actively participate in a Dordt University Athletic Program. Athletes can be awarded $\$ 1,000$ to $\$ 14,000$. Students interested in athletic scholarships should contact a sports coach through the Athletic Department. Athletic scholarships are renewable provided the student maintains the minimum cumulative GPA required by the NAIA and continues to successfully contribute to the athletic program as determined by the Athletic Department coaches.

Dordt University Music Scholarships Music scholarships of $\$ 1,000$ to $\$ 6,500$ are available for students who have contributed significantly to their high school or community music programs and intend to actively participate in one or more of the following Dordt University music areas: vocal, instrumental, or keyboard. Applicants need not be music majors; however, they must submit an application form and a music instructor's recommendation. Applicants must also audition in their chosen music area(s), following the criteria listed on the Music Scholarship Application. The audition can be accomplished in one of three ways: attending the annual on-campus Music Audition Day; scheduling an appointment with the admissions office to audition in person on a Dordt University Campus Visit Day; or by submitting a video recorded audition. Music scholarships are renewable provided the recipient maintains a minimum 2.00 cumulative GPA and successfully contributes to the music program as determined by the Music Department directors.

Dordt University Theatre Arts Scholarships Theatre arts scholarships of $\$ 1,000$ to $\$ 4,000$ are available for students who have contributed significantly to their high school or community theatre arts programs and intend to actively participate in the Dordt University Theatre Arts program through acting and/or technical work. Applicants must submit an application form, audition materials, and a recommendation letter from a person familiar with their talents and skills in theatre arts. Scholarships are available for theatre majors, minors, and non-majors and are renewable provided the recipient maintains a minimum cumulative GPA of 2.00 and completes the theatre scholarship requirements. Requirements include taking one theatre course each year and completing required hours in two of the following areas: backstage crew, acting, costume crew, makeup crew, box office crew, and set construction or design.

Dordt University Journalism Scholarships Journalism scholarships of $\$ 1,000$ to $\$ 3,000$ are available for students who contributed significantly to the publication of their high school newspaper or to any other publication project. Recipients need not be communication majors; however, they will be asked to enroll in Communication 241, Introduction to Journalism, in the fall of their first semester at Dordt. An application form and a recommendation from a person who can attest to the applicant's abilities in the area of journalism are required. Recipients are expected to participate in the publication of The Diamond, a biweekly university student newspaper. These scholarships are renewable provided the recipient maintains a 2.00 cumulative GPA and is an active staff member of the The Diamond, as determined by the newspaper's faculty advisors.

Dordt University Forensics Scholarships Forensics Scholarships of $\$ 1,000$ to $\$ 3,000$ are available for students who have exhibited proficiency in the area of formal and/or competitive speech or debate. The scholarships are awarded on a basis of merit proved through accomplishments in high school, but do not require participation on a high school team. An application form and a recommendation from a person who can attest to the applicants abilities in these areas are required. These scholarships are renewable provided the recipient maintains a cumulative 2.00 GPA and is an active participant on the forensics team, as determined by the Director of Forensics in consultation with the other coaches.

Dordt University Worship Arts Scholarship Worship Arts Ensemble Scholarships of \$1,000 to \$2,000 are available for students who have contributed significantly to their high school or church worship teams and intend to actively participate as vocalist and/or instrumentalist in a Dordt worship ensemble. Applicants must submit an application form, audition video, and a recommendation letter from a person familiar with their talents and skills in worship arts. Scholarships are available for worship arts majors, minors, and non-majors. Worship Arts Ensemble scholarships are renewable for an additional three consecutive years provided the recipient maintains a cumulative 2.00 GPA and completes the scholarship requirements. Requirements include taking one worship arts course each year and participating in a worship arts ensemble each year.

Dordt Media Network Broadcast Remote Production Scholarships Broadcast Remote Production scholarships of \$1,500$\$ 2,000$ are available for students who have an interest in learning and/or improving the skills of multi-camera live stream broadcast remote production. Applicants must intend to major or minor in Communications and submit an application, reference letter, and any videos that may represent their work and ability. Requirements include being able to work a minimum of ten hours a week, being available to work some nights and weekends, attend mandatory training sessions, and other duties as listed on the application form. Broadcast Remote scholarships are renewable for an additional three consecutive years provided the recipient maintains a cumulative 2.0 GPA and continues to complete the requirements of the scholarship.

Dordt Media Network Video Production Scholarships Video Production scholarships of \$1,500-\$2,000 are available for students who would like to contribute to the video production of various campus activities. Applicants must intend to major or
minor in Communications and submit an application, reference letter, and any videos that may represent their work and ability. Requirements include taking Introduction to Film Studies during their freshman year, being able to work a minimum of 105 hours per semester, being available to work some nights and weekends, and other duties as listed on the application form. Video Production scholarships are renewable for an additional three consecutive years provided the recipient maintains a cumulative 2.0 GPA and continues to complete the requirements of the scholarship.

Transfer Student Scholarships Admitted transfer students are eligible for the following scholarships as previously described for incoming freshman students.

- Dordt University Trustees, Presidential, Honors, and Collegiate Scholarships
- Kuyper Honors Scholarships
- Dordt University Athletic Scholarships
- Dordt University Music Scholarships
- Dordt University Theatre Arts Scholarships
- Dordt University Journalism Scholarships
- Dordt University Forensics Scholarships
- Dordt University Worship Arts Scholarships
- Dordt University Media Network Broadcast Remote Production Scholarships
- Dordt University Media Network Video Production Scholarships


## Dordt University Donor-Funded Endowed and Annual Scholarships

Individual donors, corporations, or foundations with an interest in supporting Dordt University have established over 650 scholarship programs. These scholarships are a vital part of making Dordt University an affordable Christian higher education institution for incoming freshmen as well as continuing students. Donor-funded scholarships vary in dollar amounts and in recipient selection criteria. Typically, the application process includes an application form and recommendation, and a scholarship committee that selects the recipients. Sometimes the donors request simply that the Office of Financial Aid and the Office of Scholarships select the most worthy recipient.

Scholarship descriptions and application instructions can be found online at www.dordt.edu/admissions-aid/financial-aid/scholarships.

## The Academic Program

Dordt University offers a wide variety of programs and majors for students wishing to earn a bachelor's degree. Dordt University also awards associate of arts degrees. These two-year programs offer a wide range of educational options through professionally and occupationally designed programs, or through a flexibly designed two-year sequence of relevant courses and educational experiences. Master's degrees are available in education, public administration, and social work.

## Advising

An academic advisor is assigned to each student. Because of the variety of educational opportunities available at Dordt University and alternative ways of achieving graduation requirements, students must confer with their advisor regularly to plan their academic program. The Academic Coordinator for International and Minority Students will make contact with international, ESL, and minority students so that these students can benefit from ongoing advising concerning their academic progress and so that the Dordt community can benefit from these students' unique experiences and insights. Career planning assistance from qualified personnel is available to help students select courses that will prepare them for service, vocations, or further schooling.

## Core Program

The Core Program is required of all Dordt students. Its central purpose is to prepare students for faithful Christian discipleship in the areas and responsibilities of life that are common across academic majors and vocations.

The Core Program articulates and helps students develop a broad, firmly-rooted Christian perspective on life and learning; it helps develop an understanding of who humans are and how people are called to live in relationships and in a particular historical context; and it equips students with knowledge, competencies, critical thinking, and connections needed for both their specialized programs and for life-long learning and service to God's kingdom in the contemporary world.

## Associate's Degrees

Degree Types Associate's degree recipients will earn one of the following degrees:

## Associate of Arts (A.A.)

Associate of Science (A.S.)
Graduation Requirements The formal requirements for graduation with an associate's degree are:

1. A minimum of 60 credits. In meeting this requirement, A.A. students must take Core Program requirements, complete requirements for an area of concentration, and may also take elective courses. A.S. students must take Core Program requirements and complete the Agriculture Technology or Engineering Technology program.
2. A minimum GPA of 2.00 ( 4.00 scale) in courses taken at Dordt University.
3. A minimum of 30 credits earned at Dordt University. A student may not receive both the associates and bachelors degrees at the same commencement. However, credits earned in obtaining the associate's degree may be applied toward the bachelors degree at any time.
4. Participation in the freshman orientation and student assessment programs.

Core Program Requirements for Associate's Degrees (24.5-33.5 credits) Students will.....

1. Complete foreign language competency.

Foreign Language Competency ( $0-4$ credits)

- Completion of one year of a single foreign language in high school with a grade no lower than a C ( 0 credits)
- Completion of Foreign Language 101 (4 credits)

2. Exhibit a joyful commitment to hearing and doing the Word of God, resulting in serving the lordship of Christ in all areas of their lives.

Kingdom, Identity, and Calling: CORE 100 (1.5 credits)
3. Develop, articulate, and apply a mature and self-conscious Reformed Biblical perspective in their studies, while recognizing its distinctiveness compared with other perspectives.

Biblical Foundations: CORE 150 (3 credits)
4. Practice and demonstrate rigorous critical thinking, quantitative, writing and reading, and communication skills and other competencies that are basic to continued learning across the curriculum.

Mathematics Course: Mathematics 100, 108, 115, 149 or Statistics 131 (3-4 credits)
Writing Course: English 100, 105* or CORE 120 (3-4 credits)*
Communication Course: Communication 105 or CORE 110 (3 credits)
*Students with a score below 18 on the English portion of the ACT will be required to enroll in an additional one credit tutorial session (105L).
5. Demonstrate deepening insight into both Western culture and contemporary global development, and the spirits that drive them, including critically assessing these and practicing creative solutions and alternatives to their problems from a Biblical perspective.

Two courses from CORE 140, 145, 160, 180, 200 (6 credits)
6. Demonstrate deepening insight into and practical response to the God-given structural inter-dependence of humans with each other and with the broader creation and to our role as stewards and agents of shalom in creation.

Two elective courses from CORE Science, CORE 25X, CORE 26X, CORE 27X (5-8 credits)
Associate of Arts Area of Concentration (6-12 courses) Each A.A. student must choose an approved area of concentration. Course sequences for the various areas of concentration may be found as follows:

Agriculture (see page 40)
Business (see page 54)
Computer Networking (see page 69)
General Studies (see page 115)
Paraeducator Certification Options (see page 93)

Associate of Science Major (19-20 courses) Each A.S. student must complete the Agriculture Technology (see page 40) or Engineering Technology program (see page 106).

## Bachelor's Degrees

Degree Types Bachelor's degree recipients will earn one of the following degrees:

## Bachelor of Arts <br> Bachelor of Science <br> Bachelor of Science in Engineering

Bachelor of Science in Nursing
Bachelor of Social Work

Graduation Requirements The formal requirements for graduation with a bachelor's degree are the following:

1. A minimum GPA of 2.00 ( 4.00 scale) in courses taken at Dordt University.
2. A minimum of 124 credits. In meeting this requirement, students must fulfill the Core Program requirements, complete a major, and in many cases, take elective or professional courses.
3. Eight semesters of full-time study or its equivalent. (See page 37, Residence Requirement.)
4. Participation in freshman orientation and the freshman, junior, and senior assessment program.

Core Program Requirements for Bachelor's Degrees (40-60.5 credits) For all students pursuing a bachelor's degree, the Core Program consists of pre-disciplinary foundational studies, contextual and interdisciplinary studies, and post-disciplinary integrative studies. Typically, students will begin pre-disciplinary coursework their freshman year and most will complete it by the end of their sophomore year. Beginning with their sophomore year, students will move on to contextual and interdisciplinary coursework and then finish their academic careers with the post-disciplinary integrative coursework.

## 1. Pre-disciplinary Foundational (13.5-28.5 credits)

Academic Competencies (3-18 credits) All academic competencies must be satisfied by the end of the freshman year unless otherwise noted. Options for satisfying the academic competency requirements depend on a student's academic background and include the following:

- strong high school preparation (demonstrated by high school record)
- ACT scores
- pre-testing
- completing a college-level course that meets the goals of each requirement

Mathematics Competency ( $0-4$ credits)

- A score of 22 or higher on the mathematics portion of the ACT (0 credits)
- Students with a score of $18-21$ on the mathematics portion of the ACT will be required to complete a math course numbered 101-119. This course must be completed prior to taking the quantitative reasoning course. ( 3 credits)
- Students with a score below 18 on the mathematics portion of the ACT will be required to successfully complete Mathematics 100-Mathematics for College during their first year of study and prior to taking the quantitative reasoning course. (4 credits) English Competency* (3-4 credits)
- A score of 24 or higher on the English portion of the ACT and completion of a writing-intensive college course (English 220, 305, 306, English 301/Communication 301, English 302/Communication 302, History 280, Psychology 366, Theatre Arts 365). Approved courses are designated as writing-intensive in the course description. Students in this category need not complete the writing-intensive course during their freshman year. (3-4 credits)
- Completion of CORE 120: English Composition (3 credits)
- Students with a score below 18 on the English portion of the ACT will be required to successfully complete English 100 Basic Writing for College Students (3 credits)
Communication Competency ( $0-3$ credits)
- Completion of two or more communication courses in high school with grades of B or better ( 0 credits)
- Completion of CORE 110: Communication Foundations (3 credits)
- Active participation in Communication 051: Forensics for an entire academic year (2 credits)

Foreign Language Competency (0-7 credits)

- Completion of two years of a single foreign language in high school with a grade no lower than a C in the second year ( 0 credits)
- Completion of Foreign Language 101 (if required) and 102. Any required Foreign language study must be completed prior to completing the Cross-Cultural Studies requirement below, and should be completed by the end of the sophomore year (3-7 credits)

Historical-Redemptive Outlook ( 10.5 credits)
Kingdom, Identity, and Calling: CORE 100 (1.5 credits)
Roots of Western Culture and Worldviews: CORE 140 (3 credits)
Western Culture in Global Context: CORE 145 (3 credits)
Biblical Foundations: CORE 150 (3 credits)
2. Contextual Inter-disciplinary (23.5-29 credits)

Health, Sport, and the Body: CORE 130 (1.5 credits)
HHP 209 and Nursing 201 can also fulfill the CORE 130 requirement.
Three Activity Components from the following: (1-1.5 credits)
Introduction to Lifetime Activities: CORE 135 (. 5 credits per activity - may complete up to 3 )
Participation in one season of intercollegiate athletics at Dordt University: HHP 011 (.5 credits)
Participation in two seasons of JV or Varsity athletics in high school with documentation from the high school ( 0 credits)
Theatre Arts 120, 220, and 320 can each satisfy one CORE 135 activity.
Introduction to the Arts: CORE 160 (3 credits)
Students majoring in one of the arts (art, music, theatre, digital media) may meet this requirement by completing either
CORE 160 or three credits in the arts outside their major.
Responding to Literature: CORE 180 (3 credits)
Introduction to Christian Philosophy: CORE 200 (3 credits)
Natural Science*: One lab-based science course. CORE 211-229 recommended for non-science majors. (3-4 credits)
Quantitative Reasoning*: A minimum of three credits from mathematics or statistics courses numbered 120 or higher or Computer Science 115
( $3-4$ credits)
(No single course can meet both the natural science and quantitative reasoning requirements.)
Persons in Community*: CORE 250-259 (3 credits)
Justice and Stewardship*: CORE 260-269 (3 credits)
Cross-Cultural Studies*: ( $0-3$ credits)
The cross-cultural requirement may be met in one of the following ways:
A. Students who have completed fewer than three years of high school foreign language are required to complete one of the following for a minimum of three college-level credits:

- One course from CORE 270-289, Dutch, French, or Spanish 201, 204, 206
- A pre-approved semester-long, cross-culture program (e.g., see page 30, EXCH)
- A pre-approved cross-cultural experience of no less than two weeks fully immersed in the culture
B. Students who have completed three or more years of high school foreign language with grades no lower than C in the final year are required to complete one of the following:
- One of the options listed in section A
- A pre-approved cross-cultural experience sometime during college that may be less than two weeks (e.g. AMOR). This experience is not required to be taken for credit.
C. Students who have lived in another non-English speaking culture for at least one semester in their high school years may petition to have the cross-cultural requirement waived.

3. Post-Disciplinary Integrative ( 3 credits)

Core Capstone Course: CORE $351-359$ (3 credits)

* Denotes requirements that could be satisfied via courses in a student's major area of study.

Majors To earn a bachelor's degree from Dordt University, a graduate must complete one major-a sequence of at least 10 courses in a subject area. A complete list of majors available at Dordt University, along with their applicable degree (B.A., B.S., B.S.E., B.S.N., B.S.W.), is on page 25. In addition, majors that are available in the Teacher Preparation Program are designated as elementary (E) or secondary (S).

Electives, Minors, and Professional Courses Students may choose elective courses that complement their majors or that arise out of special interest. Students earning a bachelor's degree must take as many elective credits as needed to meet the 124 -credit requirement, after meeting the Core Program and major requirements. In certain subject areas a minor of 18 to 24 credits may be earned. A complete list of minors available at Dordt University is on page 26. Minors that are available in the Teacher Preparation Program are designated as elementary (E) or secondary (S).

## Majors

Accounting (BA)
Actuarial Science (BA)
Agriculture (BA) (BS) (S)
Agri-Business Emphasis (BA)
Animal Science Emphasis (BS)
Biotechnology Emphasis (BS)
Missions Emphasis (BA)
Plant Science Emphasis (BS)
Art
Art (E) (S)
Art History Emphasis (BA)
Fine Arts Studio Emphasis (BA)
Graphic Design Emphasis (BA)
Pre-architectural Design Emphasis (BA)
Biology (BA) (BS) (S)
Public Health (BA) (BS)
Business Administration (BA)
Construction Management Emphasis (BA)
Entrepreneurship Emphasis (BA)
Finance Emphasis (BA)
Human Resource Management Emphasis (BA)
Information Systems Emphasis (BA)
International Business Emphasis (BA)
Management Emphasis (BA)
Marketing Emphasis (BA)
Office Management Emphasis (BA)
Public Administration Emphasis (BA)
Business Education (S)
Chemistry (BA) (BS) (S)
Communication
Communication Studies Emphasis (BA)
Digital Media Production Emphasis (BA)
Healthcare Communication Emphasis (BA)
Journalism Emphasis (BA)
Public Relations Emphasis (BA)
Community Development (BA)
Computer Science (BA)
Computer Science/Mathematics (BA)
Criminal Justice (BA)
Data Science (BA)
Dutch (BA)
Economics (BA)
Education (BA) (E) (S)
Engineering (S)
Biomedical Emphasis (BSE)
Chemical Emphasis (BSE)
Civil Emphasis (BSE)
Electrical-Computer Emphasis (BSE)
Mechanical Emphasis (BSE)
Engineering Science (BA) (S)
Architecture Emphasis (BA)
Construction Management Emphasis (BA)

Engineering Technology
Construction/Facilities Management Emphasis (BA)
General Engineering Technology Emphasis (BA)
Industrial Networks/Programming Emphasis (BA)
Mechanical/Energy Systems Emphasis (BA)
English
Literature Emphasis (BA)
Writing Emphasis (BA)
English/Language Arts (S)
English/Language Arts-All (S)
Environmental Studies
Environmental Science Emphasis (BS)
Natural Resource Management Emphasis (BS)
Policy and Management Emphasis (BA)
Foreign Language
French Emphasis (E) (S)
Spanish Emphasis (E) (S)
Health and Human Performance (BA)
Exercise Science Emphasis (BA)
Physical Education (E) (S)
History (BA)
American and World (S)
Museum Studies Emphasis (BA)
World (S)
Individual Studies (BA)
Industrial Technology (S)
Mathematics (BA) (S)
Medical Laboratory Science (BS)
Music (BA) (E)
Church Music Emphasis (BA)
Music Management Emphasis (BA)
Performance and Pedagogy Emphasis (BA)
Choral Music Education (S)
Instrumental Music Education (S)
Choral/Instrumental Music Education (S)
Nursing (BSN)
Philosophy (BA)
Physics (BA) (S)
Political Science (BA)
Psychology (BA)
Social Science (S)
Social Work (BSW)
Spanish (BA)
Statistics (BA)
Theatre Arts
Performance (BA)
Production and Design (BA)
Theatre Studies (BA)
Theology
Biblical Studies Emphasis (BA)
Mission and Ministry Emphasis (BA)
Theological Studies Emphasis (BA)
Youth Ministry Emphasis (BA)
Worship Arts (BA)

## Minors

Accounting (G)
Actuarial Science (G)
Agriculture (G)
American Government (S)
$\operatorname{Art}(\mathrm{G})(\mathrm{E})(\mathrm{S})$
Biology (G) (S)
Biomedical Sciences (G)
Business Administration (G)
Digital Marketing (G)
Entrepreneurship (G)
Finance (G)
Human Resource Management (G)
Chemistry (G) (S)
Communication Studies (G)
Broadcasting (G)
Digital Media Production (G)
Journalism (G)
Public Relations (G)
Speech Communication/Theatre (E) (S)
Community Development (G)
Computer Science (G)
Web Software Development (G)
Criminal Justice (G)
Dutch (G)
Early Childhood (E)
Economics (G)
English (G)
$\quad$ Writing (G)
English/Language Arts (E) (S)
ESL (E) (S)
Environmental Studies (G)
$\quad$ Environmental Science (G)
French (G)
Health and Human Performance (G)
$\quad$ Health (E) (S)
$\quad$ Physical Education (E) (S)
History-World (S)
Kuyper Honors Program (G)
Legal Studies (G)
Linguistics-Interdisciplinary (G)
Mathematics (G) (E) (S)
$\quad$ Applied Mathematics (G)
Middle School (E) (S)

Music (G) (E)
Church Music (G)
Music Performance (G)
Philosophy (G)
Physics (G) (S)
Political Science (G)
International Politics (G)
Public Policy and Administration (G)
Psychology (G)
Reading (E)
Science (E)
Social Studies (E)
Sociology (G)
Spanish (G) (E) (S)
Special Education (E) (S)
Statistics - Applied (G)
STEM (E) (S)
Theatre Arts (G)
Theology
Bible (S)
Theological Studies (G)
Worship Arts (G)

Policy Regarding Transcription of Majors and Minors A major or minor is transcribed if the student meets all of the catalog requirements for the major or minor and the student meets the following minimum credit requirements:

- Minimum credits for a major: 30
- Minimum credits for a minor: 18
- Minimum credits for a major and minor: 48
- Minimum credits for each additional major: 24
- Minimum credits for each additional emphasis or minor: 15
- Students may not major and minor in the same discipline


## Master's Degree

Dordt University offers master of education, master of public administration, master of social work, and master of special education degrees. These 30-60 credit programs can be completed in as few as two calendar years. For more information on the master's programs see page 154 .

## Pre-professional Programs

Preparation for Graduate Study Through its major departments, Dordt University prepares students for graduate-level work. Students who plan to do graduate work should consult faculty members in the major department when selecting courses in the major field of study or in related supporting subjects. Courses should be carefully selected to meet the specific requirements of the graduate school that the student plans to enter.

Pre-professional Programs Pre-professional programs are a personal and professional development path that students pursue alongside completion of their degree requirements. Students should work closely with the program advisor to plan a course of study and select a major that will adequately prepare them for the professional school(s) of their choice. Students wishing to prepare for professional schooling may enter one of the following programs.

## Pre-architecture Program

David Platter, Program Advisor
Architects work alongside engineers to design buildings and other public structures that meet the needs of individuals and communities. Architects must concern themselves with the aesthetic normativity of a structural design, while working to create structures that are environmentally responsible and culturally appropriate. Along with a team of engineers and construction managers, an ar-
chitect is responsible for designing a structure that is both safe and ergonomic. Architects serve communities by designing buildings and landscapes that reflect responsible use of spatial, material, environmental, and economic resources.

There are multiple educational paths that lead to a career in architecture. One of the common academic paths into the profession of architecture is to first complete an interdisciplinary B.A. or B.S. degree in a pre-architectural program at a liberal arts college. To be eligible for professional licensure as an architect, a student will then complete a three-to four-year masters of architecture degree at an institution that offers an accredited architecture graduate program. While the entrance requirements for architectural graduate programs vary, most programs prefer students to have completed an interdisciplinary liberal arts bachelor's degree that includes courses from art, graphic design, physics, mathematics, engineering, economics, history, environmental studies, philosophy, or psychology. Demonstrating proficient writing and communication skills is essential for admission into professional architectural programs.

While a variety of general bachelor degree programs can provide an adequate foundation for further architectural studies, Dordt has two pre-professional major options specifically designed to guide students through an undergraduate program of study that will meet the requirements of many graduate programs in architecture; a B.A. degree in art with an architectural design emphasis, and a B.A. degree in engineering science with an architecture emphasis.

## Pre-chiropractic Program

## Dr. Tony Jelsma, Program Advisor

Chiropractic care concerns the relationship between the nervous system and the rest of the body to maintain optimal health, and it focuses on allowing the body to heal itself without the use of drugs or surgery. Maintaining the proper structure of the spine will allow the nervous system to function as it should to regulate the rest of the body.

The pre-chiropractic program at Dordt University prepares students for admission to a school of chiropractic. At least three years of study at Dordt are required, which will provide the necessary background in the sciences, including biology, chemistry, and physics courses, as well as courses in the humanities and social sciences. Since required courses may vary between chiropractic graduate schools, students are advised to check requirements of specific schools early in their college career.

## Pre-health Professions Program

The Pre-health Professions Program at Dordt University prepares students for careers in medicine, pharmacy, dentistry, optometry, physical therapy, athletic training, physician assistant, public health, podiatry, forensic pathology, mortuary science, genetic counseling, and many other graduate and professional programs. The Pre-health Professions Program serves as a resource for current students and Dordt alumni from all majors who are interested in pursuing careers in healthcare.
"Pre-health" is not a specific major or academic track. It is a personal and professional development path that students pursue alongside completion of their degree requirements. The pre-health professions advisor, assists students with career and degree exploration, prerequisite course sequencing, obtaining necessary clinical and shadowing experience, preparing to take professional school entrance exams, and guidance with the application and interview process.

Dordt University students can tailor their curriculum by choosing the option that best fits their career goals and interests. Students can also strengthen their resumes by participating in undergraduate summer research programs with their faculty members. The strong background students receive at Dordt University will also prepare them for alternative careers should their career objectives change over the course of their studies.

Students who join the Dordt University Pre-health Professions Program are also encouraged to meet with the pre-health professions advisor each semester, as well as regularly attend the Pre-health Professions Club (PHPC) events. PHPC's events are geared toward students in the Pre-health Professions Program or students pursuing degrees in the medical fields. This club also provides students with additional skills and experiences that will enhance their preparedness for health professions graduate programs. For more information, please contact PHPC@dordt.edu.

## Pre-legal Program

Donald Roth, Program Advisor
Law schools look for college graduates who demonstrate leadership, exemplify strong character, and possess well-developed writing and analytical skills. The Pre-legal Program is designed as an advisory tool to assist students who are considering or planning to attend law school. Since law schools do not have any specific academic course requirements for admission, a broad liberal arts program, including major and selected electives, provides the most appropriate preparation. At Dordt, prelaw students receive a B.A. degree with a major in political science, history, English, social work, psychology, philosophy, business administration, or criminal justice, depending on their interests. In addition, many students participate in an off-campus program that enables them to serve as an intern and gain experience in legal practice. They are also advised on a range of electives to help prepare them for the Law School Admission Test (LSAT), required for entrance to an accredited law school, and expand their critical thinking, writing, and analytical perspective.

Although they are not required prelaw courses, American constitutional law, business law, criminal law, and criminal procedure are courses that provide a beneficial context for the later pursuit of legal studies.

## Pre-occupational Therapy Program

Dr. Mark Christians, Program Advisor
Occupational therapy is the health profession that uses everyday activities as the means of helping people achieve independence. A variety of rehabilitative, educational, social, and vocational activities are used to treat adults and children with disabilities resulting
from physical injury, disease, developmental delays, aging, and psychological dysfunctions. Occupational therapists help individuals adapt or improve performance in areas of work, school, independent living, and play. The goal for all patients is to attain the maximum level of independence and productivity possible.

Although Dordt does not offer a professional degree or major in occupational therapy, an excellent pre-professional program is available that prepares the student for subsequent professional education. A student may complete a B.A. degree at Dordt along with the pre-occupational therapy program of study and then apply for admission to an occupational therapy program. Information is available in the career development office relating to specific requirements of graduate schools. Certification as an occupational therapist is based on graduation from an approved occupational therapy program and acceptable performance on the American Occupational Therapy examination.

Appropriate majors for students interested in a career in occupational therapy include psychology, biology, or health and human performance. A foundation in biology and psychology is required. Since required courses for admission may vary between occupational therapy graduate schools, students are advised to check requirements of specific schools early in their college career.

## Pre-physical Therapy Program

Dr. Craig Stiemsma, Program Advisor
Physical therapy is a health profession with a primary purpose of promoting of optimal human health and function through the application of scientific principles to prevent, identify, assess, correct, or alleviate acute or prolonged movement dysfunction.

Although Dordt does not offer a professional degree or major in physical therapy, an excellent pre-professional program is available that prepares the student for subsequent professional education. A student may complete a B.A. degree at Dordt along with the prephysical therapy program of study and then apply for admission to a physical therapy program. Information is available in the Career Development Center on specific requirements for graduate schools. Licensure as a physical therapist is based on graduation from an approved physical therapy program and passing a licensure examination.

A student may select any major, but the following pre-professional courses must be completed: biology, chemistry, physics, psychology, abnormal psychology, and mathematics. Since required courses for admission may vary between physical therapy graduate schools, students are advised to check requirements of specific schools early in their college career.

## Pre-seminary Program

Dr. Justin Bailey, Program Advisor
Statistically, nearly half of seminarians complete their B.A. degree before making the decision to seek ordination into church ministry. College plays a critical role in this decision, either confirming a call to the Gospel ministry or encouraging a search in a different direction. Dordt University offers classes that are meant "to develop and implement an understanding of the entire creation in the liberating light of the Scripture."

Although Dordt does not offer a professional degree or major in seminary, an excellent pre-professional program is available that prepares the student for subsequent professional education. Individually assigned personal advisors, the camaraderie with fellow pre-seminarians, as well as connecting with students with different life goals, all contribute to the breadth of the Dordt University pre-seminary program. Courses in history, English, philosophy, communication, psychology, the arts and science - all taught in the light of God's Word - will help pre-seminary students see how they can bring glory to God in almost any topic of study. Also, courses in the language of the Bible, as well as modern foreign languages, equip the prospective minister to handle the biblical text and read current and classical theological works in their original form. Since required courses for admission may vary between seminary graduate schools, students are advised to check requirements of specific schools early in their college career.

## Pre-veterinary Program

## Dr. John Olthoff, Program Advisor

Veterinary medicine is an animal health profession that is dedicated to protecting the health and welfare of people and animals. Veterinarians are highly educated and skilled in preventing, diagnosing, and treating animal health problems. They work in private practice with both large and small animals, or in research, public health, the military, regulatory agencies, and zoos.

Although Dordt does not offer a professional degree or major in veterinary medicine, an excellent pre-professional program is available that prepares the student for subsequent professional education. Students can major in biology, animal science, chemistry, or agriculture. Dordt also works with many local veterinarians, pharmaceutical companies, and professionals involved with animal health to provide students with professional experience that is often required by schools of veterinary medicine. Since required courses for admission may vary between veterinary graduate schools, students are advised to check requirements of specific schools early in their college career.

## Off-Campus Study

Students should contact the coordinator of off-campus programs for information and application forms. The coordinator will also help students identify courses in these programs that meet Core Program requirements. * Denotes programs that satisfy the Core Program cross-cultural requirement.

## Off-Campus Policies

1. Students must be in good academic, financial, and behavioral standing to participate in off-campus programs and courses. (See Student Handbook for Off-Campus Behavioral Expectations.)
2. The pass-fail and audit options are not available for off-campus programs and courses.
3. Cancellation Policy

- Dordt University may cancel off-campus programs, courses, or service projects when, prior to departure for the program, the U.S. State Department issues a travel warning for the location of the program, course, or project. In addition, the university may choose not to participate in or provide student financial assistance for off-campus programs offered by partner colleges or organizations for locations under the U.S. State Department travel warning.
- If a U.S. State Department travel warning is issued once a program is in progress for a country in which Dordt is currently operating an off-campus program, course, or project, the coordinator for off-campus programs will notify the crisis management coordinator, who may implement the crisis management plan.
- If a U.S. State Department travel warning is issued once a program is in progress for a country in which Dordt students are participating in an off-campus program offered by a partner college or organization, the coordinator for off-campus programs will consult with the partner organization's designated director and their on-site staff and may implement a crisis plan that carefully follows the State Department's advice.

4. Refund Policy

- If Dordt University cancels the program prior to departure, students will receive a full refund of any tuition or program fees paid. Any portion of a non-refundable deposit not encumbered (e.g. travel arrangements, housing deposits) will also be returned.
- If a student withdraws from a program prior to departure, he/she is responsible for any expenses incurred on his/ her behalf by Dordt University (or the sponsoring organization) in preparation for the program.
- If it becomes necessary to cancel a program in progress, Dordt's refund policies will be followed (see page 14). Additional expenses incurred for an early departure may need to be deducted from any refund provided.
- If a student withdraws from a program after the program has begun, Dordt's refund policies or the policies of the sponsoring organization will be followed. Students are responsible for any other costs incurred by an early departure. (Early withdrawals for medical reasons are covered by a separate policy.)
- Students dismissed from a program for behavioral reasons will be charged the full fee and are responsible for any other costs incurred by an early departure.


## Dordt University Semester Programs

Minimum requirements: sophomore status and a 2.50 cumulative GPA.
Chicago Semester* Selected juniors and seniors may register for a semester of living, learning, and working in a major urban center. The Chicago Semester is cosponsored by Calvin, Central, Dordt, Hope, Northwestern, and Trinity Christian and is a fully accredited, educational program under the supervision of Trinity Christian College. Students spend four days a week in an internship related to their academic major and career interest. They also participate in seminars one day per week. To achieve 15 hours of academic credit, students must take the internship course plus two of the three seminars offered. The Metropolitan Seminar on Ethnic and Racial Diversity can be used to meet the cross-cultural requirement. Minimum requirements are junior status and a 2.50 cumulative GPA.

Denver Urban Semester* The Denver Urban Semester is a reflective, visionary leadership development program which provides a cross-cultural experience in the heart of the city, giving you the opportunity to develop a mature understanding of God's unique vocational direction for your life. During your semester in Denver, you'll spend 28 to 36 hours per week at an internship, take 2 to 3 classes, and live in community. You'll also learn about community development, careers in non profits, and how to serve and empower the poor. (Fall and spring semesters)

Semester in Korea* In cooperation with Handong University, a Christian, English-speaking university, Dordt University students may spend a semester living and studying in South Korea. Students live in the international dormitory with Koreans and other international students, and may take courses from a broad array of options, including engineering, business, and the humanities. In addition to their coursework, students can get involved with a variety of groups and ministries on campus as well as travel within Korea and the surrounding region. This program is open to all qualified sophomores, juniors, and seniors.

Semester in Zambia* The Semester in Zambia offers a unique opportunity for students to experience life as a student in Africa. Students will study at Northrise University, a Christian institution in Ndola, Zambia. Choose from coursework in business, information technology, theology, or agriculture while building relationships with students in sub-Saharan Africa. This program, open to sophomores, juniors, and seniors, gives a firsthand view into the struggles and joys of life in Zambia.

Viaa Exchange* (EXCH) Dordt University, in cooperation with the Gereformeerde Hogeschool in Zwolle, offers students the opportunity to study in the Netherlands every spring semester. Students live with host families and choose to study in one of four tracks: Western European Culture, International Business, International Education, or Social Work in an International Context. All tracks include a week-long trip to Rome, where students will gain insights into historical, religious, and cultural developments through presentations and excursions.

## Students must select one of four EXCH track options:

EXCH: Western European Culture Track: EXCH 160, 270, 271; one course from EXCH 100, 102, 201. EXCH 310 may be taken as an elective.
EXCH: International Business Track: EXCH 160, 270, 271, 330; possible elective options include EXCH 100, 102, 201, 310.
EXCH: International Education Track: EXCH 160, 270, 271; Education 239(a), 349(a); Individual Studies 391 (Comparative Education); possible elective from EXCH 100, 102, 201, 310.
EXCH: Social Work in an International Context: Track under development.

## Viaa Exchange (EXCH) Academic Offerings

100 Beginning Dutch (3) .Spring
A beginner's course on the language and culture of Dutch-speaking people, designed to develop listening and reading comprehension skills and speaking and writing skills in Dutch through exercises, listening, interviews of native Dutch speakers, and small group conversations.

102 Elementary Dutch (3). Spring
This course on the language and the culture of Dutch-speaking people is designed to develop listening and reading comprehension, spoken and written Dutch in a communicative context. The course includes interviews of native Dutch speakers, sessions with native students, and various other language activities. Prerequisite: Dutch 101 or its equivalent.

201 Intermediate Dutch (3)..................................................................................................................................................................Spring
An intermediate course that continues the study of the language in a communicative context with emphasis on precision and expansion of linguistic skills. Emphasis is also put on the development of cultural understanding and sensitivity, studying people's values and beliefs as expressed in their economic, political, and religious systems. Prerequisite: Dutch 102 or its equivalent.
 An introduction to the history of Dutch art and architecture from the Middle Ages to the present day. There will be many excursions to view various artworks "live." Students will develop insight into how to understand art and how the Dutch identity is reflected in its art and architecture. They will also develop some understanding of the importance of the works in culture and history. This will be achieved by presentations of classmates, lectures, readings, and field trips.

270 Cross-Cultural Explorations: Conversation, Reflection, and Travel (Portfolio) (3)..
.Spring
Living and studying in a different culture brings new information, experiences, and perceptions. This course helps students take the time to observe and reflect on the similarities and differences between this culture and the culture of one's home through structured and systematic observation and reflection. Students develop their own portfolio (reflective journal) in preparation for a presentation at the semester's end.

271 Dutch Culture and Society (3).
. Spring This course focuses on contemporary issues in the Netherlands as an urbanized society. By studying the culture that gets lived out in the heart of the Netherlands, students become part of the "social experiment" that Dutch society is-a society that is in a constant process of evolving and adapting new forms as it enters a new era of economic and political affiliations within a larger European community.

310 Contemporary Theology (3) Spring
This course will survey several important theologians and theological trends from the 20th century, including liberation theology and other significant schools of thought, and will compare them with Reformed theology.

330 International Business (3) ...............................................................................................................................................................Spring
This course is organized as a cross-cultural exploration and practicum in business that helps students to understand the Dutch business context and culture from different perspectives. Special attention will be given to different production concepts and Christian ethics in business. During the course, students will carry out real-time assignments and deal with real-life consultancy cases for Dutch businesses.

341 Special Topics in Dutch Literature or Composition (3) ...................................................................................................................Spring Offered on the basis of student interest and instructor availability.

392- Individual Studies (2-3).................................................................................................................................................................Spring
393 Open to qualified juniors and seniors on a limited basis with permission from the coordinator of offcampus programs and the registrar. (See page 37 for procedures and policies.) Note: EXCH 392-3 proposals must be submitted before November 1.

## Council for Christian Colleges and Universities Programs

CCCU programs are offered in the fall and spring semesters for junior and senior students with a minimum GPA of 2.75, unless otherwise noted. Participating students earn 16 credits.

Middle East Studies Program* (MESP) This program, based in Cairo, Egypt, engages students in complex and strategic world of the modern Middle East. The interdisciplinary seminars give students the opportunity to explore the diverse religious, social, cultural, and political traditions of Middle Eastern people. In addition to seminars, students study the Arabic language and work as volunteers with various organizations in Cairo. Through travel in the region (typically Israel, Palestine, Jordan, Syria, and Turkey), students experience the diversity and dynamics of the region. MESP encourages and equips students to relate to the Muslim world in an informed, constructive, and Christ-centered manner at a time of tension and change. Students earn 16 credits.

Oxford Summer Programme (OSP) This program of the CCCU and Wycliffe Hall, Oxford, is designed for students wishing to gain a comprehensive understanding of the relationship between Christianity and the development of the West and those who wish to do specialized work under expert Oxford academics in the areas of history, religious studies, political theory, philosophy, English, and history of science. The program is structured for rising college sophomores, juniors, and seniors, graduate and seminary students, nontraditional students, teachers, and those enrolled in continuing education programs. Minimum GPA of 2.90 required.

Scholarship and Christianity in Oxford* (SCIO) This program, based in Oxford, England, is designed for students interested in doing intensive scholarship in this historic seat of learning. Working with academic tutors, students hone their skills and delve into the areas that interest them most. As Visiting Students of Oxford University and members of Wycliffe Hall, students have the privilege to study and learn in one of the university's historic halls. The SCIO is designed for students interested in the fields of theology, biblical studies, education, science, premed, psychology, business, and the humanities. Applicants are generally honors and other very high-achieving students; minimum GPA of 3.50 required. Students earn 17 credits.

## Other Approved Programs

Au Sable Institute of Environmental Studies The Au Sable Institute offers field-based courses at two primary campuses, one in the Great Lakes Forest near the middle of the North American Continent; the other on the Puget Sound on the edge of the Pacific ocean north of Seattle, Washington. The Institute also has a program at ECHO in North Fort Myers, Florida. There are three-week and five-week summer sessions. Courses can be applied toward meeting Dordt University graduation requirements in several majors. Au Sable courses and Dordt courses can also be used to meet requirements for certificates issued by Au Sable Institute in the following areas: naturalist, land resources analyst, water resources analyst, and environmental analyst. Au Sable fellowships and grant-in-aid are available to Dordt students. (Summer)

Baltimore Urban Studies* (BUS) Baltimore Urban Studies is an experiential learning program designed to teach, mentor, and train Christian college students in spiritual formation, public health, and social work. The program is open to all majors but more specific to public health and social work majors. While living in a unique urban learning community, students will enroll in 15 to 18 credits of undergraduate courses, complete an internship for credit, and participate in cross-cultural field learning experiences in Baltimore, Washington, D.C., and New York City.

Contemporary Music Center (CMC) The Contemporary Music Center provides students with the opportunity to live and work in community while seeking to understand how God will have them integrate music, faith, and business. Both interdisciplinary and multidisciplinary in nature, the CMC offers two tracks: the Artist Track and the Executive Track. The Artist Track is tailored to students considering careers as vocalists, musicians, songwriters, recording artists, performers, producers, and recording engineers. The Executive Track is designed for business, arts, management, marketing, communications, and other majors interested in possible careers as artist managers, agents, record company executives, music publishers, concert promoters, and entertainment industry entrepreneurs. Both Artist and Executive Track students receive instruction, experience, and a uniquely Christian perspective on creativity and the marketplace, while working together to create and market a recording of original music. Both tracks include coursework, labs, directed study, and a practicum. Students earn 16 credits.

Creation Care Studies Program* (CCSP) A field-based education that explores Christian responsibility in a fragmented world, a world marked by poverty, hostility, environmental demise, opportunism, and social disintegration. While living in Belize, students talk with community leaders, work with non-government organizations, interact with the Belizean people, and explore the remarkable natural resources, including the second largest barrier reef in the world and the rich diversity of a tropical rainforest. A similar program is offered in the South Pacific. The semester curriculum is guided by a view that the world is an integrated web of systems and philosophies that cannot be separated from each other. (Fall, Spring)

Los Angeles Film Studies Center (LAFSC) Located in one of the primary film and television production centers in Los Angeles, California, the L.A. Film Studies Center (LAFSC) integrates a Christian worldview with an introductory exploration of the work and workings of mainstream Hollywood entertainment. Life in Hollywood and internships with 20th Century Fox casting, Henderson Productions, or Miramax Films, just to name a few, await you at LAFSC. Students from Olivet Nazarene University and CCCU schools gather to combine their ideas and energies to create in a city that is always on the cutting edge. Students earn 16 credits. (Spring)

Praxis Center Costa Rica* (PCCR) The Praxis Center is a 15 -week program tailored to any major or discipline. The program includes orientation, Spanish classes, an intro course to Central American, elective courses, an internship, and study trips to Panama or Nicaragua. The Praxis Center provides service-learning experiences which are characterized by an emphasis on cultural understanding in partnership with communities in Central America. Students earn up to 17 credits. (Fall, Spring, Summer)

Semester in Oman* (SIO) The Semester in Oman offers an experiential learning environment in which students can love and worship God, engage new ideas, and respond to God's call. The unique environment in Oman affords students the opportunity to build relationships with Omanis, learn about the Middle East and Islam, and to cultivate an appreciation and sensitivity to the cultural surrounding. Students who engage the Muslim world will be better equipped to join efforts for peace and understanding.

Study Abroad Lithuania-LCC International* (SAL) Students participating in this program are fully immersed in Eastern European cultures as they study in an international community and live in the port city of Klaipeda. Students are housed in one of our residence halls with three international roommates. Taking a wide variety of courses with their Eastern European peers exposes students to a variety of different cultures and enables them to learn the subject material while at the same time challenging their worldview through classroom diversity and intercultural engagement. In addition to academic learning, students are enabled and encouraged to immerse themselves in the community through volunteer and service oriented opportunities as well as academic internships/practicums. (Fall, Spring, Summer)

Trinity's Semester in Spain* (TSIS) A semester study program, located in Seville, Spain, offers beginning, intermediate, and advanced courses in Spanish studies. Students live with a Spanish family for the entire semester and may choose to engage in optional service-learning experiences. Two summer terms are also offered. (Fall, Spring, Summer)

Uganda Studies Program* (USP) Uganda has become an economic and public health model in its region. The USP offers students the opportunity to get a personal look at the country's function and influence. Uganda Christian University (UCU) serves as the base of study for students in the USP. Set on the outskirts of the capital city, Kampala, this rapidly growing institution brings USP students together with the UCU Honours College. A variety of courses taught by local faculty in the English tutorial tradition will immerse students in a uniquely African education and present many insights into African life. Home stays, travel, service learning, and daily interaction with Honours College students form the backbone of the USP experience. Students choose one of three emphases: Interdisciplinary, Social Work, or Global Health. In addition to the foundation experiential course, students will choose from an approved selection of courses from the UCU Honours College to earn up to 16 credits.

Veritas Christian Study Abroad* (VCSA) This program takes place in Cape Town, South Africa, the nation's oldest city. Students on this program will take a Cross-Cultural Leadership course and participate in a Missions/Service Learning Practicum through Veritas Christian Study Abroad. Students can then choose from a variety of different courses offered at the University of Cape Town (UCT), South Africa's oldest university and one of the continent's leading teaching and research institutions. This program is a great option for STEM majors.

World Journalism Institute (WJI) The World Journalism Institute was established to help train young Christians who can write well, observe keenly, and think biblically. For nearly 20 years, WJI has held its journalism courses in places like Dordt University, New York City, Washington, D.C., Los Angeles, and Asheville. Drawing its faculty from the ranks of working journalists as well as academic journalists, WJI offers summer courses with two to three weeks of classroom instruction and field-based writing assignments. The WJI summer courses offer 3-4 credits. (Summer)

Special Topics Off-Campus Program In addition to the above list of approved programs, students may apply to participate in other off-campus programs to meet specifically defined learning objectives. Interested students must submit a written request that clearly indicates their learning goals and how this particular program meets these goals more effectively than any of the existing approved programs. In addition, the student's advisor and/or major department must recommend their participation in this off-campus program. The coordinator for off-campus programs and the registrar will grant approval for participation on a case-by-case basis.

## Calvin University Programs

Calvin University offers several offcampus programs that Dordt students may attend on a room-available basis. Minimum requirements are sophomore status and a 2.50 cumulative GPA.

Study in China* (STCH) Study traditional and modern China while experiencing life in its capital, Beijing, and exploring other areas of this fascinating country. Living and studying at the Capital Normal University allows for interaction with Chinese and foreign students and gives access to the National Library, sports facilities, and parks. Visit important cultural and historical sites such as the Great Wall and China's most holy mountain Taishan. Tackle the Chinese language and be immersed in Chinese history and contemporary issues. (Fall semester)

Study in Britain* (STBR) Narrow, winding streets, ancient timbered houses, and no cars - this is the center of York, the host city for Calvin's semester in Britain. The city's layers of history will be a constant source of intrigue as students study at York St. John University, located right in the heart of it all. Students live and study together as a Christian community in the midst of one of the world's busiest and most multicultural cities, York, England, with its rich history and a society markedly more "post-Christian" than North America. Students take two courses taught by the Calvin professor in residence and other courses at York St. John University. (Spring semester)

Study in France* (STFR) Live with French families in Grenoble, nestled in the French Alps, and study the French language with other foreign students from around the world. Become acquainted with the wide variety of historical, natural, and cultural forces that have shaped contemporary France by going on excursions offered by the Centre Universitaire d'Études Françaises (CUEF) and by taking classes about French history, politics, literature, and art. During free time, enjoy hiking and skiing in the mountains or travel to destinations such as Paris, Geneva, the French Riviera, or Italy. (Fall semester)

Study in Ghana* (STGH) Enter into dialogue with Ghanaians, study the history and peoples of the country, and encounter worldviews different from those prevalent in North America. The semester in Ghana program strives for understanding the emerging theological, historical, and social perspectives within Ghana and throughout sub-Saharan Africa. Reflection and discussion is encouraged on the implication of common humanity and different understandings as Christians in God's world. Live in a university residence, study the Twi language, and interact with Africans to experience a part of this rich country. (Fall semester)

Development Study in Honduras* (STHO) Study development theory and Honduran history. Live with a Honduran third-world family. Improve Spanish language skills, and visit urban squatters' camps, remote rural villages, and tropical rain forests. For added experience, excursions include trips to banana plantations, shrimp farms, and development organizations involved in health and literacy projects. At these different locations, students can talk with national leaders about Honduras' problems and future. The director leads discussions to encourage thinking and living as Christians in God's world. Wrap up the whole experience by evaluating a specific development program. (Spring semester)

Spanish Studies in Honduras* (SPHO) Become acquainted with the world of Honduras by immersion in the Spanish language and Latin American literature and culture. The Spanish Studies program provides an opportunity to be confronted with many situations that enable exploration of the meaning of faith in a third-world country. Intensive study and living with a Honduran family grants necessary skills for building relationships with people of another language and culture. An emphasis on poverty and development aids understanding the connection between North American lives and lives of the poor. (Fall semester)

Study in Hungary* (STHU) Witness the exhilarating changes of the 20th century from the vantage point of Budapest, one of Europe's most beautiful capital cities. Live and study together as a Christian academic community at the Technical University of Budapest in the midst of a society engaged in intense conversation about the formation of culture. Develop and mature by experiencing a situation different from the familiar, by learning under a variety of teaching styles, by encountering a new set of behaviors and beliefs, and by drawing from course offerings and academic expertise unavailable elsewhere. Live in a university residence in Budapest; and visit the Krakow and Auschwitz concentration camps, Transylvania (Romania), Croatia, and the Ukraine. (Fall semester)

## Academic Policies

Academic Standing A student is expected to maintain a minimum cumulative GPA of 2.00 to graduate. Students needing extra assistance in the form of individual tutors, study skills, time management, etc. should contact the staff of the Academic Enrichment Center, located in the lower level of the library. Students will be notified when they are not meeting the graduation minimum and will be expected to seek the necessary assistance. Academic standing is determined by the following:

| Total Credits Earned | Cumulative GPA is below | Cumulative GPA is below | Cumulative GPA is below |
| :--- | :---: | :---: | :---: |
| 0 to 24 | 2.00 | 1.60 | 1.00 |
| 24 to 54 | 2.00 | 1.80 | 1.40 |
| 54 to 84 | - | 2.00 | 1.60 |
| 84 or more | - | 2.00 | 1.80 |

Academic Alert Students who finish a semester with a cumulative GPA below the graduation requirement will be alerted to their academic status at the beginning of the following semester. Students will be informed of the support services available and encouraged to make use of them. Academic alerts may also be issued during a semester when an instructor reports that a student is in danger of failing his or her course. Academic alerts do not result in any additional restrictions of activity or loss of financial aid but are intended to inform students of their current situation so they can take action to correct it.

Academic Probation Students who finish a semester with a cumulative GPA below the specified standard will be placed on academic probation. Students are notified by letter when placed on probation. The academic standing committee will set certain requirements for a student on probation, including a minimum GPA to be attained in the following semester. A student who has been placed on academic probation and fails to meet the requirements established by the committee the following semester will be subject to academic suspension. Probation may result in the loss of athletic eligibility and certain financial aid.

Academic Suspension Students who finish a semester with a cumulative GPA below the specified standard are subject to academic suspension from the university for a period of one semester. Students suspended from the university will be notified of their suspension immediately in writing and may be given an opportunity to file a letter of appeal prior to the start of the next semester. Students filing an appeal must do so in writing to the registrar by the time indicated in the notification of suspension. The letter of appeal should explain the situation leading up to the suspension, including extraordinary circumstances such as serious illness, injury, or family crisis, and include a specific plan for correcting the problems. Students allowed to return on the basis of an appeal will be placed on academic probation as described above. Students allowed to return on appeal will be subject to suspension without appeal or dismissal if they ever fail to meet the terms established by the academic standing committee. Students who do not file a letter of appeal or whose appeal is not granted may apply for readmission after a lapse of one semester. Readmission is not automatic but is based on evidence that the circumstances leading up to the suspension have been resolved. Any student, regardless of prior academic standing, who receives less than a 1.00 GPA in any given semester is subject to academic suspension at the end of the semester.

Academic Dismissal Students who have been suspended and readmitted and who fail to meet the requirements specified by the academic standing committee will be subject to permanent academic dismissal. Any full-time student who earns no grade points in any given semester is subject to permanent academic dismissal.

Audit and Institutional Visitor Policies Full-time students may audit a course at no additional charge provided they do not go into an overload. Part-time students and students who will go into an overload may audit courses at the overload tuition rate. Students auditing a class are expected to attend lectures, do the readings, and participate in all in-class activities, and may participate in other activities. No credit will be given for audits, but an official record with grade of AU will be recorded for audited courses.

On a space-available basis, members of the community are welcome to visit classes at the visitor rate. Registration is subject to approval by the course instructor and registrar, and no official academic record will be kept. A maximum of one course per semester may be visited; applied courses (such as music lessons and ensembles or labs) may not be visited.

Class Attendance Students are expected to attend all class and lab periods. Penalties for absence are left to the individual instructors. The instructor may lower a student's grade if there have been excessive unexcused absences. No allowed number of skips is permitted.

Credits All credit at Dordt University is given in semester hours and, unless noted differently in the course description, will count toward graduation. Each semester hour requires one period per week of class work and approximately two hours per week of preparation.

Dropping Courses Changes in registration must be completed during the add/drop period (within one week after the opening of a fall or spring semester, within the first three days of a summer session). Courses dropped during the add/drop period do not appear on the student's transcript. After the add/drop period, a student may withdraw from a course with permission of the in-
structor and registrar until the two-thirds point of the semester is reached. Withdrawn courses appear on a transcript with a grade of W. All courses dropped after the two-thirds point of the semester will be recorded as F.

Enrollment in Other Schools Students who are enrolled at Dordt University will not be permitted to take work for academic credit in the same semester in other schools without permission from the registrar. In no case will students be permitted to carry an academic load greater than that stated in the catalog. The registrar must approve in advance all courses taken at other institutions.

Dordt University does not offer undergraduate correspondence courses. However, if students plan to enroll in a correspondence course offered by another college or university, they must have the course approved by the Office of the Registrar in advance.

Grade Point Average Students must have a minimum cumulative GPA of 2.00 in courses taken at Dordt University to meet graduation requirements. The GPA is determined by dividing the total number of grade points by the total number of hours attempted.

A grade of F in a course will be computed in the student's GPA (this refers to both regular courses and pass/fail courses); a student who withdraws from a course prior to the expiration of 10 weeks will not have the $W$ computed in his/her GPA.

Grade Reports First semester mid-term grades are reported to new students. These are not part of the permanent record but serve as an indicator of student progress. Mid-term grades are obtained from the student's advisor. Final grades are released by the registrar's office as soon as possible after the close of each semester.

Grading System The following grading system is in effect at Dordt University:

| Grade | Points Per Hour | Description |
| :--- | :---: | :---: |
| A | 4.00 | Exceptional |
| A- | 3.67 |  |
| B $^{+}$ | 3.33 | Good |
| B | 3.00 |  |
| B- | 2.67 |  |
| C $^{+}$ | 2.33 | Graduation level |
| C | 2.00 |  |
| C- | 1.67 |  |
| D+ | 1.33 | Unsatisfactory |
| D | 1.00 |  |
| D- | 0.67 | Pasilure |
| F | 0 | Withdrawn |
| P | 0 | Audit |
| W | 0 |  |
| WM | 0 | Withdrawn - Medical Withdrawal |
| AU | 0 |  |

Graduation Students must make application for graduation the semester prior to their graduation. Commencement exercises are held only at the end of the spring semester. In order to participate in the commencement exercises, the student must have completed all coursework for the degree. Requests for exceptions must be brought to the curriculum and academic policies committee via the registrar prior to February 1. There are no exceptions for the associate degrees.

Honors Official Latin honors designations, based on final GPA, will be added to qualifying bachelor's degree recipients' transcripts after the degree is conferred. To be eligible, a student must complete 90 credits at Dordt University, and meet the following GPA requirements:

$$
\begin{array}{ll}
\text { Summa cum laude } & 3.950-4.00 \\
\text { Magna cum laude } & 3.850-3.949 \\
\text { Cum laude } & 3.750-3.849
\end{array}
$$

Individual Studies Courses Individual Studies 391, 392, and 393 courses are offered by many departments to provide properly qualified students the opportunity to do intensive work in a subject not normally included in the regular course offerings, or to pursue in depth a topic encountered as part of previous studies, or to engage in experiential education projects. The individual studies courses allow for greater flexibility of program as well as greater responsibility for the student in the learning process. Options within the individual studies concept include research, practicum, independent study, service-learning, readings, and performance. It is understood that the responsibility for learning will be on the student-it is not a tutorial program.

Students who wish to enroll in an individual studies course must complete a course proposal form that may be obtained from the registrar's office. In the written proposal the student will describe in some detail the object or goal of the study, the procedures to be followed, the materials to be used, a projected product or outcome, and the method of evaluation. The faculty project supervisor must sign the proposal. Completed proposals must be returned to the registrar for approval by the deadline for adding courses.

If a proposed individual studies project is interdepartmental or falls within a department that does not have an individual studies option, the student may consult the registrar for permission to register for Individual Studies 391, 392, or 393. (See page 37 for individual studies policies.)

Official Transcripts Requests for transcripts should be submitted well in advance of the time they are required by the student. Transcripts will not be made during the week of registration or at the time semester grades and reports are being processed. A transcript will be released only if all accounts have been settled with the university. Transcripts are released only with the written permission of the student. Transcripts will not be sent to employers or other agencies without the permission of the student. Dordt University recognizes and desires to protect student rights of privacy, rights of access to educational data, and the right of challenging the contents of records for inaccurate or misleading information. Most records pertaining to the education of an enrolled student are open to the student upon request. Records may be released to specified persons by written consent of the student. University policies for the privacy rights of students and parents are in compliance with the Family Educational Rights and Privacy Act of 1974. Inquiries concerning compliance should be directed to the provost.

Online Courses Students enrolled full-time in one of Dordt University's on-campus degree programs may enroll in courses offered online by Dordt University but must take a minimum of twelve credits per semester of on-campus face-to-face courses. Students may request exceptions from the registrar to take fewer than twelve credits in face-to-face courses if meeting that requirement isn't possible.

Participation in the Assessment Program Dordt University has a comprehensive assessment program to evaluate student learning. Assessment activities are an important part of the total educational program. They are scheduled into the academic calendar and embedded in academic programs. The various facets of assessment involve academic skills, programs, and majors, and the educational goals of the Core Program. Dordt University and its faculty are dedicated to evaluating the quality and effectiveness of all facets of its educational program. The purpose of assessment is to help make improvements in curriculum, student learning, and teaching.

Students will be required to participate in assessment activities. Baseline data will be collected at the freshman level, and additional assessment will occur throughout the student's academic career. The number and type of assessment activities may vary from student to student.

Pass/Fail Option Sophomores, juniors, and seniors have the option of selecting elective courses on a pass/fail (P/F) basis. The pass/fail option was adopted to provide flexibility in program planning and to encourage students to explore many interests outside of their normal program without the worry of overload or about the effect of the grade on their GPA. The following polices govern pass/fail courses:

1. A maximum of 15 credits of $\mathrm{P} / \mathrm{F}$ work will apply to the 124 credits required for a bachelor's degree; a maximum of 8 credits of $\mathrm{P} / \mathrm{F}$ work will apply to the 60 credits required for an associate's degree.
2. Students successfully completing a $P / F$ course will have a grade of $P$ recorded on their transcript. They will receive credit for the course, but no grade points. Thus, a grade of P will have no effect on the student's GPA.
3. Students failing a $\mathrm{P} / \mathrm{F}$ course will have a grade of F recorded on their transcript. This F will be calculated the same way as an $F$ under the normal grading system. Thus, a failing grade in a $P / F$ course will affect the student's GPA.
4. Students taking a course $\mathrm{P} / \mathrm{F}$ are expected to fully participate in the course. Instructors are not explicitly notified of the students taking the course pass/fail, but that information is available to them upon request.
5. Students who receive a P in a $\mathrm{P} / \mathrm{F}$ course may not repeat the course on a graded basis.
6. Only elective courses may be taken $\mathrm{P} / \mathrm{F}$. Courses required for a student's Core Program, major, or minor may not be taken P/F.
7. Departments have the prerogative to identify courses that should not be $\mathrm{P} / \mathrm{F}$.
8. Changes from A-F to $P / F$ grading and from $P / F$ to A-F grading may be made in the registrar's office as follows:

- P/F to A-F grading - any time prior to the last full week of classes by completing a form in the registrar's office
- A-F to P/F grading - any time during the first two weeks of the semester by contacting the registrar's office

9. Students must petition the registrar's office to have a course revert to the original grade earned when, due to a change in major, a course previously taken $\mathrm{P} / \mathrm{F}$ becomes part of the student's major.

Registration Registration takes place at the beginning of each semester. Students will be sent instructions and appointments several weeks prior to the registration dates. Registration is not completed until tuition and fees have been paid. A late registration fee is charged if registration is not completed on the designated registration day each semester.

Repeating Courses Any course with a grade of B- or lower may be repeated. The original grade remains on the transcript with a reference to the repeated course. Only the last instance of the course on the transcript is factored into the cumulative GPA.

Residence Requirement To earn a bachelor's degree from Dordt University, a student must enroll at the university for a minimum of three semesters and complete a minimum of 36 credits at Dordt University. At least twelve credits of Core Program requirements, twelve credits of each set of major requirements, and nine credits of each set of minor requirements must be completed at Dordt University. At least 24 of the last 36 credits that apply to the degree must be completed at Dordt.

Service-Learning Courses Service-Learning 281, 282, and 283 courses may be directly connected to courses in and across departments, or students may choose to participate independently in service activities with a select community organization under the supervision of a faculty/staff member. Service-Learning courses allow for greater flexibility of program as well as greater responsibility for the student in the learning process.

Service-Learning is an educational method and experience:

- through which students learn and develop through active participation in thoughtfully organized service experience that meet actual community needs
- that is integrated into the student's academic curriculum or provides structured time for a student to think, talk, or write about what the student did and saw during the service activity
- that provides students with opportunities to use newly acquired skills and knowledge in real-life, problem-solving situations in the community
- that enhances student learning beyond the classroom and fosters a clearer sense of servanthood and living as kingdom citizens.
Students who wish to enroll in a service-learning course must complete a course proposal form obtained from the registrar's office. In the written proposal, the student will describe in detail the community setting for the project, the student's learning goals, the service activities provided, the plan for reflection activities, and the method of evaluation. The faculty project supervisor must sign the proposal. Completed proposals must be returned to the coordinator of community-based learning and the registrar for approval by the deadline for adding courses.

If a proposed service-learning is interdepartmental or falls within a department without an individual studies option, the student may consult the registrar for permission to register for individual studies.

Individual studies courses and service-learning courses are governed by the following policies:

1. They may have $1-3$ credits as follows: 281 and 391, one credit; 282 and 392, two credits; and 283 and 393, three credits.
2. Individual Studies: Second semester freshmen and sophomores may take 391 courses; juniors and seniors 391, 392, and 393 courses. The registrar may grant exceptions.
Service-Learning: First semester freshmen may take 281 courses; second semester freshmen, sophomores, juniors and seniors may take 281, 282, and 283 courses (the registrar may grant exceptions).
3. A student must have a minimum 2.00 cumulative GPA to enroll in 281 and 391 ; and 2.25 for 282, 283, 392, and 393.
4. A maximum of nine individual studies/service-learning credits may be applied to the B.A. degree; a maximum of four credits to the A.A. degree.
5. Students may enroll in a course more than once. For example, a student may enroll in Business Administration 391 or 392 or 393 more than once. Not more than four individual studies/service-learning credits may be taken in a semester.
6. Normally, an individual studies/service-learning course should be completed in the semester of enrollment, but with advance notice, the course may be spread over the first and second semesters of the year. Register for the course only in the semester that the course will be completed.
7. Individual studies courses 392 and 393 and service-learning courses 282 and 283 are open to students who have had extensive previous course-work in the department.

Student Classification Classification is made at the end of every semester and is determined by the number of credits successfully earned:

Sophomore ......... 24 credits
Junior .................. 54 credits
Senior.................. 84 credits

Student Load Since 124 credits are required for bachelor's degrees and 60 credits are required for associate's degrees, students who plan to complete these degrees in the standard amount of time must average 15 to 16 credits per semester. Students must be enrolled in a minimum of 12 credits per semester to be considered full-time. Students registering for more than 15 credits should consult their academic advisor.

The following policies, monitored by the registrar, govern the maximum student load:

1. The normal maximum student load for all students is 18.5 credits.
2. First semester freshmen admitted with a high school GPA below 2.25 or a composite ACT score below 19, SAT score below 1010, or CLT below 64 are normally limited to 15 credits.
3. Second semester freshmen, sophomores, juniors, and seniors with a Dordt University GPA of 3.00 or better may register for an overload with the permission of their academic advisor and the registrar. Only under rare circumstances will a student be allowed to register for 22 or more credits.
4. No more than a total of eight credits earned in excess of 16 credits per semester will be applied to the residence requirement.

Transfer Credit Dordt University accepts credits from regionally or nationally accredited institutions that are awarded on an official transcript received directly from the institution. A minimum grade of C is required in each course to receive credit.

Students who plan to transfer to Dordt University are encouraged to contact the registrar as soon as possible so that course planning may take place and optimal use of courses and credits will occur. A maximum of 30 semester hours of credit (two semesters) may be granted for CLEP, AP, International Baccalaureate (IB) higher-level exams, and Cambridge A-level exams, or other credit by examination programs. A maximum of 61 semester hours of academic credit (four semesters) is granted to graduates of community colleges. (See also page 37, Residence Requirement.) The registrar evaluates transfer credits. Admission to advanced standing does not exempt a student from meeting the specified requirements for graduation from Dordt University.

After application materials have been evaluated, students will receive notification of credits accepted, student classification, and academic status. Student classification and academic status are assigned following the policies governing all students at Dordt University.

Withdrawal from School A full-time student who wishes to withdraw from school must obtain the necessary withdrawal form from the student services office. The form must be signed by representatives from the student services, financial aid, registrar, and business offices. Refunds are based upon the date of approval. Students who withdraw before the end of the semester will receive a grade of $W$ in each course. Students who withdraw without obtaining signatures on the withdrawal form and turning it in to the Business Office will receive a letter grade of F for all courses. Part-time students must notify the registrar of their withdrawal. Be advised that withdrawing may affect your financial aid.

Withdrawal and Reinstatement - Military Service Students called to active duty in the armed forces of the United States will be allowed to withdraw from Dordt University without penalty upon presenting an official copy of their military orders to the Registrar. This must be done at the time a student is required to stop attending classes. This policy also applies to spouses of soldiers called to active duty.

Dordt University will refund $100 \%$ of tuition and mandatory fees for the term that the student departs. This refund will be sent to the student or can be applied to a future term. For students who have room and/or board contracts in force, the cost of room and/or board will be reimbursed on a pro-rated basis.

Students who withdraw before midterm will receive normal withdrawal notations (e.g. W, Withdrew grades) on the transcript. After midterm, students may, with the permission of the appropriate instructor, exercise one of two additional options: 1) receive final grades earned as of the date of withdrawal, if work of sufficient quantity and quality has been completed to warrant a passing grade for the term; or 2) receive an Incomplete grade for one or more courses. Students who exercise one of these two additional options are subject to all other faculty policies regarding those grades and will not receive a tuition refund for those courses in which a final grade or Incomplete is assigned.

Students whose absence from the University results from being called to active duty for more than 30 days will be reinstated at the University with their same academic status if: 1) they provide notice of such service, and other documentation required by law, to the Registrar; 2) within three years of their completion of service (or within two years after any period necessary to recover from an injury incurred or aggravated during such service) they notify the Registrar in writing of their intent to return; and 3) the cumulative length of all absences from the University for service in the armed forces of the United States does not exceed five years.

## Undergraduate Academic Offerings

This section contains descriptions of programs, majors, minors, areas of concentration, fields of specialization, and courses. Semesters following course titles indicate when each course is normally offered. On rare occasions, a course may not be available when indicated because of low enrollment or unexpected staffing changes.

Courses listed as Fall Odd and Spring Even are scheduled to be offered during the 2023-24 academic year, i.e., fall 2023-24 is Fall Odd, spring 2023-24 is Spring Even.

## Academic Enrichment Center

## 100 Essentials for Academic Success (3)

$\qquad$ . Fall The primary goal of this course is to help you transition well to the college environment. In workshop style, you will practice and hone your skills in organization, time management, communication, reading, writing, test preparation, and overall self-management. This course seeks to connect you with resources that will equip you not only to achieve academic success, but also to contribute to the Dordt community and to the broader kingdom of God. Prerequisite: ASPIRE program admission; or permission from the Academic Enrichment Director.

## Accounting

General Major- Business Administration 100, 101, 201, 202, 242, 250, 301, 305, 310, 311, 312, 314, 315, 316, 324, 351; Economics 202, 203; Statistics 131; one course from Business Administration 210, 313, 317, 320, 375, 393; one elective course in economics.

General Minor- Business Administration 201, 202, 310, 311; two courses from Business Administration 210, 250, 312, 313, 315, 316, 317, 320, 324.

## Actuarial Science

General Major- Business Administration 201, 202, 305, 325; Computer Science 115; Data Science 290; Economics 202, 203; Mathematics $148,152,153$; Statistics 131, 133, 202, 203, 215, 216, 320, 352, 353, 354; one course from Business Administration 327, Data Science 250, English 305 (all three courses are strongly recommended).

General Minor- Mathematics 148, 152; Statistics 215, 216.
Students must complete two of the following three tracks (Society of Actuaries Certified Validation by Education Experience Tracks):
A. Statistics $131,133,202$.
B. Economics 202, 203.
C. Business Administration 305, 325. (Note: Business Administration 201 is a prerequisite for Business Administration 305.)

## Agriculture

The objectives of the course requirements in agriculture, and the other majors as well, are to enable students to develop a basic understanding of the discipline, to learn skills that will equip them to serve in God's kingdom in this area, and to prepare them for future learning experiences.

General Major- $\quad$ Foundation (common to all emphases): Agriculture 101, 105, 111, 221, 290, 361, 380, 381; Agriculture 370 or 372.
Students must select one of the following emphases:
Agri-business: Foundation; Chemistry 110 or 111; Agriculture 312; four courses from Agriculture 223, 224, 225, Business Administration 301, 330; one course from Agriculture 201, 232, 233, 234, 235, 238, 251, 255; Business Administration 201, 202, 206; Economics 202. Agriculture 373 recommended.

Animal Science: $\quad$ Foundation; Chemistry 110, 122 or Chemistry 111, 225*; Biology 125, 302 or $310^{*}$; Agriculture 232, 234, 291, 335; one course from Agriculture 233, 235, 238; two courses from Agriculture 331, 332, 336. Agriculture 373 recommended. *Those considering graduate school should take Biology 310 instead of Biology 302 and Chemistry 111, 225 instead of Chemistry 110, 122.

Pre-vet students must consider the entry requirements of their preferred school of Veterinary Medicine. They must take Biology 310 instead of Biology 302 and may take Biology 324 instead of Agriculture 335. They must take Chemistry 111, 212, 225, 360 and may need Chemistry 321 or 322 . Additional courses in mathematics or statistics, physics, and biology may be needed.

A poultry track is available in the Animal Science emphasis, which includes summer courses offered by the Midwest Poultry Consortium's Center of Excellence (COE) Program, along with six required internship credits. See the department for details.

| Biotechnology: | Foundation; Chemistry 111, 225, 321 or $322,323,360,361$; Biology 125, 310, 324, 335; three credits from Agriculture $201,232,234,291,315,316,331,332$. Students in the biotechnology emphasis must have a biotechnology component in Agriculture 361 and may substitute Agriculture 373 for Agriculture 380 and 381 in the foundation requirements. |
| :---: | :---: |
| General: | Foundation; Chemistry 110, 122 or Chemistry 111, 225*; Agriculture 201, 232; six credits from Agriculture 233, 234, 235, 238, 291, 331, 332, 335, 336, Biology 302; six credits from Agriculture 251, 255, 311, 315, 316, 350, Biology 125, 215. Agriculture 373 recommended. <br> *Those considering graduate school should take Chemistry 111, 225 instead of Chemistry 110, 122. |
| Missions: | Foundation; Chemistry 110 or 111; nine credits from Agriculture 201, 232, 233, 234, 235, 238, 251, 255, 311, 350, Business Administration 330, BY 291 Sustainable Tropical Agriculture (Gordon College); Theology 231, 323, 331, 332; one course from Theology 211-217; CORE 270 or one course from CORE 281-289 or participation in an off-campus program. The department encourages students to consider a community development minor. |
| Plant Science: | Foundation; Chemistry 110, 122 or Chemistry 111, 225*; Biology 125, 215; Agriculture 201, 311, 335; Agriculture 251 or 255; Agriculture 315 or 316; one course from Agriculture 341-350. Agriculture 373 recommended. <br> *Those considering graduate school should take Chemistry 111, 225 instead of Chemistry 110, 122 and may take Biology 324 instead of Agriculture 335. |

General Minor- Agriculture 101, 105, 111, 221, 290; Chemistry 110 or 111; CORE 260 or Economics 202.
Associate of Arts Degree Option Agriculture Concentration (see page 22 for Associate's Degrees Core Program requirements)
Agriculture 101, 105, 111, 221, 290; Agriculture 201 or 232; three elective credits of agriculture; Chemistry 110 or 111; CORE 260 or Economics 202.

Associate of Science Degree Option Agriculture Technology: Farm Operations and Management (see page 22 for Associate's Degrees Core Program requirements)

Agriculture 101, 105, 111, 201; Agriculture Technology 112, 113 or 123, 117, 171, 172, 173, 174, 202, 213, 221, 251, 252, 263, 271, 272, 273, 274, 275, 283; Communication 105; CORE 258, 268; English 105.

For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 85-98, Teacher Preparation Program.

101 Biology, Care, and Production of Domestic Animals (4) $\qquad$ Spring History, management, physiology, breeding, lactation, feeding, health, and products of cattle, swine, sheep, poultry, companion animals, and other species as they relate to humans and the creation. Three lectures and one three-hour laboratory period per week.

105 Orientation and Agricultural Safety (1.5) .. Fall, Spring Classroom discussion, lecture, and practical experience are used to familiarize the students with the Agriculture Department, Agricultural Stewardship Center (ASC), and the greenhouse to develop understanding and competency in operating equipment at the ASC and classroom labs. Students will receive instruction in agricultural safety to develop an understanding and competency in the areas of current agricultural production practices and safety procedures. Students will be certified in CPR and complete first aid training. The course meets for seven weeks. Two lectures and one three-hour laboratory per week.

111 Introduction to Plant Science (4)
Students will study plants, their care and use within agroecosystems, as well as their role in creation. Students will be introduced to how agriculture both influences and is influenced by human cultural development, how humankind's understanding of stewardship influences creation care, and how plants serve as sources of food, fiber, fuel, and fascination. Plant biology concepts including plant structure and function, growth, development and reproduction, and plant/environment interactions will be introduced. The course will demonstrate how these biotic and environmental factors integrate with plant biotechnology, crop breeding and propagation, protection, cropping systems, and crop economics and utilization. Three lectures and one three-hour laboratory per week.

Nature and Properties of Soils (3) Spring
A comprehensive introduction to the field of soil science with an emphasis on scientific principles and their application in solutions to practical soil management problems. Two lectures and one three-hour laboratory per week. Prerequisites: Agriculture 111 or Biology 215. [Cross-listed: Earth Science 210]

221 Introduction to Farm Business Management and Accounting (4) Spring
The study of the principles, financial statements, and analyses of farm business data using actual farm data and scenarios. Topics include decision making processes, whole business planning, goal setting, record keeping, balance sheets, budgeting, cash flow statements, income statements, budgeting, balance sheets, income statements, cash flow statements, investment analysis, tax planning and risk analysis. Three lectures and one three-hour laboratory per week. Prerequisite: sophomore standing. Business Administration 202 or Core 260 recommended.

223 Agriculture Finance and Investment Analysis (3)
Fall Even
This course will incorporate theory and applied experiences to initially address the nature, scope and principles of financial management. Additional topics include: credit risk assessment; capital structure, leverage, and financial risk; time value of money; lender-borrower relationships and loan servicing practices; and ownership and leasing of equipment and farm land. Prerequisite: Agriculture 221.

224 Agriculture Sales (3)
.Spring
Investigate the foundations of professional selling and the connection of marketing with sale in agriculture, planning and selling strategies, prospecting and understanding customers. The components of the face-to-face sales process - opening the call, identifying needs, communicating value, handling objections and closing the call - are the focus of study and practice for the majority of the course. Design strategies for online sales of agriculture products and services will also be explored. Business Administration 206 recommended.

225 Agriculture Risk Management (3). Spring Even This course will investigate the major types of agriculture risk along with corresponding mitigation strategies. Study of associated theory and applied practices using recommended steps within strategic risk management frameworks will enable students to develop relevant and practical risk management plans. Strategies to manage alternate forms of risk will be applied to the content and practices of risk management in agriculture. Prerequisite: Agriculture 221.

232 Feeds and Feeding (3) Fall The evaluation, composition, and values of feedstuffs as they relate to animal nutrient requirements will be considered. The basics of ration formulation and feeding management will be covered for the major livestock species. Two lectures and one three-hour laboratory per week. Prerequisites: Agriculture 101; Chemistry 110 or 111.

233 Principles of Dairy Science (3).
Spring Even Dairy reproduction, physiology, lactation, breeding, nutrition, and genetics will be discussed with an emphasis on scientific principles and their application to dairy science. Two lectures and one three-hour laboratory period per week. Prerequisites: Agriculture 101; Chemistry 110 or 111. Agriculture 232 recommended.

234 Principles of Animal Health (3)
.Spring Odd
Animal care and facility sanitation will be discussed, focusing on care, disease prevention, disease detection, animal treatment, pharmacology, and health programs. Three lectures per week. Prerequisites: Agriculture 101, 232; Chemistry 110 or 111. Biology 302 or 310 recommended.

235 Principles of Swine Science (3)
Fall Even
A study of swine care and management, physiology, diseases, equipment, reproduction, and nutrition. Two lectures and one three-hour laboratory per week. Prerequisites: Agriculture 101; Chemistry 110 or 111. Agriculture 232 recommended.

238 Beef and Sheep Science (3)
.Fall Odd
A study of beef and sheep management, production, physiology, nutrition, reproduction, diseases, equipment, facilities, and care. Two lectures and one three-hour laboratory per week. Prerequisites: Agriculture 101; Chemistry 110 or 111. Agriculture 232 recommended.

241 Defender Cattle Investment (1) Fall, Spring Students will implement a student-run cattle investment activity to provide applied experiences that help students learn and develop expertise through buying and selling cattle in a stewardly and profitable manner utilizing community advisors and a faculty advisor. The course will continue over both semesters and students will be encouraged to sign up for the class both semesters. Prerequisites: Agriculture 101, 221; junior or senior standing. Corequisites: Agriculture 238, 312; or permission of instructor.

251 Horticultural Plants (3) .Spring
The study of greenhouse, vegetable, and ornamental plants. The aesthetics, culture, physiology, and propagation of horticultural plants will be examined. Two lectures and one three-hour laboratory per week.

## UNDERGRADUATE ACADEMIC OFFERINGS: AGRICULTURE

Planning Agriculture Education Programs (3) Occasional This course will cover the responsibilities of an agricultural education teacher, curriculum development, experiential learning opportunities including FFA and SAE, and assessment and maintenance of program quality. The course will emphasize the development of a distinctively Christian approach to teaching agricultural education. Students participate in an extensive, 40 -clock hour, practicum experience in a local agriculture classroom, prepare a CDE team, and analyze and prepare components of a complete agriculture education program. Prerequisite: admission to the Teacher Preparation Program; or permission of instructor.

255 Forage Crop Management (3) Fall Even The production and management of crops for livestock feed are considered, and the establishment, growth, harvesting, preservation, and quality of these crops are examined. Primary emphasis is given to the value of major temperate region grasses and legumes as livestock feed, and the energy, protein, and other nutritional components they supply. The identification of common and alternative forage species is an important component of the course. Two lectures and one three-hour laboratory per week. Prerequisites: Agriculture 101, 111.

Service-Learning (1-3).
Fall, Spring, Summer
See page 37, Service Learning
290 Perspectives in Agricultural Policy (3) Fall
Worldviews relating to contemporary agriculture systems are discussed. In addition to examining historical policies, the participating stakeholder groups and development of domestic and international agricultural policies are also studied. Several views on these topics are examined and a reformed perspective is developed. Two lectures and a one-hour small group discussion period per week. Prerequisites: sophomore standing. CORE 110 and 120 recommended.

291 Anatomy and Physiology of Animals (4)
Fall Even The structures and functions of the major body systems will be studied as they work together in the life processes of an animal. The nervous, skeletal, muscle, circulatory, endocrine, digestive, and reproductive systems will be examined. Three lectures and one three-hour laboratory per week. Prerequisites: Agriculture 101 or Biology 125; Chemistry 110 or 111. Chemistry 122 or 225 recommended.

302 Methods of Teaching Agricultural Mechanics (3) $\qquad$ Occasional Students will practice methods and management techniques in agricultural mechanics laboratories. Emphasis will be on safety, mechanical skills development, and management of students, facilities, equipment, and materials. Students participate in an extensive, 60 -clock hour, practicum experience in a local agriculture classroom and laboratory to practice skills necessary to successfully teach agricultural mechanics. Prerequisite: admission to the Teacher Preparation Program; or permission of instructor.

303 Geographic Information Systems and Surveying (4) Fall An introduction to the acquisition, analysis, display, manipulation, and management of geographic information. Course topics will include geographical data input, storage, maintenance, analysis, and retrieval. Students will utilize common GIS software and associated hardware. An overview of survey methods used to gather and quantify features of physical geography will be included. The course will meet in two studio lab classes to provide an integral learn-by-doing experience applying GPS technology, survey methods, and GIS applications. Application of GIS to agriculture, business, environmental management, and other disciplines will be provided in this course. Prerequisite: sophomore standing or above. [Cross-listed: Business Administration 303, Construction Management 207, Earth Science 303, Environmental Studies 303]

311 Soil Fertility (3) Spring Even
An integrated discussion of soil-crop yields relationships with emphasis on the soil as a source of mineral nutrients for crops and the role of fertilizers and manure in crop production. Three lectures per week. Prerequisites: Agriculture 201; Chemistry 110 or 111.

312 Commodity Futures Marketing (3). Fall
The course will explore agriculture commodity markets in general and specifically commodity futures and options markets. The emphasis will be on major commercial agriculture field crops and livestock. The course will involve study of commodity price behavior and the role of futures markets as an institution in a market economy, as well as the use of futures contracts and options on futures contracts in firm asset and risk management. The mechanics of futures and options trading, basic relationships between cash and futures markets, fundamental and technical behavior of commodity future prices, hedging strategies, futures market regulations, and commodity futures market performance will be examined in light of risk management, stewardship, justice, and market development that show respect and concern for fellow human beings. Prerequisite: Agriculture 221 or Business Administration 206.

315 Entomology and Pest Management (3)
.Fall Odd
An introduction to entomology and insect-pest management including insect biology, taxonomy, ecology, life cycles, and integrated pest management. Three lectures per week. Prerequisites: Agriculture 111 or Biology 215; junior standing.

316 Plant Protection - Weed Science and Plant Pathology (3) Spring Odd A study of the major weed and plant pathology principles and theories and their application to the field of pest management. The course will include identification, physiology, ecology, life cycles, and stewardly management practices for important pest species. Three lectures per week. Prerequisites: Agriculture 111 or Biology 215; Chemistry 110 or 111 ; junior standing.

FFA and SAE Operation and Management (3)
This course is designed for preservice teachers to learn about the foundations, practices, and desired outcomes of the FFA and SAE components of an effective and comprehensive Agricultural Education program. In addition to learning about and how to teach and implement personal growth and leadership and develop concepts and skills through the FFA, students will learn about the philosophy, program, options, recordkeeping, and how to customize a comprehensive supervised agricultural experience program for all students. Prerequisite: admission to the Teacher Preparation Program; or permission of instructor.

331 Reproductive Physiology (1.5) Spring Even A study of the principles of reproductive physiology and lactation focusing on the major classes of livestock. Students will use these principles to develop an understanding of reproductive management techniques and will examine the ethics of reproductive technologies. Two lectures and one three-hour laboratory per week for seven weeks. Prerequisites: Agriculture 101 or Biology 122; Chemistry 110 or 111. Agriculture 291 recommended.

332 Advanced Animal Nutrition (1.5) .Spring Odd
A problem-solving approach will be taken to examine the nutrient requirements of animals in different production systems. Methods that can be used to meet those requirements will be evaluated. Ration formulation will be discussed as it relates to the different digestive systems and production requirements. Two lectures and one three-hour laboratory per week for seven weeks. Prerequisites: Agriculture 232; Chemistry 122 or 225.

335 Agriculture Genetics (3)
Spring Even
The current understanding of genetics will provide the basis for molecular and population genetic applications in plant and animal breeding systems. The role of genetic change in agriculture production has been, and will continue to be, an influential part of yield, quality and efficiency of production. Two lectures and one three-hour laboratory per week. Prerequisites: Agriculture 101, 111; Biology 125; Chemistry 110 or 111.

336 Meat Science (1.5) Spring Odd The processes of converting muscle tissue into meat and factors affecting meat quality will be studied. The role of the producer, packer, USDA, and consumer in quality and safety issues will be examined. Two lectures and one three-hour laboratory per week for seven weeks. Prerequisites: Agriculture 101; Chemistry 110 or 111.

337 ECHO Agricultural Conference (1) .............................................................................................................................................................Spring Participation in the major agricultural development conference held in November in Fort Myers, Florida. The Educational Concerns Hunger Organization hosts this international conference, which focuses on agricultural development, cross-cultural issues, and community development. Prerequisite: sophomore standing.

341- Special Topics (1-3) .................................................................................................................................................................................Occasional
348 These courses will consist of topics not normally covered in other program courses. Specially designed to focus on more specific topics utilizing instructor strengths and consideration of student needs.

350 Field Crop Production and Management (3).
Fall
Grain and forage production in the North Central Region of the U.S. is investigated using lectures, group projects, field trips, and production and research experiences at the ASC. The role of grains in world food production is examined, and students are challenged to find solutions to the problems frequently associated with grain production. Students collect and analyze field crop data and explore sustainable crop production methods and systems. The investigation of new and innovative crop production strategies is an important component of the course. Two lectures and one three-hour laboratory per week. Prerequisites: Agriculture 105, 221; one course from Agriculture 201, 255, 311, 315, 316.

361 Agriculture Senior Seminar (3)
.Spring
An integration of departmental courses, research, and analysis of current topics with emphasis on Christian perspective for persons involved in agriculture. Issues will include government policies, world hunger, the family farm, meat production, and others. Three lectures per week. Prerequisites: CORE 200; junior or senior standing in the agriculture department; or permission of instructor.

370 Agroecology (3)
Fall
An introduction to the principles of agricultural ecology with an emphasis on Christian stewardship of God's world. Topics include the development and characteristics of agroecosystems, ecological disturbance and succession, diversity, pest management, nutrient cycling, environmental quality, energy use, climate change, social capital, conservation practices, and global food production. The interaction of agroecosystems with surrounding ecosystems is studied, and the utilization of ecological principles in agroecosystem design and management are examined. Two lectures and one three-hour laboratory per week. Prerequisites: Agriculture 101, 111 or Biology 122, 215 or Environmental Studies 151, 152; junior or senior standing. [Cross-listed: Earth Science 370]

372 Serving and Learning in Southern Africa (Zambia) (3) .Occasional This course begins as an in-class seminar during spring semester and concludes with a 2-week long trip to Zambia in June. The on-campus component will be preparing students to understand basic principles of natural ecosystems and interactions with agricultural systems. After

## UNDERGRADUATE ACADEMIC OFFERINGS: AGRICULTURE TECHNOLOGY

finishing the classroom part of the course, the class will arrive in Ndola, Zambia and live in the dormitory at Northrise University. During their stay, students will study and analyze at least six agroecosystems in the developing country. This course is open to students of any major who have completed at least one year of college and meet the prerequisites. [Cross-listed: CORE 286]

## 373 Internship (1-3)

.Fall, Spring, Summer Students are given the opportunity to apply the principles of agriculture and business in an off-campus assignment. Prerequisite: sophomore, junior or senior standing.


#### Abstract

380 Directed Study-Class Component (.5) .Fall, Spring Students will receive instruction and guidance for the development of a group agriculture capstone project. Student groups will identify a relevant problem, review background information, develop a project with an advisor, and gain its approval prior to implementation. A Capstone Agriculture Project Handbook will provide guidance for project expectations. Graded on a pass/no record basis. Prerequisites: Agriculture 101, 105, 111, 221; Agriculture 290 or 370 ; junior or senior standing.


381 Directed Study-Project Component (3)
. Arranged A continuation of Agriculture 380. The student groups will implement an approved capstone project, report the results of the project in writing, and give a public oral presentation of their work. A Capstone Agriculture Project Handbook will provide guidance for project expectations. Prerequisite: Agriculture 380.
391. Individual Studies (1-3)
.Fall, Spring, Summer

## Agriculture Technology

112 Farm Maintenance and Repair (1) Spring
Equips students to maintain and repair various agriculture implements. Develops skill in the interpretation and use of owner's manuals. Includes the use of hand and power tools following best practices.

113 Introductory Welding (1)................................................................................................................................................................Spring
An introduction to the principles of metal joining and cutting techniques. Students will evaluate methods and techniques for metal joining and cutting. The course will cover principles and practice of shielded metal arc welding (SMAW), gas metal arc welding (GMAW), oxyacetylene welding, and cutting. Curriculum aligns to federally endorsed national standards for production workers.

117 Agriculture Electrical and Plumbing Construction (1) Fall
Introduces the student to electrical safety, basic wiring methods and materials, and basic electric circuits. Develops wiring skills using trainers that facilitate the construction of actual circuits. Introduces the student to basic plumbing construction design, methods, and materials as they relate to farm applications such as dairy milking systems, crop chemical and fertilizer sprayers, and product handling equipment. Uses lab activities to develop skills in cutting, assembling, and threading both plastic and steel pipe.

123 Intermediate Welding (1) Spring Students will learn and utilize intermediate techniques for metal joining and cutting. The course will cover intermediate level concepts, skills, and practices of shielded metal arc welding (SMAW), gas metal arc welding (GMAW), oxyacetylene welding and cutting. The course will focus on project-based learning activities Prerequisite: Agriculture Technology 113; or permission of instructor.

171- Defender Crop (1) Fall, Spring
173 Students will implement a student-run crop farming operation activity to provide applied experiences that help students learn and develop expertise through managing and operating 80 acres of the Dordt Ag Stewardship Center Farm in a stewardly and profitable manner utilizing community advisors and a faculty advisor. Production management, financial management and marketing management decision will be made and implemented in this course. Prerequisite: enrollment in Agriculture Technology program; or permission of instructor.

174 Defender Crop (.5)..........................................................................................................................................................................Spring Students will implement a student-run crop farming operation activity to provide applied experiences that help students learn and develop expertise through managing and operating 80 acres of the Dordt Ag Stewardship Center Farm in a stewardly and profitable manner utilizing community advisors and a faculty advisor. Production management, financial management and marketing management decision will be made and implemented in this course. Prerequisite: enrollment in Agriculture Technology program; or permission of instructor.

will be reviewed as well as the calibration and operation of broadcast and band applicators. Includes current topics such as the development of herbicide resistance. Prerequisite: Agriculture 111.

| 221 | Precision Agriculture (2) $\qquad$ .Spring Introduces the framework for understanding global positioning systems and related components. Topics include precision farming, positioning systems, yield monitoring, GIS systems, and variable rate technologies. |
| :---: | :---: |
| 251 | Farm Business Management (3) $\qquad$ Fall Current principles and practices of farm management. Topics include current agricultural policy, goal setting, planning, organization of the farm business, systems management, record keeping, budgeting, balance sheets, income statements, cash flow statements, investment analysis, tax planning, and risk analysis. |
| 252 | Commodity Marketing and Agriculture Sales (2). $\qquad$ Spring Introduction to the commodity futures markets, futures contracts, forward contracts, and risk management, as related to crop and livestock sales. Foundational business skills such as cash flow planning projections are also covered. Examines principles of sales and transactions common to the agricultural sector regarding inputs such as seed, fertilizer, feed, chemicals, and services. Includes steps of the sales process as well as the study of different personality styles as they function in the sales person-customer relationship. |
| 263 | Professional Networking for Internship (1) $\qquad$ .Spring Students will develop and apply professional networking competencies in the process of securing their summer internship. Example activities include exploring and identifying internship sites, networking with company representatives to identify possible options, applying to and interviewing for positions, and completing pre-employment paperwork. |

271 Agriculture Technology Internship (1.5)
An off-campus experience that provides Agriculture Technology students with opportunities to work with a mentor and apply knowledge, principles, skills, and attitudes gained in the program's courses in a workplace environment. Prerequisite: admission to Internship Program.

272 Agriculture Technology Internship (3) Spring
An off-campus experience that provides Agriculture Technology students with opportunities to work with a mentor and apply knowledge, principles, skills, and attitudes gained in the program's courses in a workplace environment. Prerequisite: Agriculture Technology 271; admission to Internship Program.

273 Agriculture Technology Internship (2)
Summer
An off-campus experience that provides Agriculture Technology students with opportunities to work with a mentor and apply knowledge, principles, skills, and attitudes gained in the program's courses in a workplace environment. Prerequisite: Agriculture Technology 272; admission to Internship Program.

274 Agriculture Technology Internship (2-3) Fall
An off-campus experience that provides Agriculture Technology students with opportunities to work with a mentor and apply knowledge, principles, skills, and attitudes gained in the program's courses in a workplace environment. Prerequisite: Agriculture Technology 273; admission to Internship Program.

275 Agriculture Technology Internship (3). Spring
An off-campus experience that provides Agriculture Technology students with opportunities to work with a mentor and apply knowledge, principles, skills, and attitudes gained in the program's courses in a workplace environment. Prerequisite: Agriculture Technology 274; admission to Internship Program.

283 Agriculture Technology Internship Closeout (1) ................................................................................................................................Fall
Students will reflect on, evaluate, and share outcomes from their summer internships. Example activities include written reflections, exit interviews, discussions with peers, and presentations to summarize their activities and learning.

391- Individual Studies (1-3) .............................................................................................................................................Fall, Spring, Summer
393 See page 36, Individual Studies
Art

## General Major-

Art History:

| Fine Arts Studio: | Art 201, 202, 209, 216, 302, 370; two courses from Art 207, 208, 210; two courses from Art 218, 225, 228, 230, 240; two <br> courses from Art 316, 318, 325, 328, 330, 340; one course from Art 295, 352, 366, 368, 375, 378, 380, 390; Philosophy <br> 206. |
| :--- | :--- |
| Graphic Design: | Art 201, 202, 209, 228, 230, 240, 250, 295, 340, 370, 390; Art 225 or 302; Business Administration 206; Philosophy 206. |

201 Design Theory (3) ..... Fall, Spring
Manipulation of two-dimensional design through the use of the basic art elements: line, shape, value, color, texture, and space. The course is intended to develop a visual vocabulary and an imaginative approach to design.
202 Drawing I (3) ..... Fall, SpringAcquiring the basic skills of drawing through an objective investigation of reality. Common media and tools are used.
207 Art History: Ancient and Medieval (3). ..... Fall Odd
This course is the first of a three-semester survey of the history of the visual arts. It investigates the role of the visual arts in the historical and cul- tural development of world civilization between prehistory and the 14th century.
208 Art History: 14th to 19th Centuries (3). ..... Spring EvenThis course is the second of a three-semester survey of the history of art. It covers the history of architecture, painting, and sculpture fromthe 14th century through the 19th century.
209 Art History: Contemporary Art and Architecture (3) ..... Fall EvenThis is the third course in a historical survey of art and architecture. The course will begin with the foundations of modernism in the lasthalf of the 19th century and then cover the plurality of styles in the 20th century.
210 Non-Western Art History (3) ..... Spring Odd
This course studies non-European art and culture including Islamic, Japanese, and Chinese art.
216 Sculpture I (3) ..... Fall
An introductory course emphasizing 3-D design and utilizing a variety of materials including clay, wood, plaster, stone, and mixed media.
218 Ceramics I (3) ..... SpringAn introduction to clay and the basic process of slab, pinch, coil, and wheel-thrown constructions. Class size is limited.
225 Painting I (3) ..... FallAn introduction to painting, emphasizing techniques and methods of communicating ideas visually. Class size is limited. Prerequisite: Art201 or 202; or permission of instructor.
228 Printmaking I (3) ..... Spring
An introduction to some basic printmaking methods including serigraphy, linocuts, collographs, and intaglio. Class size is limited. Prereq-uisite: Art 201 or 202.
230 Photography I (3) ..... SpringAn exploration of black and white photography as an art form. Students must provide their own 35 mm camera. Class size is limited.
240 Graphic Design I (3)SpringAn introductory class in the use of the Macintosh computer, covering basic layout software, object-oriented drawing software, and a paintprogram for scanning, image manipulation, and their use in graphic design. Through assignments that address the functional and experi-mental aspects of typography, students explore the interaction of form and meaning in typographic design. This course provides an initialexploration of visual communication issues and applications along with design methodology. Prerequisites: Art 201, 202; or permission ofinstructor.
250 Web Design (3) ..... SpringUsing projects that simulate real-world web design situations, learn the basics of organizing, designing, and constructing web-based inter-faces common to the professional web design process by using Adobe applications, specifically Dreamweaver. A basic knowledge of AdobePhotoshop is advised and a working knowledge of the Internet and web browsers is recommended. Prerequisites: Art 240; Computer Sci-ence 101, 103; or permission of instructor.
281- Service-Learning (1-3) Fall, Spring, Summer
See page 37, Service-Learning
295 Motion Graphics (3) ..... SpringThis course is an introduction to the art of 2-D and 3-D digital graphics animation and interactivity for video, Web, and DVD. Studentswill gain knowledge of digital animation and its history. Projects are centered on getting hands-on experience and will integrate learningwith real-world video production. The course also focuses on planning, design, and production using lectures, demonstrations, workshops,and screenings. Students will focus on using the most popular software programs. Prerequisites: Art 240; permission of instructor.
Note: Courses 302-340 are continuations of the introductory media courses. Each 300-level media course has a corresponding 200-level media course as its prereq-uisite. Permission of instructor is also required.
302 Drawing II (3) ..... Spring
316 Sculpture II (3) ..... Fall
318 Ceramics II (3) ..... Spring
325 Painting II (3) ..... Spring
328 Printmaking II (3) ..... Spring
330 Photography II (3) ..... Fall
340 Graphic Design II (3) ..... Fall
A continuation of Art 240, students apply their growing knowledge of the interaction between typography and visual form to specific designsituations. Type/image relationships are important aspects of this course. Typographic syntax and arrangement are stressed. Design meth-odology, research, the development of a variety of ideas, and print production technology is emphasized. Prerequisite: Art 240.
341- Special Topics (3) Occasional
348 These courses will consist of topics not normally covered in other program courses. Specially designed to focus on more specific topicsutilizing instructor strengths and consideration of student needs.
352 Drawing III (3) ..... SpringPrerequisites: Art 202, 302; permission of instructor.
366 Sculpture III (3) ..... Fall
Prerequisites: Art 216, 316; permission of instructor.
368 Ceramics III (3) ..... SpringPrerequisites: Art 218, 318; permission of instructor.
370 Senior Seminar in Art (3)FallA critical examination of contemporary problems and trends in the field of art. The course will include readings, discussions, a paper orpresentation, critique of current exhibitions, and a senior art show.
371 Art Internship (1) ..... Fall, SpringA professional opportunity for the art major to apply the knowledge, principles, and skills gained in the classroom in an actual workplaceenvironment. Prerequisites: level I art course in area of internship (Art 202, 216, 225, 228, 230, 240 or one of the following: Art 207, 208,209, 210); permission of instructor.
A professional opportunity for the art major to apply the knowledge, principles, and skills gained in the classroom in an actual workplace environment. Prerequisites: level II art course in area of internship (Art 302, 316, 325, 328, 330, 340 or two of the following: Art 207, 208, 209, 210); permission of instructor.
373 Art Internship (3) ..... Fall, SpringA professional opportunity for the art major to apply the knowledge, principles, and skills gained in the classroom in an actual workplaceenvironment. Prerequisites: level III art course in area of internship (Art 352, 366, 375, 378, 380, 390 or three of the following: Art 207, 208,209, 210); permission of instructor.
374 Art Internship (4) ..... Fall, SpringA professional opportunity for the art major to apply the knowledge, principles, and skills gained in the classroom in an actual workplaceenvironment. Prerequisites: level III art course in area of internship (Art 352, 366, 375, 378, 380, 390 or three of the following: Art 207, 208,209, 210); permission of instructor.
375 Painting III (3) ..... Fall, SpringPrerequisites: Art 225, 325; permission of instructor.
378 Printmaking III (3). ..... Spring
Prerequisites: Art 228, 328; permission of instructor.
380 Photography III (3) ..... Fall
Prerequisites: Art 230, 330; permission of instructor.
390 Graphic Design III (3) ..... Spring
A continuation of Art 340, this advanced course presents complex design situations. Students are involved in extended projects such asidentity systems with various components including website design, families of package design, utilitarian design or poster designs devel-oped in a series. Students are expected to cultivate and demonstrate a high level of comprehension about the interrelationship betweenvisual form and meaning. Prerequisites: Art 240, 340; permission of instructor.
391- Individual Studies (1-3)

$\qquad$
Fall, Spring, Summer
393 See page 36, Individual Studies
Astronomy
121 Solar System Astronomy (4) ..... Fall OddAn introduction to the structure and diversity of the solar system, focusing on both the historical development of understanding of our cosmic"neighborhood" from the ancient Greeks to Einstein, as well as recent discoveries and their implications for an improved understanding ofour Earth. Students will obtain hands-on experience observing the heavens with naked eye, binoculars, and telescopes. The course involvesthree lecture hours and three observation/laboratory hours per week. Prerequisite: completion of Core Program mathematics requirement.[Cross-listed: CORE 224, Earth Science 121]
122 Stellar and Galactic Astronomy (4) ..... Fall EvenAn introduction to stellar and galactic astronomy, focusing on the historical development of understanding of the cosmos as well as recentdiscoveries and their implications. Topics include the classification and explanation of stars, stellar life-cycles, remnants of stellar collapse(white dwarfs, neutron stars, black holes), galaxies, and cosmology (the study of the universe as a whole). Students will examine origins inlight of Scripture and modern scientific evidence. Students will also obtain hands-on experience observing the heavens with naked eye,binoculars, and telescopes. The course involves three lecture hours and three observation/laboratory hours per week. Prerequisite: comple-tion of Core Program mathematics requirement. [Cross-listed: CORE 225]
Biblical Languages
111 Biblical Greek I (4) ..... Fall OddStudents are introduced to the basics of biblical Greek and learn the basic forms of the Greek language, a foundational vocabulary, andelementary grammar. The focus of this course is on Greek nouns. Theology 110, 215, 216, and 217 are strongly recommended with BiblicalGreek.
112 Biblical Greek II (4). ..... Spring Even
Continues Biblical Languages 111. Students continue to work on the basic forms of the Greek language, a foundational vocabulary, andelementary grammar. The focus of this course is on Greek verbs. Prerequisite: Biblical Languages 111.

113 Biblical Hebrew I (3) ..................................................................................................................................................................Fall Even Students are introduced to the basics of biblical Hebrew and learn the basic forms of the Hebrew language, a foundational vocabulary, and elementary grammar. Theology 110, 211, 212, 213, and 214 are strongly recommended with Biblical Hebrew.
114 Biblical Hebrew II (3). $\qquad$
Continues Biblical Languages 113. Students continue to work on the basic forms of the Hebrew language, a foundational vocabulary, and elementary grammar. Prerequisite: Biblical Languages 113.
211 Biblical Greek III (3)
Fall Even
Building on the language learned in the first year, students read from a variety of texts and are taught intermediate grammar. Prerequisite: Biblical Languages 112.
212 Biblical Greek IV (3)
Spring Odd
This course is a continuation of Biblical Languages 211. Students continue to work on reading Greek texts, developing their knowledge of grammar, and engaging in elementary exegesis. Prerequisite: Biblical Languages 211.
241- Readings in Biblical Languages (1) .................................................................................................................................................... Fall, Spring
244 Students read Greek or Hebrew texts and work on building vocabulary and grammar skills to retain and develop skills learned in prior courses. Prerequisite: Biblical Languages 112 or 114 .
281- Service-Learning (1-3) $\qquad$ Fall, Spring, Summer
283 See page 37, Service-Learning
341- Special Topics (3) $\qquad$ Occasional
348 These courses will consist of topics not normally covered in other program courses. Specially designed to focus on more specific topics utilizing instructor strengths and consideration of student needs.
391- Individual Studies (1-3) $\qquad$ Fall, Spring, Summer
393 See page 36, Individual Studies

## Biology

The biology department offers several options for students with different career goals. Integrative threads in biblical perspective, biological structure, unity and diversity, historical context, environmental stewardship, and the practice of science are treated throughout. The Bachelor of Science provides excellent preparation for graduate or professional schools and is divided into a three-tier curriculum including foundational principles, distribution/ exploration, and directed research. Six cognate support courses in chemistry, mathematics and/or statistics are included. The Bachelor of Arts major is smaller and has three cognate courses and no senior directed research requirement. It is intended for students who plan to enter the work force after graduation or who would like the option of a double major. General biology and biomedical science minors are also available for students in other majors who need significant biological coursework for their intended profession.

## Bachelor of Science

Biology: Biology 122, 125, 180, 200, 215, 358, 380; Biology 225 or 251 ; seventeen credits from biology courses numbered above 215, Agriculture 251, 315, 316, Environmental Studies 270*; Statistics 131, 133.

Students must complete the following chemistry cognates: Chemistry 111, 225, 360; two chemistry courses with lab numbered 200 or above (Statistics 201 can replace one of the chemistry courses).
*Courses may be used from off-campus study sites such as the Au Sable Institute or the Latin American Studies Program, if appropriate and approved.

Public Health: Biology 122, 125, 180, 200, 310, 324, 325, 326, 357, 358, 380; Biology 225 or 251; Chemistry 111, 225, 360; Community Development 201, 330; Psychology 201, 210; Social Work 216; Statistics 131, 133, 201; one chemistry course with lab numbered 200 or above.

## Bachelor of Arts

Biology: Biology 122, 125, 180, 200, 215; Biology 225 or 251; seventeen credits from biology courses numbered above 215, Agriculture 251, 315, 316, Environmental Studies 270*.

Students must complete the following chemistry cognates: Chemistry 111, 225; one chemistry course with lab numbered 200 or above.
*Courses may be used from off-campus study sites such as the Au Sable Institute or the Latin American Studies Program, if appropriate and approved.

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Public Health:
Biology 122, 125, 180, 200, 310, 324, 325, 326, 357; Biology 225 or 251; Chemistry 111, 225, 360; Community Development 201, 330; Psychology 201, 210; Social Work 216; Statistics 131, 133, 201.

## General Minors-

Biology: $\quad$ Biology $122,125,200,215$; two semesters of college chemistry.
Biomedical Sciences: Two courses from Biology 203, 204, 325, 326; Biology 357; one college chemistry course; two courses from Biology 125, $210,301,302,304,335,350$, second college chemistry course.

For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 85-98, Teacher Preparation Program.

> 122 Animal Biology and Diversity (4).
> .Spring
> A detailed exploration of animal diversity and diversification. We explore major phyla, learn current taxonomy and principles of phylogenetics. We compare animal body plans via dissections. We learn consensus scientific understanding of evolutionary mechanisms, explore various Christian perspectives, and wrestle with the implications. We consider the current extinction rate of animals and wrestle with our responsibility to tend and keep this world. Three lectures and one three-hour laboratory period per week. Prerequisite: Biology 125 .
> 125 Cell and Molecular Biology (4) Fall
> An introduction to molecular mechanisms in eukaryotic cells. Topics include structure and functions of macromolecules and cellular structures, an introduction to major themes in biology, basic cellular physiology, Mendelian and molecular genetics, gene structure and expression. Lab includes fundamental skills in microbiology, microscopy, molecular biology, keeping a laboratory notebook, and writing lab reports. Three lectures and one three-hour laboratory period per week.
> 180 First Semester Seminar (1)......................................................................................................................................................................Fall evaluate scientific writing, consider how their faith informs their science, and learn about contemporary science/faith issues as they begin to participate in the community of learning and research on Dordt's campus. [Cross-listed: Chemistry 180]

200 Principles of Ecology and Field Biology (4). Fall
An introduction to ecological studies including topics in ecosystem and community structure, nutrient cycling, energy flow, limiting factors, and population interrelationships. The laboratory will emphasize study of local flora and fauna via field work. Three lectures and one laboratory period of three hours per week, plus one or two Saturday field trips. Prerequisite: one year of college biology.

203 Human Biology I (4)
Fall, Spring
An overview of the structure and function of the human body, using an experimental approach. Addresses how worldview impacts the use of one's own body and guides ethical decision-making. Cadaver lab exercises will be included. Three lectures and one laboratory per week. For nursing, HHP, and other non-biology majors. [Cross-listed: CORE 212]

204 Human Biology II (4)
A study of human anatomy and physiology in the context of common diseases and disorders, integrating core knowledge of structure and function with clinical correlations. The complex connections of the human body are investigated with applied lab exercises and activities. Three lectures and one laboratory per week. For nursing majors. Prerequisites: Biology 203; Chemistry 102 or 110; or permission of instructor.

210 Nutrition (3). Fall, Spring
This course will focus on the basic science of foods and their components including relationships to health and disease. The implications of personal decision making and behavior change, as well as social, economic, and cultural influences, will be discussed. Does not count toward the biology major. [Cross-listed: HHP 211]

215 General Botany (4)
An introductory study of the anatomy, physiology, taxonomy, and ecology of the major plant groups. Three lectures and one three-hour laboratory per week. Prerequisite: Biology 125.

225 Biology, Technology, and Culture (2) .Fall Odd
We are living in a golden age of biology. Our understanding of life systems at every level is exploding, leading to new opportunities to live well within a complex and deeply interconnected reality. Making wise decisions and developing responsible technologies requires an awareness of how the field is expanding as well as taking time to consider what is driving the direction of our inquiry and the implications of our discoveries. This course will explore current issues in biology through both practical and ethical lenses. Topics will be addressed through critical engagement with both primary research literature and popular media.

Paleontology (3)
Occasional
An introduction to the major fossil plants and animals, and the environments (paleoecology) in which they are found. Three lectures, or two lectures and one two-hour laboratory per week. The course includes several Saturday field trips and one weekend field trip to the Pella area. Prerequisite: Biology 122; or permission of instructor. [Cross-listed: Earth Science 227]

251 Perspectives on Origins (3). Fall Odd
A study of the philosophical, theological, and scientific aspects of evolutionary theory and the creation-evolution debate. The course will use a seminar format in which students will be required to articulate and critically analyze the different positions on origins. Not open to freshmen. Prerequisites: one college science course; CORE 200.

281- Service-Learning (1-3)..............................................................................................................................................Fall, Spring, Summer
283 See page 37, Service-Learning
300 Conservation Biology (3)
..Occasional
An upper-level course emphasizing principles of applied population and community ecology, including the biology of endangered and threatened species, their conservation, and restoration. The course will be developed in the context of Christian environmental stewardship principles. The class will meet in seminar/discussion format. Occasional field trips. Prerequisite: Biology 200.

301 Developmental Biology (3)
.Spring Odd
A study of the principles of development of representative vertebrates and invertebrates, with applications to stem cell biology and mechanisms of evolutionary change. Prerequisite: Biology 125; or permission of instructor.

302 Microbiology (4). Spring A study of the form, structure, and classification of microorganisms, including an introduction to viruses. The course will emphasize bacteria, general laboratory techniques, culturing and control of microbial growth. A substantial portion of the course will deal with immunologic processes: antibodies and antigens, host-antigen reactions, T \& B cell response mechanisms, and non-specific host defense mechanisms. Three lectures and one laboratory period per week. Prerequisite: second year student in the BSN program; or permission of instructor. Does not count toward the biology major.

304 Histology (3) .Spring Even A study of the microscopic anatomy of animal tissues and organs, emphasizing the relationship between structure and function. Prerequisite: Biology 203 or 325 ; or permission of instructor.

310 Advanced Microbiology (4) .Spring
An upper-level course in the study of microbes, their history, their cell biology, and inter-organism (symbiotic) processes. Topics will include and build on pro- and eu-karyotic distinctions, in-depth study of viruses and plasmids, anaerobic metabolism, biofilms, endosymbiosis, antibiosis, antibiotic resistance, disease mechanisms, how host immune responses develop and adapt. Laboratory work will include basic microscopic observation, culturing, and identification. Isolation and characterization of bacteria, viruses, and potential antibiosis will be featured as "unknown" work. Intended for biology majors and pre-medical students. Students cannot receive credit for both Biology 302 and 310. Three lectures and one three-hour laboratory per week. Prerequisite: Biology 125; or permission of instructor.

316 Flora of North America (3).........................................................................................................................................................Fall Even Welcome to the flora of North America! This is a course in field biology and taxonomy of vascular plants. Our study will focus on the native vegetation of the tall-grass prairie landscape with its associated gallery forests and wetlands. We will be comparing local studies to plant complexes from other geographic locations. Two lectures and one laboratory period per week. This course includes extensive field work and potentially several weekend field trips. Prerequisite: Biology 215.

319 Plant Physiology (3).
.Occasional
A study of the basic functional aspects of plant growth, development, and reproduction. Lecture topics will include water relations, nutrient relations, translocation, photosynthesis, flowering, fruiting, seed germination, growth, development, and phytohormones. Two or three lectures and/or one three-hour laboratory period per week. Prerequisites: Biology 125; Agriculture 111 or Biology 215; Chemistry 110, 122 or Chemistry 111.

320 Wildlife Ecology and Stewardship (3). .Spring Odd
Advanced examination of animal (especially terrestrial vertebrate) populations, communities, and habitats, particularly as such analysis is applied to the manipulation and exploitation of animal populations and communities to regulate their abundance and distribution and/or to restore them. Considerable exploration and critique of the development and practice of wildlife management, particularly as it compares to biblical principles for creation stewardship. Two lecture/discussion sessions and one three-hour lab per week. Additional activities include an overnight field trip and attending a wildlife conference. Prerequisite: one course from Agriculture 370, 371, Biology 200. [Cross-listed: Environmental Studies 320]

324 Advanced Genetics (3) Fall Even
A study of the relationship between genetic information and the organism. Topics include Mendelian, molecular, and population genetics,

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regulation of gene expression, epigenetics, biotechnology, and evolution. A variety of bioinformatics tools will be used for genetic analyses. Prerequisite: Biology 125.

325 Human Anatomy (4)
A detailed study of the organ systems of the human body, with an emphasis on dissections, including cadaver dissections. Three lectures and one laboratory per week. Prerequisite: Biology 122 or 203; or permission of instructor.

326 Human Physiology (4) Spring
An advanced study of the functions of the human body and how it responds to stress and disease. Three lectures and one laboratory per week. Prerequisites: Biology 125; one college chemistry course; or permission of instructor. Biology 203 or 325 strongly recommended.

327 Cadaver Dissection (1) Fall
A one-week (40 hours) laboratory course to enhance students' knowledge of human anatomy, develop dissection skills, and gain a greater appreciation for the human body. A sufficient number of students is required for the course to be offered. Graded on a pass/fail basis. Prerequisite: Biology 325 (with rare exceptions); permission of instructor.

328 Advanced Techniques in Biology (3). Fall Even Students will develop skills needed to perform laboratory techniques commonly used in research, including cell and (chick) embryo culture, histology, and molecular biology techniques. This course is project-based, primarily laboratory-focused, with some lecturing to introduce concepts. Prerequisites: Biology 125; Chemistry 111; junior or senior standing; or permission of instructor.

329 Advanced Genetics Laboratory (1) .............................................................................................................................................................................. Even Applications of genetic principles that involve crosses and analyses, microscope and molecular techniques, and bioinformatics. Graded on a pass/fail basis. Pre or corequisite: Biology 324.

335 Advanced Cell and Molecular Biology (3).
.Spring Odd An in-depth analysis of selected topics and techniques in cell and molecular biology. The field of translational research, as it applies to basic research and clinical practice, will be emphasized. Prerequisites: Biology 125; Chemistry 111.

336 Advanced Cell and Molecular Biology Laboratory (1)
Spring Odd
Techniques of mammalian cell culture and manipulation. Pre or corequisite: Biology 335 .
341- Special Topics (1-3)
.Occasional
348 These courses will consist of topics not normally covered in other program courses. Specially designed to focus on more specific topics utilizing instructor strengths and consideration of student needs.

350 Advanced Medical Pharmacology (4)
. Fall Odd
This course is designed to introduce basic concepts of pharmacology and pharmacotherapy. It conveys an understanding of drug design and the molecular mechanisms by which drugs act in the treatment and prevention of human diseases. Students will engage in team-based learning, exemplars, case studies, and concept mapping of exemplar medications. Prerequisite: Biology 326; or permission of instructor.

355 Research (1)
Fall, Spring
Laboratory or field research on an approved topic, supervised by the department staff. Strongly recommended for biology majors (sophomores, juniors, and seniors). This course can be seen as preliminary to Biology 380.

356 Research (1)
Fall, Spring
A continuation of Biology 355 .
357 Medical Terminology (1). Fall, Spring The course is designed for students in pre-health professions and secretarial science-medical emphasis. Students will learn medical terminology and its meaning within the context of the healing professions. Programmed texts and computer software will be used with regular testing periods throughout the semester. Recommended that Biology 203 or 325 be completed before taking this course. May be taken for a grade or a pass/no record basis.

358 Introduction to Biological Research (1). Fall, Spring
This is a mini-course designed to prepare students for directed senior research. The course will introduce the idea and practice of biological research. It will include the nature and scope of a research project, how to conduct literature searches, and how to design methods and protocols for problem solving. The class will meet weekly in seminar or tutorial format. Students will make weekly presentations of their progress, finalize their proposal for Biology 380 , and (if appropriate) begin the work for the directed research project. Graded on a pass/no record basis. Prerequisites: Biology 122, 125, 200, 215. [Cross-listed: Chemistry 358; Environmental Studies 358]

373 Biological Practice and Research Internship (3) $\qquad$ Fall, Spring, Summer Students apply the principles of biological practice and research in an internship setting working with businesses, academic institutions, or
non-profit organizations. Students will spend at least 120 hours at their placement site. Learning objectives relevant to each situation will be developed and assessed. Weekly reflections, a final paper, and a formal presentation are required. Prerequisite: junior or senior standing in the biology program; permission of the instructor.

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380 Directed Senior Research (3)
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``` Fall, Spring A senior-level research course that focuses on problem solving and critical thinking in the biological sciences. The project will be chosen and conducted interactively with a staff mentor(s). Research should begin in the context of earlier courses and library literature and extend to the lab and field on or off campus. Project results will be presented in a peer seminar. Prerequisite: Biology 358. [Cross-listed: Chemistry 380; Environmental Studies 380]
391- Individual Studies (1-3)
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``` Fall, Spring, Summer

\section*{Business Administration}
\begin{tabular}{|c|c|}
\hline General Major- & tion (common to all emphases): Business Administration 100, 101, 201, 202, 205, 206, 241, 301, 305, 351; Economics 3. \\
\hline \multicolumn{2}{|l|}{Students must select one of the following emphases:} \\
\hline Construction Management: & Foundation; Chemistry 110; Communication 220 or 222; Construction Management 101, 102, 220, 225, 240, 270, 280, 370; Mathematics 152; Physics 215 or 231; Statistics 131; a minimum of three additional credits from business administration or construction management. \\
\hline Entrepreneurship: & Foundation; Business Administration 207, 243, 332, 337; Business Administration 304 or 331; Communication 222; English 305; six credits designed to fit the vocational goals of the student. Accounting, Business Administration, or Economics courses will satisfy this requirement. Alternative interdisciplinary courses may also be approved in consultation with the student's advisor. \\
\hline Finance: & Foundation; Business Administration 242, 315, 325, 326, 327; Economics 303; Mathematics 152 or Mathematics 148; Statistics 131. \\
\hline General: & Foundation; three business administration electives; one economics elective; one elective from business administration or economics. \\
\hline Human Resource Manage & Foundation; Business Administration 207, 210, 333, 335; Communication 228, 260; English 305; Psychology 210; Statistics 131. \\
\hline Information Systems: & Foundation; Computer Science 115, 120, 204, 319; one course from Computer Science 290, 331, Data Science 250; one business administration elective; one economics elective; Mathematics 152 or Statistics 202; Statistics 131. \\
\hline International Business: & Foundation; Business Administration 330; Economics 321; Political Science 210; Theology 231 or 331; a minimum of six credits in an approved international off-campus experience. \\
\hline Management: & Foundation; Business Administration 207, 215, 242, 270, 307, 339; Business Administration 335 or English 305; Statistics 131. \\
\hline Marketing : & Foundation; Business Administration 308, 336, 339; Communication 260; Statistics 131; two courses from Business Administration 230, 334, 337, 338*. *Students interested in interpersonal promotional relationships should take Business Administration 334, 337. Students interested in the creative and technical aspects of promotion should take Business Administration 230, 338. Computer Science 101 and 103 also recommended. \\
\hline Office Management: & Foundation; Business Administration 105, 112, 270, 321, 322; one business administration elective; Communication 228; English 305. \\
\hline Public Administration: & Foundation; Political Science 202, 214, 245, 333; Communication 228; Business Administration 320; Economics 303 or 321. Economics 315. \\
\hline
\end{tabular}

\section*{General Minors-}
\begin{tabular}{|c|c|}
\hline Business: & Business Administration 100, 201, 202, 205, 206; Economics 202; one elective from business administration or economics. \\
\hline Digital Marketing: & Business Administration 206, 242, 250, 338; Computer Science 101, 103; English 305; Business Administration 230 or Art 240; Communication 240 or 260. \\
\hline Entrepreneurship: & Business Administration 200 or 201; Business Administration 205, 206; Business Administration 304 or 331; six credits from Business Administration 100, 207, 210, 243, 270, 307, 332, 337, Communication 222, Economics 202, 203, English 305, Theatre Arts 207. \\
\hline Finance: & Business Administration 201, 202, 305, 315, 325, 326, 327; one credit from Business Administration 242, 360, 361. \\
\hline \multicolumn{2}{|l|}{Human Resource Management: Business Administration 205, 207, 210, 333, 335; Communication 228; Psychology 210.} \\
\hline Associate of Arts Degree Option & \begin{tabular}{l}
Business (see page 22 for Associate's Degrees Core Program requirements) \\
Foundation (common to all emphases): Business Administration 100, 101, 200 or 201, 205, 206, 241.
\end{tabular} \\
\hline \multicolumn{2}{|l|}{Students must select one of the following emphases:} \\
\hline Accounting/Bookkeeping: B & Business Administration 202, 210, 242, 243; Business Administration 313 or 324. \\
\hline Administrative Assistant: B & Business Administration 105, 112, 321, 322. \\
\hline Entrepreneurship: & Business Administration 304, 332; Business Administration 207 or 210; one three-credit elective from business administration. \\
\hline Event Planning: B & Business Administration 207, 337, 338; Business Administration 335 or Communication 228. \\
\hline General: F & Four three-credit courses from Business Administration. \\
\hline Retail and Sales: B & Business Administration 334, 337; one course from Business Administration 308, 338, 339; Communication 260. \\
\hline \multicolumn{2}{|l|}{For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 85-98, Teacher Preparation Program.} \\
\hline
\end{tabular}

100 Computer Literacy for Business/Accounting Majors (3). Fall, Spring This course teaches important computer skills used in today's world of business. Areas of study include beginning and intermediate Excel and Word, advanced PowerPoint, an introduction to Access, and Windows and file management basics.

101 Introduction to Business (2). Fall, Spring This course will prepare you to understand your calling in the business industry. This course will help develop your understanding of God's plan for business and how you can become an effective Kingdom citizen in this area of work. This course will also help you gain a better understanding of the different roles people play within a business and the ways these roles work together for the effectiveness of the business. Finally, this course will provide students with advice on how to be successful within the business major.

105 Calculating Machines/Records Management (3). Spring The development of job-level skill in the operation of the electronic calculator, emphasizing the application to the solution of typical problems in business mathematics. Includes an overview of records management principles and procedures. Introduction to database application software and paperless records management are also included.

112 Keyboarding and Document Formatting (3).
Development of accuracy and speed at the keyboard. Application of skill to common office documents including emails, letters, reports, newsletters and more. The course introduces students to word processing software. Focus is placed on formatting text within the document.

200 Introduction to Accounting (3) Spring This course provides exposure to basic accounting information concerning the recording of daily business transactions and the preparation, use, and interpretation of accounting records and reports. Business Administration 100 strongly recommended.

201 Principles of Financial Accounting (3) .Fall, Spring, Summer Introduces the concepts and terminology of accounting and financial reporting for modern business enterprises. The course is centered around analyzing and interpreting accounting information for use in making decisions about organizations. There is a special emphasis on analyzing the balance sheet, the statement of income and expense, the statement of cash flows, and the statement of stockholders' equity.

Additional emphasis is placed on problem-solving, critical thinking, and communication skills that are necessary for forming conclusions about business activities and to communicate these conclusions to others.

202 Principles of Managerial Accounting (3)
.Fall, Spring, Summer
An introduction to managerial accounting, presenting basic accounting concepts that are important to management decisions. Emphasis is placed on analyzing and interpreting accounting information that enables management accountants to work with managers from other areas, particularly marketing and operations, and to make decisions about costing, pricing, and production. The tools and information that are important are described within the decision framework rather than as isolated accounting procedures.

205 Principles of Management (3). .Fall, Spring, Summer
An introductory course in management theory and practice. Major topics covered include planning and strategic management, organizational design, Christian leadership and motivation theory, and control mechanisms.

206 Principles of Marketing (3) ......................................................................................................................................Fall, Spring, Summer
A study of marketing institutions, product development, channels of distribution, price determination, promotion methods, government influences, and ethical problems facing marketing personnel. Includes a foundational study and discussion of business from a Christian perspective.

207 Human Resource Management (3) Fall Introduces students to the role that Human Resource Management (HRM) plays in organizational settings. Course content is geared towards developing the foundational body of knowledge required of entry-level HRM practitioners and is organized around the four foundation areas of HRM expertise: staffing and recruitment, employee and organizational development, compensation and benefits administration, and labor relations. Prerequisite: Business Administration 205.

210 Payroll Accounting and Employee Benefits (3). Fall
In this course, students will explore payroll accounting and employee benefits as one of the most critical elements between accounting and human resources and one of the touch points between managerial and financial accounting. This class will explore payroll processing, legal and government regulations for payroll and benefits, record keeping rules, and employee benefit and compensation program design.

215 Leading and Serving Others (3).
Spring, Summer
This course is designed to be a general elective for students in any major. Leadership Involves the study of human behavior and how individuals influence that behavior. This course will reflect a diversity of perspectives on leadership and motivation. Students will examine different models, skills, and styles of leadership, review common traits of effective leaders and evaluate, from a Christian perspective, the ethical and moral issues facing leaders. [Cross-listed: CORE 258]

226 Personal Financial Management and Stewardship (3) .Fall, Spring, Summer
Prepares students for the many financial decisions that they will be making during their lives in light of a Biblical and reformed view of stewardship. [Cross-listed: CORE 260]

230 Graphic Design (3)
Fall
This course is designed to give students the tools needed to effectively communicate and understand the area of graphic design. Students will be introduced to basic design theory that will help them create effective marketing documents. Adobe InDesign \(\circledR\) and Photoshop \(\circledR\) will be introduced to the student in a hands on, project-based learning environment.

241 Professional Practices: Career Preparation and Etiquette (1).
.Fall, Spring Students will learn the purpose and process of preparing for a career and will learn formal etiquette useful in many areas of life. We will use hands-on learning to ascertain knowledge about finding and applying for jobs, workplace professionalism, professional interviewing, applying for graduate school, and other topics related to career preparation.

242 Intermediate Excel Techniques (1) .Fall, Spring This course will provide a development of skills needed to become proficient in the use of spreadsheets. Students will use PivotTables, charts, and organizational tools while incorporating many formulas to make their spreadsheets come to life. A main component of this course will be hands-on learning with students becoming peer instructors for one another. This elective course is designed for students majoring in business who are in their sophomore, junior, or senior year. Prerequisite: Business Administration 100.

243 Introduction to QuickBooks (1). Fall, Spring This elective course provides an introduction to and overview of QuickBooks, a computerized accounting software package popular in small- and mid-sized businesses. A main component of the course will be hands-on practice. By the time you complete this course you will have a good idea of all that QuickBooks offers, be familiar with the most common tasks, and know where to find information about more advanced features.

244 Lean Enterprise and Continuous Improvement (1). ..Spring
The philosophy and related processes known as Lean is a major movement in a variety of organizations today, including for-profit, not-for-

\section*{UNDERGRADUATE ACADEMIC OFFERINGS: BUSINESS ADMINISTRATION}
profit, and governmental. Continuous Improvement (CI) is a time-based methodology often employed to implement and sustain a Lean environment. This one-credit module will expose students to the theories and practical applications of Lean and CI, providing them a familiarity and working knowledge in the strong likelihood that they join a firm that practices Lean.

\begin{abstract}
250 Business Analytics (3) .Spring The aggressive rate of data growth has outpaced our ability to manually understand what data represents. Data Analytics is the science of applying quantitative techniques to analyze data with the objective of discovering hidden knowledge and identifying interesting patterns. This course surveys several data processing and modeling methods. It will introduce analytical modeling techniques in a practical managerial context, demonstrating their potential on a wide array of applications. Prerequisite: Business Administration 100 or Computer Science 115. Business Administration 241 recommended as a corequisite. [Cross-listed: Data Science 250]
\end{abstract}

Project Management (3)
This course is an introduction to the field of project management. The primary objective is to acquaint students with a broad basic overview of project management and the role of a project manager throughout the five primary processes of managing projects. The course will also cover common agile methodologies and principles because of how they relate to project management. The agile project management process encourages frequent inspection and adaptation, teamwork, accountability, self-organization, best practices that allows for rapid delivery and high quality, and a business approach that aligns development with customer needs and company goals. Prerequisite: sophomore standing. [Cross-listed: Computer Science 270, Construction Management 270]
\(\qquad\)
See page 37, Service-Learning

301 Business Law (3).......................................................................................................................................................................Fall, Spring
This course provides an overview of the law as it relates to business, specifically focusing on regulation of businesses and business dealings. Specific topics covered include: government regulation, contracts, secured transactions, insurance, bankruptcy, and employment law. Primary emphasis is placed on contract formation and interpretation.

303 Geographic Information Systems and Surveying (4) ............................................................................................................................ Fall
An introduction to the acquisition, analysis, display, manipulation, and management of geographic information. Course topics will include geographical data input, storage, maintenance, analysis, and retrieval. Students will utilize common GIS software and associated hardware. An overview of survey methods used to gather and quantify features of physical geography will be included. The course will meet in two studio lab classes to provide an integral learn-by-doing experience applying GPS technology, survey methods, and GIS applications. Application of GIS to agriculture, business, environmental management, and other disciplines will be provided in this course. Prerequisite: sophomore standing or above. [Cross-listed: Agriculture 303, Construction Management 207, Earth Science 303, Environmental Studies 303]

304 Entrepreneurship/Small Business Management (3) Spring
A study of the importance of entrepreneurship in both the for-profit and not-for-profit sectors to the development of a society, emphasizing the different paths to business concepts, interactions with entrepreneurs, and the development of a business plan. Prerequisite: junior or senior standing; or permission of instructor.

\section*{305 Corporate Finance (3)}

Fall, Spring
An introduction to the theory, issues, and practice of business finance. Key components include valuation of financial assets, financial planning and control, working capital management, and capital budgeting. Prerequisite: Business Administration 100, 201; Math 115 for students with a score below 22 on the mathematics portion of the ACT.

307 Production and Operations Management (3).............................................................................................................................Fall Even Designed to acquaint students with the theory underlying production and operations management, to give them practice in solving the kinds of problems confronted by managers of production and service operations, and to inform them of the opportunities and challenges in the field. Prerequisites: Business Administration 205; or permission of instructor.

\section*{308 Integrated Marketing Communications (3)}Fall

In this course, students will study the principles and practices of promoting a product or service including advertising, personal selling, direct marketing, public relations, trade promotions, and the internet, all from a Christian perspective. The importance of integrating all these areas of marketing communications will be emphasized. Prerequisites: Business Administration 206 or Communication 240; junior or senior standing.

310 Intermediate Accounting I (3) Fall
Analysis of financial accounting theory and current practice. Analysis of problems concerning valuation of assets, evaluation of liabilities and capital structure, communication, and reporting of financial information. Prerequisite: Business Administration 201.

311 Intermediate Accounting II (3)
Continuation of Business Administration 310, includes special financial reports and financial analysis.

\section*{312 Advanced Accounting (3)}

Fall Even
A comprehensive study of accounting problems of partnerships, consolidations, branch operations, bankruptcies, estates, trusts, etc. Prerequisite: Business Administration 202.

313 Cost Accounting (3).
Fall Odd
A study of measurement and evaluation of production costs, including job order costing, process costing, standard costing, and quantitative methods of costing. Prerequisite: Business Administration 202.

314 Auditing (3)
Spring
A working knowledge of principles and procedures of professional auditing and accounting with special emphasis on AICPA standards and professional ethics. Prerequisite: Business Administration 311.

315 Federal Income Tax (3) Fall
A study of federal income tax regulations and forms, based on the Internal Revenue Code, with primary emphasis on tax problems for the individual. Prerequisite: Business Administration 200 or 201; or permission of instructor.

316 Advanced Federal Income Tax (3) Spring
A study of federal income tax regulations and forms, based on the Internal Revenue Code, with primary emphasis on corporations, partnerships, S corporations, estates, and trusts. Business Administration 315 strongly recommended.

317 Fraud Examination (3) Fall Even
In this course students will study fraud examination which is a methodology for resolving allegations of fraud from inception to disposition. The process involves gathering evidence, taking statements, writing reports, and assisting in the detection and prevention of fraud. Prerequisite: Business Administration 201.

320 Not-For-Profit Accounting (3).
Fall Odd
Accounting methods and managerial analyses employed for governmental bodies and private and public not-for-profit institutions. Prerequisite: Business Administration 201.

321 Office Management (3).
A study of procedures and duties essential to the efficient administration of an office by all employees. Emphasis on the role of teams in the workplace including relationships and communication. Introduction to the role of ergonomics at the workstation and in the office as well as the role of company culture in designing the workspace. Pre or corequisite: Business Administration 112.

322 Advanced Office Administration (3)
.Spring
A continuation of Business Administration 321. An emphasis on the productive relationship between the manager and the team members. A focus is placed on completing daily activities introduced in the course including meeting procedures, travel planning, virtual technology, etc. The role of human resources is also developed concerning the positions involved in an office setting. Prerequisite: Business Administration 321.

324 Accounting Information Systems (3)
.Spring
Students will develop a variety of technology and business analysis concepts and skills as users, managers, designers, and evaluators of technology and technology-driven business processes. The student will develop an understanding of how organizational processes generate information important to management. This course will use daily assignments, papers, a project with presentation, and tests. Significant discussion will pertain to the design and implementation of an accounting information system according to a Reformed perspective. Prerequisite: Business Administration 201; or permission of instructor.

325 Advanced Financial Management (3)
.Spring
The study of advanced topics in financial management, such as risk analysis, capital structure, dividend policy, mergers, acquisitions, foreign investment, etc. Case analysis will be used extensively. Prerequisite: Business Administration 305.

326 Investments Management (3)
.Spring
The study of all types of investments with primary emphasis on stocks, bonds, and related securities. Includes a discussion of the function of securities markets and institutions and portfolio management. Prerequisite: Business Administration 305; or permission of instructor.

327 Insurance and Risk Management (3)
Addresses the fundamental issues of risk management, property insurance, liability insurance, life and health insurance, the insurance market, and the operation of insurance companies. Topics to be discussed include the functions of insurance, government regulation, the nature and legal characteristics of insurance documents, marketing, loss adjustment, social insurance programs, employee benefit plans, re-insurance, and the international role of insurance underwriting. Open to juniors and seniors.

330 International Business (3) .Spring Odd
A study of the special problems involved in doing business across national boundaries with an emphasis on the economic basis for trade

\section*{UNDERGRADUATE ACADEMIC OFFERINGS: BUSINESS ADMINISTRATION}
and the impact of religious, cultural, and political environments on business practice. Includes an evaluation of the management, marketing, and financial practices of multinational corporations from a Christian perspective. (Credit will be granted for either this course or the International Marketing course taught in the Netherlands, but not both.) Prerequisites: Business Administration 206; Economics 202; junior or senior standing.

331 Social Entrepreneurship (3) ...................................................................................................................................................Spring Even
This course examines the role of social entrepreneurship, which combines the innovative and resource maximizing principles of business to improving social and environmental issues, in contributing to the common good of communities. Students will examine current social and environmental issues at the local and global level and consider ways to effectively address these issues.

332 Innovation and Creative Thinking (3).
Innovation and creativity are essential for organizations to thrive. Innovative thinking has become central to problem solving in our organizations and our communities. This course provides an overview of the processes that leads to innovative outcomes. Emphasis is on developing a systematic approach to problem solving and explores a variety of design-based methodologies. You will explore and expand your own innovation and creativity through concrete exercises and tools to reignite imagination, develop creative routines, encourage creative problem solving and spark innovative thinking. You will learn to recognize, analyze and support individual and group creativity. This course is appropriate for students in any major.

333 Strategic Human Resource Management (3) Spring An advanced course in Human Resource Management (HRM). Specific emphasis is placed on the critical strategic role that HRM plays in the success of any organization and the application of HRM practices and theory through case studies and interactive in-class exercises. Prerequisites: Business Administration 205, 207.

334 Consumer Behavior (3). Fall
A study of how consumers select, purchase, use, and dispose of goods and services. Includes analyses of how markets and others influence these processes. Application of concepts and methods of the behavioral sciences to marketing management decision making. Considerable emphasis on biblical perspectives on wealth, materialism, and consumption.

335 Organizational Behavior (3)
Fall
An advanced study of the theory and practice of organizational behavior. Topics include personality, motivation, group leadership, organization/work design, and group/team dynamics. Specific emphasis is placed on the diagnosis of organizational dysfunction and the design and implementation of appropriate Human Resource Management-driven interventions. Prerequisite: Business Administration 205; junior or senior standing. Psychology 376 recommended.

336 Marketing Research (3) Fall
A study of the various techniques used to assess the wants and needs of consumers, including focus groups and market surveys. Both qualitative and quantitative procedures will be studied with emphasis on questionnaire development and interpretation using SPSS. Business market and not-for-profit research will also be discussed. The value of secondary sources will be explored. A Christian response to the use of this analytical tool will be developed. Prerequisite: Statistics 131.

337 Serving through Selling and Retailing (3). .Spring Using lectures, class discussion, and small group activities, you will learn about the exciting fields of Personal Selling and Retailing. The basic areas of retail management will be covered: buying, merchandising, retail promotion, store location, store layout, credit management, and inventory control. Emphasis is on practical application of retail management principles. Also includes a study of the discipline of personal selling, including both sales strategies and sales management. Emphasis is given to both personal as well as business and industry sales applications. Topics include sales training, sales preparation, prospecting methods, types of presentations, handling buyer questions, closing methods, post-sales service, and sales management. Both areas will be approached from the perspective of serving others through these disciplines.

338 Digital Marketing (3) Spring An exploration of the methods businesses use to approach customers in the digital age. This course will equip students with a variety of technical skills and knowledge related to the application of Marketing principles in an online environment. Includes a thorough preparation and testing for three certifications from the American Marketing Association and Google and an exploration of the impact of the digital movement's disruption of current economies. Prerequisite: sophomore standing.

339 Marketing Management (3). Spring Prepares students to manage the interacting forces in the market to facilitate exchange processes between the producer and consumer. Strategic planning and implementation of all areas of marketing within acceptable ethical standards will be discussed. Through case studies and a simulation students will apply the concepts learned in Principles of Management and Principles of Marketing. Prerequisites: Business Administration 205, 206; junior or senior standing.
348 These courses will consist of topics not normally covered in other program courses. Specially designed to focus on more specific topics
utilizing instructor strengths and consideration of student needs.
351 Senior Business and Economics Ethics Seminar (3) Fall, Spring An integration of departmental courses involving student research and analysis on current topics in business, accounting, and economics, with primary emphasis on Christian perspectives for the businessperson and economist. Required for senior majors in business administration, accounting, or economics. [Cross-listed: Economics 351]
360 Portfolio Management (1) .Fall, Spring
An introduction to the process of professional portfolio management via the Defender Capital Management Alumni Endowed Investment Fund (DCM). Students will gain insights into the philosophy, processes, and organization involved in managing an equity portfolio. They will also develop securities research skills, including uncovering sources of information, evaluating economic, industry, sector and firm data, and securities valuation and selection. Presentations will allow opportunities for communicating research findings and reports through formal and informal means. Students will also gain hands on experience with portfolio construction, asset allocation, and risk management, as well as experience with portfolio monitoring, performance evaluation and reporting. Students will be expected to serve concurrently as senior analysts and/or officers in Defender Capital Management. Prerequisite: Business Administration 305; or permission of instructor.
361 Portfolio Management Practice (.5) Fall, Spring Practical application of portfolio management techniques in the context of the Defender Capital Management portfolio. This practicum gives students valuable hands-on experience in securities research, valuation of risky assets, and asset allocation by managing the Defender Capital Management Alumni Endowed Investment Fund (DCM). Through readings, student-prepared research reports and presentations, students develop skills in evaluating economic, industry, sector and firm data, integrating such data into a formal securities analysis and selection process, and communicating their research results to others. Students will be expected to serve concurrently as senior analysts and/or officers in DCM. Depending on their position, they may also be asked to be involved in portfolio construction (including asset allocation), risk management, monitoring, performance evaluation, and reporting. Prerequisite: Business Administration 326; or permission of instructor.
Business Administration Internship (3-9)
Fall, Spring, Summer
373 Intended to provide business administration majors the opportunity to apply the knowledge, principles, and skills gained in the classroom in an actual business environment. Prerequisite: junior or senior status and 2.00 GPA ; or permission of internship coordinator.
Accounting Internship (3-9)
Fall, Spring, Summer
377 Intended to provide accounting majors the opportunity to apply the knowledge, principles, and skills gained in the classroom in an actual accounting environment. Prerequisite: junior or senior status and 2.00 GPA ; or permission of internship coordinator.
391- Individual Studies (1-3) \(\qquad\) Fall, Spring, Summer

\section*{Chemistry}

Bachelor of Science
General Major- Chemistry 111, 180, 212, 225, 231, 271, 305, 358, 360, 380; four courses from Chemistry 251 (or Au Sable 332), 321, 322, 331, 333, 361, 365, 393; three courses from Chemistry 252, 312, 323, 335, 362.

Students must complete the following cognates: Biology 125 or Environmental Studies 151 and 161; Mathematics 152, 153; Physics 215, 216 or Physics 231, 232.

Bachelor of Arts
General Major- Chemistry 111, 180, 212, 225, 231, 271, 305, 360; a minimum of two credits from Chemistry 281-283, 284, 285 or Chemistry 358, 380; two courses from Chemistry 251 (Au Sable 332), 321, 322, 331, 333, 361, 365, 393; two courses from Chemistry 252, 312, 323, 335, 362.

Students must complete the following cognates: Biology 125 or Environmental Studies 151 and 161; Mathematics 152; Mathematics 153 or Statistics 131; Physics 215, 216.

General Minor- Chemistry 111, 212, 225; two 3- or 4-credit courses from Chemistry 200 or above.

102 General, Organic, and Biochemistry (3) Fall
An introduction to the fundamental concepts of general, organic, and biochemistry. Using relevant biological case studies, we will explore how chemistry helps us investigate, understand and explain the function and malfunction of living systems. Topics include atomic structures and chemical bonding, states of matter, chemical reactions, solutions, equilibria, acids, bases and buffers, basic organic chemical mechanisms, structure and function of biomolecules, enzyme catalysis, and central dogma of molecular biology. Three lectures per week.

110 General Chemistry (4)
Fall, Spring
A first course in the fundamental principles of chemistry for students in all science disciplines. Topics include measurement, the mole and reaction stoichiometry, atomic and molecular structure and bonding, intermolecular forces, gases, types of reactions, and energy in chemical reactions. An introduction to laboratory safety and chemical hygiene is included in the laboratory. Three hours of lecture and one three-hour laboratory period per week.

111 Principles of Chemistry (4) Fall, Spring
A study of the fundamental principles of chemistry and an introduction to foundational issues in science. Topics include atomic and molecular structure, chemical equilibria, chemical kinetics, chemical thermodynamics, and electrochemistry. An introduction to laboratory safety and chemical hygiene is included in the laboratory. This is the first course in chemistry for majors in the physical and life sciences. Three lectures and one three-hour laboratory period per week. Prerequisite: completion of online mini-course or Chemistry 110.

122 Organic and Biological Chemistry (4) Spring Organic molecules and their functional groups and biomolecules and their function in living cells will be studied. Three lectures and one three-hour laboratory period per week. The laboratory will include experiments in organic and biological chemistry. Prerequisite: Chemistry 110 or 111; or permission of instructor.

180 First Semester Seminar (1). Fall
An introduction to scientific inquiry and the skills necessary to flourish in the sciences. Students will learn to think like scientists, read and evaluate scientific writing, consider how their faith informs their science, and learn about contemporary science/faith issues as they begin to participate in the community of learning and research on Dordt's campus. [Cross-listed: Biology 180]

212 Chemical Analysis (4).
Spring
An in-depth study of the theory and practice of quantitative methods of chemical analysis. Includes discussion of proper laboratory techniques, theory of operation of common laboratory equipment, discussion of various analytical methods, sampling and sample preparation, and discussion of statistical methods for evaluating and interpreting data. Three lectures and one three-hour laboratory period per week. Prerequisite: Chemistry 111; or permission of instructor.

225 Organic Chemistry: Structure and Mechanism (4) Fall In this foundational organic chemistry course, students will learn the foundational topics and problem-solving skills needed to understand the plethora of chemical reactions that involve compounds containing carbon. A working knowledge and application of topics such as nucleophiles, electrophiles, acids, bases, stereochemistry, mechanism, kinetics, substitution reactions, elimination reactions, carbonyl chemistry, and conformational analysis will be developed. Through a detailed understanding of the chemistry, an honest discussion of ethical implications, and a thoughtful interaction with the material we will develop an understanding of how God reveals himself through his creational structure. Prerequisite: Chemistry 111.

231 Foundations of Physical Chemistry (4). .Fall Odd
This course gives a foundational treatment of the major areas of physical chemistry: chemical kinetics, thermodynamics with an emphasis on chemical and phase equilibria, and quantum chemistry with an emphasis on simple quantum systems, bonding, and spectroscopy. Three lectures and one three-hour laboratory period per week. Prerequisites: Chemistry 111; Mathematics 152. Physics 231, 232 or Physics 215, 216 recommended.

251 Environmental Chemistry (3) .Spring Odd
A study of the nature and transport of chemical species-both natural and human-introduced-in the natural environment (atmosphere, hydrosphere, geosphere, and biosphere). Three lectures per week. Prerequisite: Chemistry 111; or permission of instructor. Prior completion of Chemistry 122 or 225 recommended. [Cross-listed: Earth Science 251, Environmental Studies 251]

252 Environmental Chemistry Laboratory (1). .Spring Odd
This lab will include methods of sampling and analysis of samples from natural and/or human influenced environments. Graded on an A-F scale. Corequisite: Chemistry 251. [Cross-listed: Earth Science 252, Environmental Studies 252]

271 Inorganic Chemistry (3). ..Spring Even
A survey of the chemistry of the elements based on the physical principles underlying the periodic arrangement of the elements. Three lectures per week. Prerequisite: Chemistry 111.

281- Service-Learning (1-3). ..Fall, Spring, Summer

Students will design and implement a project in chemical education. May be offered upon request to the department chair.

285 Literature Review in Chemistry (1-3) ................................................................................................................................................... Fall, Spring Students will conduct a literature review on a topic in modern chemistry. May be offered upon request to the department chair.

305 Perspectives in Physical Science (3)
Fall Even
Historical, philosophical, and theological perspectives on the physical sciences are discussed and developed. The historical and contemporary roles of Christianity and other influential forces in science are considered. Prominent positions in the philosophy of science are examined. Aspects of the complex interactions between Christian faith and the physical sciences are discussed. Prerequisites: CORE 200; completion of the Core Program natural science requirement with a physical science course (Astronomy, Chemistry, Physics, or CORE 220-229). [Cross-listed: Physics 305]

312 Instrumental Analysis (3)
Fall Odd
Optical, electrical, and chromatographic methods of quantitative analysis and theoretical study. The class meets for three lectures per week for the first two-thirds of the semester; laboratory experiments are performed during the last one-third of the semester. Prerequisite: Chemistry 111; or permission of instructor.

321 Advanced Organic Chemistry: Synthesis and Mechanism (3) Spring Even In this advanced organic chemistry course, students will learn more advanced topics and problem-solving skills needed to understand the diversity of chemical reactions utilized in modern organic chemistry. Through the process of reviewing current chemical literature articles that report the total synthesis of natural products and investigate reaction mechanism, students will apply the foundational ideas learned in Chemistry 225, classify reactions based on analogy, articulate an understanding of topics such as stereoselectivity and regioselectivity, and explore how organic chemists advance the field. Through a detailed understanding of the chemistry, an honest discussion of implications, and a thoughtful interaction with the material will we develop an understanding of how we as scientists and Christians should respond to culture. Prerequisite: Chemistry 225.

322 Advanced Organic Chemistry: BioOrganic (3) Spring Odd In this advanced organic chemistry course, students will learn the application of organic chemistry to the processes of life. Through the process of reviewing chemical literature articles that report metabolic pathways and the total synthesis of biological products, students will apply the foundational ideas learned in Chemistry 225, classify reactions based on analogy, articulate an understanding of topics such as stereoselectivity and regioselectivity, and consider how biological catalysts accommodate chemical reactions. Through an in-depth application of the chemistry, an honest discussion of implications, and a thoughtful interaction with the material we will develop an understanding of how God has created a world in which life is supported through organic chemistry. Prerequisite: Chemistry 225.

323 Advanced Organic Chemistry Laboratory (1). ..Spring
In this advanced laboratory course, students will propose, complete, and report on common laboratory techniques utilized in organic chemistry. Students will explore several common reactions including esterification, electrophilic aromatic substitution, and multi-step chemical synthesis. Students will also propose and complete an individual laboratory project. Graded on an A-F scale. Pre or corequisite: Chemistry 321 or 322 .

331 Thermodynamics and Statistical Mechanics (3)
Spring Even The study of heat, the laws of thermodynamics, thermodynamic generating functions, Maxwell's relations, kinetic theory, partition functions, and classical and quantum statistics. Three lectures per week. Prerequisites: Chemistry 111; Mathematics 152, 153; Physics 215,216 or 231, 232; Chemistry 231 or Physics 324. [Cross-listed: Physics 331]

333 Quantum Chemistry (3)...........................................................................................................................................................................Fall Even
Quantum mechanics as applied to chemical systems. An introduction to quantum theory including a study of the postulates and simple systems. Application of quantum mechanics to atomic and molecular structure and bonding. Theoretical foundations of atomic and molecular spectroscopy. An introduction to computational methods of quantum chemistry. An overview and critique of philosophical theories relating to the meaning of quantum mechanics. Three lectures per week. Prerequisites: Chemistry 231; Mathematics 152,153 ; Physics 215, 216 or 231, 232; or permission of instructor.

335 Advanced Physical Chemistry Lab (1) Fall Even In this advanced laboratory course, students will propose, complete, and report on common laboratory techniques utilized in physical chemistry. Graded on an A-F scale. Pre or corequisite: Chemistry 331 or 333.

341- Special Topics (1-3) Occasional
348 These courses will consist of topics not normally covered in other program courses. Specially designed to focus on more specific topics utilizing instructor strengths and consideration of student needs.

355 Research Apprenticeship (1) .Fall, Spring
Laboratory or field research on an approved topic, supervised by the department faculty, working on a current research project in the

\section*{UNDERGRADUATE ACADEMIC OFFERINGS: COMMUNICATION}
department. Strongly recommended for chemistry majors (sophomores, juniors, and seniors). This course can be seen as preliminary to Chemistry 358 and/or Chemistry 380.

\begin{abstract}
358 Introduction to Chemical Research (1) Fall, Spring This is a mini-course designed to prepare students for directed senior research. The course will introduce the idea and practice of chemical research. It will include the nature and scope of a research project, how to conduct literature searches, and how to design methods and protocols for problem solving. The class will meet weekly in seminar or tutorial format. Students will make weekly presentations of their progress, finalize their proposal for Chemistry 380, and (if appropriate) begin the work for the directed research project. Graded on a pass/ no record basis. Prerequisites: Chemistry 111, 225, 360. [Cross-listed: Biology 358, Environmental Studies 358]

360 Biochemistry (3). .Spring
Study of the foundations of biochemistry, starting with the structures and functions of small biomolecules-amino acids, monosaccharides, fatty acids and nucleotides-to macro-biomolecules-peptides, proteins (enzymes), oligosaccharides, nucleic acids and lipids. With this knowledge of biomolecules, the principles of metabolism, enzyme kinetics, catalytic strategies, regulatory strategies, and allosteric enzymes will be studied. Introduction to transduction and energy storage involved with glycolysis and gluconeogenesis, the citric acid cycle, oxidative phosphorylation, and fatty acid metabolism. After exploring God's beautiful design of biomolecules, the students will understand how God's hand is working in living cells and thereby give glory to God. Prerequisites: Chemistry 111, 225.
\end{abstract}

361 Advanced Biochemistry (3) \(\qquad\) .Fall Odd
A study of the way the cell uses the breakdown of molecules to extract energy and then uses this energy for sustaining the functions of the cell by producing new needed biomolecules. This sequence will begin with the study of the metabolism of the carbohydrates culminating in the electron-transfer processes leading to the production of ATP. The metabolism of other types of biomolecules such as lipids, proteins, and nucleic acids will also be studied. Finally, the processes of biosynthesis will be investigated beginning with photosynthesis of carbohydrates in plants and ending with biosynthesis of lipids and proteins. The last chapter will help the student to appreciate how all of these complex created biological processes are regulated by the use of hormonal signals which integrate and coordinate the metabolic activities of different tissues and optimize the allocation of fuels and precursors to each organ. Three lectures per week. Prerequisite: Chemistry 360 .

362 Advanced Biochemistry Laboratory (1). Fall Even The purpose of the laboratory is to provide practical hands-on experience for students so they can appreciate the reactions taking place in the cells God has created. The experiments will be organized to parallel the various topics in Chemistry 360. One three-hour laboratory per week. Graded on an A-F scale. Prerequisite: Chemistry 360.

365 Solar System Chemistry (3) .............................................................................................................................................................Spring Odd A detailed survey of the chemistry of the Sun, planets, satellites, asteroids, and comets. Topics include the origin of the elements and clues regarding the formation of planetary systems including exoplanetary systems, the comparative geochemistry of the terrestrial planets (Mercury, Venus, Earth, Mars), and the atmospheric chemistry of the gas giant planets (Jupiter, Saturn, Uranus, Neptune) based upon ground, orbital, and spacecraft observations, and implications for a Christian understanding of the origin and history of the Earth and the Solar System. Prerequisite: Chemistry 111; one course from Astronomy 121, Earth Science 201, 202, Chemistry 251; or permission of instructor. Chemistry 231 recommended.


391- Individual Studies (1-3) \(\qquad\) Fall, Spring, Summer
393 See page 36, Individual Studies

\section*{Communication}
\begin{tabular}{|c|c|}
\hline General Major- & Foundation (common to all emphases): Communication 180, 222, 240, 241, 323, 380. \\
\hline \multicolumn{2}{|l|}{Students must select one of the following emphases:} \\
\hline Communication Studies: & Foundation; Communication \(220,228,232,270,301,311,314,322\); nine credits designed to fit the vocational choice of the student. Six of these credits must be communication credits and the communication department advisor must approve all credits. \\
\hline Digital Media Production: & Foundation; Art 201, 295; Communication 250, 255, 320, 330, 333, 381; one course from Communication 235, 260, 261; two courses from Business Administration 308, Communication 350, English 307, Music 306, Theatre Arts 372. \\
\hline
\end{tabular}
\begin{tabular}{ll} 
Healthcare Communication: & \begin{tabular}{l} 
Foundation; Communication 220, 232, 260, 270; one course from Business Administration 206, Communication \\
261, 305, 311, 314; one credit from Communication 041, 051, 071, 371, 391; Biology 357; CORE 212; Health and \\
Human Performance 209; Nursing 180, 207; Political Science 333; Statistics 131.
\end{tabular} \\
Journalism: & \begin{tabular}{l} 
Foundation; Communication 235, 242, 244, 250, 324; Communication 260 or 261; Communication 232 or 382; \\
one course from Communication 301, 302, 320, History 308; three credits from Communication 041. To complete \\
this major, students will work with their advisor to select six additional credits to gain content knowledge for a beat \\
concentration.
\end{tabular} \\
Public Relations: & \begin{tabular}{l} 
Foundation; Communication 228, 232, 260, 261, 360; Communication 235 or 250; Art 201; Business Administra- \\
tion 206, 336; three credits from Communication 041, 051, 071, 371, 391, 392, 393. Statistics 131 recommended to \\
fulfill Core quantitative reasoning requirement.
\end{tabular} \\
General Minors- & \begin{tabular}{l} 
Communication 235, 236, 240, 241; Communication 244 or 324; Communication 250 or 311; two credits from \\
Communication 071.
\end{tabular} \\
Broadcasting: & \begin{tabular}{l} 
Communication 180, 222, 228, 240, 270, 301; Communication 220 or 322.
\end{tabular} \\
Communication Studies: & \begin{tabular}{l} 
Art 201 or 202, 240; Communication 240, 250, 320; two courses from Business Administration 308, Communica- \\
tion 330, 333, English 307, Music 306, Theatre Arts 372.
\end{tabular} \\
Digital Media Production: \\
Journalism: & \begin{tabular}{l} 
Communication 240, 241, 242; Communication 301 or 302; two courses from Communication 235, 244, 323, 324; \\
two credits from Communication 041.
\end{tabular} \\
Public Relations: & Communication 228, 260, 261, 360; Business Administration 206, 336.
\end{tabular}

\section*{041 Diamond Workshops (1)} Fall, Spring
This workshop provides hands-on practical experience working as a team on the campus newspaper and website, the Diamond. Joining the staff of the student-led publication offers opportunities to apply multimedia storytelling and design skills learned in class, hone deadline-reporting expertise, and develop management and leadership abilities. This workshop is required of all journalism majors and may be completed for credit up to four times.

051 Forensics (1)
Fall, Spring
Forensics includes individual events and debate for the continued development of public speaking skills. Active participation involves weekly practice and coaching, as well as formal evaluation in a collegial, competitive environment at regional tournaments. Graded on a pass/no record basis.

071 Dordt Media Network (1-3) .Fall, Spring
Dordt Media Network strives to obediently communicate God's unfolding creation, equipping and encouraging viewers to live according to His Word. Students apply for \(1-3\) hours of academic credit for work with the Dordt Media Network in two areas: video production and live stream/remote broadcast production. Registration for credit is required in the semester in which you are on the Dordt Media Network team. Student work will include producing promotional videos for the university and sports highlight videos of Defender athletic events. In addition students can work on the live stream/remote broadcast team as camera operators, graphic, replay and audio operators.

105 Workplace Communication (3) Fall, Spring During this semester we will be exploring the types of formal and informal communication encountered in a workplace setting. Where we work is a fundamental part of who we are so it is vital we learn about and practice the various kinds of communication that take place in an organization. There is a lot to cover during our time together, but some of the issues involve discovering the communication process, improving listening skills, developing public speaking and presentation skills, improving interpersonal communication, and examining cross-cultural influences.

180 First Semester Seminar (1). Fall Designed to introduce the beginning communication student to some basic principles and thought in the field of communication. Offered in a seminar style, each week we will meet to cover key concepts of communication, such as the communication model, areas of communication, and preparing for a career in communication. This introductory course is designed for new communication students, but anyone wanting an overall understanding of communication and its principles will benefit as well.

\section*{UNDERGRADUATE ACADEMIC OFFERINGS: COMMUNICATION}

Small Group Communication (3) Spring Even
A study of the theory and practice of group problem-solving in cooperative face-to-face discussion; the development of awareness and understanding of group dynamics, and the presentation of panel, symposium, and dialogue.

222 Interpersonal Communication (3)
Fall, Spring
The study of concepts, problems, and responsibilities in communication between two or more persons, focusing on conversation with consideration of many variables and contexts. [Cross-listed: CORE 254]

228 Organizational Communication (3) Spring
The analysis of formal and informal communication in such organizations as corporations and institutions. Included will be considerations of communication problems related to grapevine, rumor, channels, perception, power, status, roles, structures, etc.

232 Emerging Media (3)..............................................................................................................................................................................Spring Even In this course, we explore technology's role and influence in media, communication, and faith. Through the study of communication theories, marketing techniques, entertainment vocabulary, technology applications, and Scripture, we will consider social change at various levels (from the individual to the world). Students will use digital communications tools creatively to apply practical concepts to organizational settings, professional roles, and special areas of interest.

235 TV and Radio Broadcast Production (3)
This television and radio broadcasting course strives to obediently communicate God's unfolding creation, equipping and encouraging students to use their video and radio broadcasting skills to live according to His Word. Students will learn the basic fundamental skills in radio and television news reporting, interviewing, commercial production and broadcast remote production.

236 Sports Broadcasting (3). .Spring Odd
This course focuses on all aspects of Sports Broadcasting including sports reporting and anchoring. Students will learn how to properly shoot and edit sports video, how to provide quality play-by-play announcing, and how to properly prepare to call a game. Students will also learn to conduct in-depth interviews with players and coaches.

240 Introduction to Mass Communication (3).
Fall
An introduction to the concept of mass communication and its application to electronic and written media. The course will survey the historical development of technology and the impact of mass communication on culture and society.

241 Introduction to Journalism (3)
Fall
An overview of how journalists should tell the world's stories and how journalism can be used to sustain and build communities in a free society. The course emphasizes storytelling. Students practice several types of creative but factual journalism for print, audio, and video media. Students also will explore the reporter's role and mandate in society, the current state of the news media, and how Christians can use journalism to serve the public good by helping citizens better understand and then confront their community's challenges. [Cross-listed: English 241]

242 Feature Writing (3).
Spring
This course is designed to help students craft compelling true stories using creative writing techniques from the world of fiction. Students will examine key story elements found in captivating narratives such as structure, point of view, character, scene, action, dialogue, and theme. We will also analyze numerous award-winning feature articles to see how professional writers use these methods to tell human interest stories that are no less engaging because they are true. Students then will hone their own storytelling skills by writing about people they find around the campus and the community. Satisfies Core Program writing-intensive requirement. [Cross-listed: English 242]

244 Beat Reporting (3). Fall Even
Using the community as the laboratory, this course enables students to practice responsibly serving the public good by being a watchdog who holds the powerful accountable and tells the stories of the weak. Students in this course learn the foundations of beat reporting, going deeper into the many subjects a journalist covers. Specialized areas to explore may include politics, education, business, agriculture, art, science, community development, crime, healthcare, sports, and religion.

250 Introduction to Film/Video Production (3) In this introductory course, students will gain working knowledge of sophisticated cameras and equipment, a beginning knowledge of editing on the Avid platform, and in-depth discussion of what it means to be a Christian in the communication and entertainment industry today. Students will work in teams to produce films during the semester.

Film Criticism (3) Spring
Movies are one of the most powerful forms of communication of the modern era, but how many of us actually know how to "read" them? Directors use camera angles, color, music, sound, blocking, mise-en-scene, and various other techniques to tell us a story without words. Knowing the language of film will make them more enjoyable and help you understand them better. Film screenings will include popular films, classic films, and films that both critics and audiences praise. Students will be introduced to theories of film criticism.

Public Relations (3) Fall
As an introduction to public relations, this course will set the background for additional courses in communication and business administration. After a study of the history of public relations, students will learn what is expected of public relations workers, study the various publics, become familiar with current problems and issues in public relations, analyze several cases, and develop a Christian perspective for the continued study of public relations.

261 Public Relations Writing (3)
.Spring Odd
This course is, above all, a writing course. Focused on public relations writing that serves overall organizational goals, the course readings and assignments allow students opportunities to further develop their writing, research, and critical thinking skills and creativity in one of the most culture-shaping industries.

270 Cross-Cultural Communication (3)
Fall, Spring
This course explores a variety of cross-cultural and intercultural communication experiences. Students will explore the concept of culture and examine the relationship of culture and communication to build a framework for studying cross-cultural communication patterns from a variety of representative cultures (including North American culture). Special emphasis will be given to the influence of worldview, ethnic identity, and socialization on the process of communication. Overall, this course is designed to help you appreciate and understand different forms of communication and begin to develop a Christian perspective for the differences and relationships between cultures. [Cross-listed: CORE 270]
\(\qquad\) narrative writing skills, especially an engaging voice. Major assignments include the profile, the review, and the personal essay. Students will also read and react to various types of non-fiction writing, both essays and longer works. Significant class time is spent in workshop format, with students reading and discussing their own work. Satisfies Core Program writing-intensive requirement. English 220 recommended. [Cross-listed: English 301]

302 Advanced Argumentative Writing (3) .Occasional The primary goal of this course is to help students argue and persuade well in writing, in preparation for careers that demand high-level argumentation-such as seminary, law school, graduate school, political work, and research and grant writing. Students will study the art of rhetoric, writing for specific audiences in order to persuade, dissuade, or inspire them. They will also incorporate research, at an advanced level. Satisfies Core Program writing-intensive requirement. [Cross-listed: English 302]

305 Business and Technical Writing (3) .Fall, Spring
Students will study the process, application, and characteristics of business and technical writing, and the way in which writing style, strategies, content, and clarity will relate practically to one's profession. Concentrates on developing competence in a variety of writing tasks commonly performed in business, law, industry, social work, engineering, agriculture, and medicine. Satisfies Core Program writing-intensive requirement. [Cross-listed: English 305]

311 Advanced Public Address (3)
.Spring Odd
An emphasis upon proper speech construction and delivery with application of communication concepts. Includes analysis of some public addresses. Prerequisite: CORE 110 or equivalent.

314 Argumentation and Persuasion (3)
Spring Even
After a study of the history of argumentation and persuasion and the relationship of argumentation and persuasion, this course will focus on various theories of attitude change, the structure of argument, and the development of a Christian perspective. Applications of argument and persuasion to be considered are: propaganda, advertising, political campaigns, and political debate. The student will be expected to apply the course studies to his/her specific vocational decisions.

320 Advanced Film/Video Production (3).
Building on the preproduction, production, and postproduction skills gained in Communication 250, students will bring their film/video production skills to a deeper level through in-depth analysis of other filmmakers' work and through hands-on work with green screen techniques and more. A variety of videos will be produced during the semester. Prerequisite: Communication 250.

322 Family Communication (3)
Spring Odd
The focus of this course is to analyze and understand communication in long-term interpersonal relationships in the family. Problems specific to family communication will receive attention. The course aims at improving communication by stressing application of communication principles to family interaction. Prerequisite: Communication 222; or permission of instructor.

323 Communication Law and Ethics (3) Fall Even
The course examines the legal roots behind the notion of a public media. Students will explore the laws protecting communication in the

\section*{UNDERGRADUATE ACADEMIC OFFERINGS: COMMUNICATION}
public square. Students will study the ethics highlighting a communication professional's responsibilities in the face of these legal freedoms and protections. Paying particular attention to principles from a Christian perspective and using case studies, mock trials, and role playing, students will look at both what a communicator can do and what a communicator should do.

324 Issues in Journalism History and Culture (3).
.Spring Odd
An exploration of the roots of journalism and an examination of how the media both chronicles and shapes culture. Students follow journalism's own story from the printing press to podcasts, using research and storytelling skills to bring this history to life. Focus topics will vary each semester but in general will include a look at the people and technology behind journalism's ongoing evolution. Readings will come from well-known journalists involved in key moments of history. Students will also view important films featuring journalists as the heroes or villains with the class critiquing these films for what they highlight and warn us about the role of media in society.

330 Advanced Video Editing (3) ...................................................................................................................................................Spring Odd
Students will do an in-depth study of the film/video editing techniques of great editors through history, study the impact that editing decisions have on a final product, and bring their own editing abilities to a new level through advanced training with Media Composer. Prerequisite: Communication 250.

333 Documentary Film Making (3).
Spring Even A study of the history of the genre; screen documentary films and draw upon a wealth of critical writings produced in the past to help us decipher the textual strategies that create documentary films' "reality effect." Students will also explore the creative, technical, and practical aspects of creating a documentary film. Teams will produce documentary films for their final projects. Prerequisite: Communication 250.

\section*{341- Special Topics (1-3)}
.Occasional
348 These courses will consist of topics not normally covered in other program courses. Specially designed to focus on more specific topics utilizing instructor strengths and consideration of student needs.

\section*{Short Film Production (3)}

This course gives a select number of students an immersive opportunity to create a short film by working in assigned roles on a film crew. The team will collaborate to create a short film that is content worth consuming. Understanding the unique roles of filmmaking and the critical need for cooperation and collaboration will help students become better communicators in this culture-shaping arena.

360 Campaigns and Cases (3)
Spring Even An advanced course that focuses on public relations as a management function in organizations. A key component of the course is planning and implementing a public relations campaign for a local organization. Students also will examine specific public relations contexts and analyze case studies that exemplify how real organizations successfully apply communication to take advantage of public relations opportunities and to solve public relations problems.

371 Communication Internship (1-6) Fall, Spring, Summer A supervised work experience in the areas of communication, public relations, journalism, digital media, or with the Digital Media Network designed to provide the student with the opportunity to apply principles and skills gained through coursework. Open to all communication students.

380 Senior Seminar (3) Fall The capstone course for all communication majors - communication studies, digital media, healthcare communication, journalism, and public relations. Students will research, discuss, and struggle with major issues in communication such as freedom of speech, media impact, modern technology, and the information superhighway. Students will be pressed to expand and refine their Christian perspective regarding communication with the study of the role and responsibility of communication in society. Students will examine current communication theories, research, and research design.

381 Media Production Practicum (3)
Fall, Spring Building on skills learned in Communication 250 and 320, junior and senior communication majors work independently to create media content for a client or on a project the student cares about deeply. Students gain valuable experience in meeting production deadlines, dealing with client expectations, and behaving in a professional manner while producing media content. Students will regularly reflect on issues of ethics, excellence, and Christian perspective in one's work through readings, written reports, and discussion. Students will give a public screening of their project at the end of the semester. Prerequisites: Communication 250, 320; junior or senior standing.

382 Journalism Practicum (3) \(\qquad\) Spring Serving as a culmination of time in the program and taking reporting to the highest levels, the practicum gives journalism majors a semester to produce a series of stories on a thematic topic. Students will work across multimedia platforms to develop their pieces, combining photography, video, graphics, sound, websites, and the written word to present engaging multimedia packages. Students will then demonstrate proficiency with social media strategies to disseminate their stories to a diverse audience. This final product can be used as a cornerstone for employment portfolios. Prerequisites: Communication 241, 242, 244; junior or senior standing.

\section*{Community Development}

The goal of community development work is to see communities (international and domestic, urban and rural) flourish in new ways. Community development professionals are motivated to help communities identify and solve their own problems. They have a broad understanding of the development process, as well as in depth knowledge in specific areas (see list of tracks below). They may work in many settings, including government agencies (cities, states, the United Nations), non-profit development organizations (World Renew, Mennonite Central Committee), or for-profit companies interested in strengthening the communities they interact with.
\begin{tabular}{ll} 
General Major- & \begin{tabular}{l} 
Foundation (common to all tracks): Community Development 101, 151, 161, 201, 301, 330, 391; one course from Sociology \\
201, 215, 216; Theology 310 or Social Work 313; Community Development 373 or completion of a semester long cross- \\
cultural experience approved in advance by the community development program leader.
\end{tabular}
\end{tabular}

Students must select one of the following tracks:
\begin{tabular}{ll} 
Belief Systems and Culture: & Psychology 201; Psychology 210 or 384; Theology 231, 331, 332, 351, 352. \\
Business and Economics: & \begin{tabular}{l} 
Business Administration 205, 206; Economics 202, 203, 334; Sociology 215; one course from Business Ad- \\
ministration 304, 320, 330, Economics 321, Environmental Studies 152.
\end{tabular} \\
Communication and Digital Media: & \begin{tabular}{l} 
Communication 222, 270; one course from Communication 220, 228, 240, English 305; eleven additional \\
credits of communication coursework approved in advance by the community development program leader.
\end{tabular} \\
Community Education: & \begin{tabular}{l} 
Education 101, 165, 203, 300; Communication 220 or 270; Education 355 or Linguistics 201; Sociology 215 \\
or 216.
\end{tabular} \\
Facilities and Infrastructure: & \begin{tabular}{l} 
Construction Management 101, 102, 207, 270; nine additional credits selected from construction manage- \\
ment and engineering coursework and Environmental Studies 152 approved in advance by the community \\
development program leader.
\end{tabular} \\
Food Systems: & \begin{tabular}{l} 
Agriculture 101, 111, 221, 251; one course from Agriculture 370, 371, 372; three credits of agriculture electives \\
numbered 200 or higher. Relevant courses from Au Sable Institute may be used if approved in advance by the \\
community development program leader.
\end{tabular} \\
Natural Resources and the Environment: & \begin{tabular}{l} 
Biology 200; Chemistry 110; Economics 334; Environmental Studies 251, 252; one course from Biology 316, \\
Environmental Studies 270, 320; one course from Environmental Studies 152, 201, 202, 303, Geography 151.
\end{tabular} \\
Public and Environmental Health: & \begin{tabular}{l} 
Chemistry 111; Sociology 201; Biology 200 or Environmental Studies 152; Biology 302 or Environmental \\
Studies 251, 252; two courses from HHP 202, 209, 211, EMT training recommended.
\end{tabular} \\
Politics and Social Policy: & \begin{tabular}{l} 
Political Science 201, 214, 245; Political Science 210 or 370; Social Work 313; Political Science 333 or Social \\
Work 315; Sociology 215 or 305.
\end{tabular} \\
General Minor- & Community Development 101, 151, 161, 201, 301, 330, 391; one course from Sociology 201, 215, 216; one course from Theol- \\
ogy 310, 323, Social Work 313.
\end{tabular}

\section*{101 Community Development Seminar I (1) Fall}

An introduction to the community development discipline with an emphasis on current events and a holistic understanding of the discipline. The class will meet in one three hour laboratory block and integrate guest speakers, discussion and analysis, field trips, and interaction (direct or electronic) with community development professionals. Graded on a pass/no record basis.

151 Communities and the Environment (3) Fall
An introduction to contemporary environmental studies and creation care, with emphasis on class discussion of relationships between human population and resource use in light of biblical teaching about environmental stewardship. Particular attention is given to the biotic and ecological dimensions of creation stewardship and planetary distress. Corequisite: Community Development 161. [Cross-listed: CORE 211, Earth Science 151, Environmental Studies 151]

161 Field and Laboratory Investigations in Environmental Studies (1) Fall
A field and laboratory exploration of fundamental issues, concepts, and techniques of contemporary environmental studies with a biological and ecological focus. Includes visits to sites of natural history and stewardship interest both locally and regionally. Also includes an introduction to important technological tools in environmental studies and analysis of physical and biotic parameters of the environment. Required for students majoring or minoring in Environmental Studies or Community Development. Corequisite: Community Development 151. [Cross-listed: Environmental Studies 161]

201 Helping Communities Flourish (3) ..Spring Christians are called to love their neighbors and can do so by working to strengthen communities in North America and throughout the world. In this course we will examine community development strategies and practices (historical and current) used in domestic, international, urban, and rural settings. Our goal will be to identify those that fit well with a Christian view of the world and are likely to help communities flourish in the long term. We will also explore how these practices and strategies can be successfully implemented. [Crosslisted: CORE 257]

281- Service-Learning (1-3)......................................................................................................................................................Fall, Spring, Summer
283 See page 37, Service-Learning
301 Community Development Seminar II (1).
.Spring Odd
An examination of emerging trends and practices in community development. Particular emphasis will be put on how the field is developing and how Christians can contribute to it now and in the future. The class will meet in one three hour laboratory block and integrate guest speakers, recent articles and videos, field trips, and interaction (direct or electronic) with community development professionals. Prerequisite: Community Development 201.

320 Place, Grace, and Humans in Community (3) .Occasional A study of the philosophical foundations of social relationships. Possible topics explored include the relationship between groups of people and their physical environment, the possibility of understanding people from different cultures than our own, and whether we can hold other communities to the standards of our own communities. Prerequisite: CORE 200. [Cross-listed: CORE 356, Philosophy 320]

330 Community Development and the Kingdom of God (3)
.Spring Odd
An exploration of the opportunities community development professionals have to live as kingdom citizens. This course will build on the framework established in Community Development 201, extending the theoretical and practical concepts and examining how they relate to our calling as Christians to work toward restoration and shalom in urban, rural, domestic, and international settings. Prerequisite: Community Development 201.

341- Special Topics (1-3)
Occasional
348 These courses will consist of topics not normally covered in other program courses. Specially designed to focus on more specific topics utilizing instructor strengths and consideration of student needs.

373 Community Development Internship (3) .Fall, Spring
Provides community development majors and minors with an opportunity to learn from professionals in the community development field, to apply the insights, skills, and principles they have learned in their coursework, and to serve a community in a meaningful way. Prerequisites: junior or senior standing; permission of internship coordinator.

391 Professional Conference Attendance (1) ........................................................................................................................................Fall, Spring
Participation in a professional community development conference. Examples include the ECHO conference and the International Development Conference at Calvin University. Pre-conference and post-conference activities and assignments will be utilized to help participants prepare for, and process, the experience. Prerequisites: sophomore standing; permission of instructor.

\section*{Computer Science}

General Major- Foundation: Computer Science 109, 115, 116, 120, 204, 205, 215, 315, 371, 390; Engineering 310 or Philosophy 206; Mathematics 152, 212; one course from Computer Science 283, 393, or an approved undergraduate research experience; one course from Communication 220, 222, English 305.

After completing two semesters of the computer science curriculum (with a minimum of one semester at Dordt University), students seeking the computer science major must apply to be officially accepted into the program. Typically, this takes place as part of participating in the Computer Science 109 careers seminar course. To be accepted into the computer science program, students must:
- Review the program's mission and curricular objectives and outcomes. Students will reaffirm their commitment to the program objectives and outcomes as they partner with faculty in the learning process.
- In consultation with computer science faculty, create an approved area of study in the computer science program and provide an updated program of study plan.
- Achieve a C- or better in each of Computer Science 115, 120, 204, 205, 215, 315, Mathematics 152, and a passing grade in Computer Science 109; along with an overall GPA of 2.5 or higher.

Students will select, in consultation with an ad hoc faculty committee, a set of at least 21 additional credits, from any department. These courses must constitute a cohesive preparation for the student's vocation and must be recommended by their ad hoc committee and approved by the department. Examples of areas of study that are possible include: Systems Administration, Business Programming, Data Science, Device Driver Programming, Graphics Animation, Computational Science, Digital Humanities, Agricultural GIS Programming, or preparation for the many other fields of service which require both skills in computing and domain knowledge in some other area. Ordinarily, this set of courses will be selected as part of completing Computer Science 109 during the student's sophomore year. Recommended courses that should be included in many student's area of study include: Computer Science 270, 319, 331.

Computer Science/Mathematics Major- Computer Science 115, 116, 120, 204, 205, 215, 315, 340; one course from Computer Science 290, 319, 331; Mathematics 152, 153, 203, 207, 209, 212, 304, 390; one course from Mathematics 201, 204, 215 and 216, 303.

\section*{General Minors-}
\begin{tabular}{|c|c|}
\hline Computer Science: & Computer Science 115, 204, 205; Statistics 131; six credits from Computer Science 120 or above; three credits from Mathematics 148 or above. \\
\hline Web Development: & Computer Science 115, 120, 215, 319, 331; Art 250; Business Administration 338; Mathematics 152 or Statistics 131. \\
\hline Associate of Arts Degre & Option Computer Networking Concentration (see page 22 for Associate's Degrees Core Program requirements) \\
\hline & Computer Science 115, 116, 120, 204, 205, 215, 245, 371; two courses from Computer Science 315, 319, 331; Economics 202; English 305; Mathematics 149 or 152. Recommended electives: Business Administration 205, Communication 220, 222, Computer Science 319, Psychology 201, Statistics 131. \\
\hline
\end{tabular}

101 Digital Literacy (1) \(\qquad\) .Occasional
An introduction into techniques and tools used to find, evaluate, utilize, share, and create content using information technologies and the internet. Topics for discussion include: perspectives on technology, the capabilities and limitations of computing, and issues relating faith, computer technology, and the impact on society.

102 Computational Literacy (1) Occasional An introduction into techniques and tools used to develop algorithms, apply problem solving strategies, and acquire and analyze data.

103 Web Page Development (1). \(\qquad\) Occasional An introduction into programming web pages. The course will focus on the implementation of HTML and CSS. Other topics will include the use of web content publishing platforms. Prerequisite: Computer Science 101 or 102.

104 Computational Science (1). Occasional An introduction into techniques and tools used to apply computing capabilities to understand and solve complex problems. Topics for discussion may include: data types (representation, abstraction, and limitation), scientific data acquisition, solving equations and algorithms, or modeling. Prerequisite: Computer Science 102.

109 Callings and Careers in Computer-Related Fields (1). Fall
A survey of the various careers and fields of service that are possible in the field of computing. Topics include the breadth of opportunities available, insight into how to prepare, and guidance on selecting courses for an area of study for the computer science major, and application to the computer science program.

115 Programming I (3).
.Fall, Spring
An introduction to computer programming. Basic notions of abstraction, elementary composition principles, the fundamental data structures, and object-oriented programming technique are introduced. Topics include variables, control structures, arrays, and input/output. [Cross-listed: Engineering 170]

116 Selected Topics in Programming (1)
Fall
An extension to the topics included in Computer Science 115 that will be beneficial to further study in computer science. Topics include a survey of other programming languages, an introduction to GUI and event-driven programming, and an introduction to the syntax of the C language. Corequisite: Computer Science 115.

120 Information Systems Design (3)
Fall
An introduction to the nature of information systems, the conceptual foundations and use of such systems. Topics include information

\section*{UNDERGRADUATE ACADEMIC OFFERINGS: COMPUTER SCIENCE}
systems project management, requirements analysis and use cases, structural and behavioral modeling, prototyping, use of the Unified Modeling Language, and an introduction to SQL database access. Corequisite: any college level computer science course.

\begin{abstract}
204 Introduction to Data Communications (3).
A study of the concepts, issues, and technology involved in the transmission of data. Topics include network configurations, communications protocols, data coding schemes, and transmission hardware. Prerequisite: completion of Core Program mathematics requirement. Pre or corequisite: Computer Science 115.

205 Computer Systems and Digital Circuits (4) Spring
An introduction to the organization and inner workings of a modern digital computer and its components. Topics include introductory digital logic and circuits, CPU components, memory systems, input/output, storage systems, and introductory operating systems concepts. Digital circuits are covered, from simple logic gates through elementary microprocessor architecture. Laboratory provides hands-on experience in logic design, digital circuits, and computer systems. This course serves both computer science and engineering students. Strong algebra skills required. [Cross-listed Engineering 205]

215 Programming II (3) ........................................................................................................................................................................Spring
A continuation of Computer Science 115. The course includes advanced programming techniques, in-depth examination of object-oriented principles, good programming style including documentation, basic data structures including array lists and linked lists, and basic algorithm design, with attention to the sorting problem. Prerequisite: Computer Science 115; or permission of instructor.

245 Network Systems Administration (3). .Spring Odd
An introduction to the issues involved in installing and maintaining a network operating system and other network servers. Students will gain hands-on experience with modern network operating systems and servers for common network services. Topics include managing network applications such as file serving, email, web serving, and security implementation. Strong algebra skills required.

270 Project Management (3)
This course is an introduction to the field of project management. The primary objective is to acquaint students with a broad basic overview of project management and the role of a project manager throughout the five primary processes of managing projects. The course will also cover common agile methodologies and principles because of how they relate to project management. The agile project management process encourages frequent inspection and adaptation, teamwork, accountability, self-organization, best practices that allows for rapid delivery and high quality, and a business approach that aligns development with customer needs and company goals. Prerequisite: sophomore standing. [Cross-listed: Business Administration 270, Construction Management 270]
\end{abstract}

281- Service-Learning (1-3)...............................................................................................................................................Fall, Spring, Summer
See page 37, Service-Learning
290 Introduction to Data Science (3)
.Spring Odd Introduction to the field of data science and the workflow of data scientists. Types of data (tabular, textual, sparse, structured, temporal, geospatial), basic data management and manipulation, simple summaries, and visualization. This course also serves as preparation for Actuarial Exam PA. Additionally this course, along with Statistics 320 and 353, serves as preparation for Actuarial Exam MAS II. Prerequisites: Computer Science 115; Statistics 131. [Cross-listed: Data Science 290]

313 Machine Learning (3)
Spring Even
A continuation of Introduction to Data Science to delve deeper into modern machine learning algorithms. The course is aimed at developing practical machine learning skills. It covers theoretical basis of a broad range of machine learning concepts and methods with practical applications. Pre or corequisite: Statistics 201 or 202; Prerequisite: Data Science 290. [Cross-listed: Data Science 313]

315 Data Structures (3)
Fall
A study of the various types of information forms handled by a computer, including the format of data and the design and analysis of algorithms to manipulate data. Topics include the use of functional programming and multi-threaded algorithms. Prerequisite: grade of C-or higher in Computer Science 215; or permission of instructor. Pre or corequisite: Mathematics 152.

319 Database Systems Design (3)
Fall Even
A study of the design, development, and implementation of an information system for management. Topics include database architecture, data definition and manipulation, report generation, and high-level language interface. Prerequisites: Computer Science 115, 120.

331 Client/Server Programming (3)
.Fall Odd
An introduction to software development in a networked computing environment. Focus will be on development of web-based software solutions employing tools such as scripting languages for both the client (browser) side and the server side. Prerequisite: Computer Science 115. Corequisite: Computer Science 120.

340 Advanced Topics in System-Level Programming (3). Spring Even
A study of the relationship between the instruction set architecture of a computer and the software running on it, as mediated through
the operating system. Topics include assembly-language programming, processor modes, memory management and virtual storage, multiprocessing, multithreading, deadlock, and systems security. Prerequisites: Computer Science 205 or Engineering 204; Computer Science 315; or permission of instructor.
341- Special Topics (1-3) Occasional
348 These courses will consist of topics not normally covered in other program courses. Specially designed to focus on more specific topicsutilizing instructor strengths and consideration of student needs.
355 Selected Topics in Security (3) ..... Spring
Security is a core requirement when creating and maintaining systems and software. This course introduces students to various topics of computer security. The topic of security is too broad for one course, so topics may include vulnerability analysis, defense, exploitation, re- verse engineering, or cryptography. Topics covered will maximize the individual instructor strengths, interests and competencies. Students may take this course a maximum of three times.
371 Practicum (3) ..... Fall, Spring
Students will be given the opportunity to apply principles and theories learned through course work. The assignment can be an on-campus or off-campus professional experience. Prerequisites: five Computer Science courses; junior standing or sophomore standing for Associate of Arts students.390 Technology and Society (3)..........................................................................................................................................................................SpringAn examination and critique of the relationship of technology to other areas of Western society. During the first half of the course studentsexamine a Christian philosophy of technology and application is made to such problems as the role of the computer, technocracy, appropri-ate technology, and the historical two-cultures dualism. During its second half, the course focuses on the question of engineering ethics,with particular emphasis on such questions as safety and risk, professional responsibility and authority, whistle blowing, normative socio-economic structures, and morality in career choice. This course requires the student to write and orally present a significant thesis paper.Prerequisites: CORE 200; junior or senior standing. [Cross-listed: CORE 267, Engineering 390]
391- Individual Studies (1-3) .Fall, Spring, Summer
393 See page 36, Individual Studies

\section*{Construction Management}

For a description of the Construction Management program see Business Administration: Construction Management on page 53 and Engineering Science: Construction Management on page 100.

\section*{101 Principles of Construction Management (3)}Fall

An introductory survey course in construction management that begins by building a Christian perspective on the task and calling of a construction manager or construction engineer. The course introduces methods of construction project planning, scheduling, delivery, quality, and control. It also introduces construction contract types, construction cost estimating and accounting, along with an overview of construction method, practice, and safety.

102 Construction Communication and Architectural Graphics (2) .Spring
This lab studio course introduces architectural and construction communication by practicing methods of construction documentation and preparation. The course will introduce students to basic plan reading. Construction planning computer applications and architectural computer-aided drafting will be explored and practiced.

\section*{207 Geographic Information Systems and Surveying (4)} Fall
An introduction to the acquisition, analysis, display, manipulation, and management of geographic information. Course topics will include geographical data input, storage, maintenance, analysis, and retrieval. Students will utilize common GIS software and associated hardware. An overview of survey methods used to gather and quantify features of physical geography will be included. The course will meet in two studio lab classes to provide an integral learn-by-doing experience applying GPS technology, survey methods, and GIS applications. Application of GIS to agriculture, business, environmental management, and other disciplines will be provided in this course. Prerequisite: sophomore standing or above. [Cross-listed: Agriculture 303, Business Administration 303, Earth Science 303, Environmental Studies 303]

213 Statics for Construction Management (2) Fall
A mechanics course that examines the effects of forces on statically determinate rigid bodies in equilibrium, including the analysis of determinate truss structures. This course is a subsection of Engineering 208. Prerequisites: Mathematics 152; Physics 215 or 231.

214 Mechanics of Materials for Construction Management (2) ..Spring
A mechanics course that examines the stresses, strains, and deformations that develop when various loads are applied to deformable bodies, including beams and columns. This course is a subsection of Engineering 212. Prerequisite: Construction Management 213 or Engineering 208.

220 Construction Materials and Methods (4)
Spring Odd
A comprehensive study of the properties, sources, processing, methods, sequences, and equipment used in residential and commercial construction projects. Planning and managing of the construction process, including an introduction to structural and finish systems that make up building structures, are investigated. Appropriate application and responsible use of materials for design and functional intent is investigated. The environmental impact of construction is discussed. Prerequisite: Construction Management 101.

\section*{225 Construction Safety and Quality (2)}
.Spring Odd
A study of safety and quality control as it relates to construction management. An emphasis on the legal and financial impacts of safety and quality management is included, as well as a discussion of the ethical and regulatory issues involved. Causes and effects of safety and quality deficiencies in construction and the related methods to minimize these deficiencies. Prerequisite: Construction Management 101. Corequisite: Statistics 131.

240 Mechanical and Electrical Systems (3)
Spring Even
A study of the construction of mechanical and electrical systems, emphasizing principles of heating, cooling, ventilation, water supply, waste disposal, and electrical distribution. An introduction to mechanical, electrical, and plumbing codes and design software included. Energy conservation issues, sustainable design principles, and use of renewable energy are addressed. Prerequisite: Construction Management 220.

270 Project Management (3) ........................................................................................................................................................................Fall
This course is an introduction to the field of project management. The primary objective is to acquaint students with a broad basic overview of project management and the role of a project manager throughout the five primary processes of managing projects. The course will also cover common agile methodologies and principles because of how they relate to project management. The agile project management process encourages frequent inspection and adaptation, teamwork, accountability, self-organization, best practices that allows for rapid delivery and high quality, and a business approach that aligns development with customer needs and company goals. Prerequisite: sophomore standing. [Cross-listed: Business Administration 270, Computer Science 270]

280 Construction Estimating (4)
Spring Even
An introduction to construction estimating and bid preparation with an emphasis on quantity takeoff. Includes a detailed study and application of pricing, subcontract evaluation, and bidding techniques using blueprints and specifications. Project types studied include residential, light commercial, and commercial building projects. Prerequisite: Construction Management 101.

318 Soil Mechanics and Foundation Design (4) Fall
A study of the engineering principles relating to soil properties and foundation design. The material properties of soil including structure, index properties, permeability, compressibility, and consolidation will be explored. Methods of soil testing, identification, and remediation will be covered. Principles of settlement and stresses in soils will be considered. Slope stability, retaining walls, and bearing capacity of shallow foundations will be introduced. The soils lab will provide hands-on opportunities to determine water content, perform sieve analyses, and test liquid, plastic, and shrinkage limits. Soil classification, compaction, compression, and consolidation testing will be explored. Prerequisite: Engineering 212 or Construction Management 214. [Cross-listed: Engineering 318]

\section*{341- Special Topics (1-3)} Occasional
348 These courses will consist of topics not normally covered in other program courses. Specially designed to focus on more specific topics utilizing instructor strengths and consideration of student needs.

370 Risk Management for Construction (2). Spring Odd
A study of the systematic process used to minimize the degree of uncertainty and control risks in construction projects. An emphasis on identifying, analyzing, assessing, mitigating, transferring, and monitoring risk is included, as well as processes to implement risk management strategies at all stages in a construction project. Prerequisites: Construction Management 101, 270.

371- Construction Management Internship (1-3) \(\qquad\) Fall, Spring, Summer
373 An off-campus construction management experience that is intended to provide the student with the opportunity to apply knowledge, principles, and skills gained in the classroom in a project management role on a construction related project. Written and oral summary reports are required. Prerequisite: completion of two years of construction management curriculum.

391- Individual Studies (1-3) ..............................................................................................................................................Fall, Spring, Summer

\section*{COMMUNICATION COMPETENCY}

110 Communication Foundations (3) \(\qquad\) Fall, Spring
Examines the ways in which communication is used in the public sphere to create, maintain, and change culture. Students apply understandings of the concepts of culture and communication to a range of contemporary social issues, cultural texts, and communication practices. Emphasis is given to public speaking, to listening skills, and to rhetorical methods for analyzing and constructing oral and written arguments. Students also work cooperatively on researching and designing larger class presentations.

Active participation in Communication 051: Forensics for an entire academic year also fulfills competency requirement.

\section*{ENGLISH COMPETENCY}

120 English Composition (3) .Fall, Spring, Summer Students will write a number of essays and a research paper. As they work on these, they will become aware of writing as a process and develop skills in generating ideas, revising, and editing. They will also review traditional grammar and principles of usage and style.

Writing-Intensive Courses: English 220, 305, 306, English/Communication 242, 301, 302, History 280, Psychology 366, Theatre Arts 365.

130 Health, Sport, and the Body (1.5) \(\qquad\) Fall, Spring, Summer A study of the concept of fitness and health from a Christian view of humankind. Designed to help students evaluate their own physical needs and strengths. This course assists students in developing their personal exercise and activity program. Preferably should be taken in the freshman year. Graded.

135 Introduction to Lifetime Activities (.5 per component) Fall, Spring Students will complete up to three lifetime fitness activity components. Each activity component focuses on the lifetime fitness and health principles learned in CORE 130.

140 Roots of Western Culture and Worldviews (3). Fall, Spring
A study of the roots and formation of Western culture from ancient times to the early modern period, in the light of a biblical view of history. Special attention is given to the synthesis of and tensions between classical, Christian, and Germanic worldviews and cultures.

145 Western Culture in Global Context (3) Fall, Spring Continuation of CORE 140. A study of the emergence of modern and contemporary Western culture in its increasingly global context. Prerequisite: CORE 140; or permission of instructor.

150 Biblical Foundations (3) \(\qquad\) Fall, Spring, Summer A survey of biblical revelation in its progressive unfolding of key ideas and institutions against their cultural-historical background and within their covenant setting. Emphasis is placed on the normativity of Scripture that reaches its fullness and fulfillment in Christ for all academic work.

160 Introduction to the Arts (3)
.Fall, Spring, Summer Students choose from a variety of sub-courses in art, drama, film, and music topics that are of interest to them. Students also fulfill requirements by attending special arts events and lectures.

180 Responding to Literature (3). \(\qquad\) Fall, Spring, Summer This course asks students to respond to poems, essays, stories, plays, a novel, and perhaps a film. Its purpose is to teach students how to understand these various forms and how to evaluate the moral vision when the imaginative world intersects with their own lives.

200 Introduction to Christian Philosophy (3) \(\qquad\) Fall, Spring Using figures from the history of Western philosophy as our guide, this class will challenge you to examine your own life, see why you do what you do, and evaluate how your actions are shaped by certain religious commitments. It will demonstrate the need for wisdom and discernment and will begin to equip you with the tools you will need (critical thinking, self-reflection, clear communication) to discern how we are called to live as Christian disciples in today's day and age. Prerequisites: CORE 140, 150.

\section*{NATURAL SCIENCE}

\section*{211 Creation Care and the Environment (4)} Fall
An introduction to contemporary environmental studies and creation care, with emphasis on class discussion of relationships between human population and resource use in light of biblical teaching about environmental stewardship. Particular attention is given to the biotic and ecological dimensions of creation stewardship and planetary distress. Three lectures and one laboratory period of three hours per week. [Cross-listed: Community Development 151, Earth Science 151, Environmental Studies 151]

\section*{UNDERGRADUATE ACADEMIC OFFERINGS: CORE}

212 Human Biology I (4) .Fall, Spring An overview of the structure and function of the human body, using an experimental approach. Addresses how worldview impacts the use of one's own body and guides ethical decision-making. Cadaver lab exercises will be included. Three lectures and one laboratory per week. For nursing, HHP, and other non-biology majors. [Cross-listed: Biology 203]

214 Food: Connecting to Life (4) Fall, Spring
Students will study our current food system from the producer to the consumer. Agricultural production practices, processing, and marketing will be considered in the context of cultural influences, environment, economics, politics, and social impacts. Using tools of scientific investigation, students will be asked to examine how systems of food production affect food chemistry, safety, preservation, marketing, and government regulations, and ultimately, society and the environment. Finally, students will examine how their faith commitment is shaped by an understanding of stewardship and global needs. The laboratory component includes growing, preserving, and preparing food along with visiting producers and processors.

215 Science and Culture in Puerto Rico (3). .Occasional
While immersed in the biologically, geologically, and meteorologically diverse environment of Puerto Rico, students will engage in thoughtful consideration of our relationship with the rest of the creation. Major shaping questions include: What does it mean to be an image bearer and steward in the larger context of the whole creation? What are the dispositions and knowledge base required for careful stewardship? What does it mean to understand and study the creation scientifically? And, what are the scope and limits of scientific ideas in relation to eco-social problems? To fully engage these questions, students will participate in a variety of modes of scientific observation of the island of Puerto Rico, discuss texts related to environmental ethics by both Christian and non-Christian authors, and reflect on several texts related to the nature of science. Prerequisites: good standing with the registrar, student services, and the financial aid office; permission of instructor.

216 God's Green Earth (3) .Occasional Welcome to the flora of North America! This is a course in field biology and taxonomy of vascular plants. Our study will focus on the native vegetation of the tall-grass prairie landscape with its associated gallery forests and wetlands. We will be comparing local studies to plant complexes from other geographic locations. Two lectures and one laboratory period per week. This course includes extensive field work and potentially several weekend field trips.

221 Physics Applications and Implications (4) Spring The development of modern physics will follow a historical framework with particular attention given to the relationship between scientific discovery and Christian faith.

222 Energy, Materials, and the Environment (4) Spring Flowing from a foundation in physical and earth sciences, this course offers an introduction to energy and material use in Western society and examines the resulting impact on the environment. Contemporary practices and their historical roots are critiqued in light of Biblical norms for stewardship. An emphasis on evaluation and implementation of practical steps toward sustainability permeates the course with the goal of motivating and equipping students to become lifelong stewards. The laboratory portion of the course combines tours, laboratory measurements, economic analysis, and environmental analysis. Three lectures and one laboratory period of three hours per week. [Crosslisted: Earth Science 152, Environmental Studies 152]

223 Introductory Geology and Physical Geography (4)
.Spring Odd
A general introduction to the physical nature and structure of the solid Earth, including, briefly, its physical geography and a more detailed look at its geology. The environmental implications of these subjects are detailed. Three lectures and one laboratory period of three hours per week plus one overnight field trip and one or two shorter trips. [Cross-listed: Earth Science 201, Environmental Studies 201, Geography 201]

224 Solar System Astronomy (4)
.Fall Odd
An introduction to the structure and diversity of the solar system, focusing on both the historical development of understanding of our cosmic "neighborhood" from the ancient Greeks to Einstein as well as recent discoveries and their implications for an improved understanding of our Earth. Students will obtain hands-on experience observing the heavens with naked eye, binoculars, and telescopes. The course involves three lecture hours and three observation/laboratory hours per week. Prerequisite: completion of Core Program mathematics requirement. [Crosslisted: Astronomy 121, Earth Science 121]

225 Stellar and Galactic Astronomy (4) Fall Even
An introduction to stellar and galactic astronomy, focusing on the historical development of understanding of the cosmos as well as recent discoveries and their implications. Topics include the classification and explanation of stars, stellar life-cycles, remnants of stellar collapse (white dwarfs, neutron stars, black holes), galaxies, and cosmology (the study of the universe as a whole). Students will examine origins in light of Scripture and modern scientific evidence. Students will also obtain hands-on experience observing the heavens with naked eye, binoculars, and telescopes. The course involves three lecture hours and three observation/laboratory hours per week. Prerequisite: completion of Core Program mathematics requirement. [Cross-listed: Astronomy 122]

Any lab based science course from agriculture, astronomy, biology, chemistry, engineering, environmental studies or physics.

\section*{QUANTITATIVE REASONING}

A minimum of three credits from mathematics or statistics courses numbered 120 or higher or Computer Science 115.

\section*{PERSONS IN COMMUNITY (CORE 250-259)}

251 Lifespan Development (3)
Fall, Spring, Summer
This course studies the growth and maturation of persons throughout the entire lifespan, including examination of physical, cognitive, personality, social changes, faith development, and other developmental tasks. This course will also focus on evaluating the theoretical issues and descriptive information portraying the growth of an individual from conception through late adulthood. Students will develop a biblically-informed vision of who we are as image-bearers of God and what it means to be humans living in God's creation. [Cross-listed: Psychology 204]

252 The Social Psychology of Persons (3) Fall, Spring
We influence and are influenced by culture, social structures, groups, personality, family, and the media, just to name a few. Studying the situational and personal/interpretive factors that influence an individual's social behavior can reveal new insights about the grace and sin at work in our relationships and social situations. Utilizing a biblical perspective on the social psychology of persons, this class will explore how students can function as faithful Christians within all of these situations. [Cross-listed: Psychology 210, Sociology 210]

254 Interpersonal Communication (3) Fall, Spring The study of concepts, problems, and responsibilities in communication between two or more persons, focusing on conversation with consideration of many variables and contexts. [Cross-listed: Communication 222]

255 Educational Psychology (3). .Fall, Spring This course introduces you to the fields of educational psychology and developmental psychology as they help us figure out the teaching and learning environment. This course studies the growth and maturation of children and adolescents, including examination of physical development and activity, cognitive, social, emotional, and spiritual development. We will also look at different roles teachers play such as teacher-as-researcher, teacher-as-observer, and teacher-as-facilitator. This course introduces you to developmental theories and learning theories that impact PreK-12 education today. Prerequisite: Education 101. [Cross-listed: Education 135]

256 Vulnerable Populations (3).
Spring
A historical and contemporary analysis of groups considered vulnerable by economic and social standards in American society. Causes, consequences, and implications for society are examined from a biblical view of humankind with an emphasis on social work practice. [Cross-listed: Sociology 215, Social Work 215]

257 Helping Communities Flourish (3) .Spring
Christians are called to love their neighbors and can do so by working to strengthen communities in North America and throughout the world. In this course we will examine community development strategies and practices (historical and current) used in domestic, international, urban, and rural settings. Our goal will be to identify those that fit well with a Christian view of the world and are likely to help communities flourish in the long term. We will also explore how these practices and strategies can be successfully implemented. [Cross-listed: Community Development 201]

258 Leading and Serving Others (3). Spring, Summer This course is designed to be a general elective for students in any major. Leadership Involves the study of human behavior and how individuals influence that behavior. This course will reflect a diversity of perspectives on leadership and motivation. Students will examine different models, skills, and styles of leadership, review common traits of effective leaders and evaluate, from a Christian perspective, the ethical and moral issues facing leaders. [Cross-listed: Business Administration 215]

\section*{JUSTICE AND STEWARDSHIP (260-269)}

260 Personal Financial Management and Stewardship (3). Fall, Spring Prepares students for the many financial decisions that they will be making during their lives in light of a Biblical and reformed view of stewardship. [Cross-listed: Business Administration 226]

261 Sociology and Social Justice (3).
Fall, Spring, Summer Includes an examination of culture, socialization, social structure, group behavior, and inequalities (of class, race, and gender), as well as identifying and analyzing the pressing problems in our world that requires an understanding of social change that occurs through collective action and social movements. Through an exploration of predominant sociological theories, students are able to contrast those with a biblical worldview that challenges them to articulate how a reformed Christian understanding of creation (and norms) sin, redemption, and consummation may be used to positively affect social interaction, organizations, and institutions. [Cross-listed: Sociology 201]

\section*{UNDERGRADUATE ACADEMIC OFFERINGS: CORE}

262 Introduction to Politics (3). Spring
An introduction to the political dimension of life from a biblically-oriented perspective. Laying the foundation for politi............................................................................................................ practice, the course will examine scripture, models of how the church relates to culture, and examples of Christian engagement with the political world. It will also provide a brief survey of each of the fields of political science and raise practical questions about political involvement. [Cross-listed: Political Science 201]

264 American National Politics (3) .....................................................................................................................................................................................
A general introduction to the American political process-its foundations, external influences, institutions, political actors, and policymaking. [Cross-listed: Political Science 202]

265 World Regional Geography: Peace and Justice on the International Stage (3) Fall
A survey of major geographical regions of the world including politics, economics, and cultures. Emphasis is on the interrelatedness of regions and how peace and justice are linked to human flourishing. [Cross-listed: Geography 151]

267 Technology and Society (3).............................................................................................................................................................Spring
An examination and critique of the relationship of technology to other areas of Western society. During the first half of the course students examine a Christian philosophy of technology and application is made to such problems as the role of the computer, technocracy, appropriate technology, and the historical two-cultures dualism. During its second half, the course focuses on the question of engineering ethics, with particular emphasis on such questions as safety and risk, professional responsibility and authority, whistle blowing, normative socioeconomic structures, and morality in career choice. This course requires the student to write and orally present a significant thesis paper. Prerequisites: CORE 200; junior or senior standing. [Cross-listed: Computer Science 390, Engineering 390]

268 Serving Christ's Kingdom Through the Agriculture and Manufacturing Technology Programs (2). \(\qquad\) .Spring A capstone course for the agriculture and manufacturing technology programs that develops and applies a Reformational framework for Christian service in technical vocations, within agriculture and engineering technology fields, and explores the relationship of these fields to our work as an act of worship. The course explores dualisms that tend to separate faith and work and applies a Reformed perspective to questions such as safety and risk, professional responsibility and authority, the impacts of technology and automation, social and economic structures, and career choice.

\section*{CROSS-CULTURAL STUDIES (270-293)}

270 Cross-Cultural Communication (3) ........................................................................................................................................Fall, Spring This course explores a variety of cross-cultural and intercultural communication experiences. We will explore the concept of culture and examine the relationship of culture and communication to build a framework for studying cross-cultural communication patterns from a variety of representative cultures (including North American culture). Special emphasis will be given to the influence of worldview, ethnic identity, and socialization on the process of communication. Overall, this course is designed to help you appreciate and understand different forms of communication and begin to develop a Christian perspective for the differences and relationships between cultures. [Crosslisted: Communication 270]

271 Learner Differences (3) .Fall, Spring
Examination of individual differences and diverse cultures and communities-ethnicities, SES, immigrant, cognitive (SPED and TAG), gender, learning profiles, as well as English language learners. Focus on designing inclusive learning environments to meet high standards. Prerequisite: Education 101. [Cross-listed: Education 145]

272 History of the Muslim World (3) \(\qquad\) .Spring Odd A survey of the history of the Muslim world focusing on the Middle East, North Africa, and Southwest Asia. Primary emphasis is on the development and features of Muslim society and culture, the relations between Muslim and Western civilizations, and the sources of tension in the modern Muslim world. Not open to first-semester freshmen. Prerequisite: CORE 140. [Cross-listed: History 212]

273 Latin America (3) Fall Odd A selective survey of the history of Latin America from pre-Columbian times to the present. Attention will be given to the indigenous and colonial origins of Latin American culture and society. Twentieth-century developments will be explored through a series of case studies. Not open to first-semester freshmen. Prerequisite: CORE 140. [Cross-listed: History 213]

274 East Asia (3)
Spring Even
The history of East Asia, paying special attention to China, Japan, and Indonesia in the early-modern and late-modern periods. The primary emphasis will be on east Asian responses to the challenges represented by Western ideas, commerce, and imperialism in its various expressions. Not open to first-semester freshmen. Prerequisite: CORE 140. [Cross-listed: History 214]

275 Faith and Cultural Aspects in Health Care (3). Fall Students engage in an introductory study of culture and its influence on behavior. Discussions include specific cross-cultural issues that affect healthcare delivery. Students consider the worldviews of modern cultures and the implications for Christian discipleship within nursing practice; define health and illness as Christian individuals and part of the community as a whole; and comprehend traditional
and alternative health care practices, incorporating religious beliefs, practices, and rituals. A phenomenological assessment is applied to the populations studied. Prerequisites: enrollment in BSN program; Nursing 207, 217; or permission of instructor. Corequisites: Nursing 203, 213, 218. [Cross-listed: Nursing 310]

276 Diversity and Inequality (3) Fall, Summer Students examine the historical and contemporary factors related to diversity and inequality in North America and increase their appreciation for the contributions of diverse groups in culturally-pluralistic societies. The course assumes that human diversity is created good and explores how to discern that goodness after the Fall. Students assess their own biases in light of course material and increase their sensitivity to diversity. [Cross-listed: Criminal Justice 216, Social Work 216, Sociology 216]

277 American Multicultural Literature (3)
.Fall Odd
In this course, students will read, discuss, and write about literature from several different American groups of various identities, including Native American, African-American, Asian-American, and Latinx. Students will examine various cultural understandings of what it means to be American and explore American ethnic subcultures through field trips. Writers discussed will vary but may include Joy Harjo, Louise Erdrich, Toni Morrison, Ta-Nehisi Coates, Viet Than Nguyen, Li-Young Lee, Sandra Cisneros, and Junot Diaz. [Cross-listed: English 203]

278 World Music (3) \(\qquad\) Spring Even Examination of music heard in various contemporary world cultures, its aesthetic and stylistic aspects as well as its functions and underpinning ideas and values. [Cross-listed: Music 222]

279 Cross-Cultural Dialogues Through Role-Immersion Games (3). Spring
Students will immerse themselves in different cultures and worldviews playing three Reacting to the Past games where they assume character roles, as a member of various cross-cultural factions, to achieve their assigned victory objectives. Students will read numerous cross-cultural texts including primary and secondary source materials from and about that culture and articulate assigned worldviews in cross-cultural dialogue in public speaking and through numerous written papers. These games and assignments will form the basis of class discussion to help form a reformational approach to cross-cultural engagement among students.

281 Puerto Rico: Language, Culture, and Society (3) \(\qquad\) Occasional Explore the historical roots and influences shaping Puerto Rico while improving your Spanish skills or learning some Spanish for the first time. Emphasis is placed on understanding the challenges and potential of Puerto Rico today. Students will engage in contact with locals through service projects, travel to different historical sights, and explore Puerto Rico's abundant natural beauty. Daily excursions will supplement onsite instruction and exploration. Spanish is not a prerequisite for this course.

282 Serving and Learning in Hungary and Transcarpathia, Ukraine (3) \(\qquad\) Occasional Arrive in Budapest, Hungary and spend time exploring and studying Hungarian culture and history. Then spend two weeks living in Hungarian ethnic communities in rural Transcarpathia, Ukraine. Visit schools in the region and assist in teaching English to middle and high school students and adults. Absorb and experience the local culture and be of service in appropriate ways to people living in the postcommunist era. There will be pre-trip orientation and assignments related to history, culture and language of the region.

283 Dutch Culture and Reformed Worldview (3) \(\qquad\) Summer Even Study the identity of the Dutch people from prehistoric times to the present while living in the Netherlands for three weeks. Examine the history of the Calvinist heritage from the Synod of Dort through the contributions of Abraham Kuyper and others. Discover how the Reformed worldview has shaped various aspects of Dutch life and society, such as church, politics, trade, and land reclamation. Special attention will be given to events and sites relating to World War II. There are classes in the morning and field trips in the afternoon. Two-day trips to London and Normandy/Paris are part of the program. CORE 283 is not a language class and is open to students from any major.

284 Culture, Missions, and Community Development in Nicaragua (3) \(\qquad\) Occasional The course will focus on culture, missions, and community development in Nicaragua in cooperation with the Nehemiah Center in Managua, Nicaragua. Through pre-trip orientation and assigned readings and a variety of in-country experiences, students will explore the history, culture, government, and social life of Nicaragua and examine how a variety of mission outreaches and community developments have attempted to offer assistance in Nicaragua. Utilizing representatives from a variety of agencies active in Nicaragua, the students will be involved in discussions about the future of Nicaragua and its relationship to the rest of the world, as well as having an opportunity to learn about the differing philosophies and implementation plans of these different mission agencies and community development organizations. Where possible, students will be given the opportunity to get involved in the day-to-day work of the agencies visited in Nicaragua.

Korean Culture (3). .Occasional Students will stay in Korea for three weeks in urban and rural areas and study its culture through religion and music. Both in a classroom setting and through travels, students will learn about the history and religions of Korea with emphasis on their modern development. They will experience Korean culture and music through personal relationships with Chong-Shin University students while they take lectures, discussions, and excursions together. This course is open to students of any major who have completed at least one year of college.

\section*{UNDERGRADUATE ACADEMIC OFFERINGS: CORE}
component will be preparing students to understand basic principles of natural ecosystems and interactions with agricultural systems. After finishing the classroom part of the course, the class will arrive in Ndola, Zambia and live in the dormitory at Northrise University. During their stay, students will study and analyze at least six agroecosystems in the developing country. This course is open to students of any major who have completed at least one year of college and meet the prerequisites. [Cross-listed: Agriculture 372]

287 Encountering the Land of Israel (3)
Summer Occasional
Travel on location in Israel for a two-week, transformative immersion course covering the land, culture, and story of the Bible. Biblical study takes on new meaning as you relate it directly to your surroundings through activities and experiences that engage all your senses. Assignments include readings and lectures on the history, culture, archaeology, and geography of Israel, all framed within a Reformational perspective on how to read the Bible well and how to engage important political and religious issues that continue today. [Cross-listed: Theology 261]

288 Sport and Exercise in Society and Culture (3)
Spring Even
This course studies sport, exercise, and physical activity within the contexts of society and culture by investigating and analyzing contemporary views and a Reformed perspective. Including a cross-cultural element, an evaluation of physical culture will be examined between the United States and Scotland with the semester culminating in a two-week trip to Scotland in May to experience the country's sport and societal customs. Activities include: experiencing Highland Games events, curling, hiking in the Highlands, touring a Glasgow club soccer stadium, walking the home of golf at St. Andrews, attending a cathedral worship service, volunteering at a Glaswegian church, learning about John Knox and the Scottish Reformation, sightseeing castles and cathedrals, traversing lochs and battlefields, and exploring the cities of Edinburgh, Glasgow, Stirling, Inverness, and St. Andrews. [Cross-listed: HHP 305]

289 Dante's Divine Comedy and the Italian Renaissance (3)
.Fall Odd
This course begins as an in-class seminar during fall semester and concludes with a week-long trip to Italy in January. After spending several of our on-campus weeks on Dante's Comedy, we will explore the transition between the medieval period and the Italian Renaissance, looking at how politics, art, business, science, and literature developed together under a Catholic worldview in Florence. After finishing the classroom part of the course, we will take a great trip to Florence, where we will see and study the city in person. [Cross-listed: History 329]

293 Cross-Cultural Reflections (3)
.Fall, Spring, Summer
A 'portable', supervised reading and journal-writing course that students complete while participating in a semester-long internship or practicum experience in a cross-cultural setting (following established criteria for cross-cultural experiences). The selected readings and journal-writing instructions are designed to help the student to bring coherence to both the inner journey that occurs when students reflect upon a significant experience in their lives and the external journey they make into a cross-cultural situation. The reading and reflective journaling is not intended to substitute for or replace the requirements for the internship/practicum, but rather to build on the total impact of the experience and to enrich the student's cross-cultural understanding.

\section*{POST DISCIPLINARY INTEGRATIVE (351-359)}

351 The Good Design of Limits (3) ................................................................................................................................Alternating Semesters This course is an inter-disciplinary, capstone core program course that helps you reflect upon issues you will encounter in your life, evaluate them from a Christian perspective, and live out a biblical perspective as a disciple of Christ. Prerequisites: CORE 200.

352 Christianity and Pop Culture (3) Fall, Spring The purpose of this course is to examine the relationship between Christian faith and popular culture. We will begin by reflecting categorically on popular culture, taking critical theory and cultural studies into account, before sketching a theological account, rooted in the Reformational emphasis on creation, fall, redemption, and renewal. The course will then investigate the sort of theological visions that are implicit in popular culture, noting oppositions, opportunities, and openings for discipleship and Christian witness. Prerequisite: CORE 200.

353 Faith and Suffering (3) \(\qquad\) Alternating Semesters Drawing on Scripture, the riches of the Christian tradition, and personal narratives, this course will explore how Christians have approached the problem of suffering intellectually and existentially. We will begin by examining classical philosophical responses to the problem of evil. Then we will explore questions of pain and suffering within the narrative of scripture in order to enter into theological reflection on the relationship between faith and suffering from through a Reformed lens. The course will then investigate various models of how Christians steward their suffering, noting models that have resonance and dissonance with the scriptural narrative, and discerning ways to examine our own experiences of suffering (past, present, and future). Prerequisite: CORE 200.

354 Technology, Identity, and Community (3)
Technology is a powerful force in human culture, impacting both what we do and how we do it. This course is an opportunity to examine technology's effects on human beings, both how we view ourselves and how we relate to others. We will explore various issues we encounter as we interact in a digital culture, evaluate these issues from a Christian perspective, and reflect on what it means to be a disciple of Christ in a technology-saturated society. Prerequisite: CORE 200

What are video games? How do we begin to play them and think about them in a more comprehensive and informed Christian manner? In this course, students will examine video games as a cultural artifact from multiple historical and cultural perspectives in order to think theologically about video games as a cultural good and a meaningful Christian calling. This course is designed to enable students to reflect upon the broader world of gaming, evaluate it from a Christian perspective, and live out a biblical perspective as disciple of Christ in whatever gaming-related capacity that they might find themselves. Prerequisite: CORE 200

356 Place, Grace, and Humans in Community (3). \(\qquad\) Alternating Semesters A study of the philosophical foundations of social relationships. Possible topics explored include the relationship between groups of people and their physical environment, the possibility of understanding people from different cultures than our own, and whether we can hold other communities to the standards of our own communities. Prerequisite: CORE 200. [Cross-listed: Community Development 320, Philosophy 320]

\section*{Criminal Justice}
\[
\begin{array}{ll}
\text { General Major- } & \begin{array}{l}
\text { Criminal Justice 101, 201, 202, 203, 205, 216, 250, 304, 305, 323, 324, 325, 350, 360, 373; Political Science 214 or 245; one } \\
\text { course from Spanish 252, 254, 256, 258. Students are advised to consider taking a minor in addition to this program. }
\end{array} \\
\text { General Minor- } & \text { Criminal Justice 101, 250; one from Criminal Justice 201, 202, 203; Criminal Justice } 304 \text { or 305; Criminal Justice } 323 \text { and } \\
324 \text { or } 360 \text { and } 373 .
\end{array}
\]

\section*{101 Introduction to Criminal Justice (3)}

Overview of the criminal justice system, including criminal justice research, criminal law, procedure, evidence, criminology, victimology, policing, the courts, and corrections. Students will explore how our views of crime and the criminal justice system have been influenced by government leaders and the media. Students will also seek to apply biblical norms to our analysis of the criminal justice system with suggestions on reform.

201 Policing (3) .Fall Odd
This course provides an overview of the history, function, administration, and challenges facing modern police. Emphasis will be placed on major reform efforts, including evidence-based practices, community policing, and the challenges of militarization. Students will also evaluate the role of police in society, especially within the framework of a biblical, Reformed worldview.

202 Corrections (3) \(\qquad\) ..Spring Even
This course provides an overview of the various means used to punish criminals and protect society. Students will develop an understanding of the concepts of incarceration, prison management, and rehabilitation (penology), especially in the United States. Students will study correctional philosophies, the challenge of prison violence and subcultures, rehabilitation efforts, and recidivism. This course will encourage students to critically assess the challenges facing the American correctional system through evidence-based policy analysis and comparative study of international approaches.

203 Juvenile Justice (3). .Spring Even
Students will review causal theories of juvenile crime and will also examine the history and philosophy of the treatment of juveniles in the criminal justice system and the goals and effectiveness of the system. Promising alternatives rooted in a biblical reconciliation worldview will be included. Problems such as gangs, drug usage, and school violence will also be explored. The emphasis will be on how to be a salt and a light in a strategic part of society.

205 Crime Scene Investigation (3) Spring
Students will become acquainted with the forensic sciences, learn how to gather evidence and use it to solve crimes, and understand how proper investigation promotes justice. Considerable emphasis will be placed on how to conduct interviews and interrogations, write reports, and testify in court. Students will learn how to evaluate criminal investigations in current and high profile cases. Students will apply biblical norms and discuss police ethics in conducting investigations. Intended for anyone interested in criminal investigation and hands-on learning.

216 Diversity and Inequality (3) \(\qquad\) .Fall, Summer Students examine the historical and contemporary factors related to diversity and inequality in North America and increase their appreciation for the contributions of diverse groups in culturally-pluralistic societies. The course assumes that human diversity is created good and explores how to discern that goodness after the Fall. Students assess their own biases in light of course material and increase their sensitivity to diversity. [Cross-listed: CORE 276, Social Work 216, Sociology 216]

250 Speaking and Writing for Public Service
This course will help students develop their skills in interviewing, report writing, and giving court testimony, including a basic introduction to the rules of evidence and procedure as they pertain to this process. Students will engage the material through a series of simulations that
allow them the opportunity to see the impact of decisions and performance in earlier phases of the process from initial contact to sworn testimony.

\begin{abstract}
304 Criminology (3) Fall A theory-based course that studies crime causation, typologies of crime, and crime control. It looks at both historical and modern theories, including those that look to individual, social, and structural causes. It also broadly analyzes the guardianship and enforcement functions of the criminal justice system. Students will be able to identify criminology theories in modern media and engage in theory-building exercises. Prerequisite: sophomore standing. [Cross-listed: Sociology 202]
\end{abstract}

305 Victimology and Family Violence (3)......................................................................................................................................Spring Odd
The victimology section will look at the various harms suffered due to crime, how victims interact with various agencies and players, public reaction to victims, the victims' rights movement, and how to better serve the victims of crime through our criminal justice system. Students will also identify and describe the problem, measure its true dimensions, and review evidence and hypotheses of victimologists. In the family violence portion, theories on family violence will be analyzed, the consequences of family victimization will be considered, as well as how to recognize child abuse and understand the dynamics of partner violence. Students will analyze legal and enforcement responses, consider how institutional responses can prevent or lessen revictimization, and look to how a restorative justice model can alleviate some of the harms of victimization. Prerequisite: junior standing; or permission of instructor. [Cross-listed: Sociology 305]

\begin{abstract}
323 Criminal Law (3). Fall This course is an introduction to the basic concepts of criminal law focusing on a study of what constitutes particular crimes, both in the common law and by statute, including certain defenses. Principles learned in this course will help students develop a deeper ability to discern what constitutes fair administration of justice: dealing fairly with the accused while continuing to uphold the interests of both victims and society at large. Prerequisite: sophomore standing.
\end{abstract}

324 Criminal Procedures (3) ..Spring
This course continues the material covered in Criminal Law, this time focusing on the procedural protections guaranteed by the 4th, 5th, 6th, and 8th Amendments to the Constitution, helping students develop a more sophisticated understanding of things like searches and seizures and the right to an attorney. Students will learn the crucial role these protections play in protecting the rights of those suspected or accused of criminal activity. Prerequisite: Criminal Justice 323; or permission of instructor.

325 American Constitutional Law (4)..................................................................................................................................................Spring This course focuses on the American Constitution as interpreted by the Supreme Court. Through analysis of landmark cases, this course will study both historical and recent developments in constitutional law with the goal of gaining deeper insight into the way our system works and the reasons for the freedoms we hold dear. Prerequisite: Political Science 202; junior standing; or permission of instructor. [Cross-listed: Political Science 322]

341- Special Topics (1-3)
Occasional
348 These courses will consist of topics not normally covered in other program courses. Specially designed to focus on more specific topics utilizing instructor strengths and consideration of student needs.

350 Domestic Preparedness (3) .................................................................................................................................................................... Fall natural. Drawing on the roles of police as first responders, emergency management personnel, and protectors of public order, this course will look at major historic incidents, such as \(9 / 11\) and Hurricane Katrina, to encourage students to think critically about how to learn from the past and how to be always ready to pursue one's vocation, especially in times of trial. Prerequisite: Justice and Stewardship core requirement; junior standing.

360 Senior Seminar in Criminal Justice (3)
解 This capstone course to the Criminal Justice curriculum will integrate topics from across the discipline to help students critically evaluate the system as a whole. Students will discuss themes of justice, Christian perspective, and special consideration will be given to the most recent developments in news, technology, and popular culture regarding the criminal justice system. Prerequisite: Criminal Justice 373; or permission of instructor.

373 Field Experience in Criminal Justice (3) Fall, Spring This field experience provides exposure to the type of activities in which Criminal Justice graduates are likely to be involved. Requires 8-10 on-site hours per week plus one hour of weekly supervision. Application deadline for the spring semester is November 1; deadline for the fall semester is April 1. Prerequisites: declared criminal justice emphasis or minor; junior or senior standing; approval of the department.

391- Individual Studies (1-3) \(\qquad\) Fall, Spring, Summer

\section*{Data Science}
General Major- \(\quad\) Computer Science 109, 115, 120, 215, 315, 319; Data Science 290, 313, 371; Mathematics 152, 153, 203; Statistics 131,
\(133,201,203,212,215,216,320\).

250 Business Analytics (3) ....................................................................................................................................................................Spring
The aggressive rate of data growth has outpaced our ability to manually understand what data represents. Data Analytics is the science of applying quantitative techniques to analyze data with the objective of discovering hidden knowledge and identifying interesting patterns. This course surveys several data processing and modeling methods. It will introduce analytical modeling techniques in a practical managerial context, demonstrating their potential on a wide array of applications. Prerequisite: Business Administration 100 or Computer Science 115. Business Administration 241 recommended as a corequisite. [Cross-listed: Business Administration 250]

290 Introduction to Data Science (3) ............................................................................................................................................Spring Odd Introduction to the field of data science and the workflow of data scientists. Types of data (tabular, textual, sparse, structured, temporal, geospatial), basic data management and manipulation, simple summaries, and visualization. This course also serves as preparation for Actuarial Exam PA. Additionally this course, along with Statistics 320 and 353, serves as preparation for Actuarial Exam MAS II. Prerequisites: Computer Science 115; Statistics 131. [Cross-listed: Computer Science 290]

313 Machine Learning (3) ............................................................................................................................................................Spring Even A continuation of Introduction to Data Science to delve deeper into modern machine learning algorithms. The course is aimed at developing practical machine learning skills. It covers theoretical basis of a broad range of machine learning concepts and methods with practical applications. Pre or corequisite: Statistics 201 or 202; Prerequisite: Data Science 290. [Cross-listed: Computer Science 313]

371- Data Analysis Internship (3) \(\qquad\) Fall, Spring, Summer
374 A semester-long research experience that involves a significant use of data analysis, cleaning, and visualization in an applied research project or internship. Students will identify and work with a primary faculty mentor to develop a project proposal prior to enrolling; students will also be supervised by a data science professor. Part of the course will include an oral and written presentation of results. The course will be offered as needed and is run as an individual study. May be repeated for up to 12 credits. Permission of instructor required. Prerequisite: Data Science 290.

\section*{Dutch}

General Major-
\begin{tabular}{ll} 
General Minor- & \begin{tabular}{l} 
Dutch 101, 102, 201; Linguistics 201; three courses from CORE 283, Dutch 202, 204, 206, 208, EXCH 148, 160, 270, \\
271 (for a description of the EXCH classes, see page 30; three semesters of Dutch conversation 251-258. Three credits in \\
study-abroad courses are required.
\end{tabular}
\end{tabular}

Fall
An introductory study of the language and culture of the Dutch-speaking people. Emphasis on the acquisition of oral and written language skills in a communicative context combined with the study of cultural etiquette and social customs. If desired, students can schedule extra sessions with advanced students (often native speakers) to practice oral skills.

102 Elementary Dutch II (3)
Spring
Continuation of 101. Prerequisite: Dutch 101 or its equivalent

201 Intermediate Dutch I (3)
Fall
An intermediate course that continues the study of the language in a communicative context with emphasis on precision and expansion of linguistic skills. Emphasis is also put on the development of cultural understanding and sensitivity, studying people's values and beliefs as expressed in their economic, political, and religious systems. Dutch culture will be compared with our culture in the light of the cultural mandate. Prerequisite: Dutch 102 or its equivalent.

202 Intermediate Dutch II (3). \(\qquad\) Occasional
Continuation of Dutch 201. Prerequisite: Dutch 201 or its equivalent.
204 Literary and Cultural Readings (3) Occasional Designed to develop reading skill and an appreciation for Dutch culture and literature with emphasis on contemporary literature. Permission will be granted for individual readings in academic areas of interest to the student. Prerequisite: Dutch 202 or department approval.
206 Dutch Culture (3) \(\qquad\) Occasional Designed to cover many aspects of the Dutch way of life. Listening and speaking skills will be developed through classroom activities. Prerequisite: Dutch 201 or its equivalent.
208 World Literature II (3) ..........................................................................................................................................................Spring Even See English 318 for course information. [Cross-listed: English 318, French 208, Spanish 208]
251- Conversation (1)......................................................................................................................................................................Fall, Spring
258 Designed to give the student practice in listening and speaking. The content of the courses will be altered each year. The class will meet two times each week. Graded on a pass/no record basis. Prerequisite: Dutch 201; or permission of instructor.
281- Service-Learning (1-3)...............................................................................................................................................Fall, Spring, Summer
283 See page 37, Service-Learning
301 Dutch Phonology (3)
.Occasional An application of the principles of general phonology to the sound system of Dutch. See Linguistics 301. Prerequisites: Dutch 201; Linguistics 201.
341- Special Topics (1-3) ..................................................................................................................................................................................Occasional
348 These courses will consist of topics not normally covered in other program courses. Specially designed to focus on more specific topics utilizing instructor strengths and consideration of student needs.
391- Individual Studies (1-3) .............................................................................................................................................Fall, Spring, Summer
393 See page 36, Individual Studies

\section*{Earth Science}

\begin{abstract}
121 Solar System Astronomy (4) Fall Odd An introduction to the structure and diversity of the solar system, focusing on both the historical development of understanding of our cosmic "neighborhood" from the ancient Greeks to Einstein as well as recent discoveries and their implications for an improved understanding of our Earth. Students will obtain hands-on experience observing the heavens with naked eye, binoculars, and telescopes. The course involves three lecture hours and three observation/laboratory hours per week. Prerequisite: completion of Core Program mathematics requirement. [Cross-listed: Astronomy 121, CORE 224]
\end{abstract}

151 Creation Care and the Environment (4). Fall
An introduction to contemporary environmental studies and creation care, with emphasis on class discussion of relationships between human population and resource use in light of biblical teaching about environmental stewardship. Particular attention is given to the biotic and ecological dimensions of creation stewardship and planetary distress. Three lectures and one laboratory period of three hours per week. [Cross-listed: Community Development 151, CORE 211, Environmental Studies 151]

152 Energy, Materials, and the Environment (4) Spring Flowing from a foundation in physical and earth sciences, this course offers an introduction to energy and material use in Western society and examines the resulting impact on the environment. Contemporary practices and their historical roots are critiqued in light of Biblical norms for stewardship. An emphasis on evaluation and implementation of practical steps toward sustainability permeates the course with the goal of motivating and equipping students to become lifelong stewards. The laboratory portion of the course combines tours, laboratory measurements, economic analysis, and environmental analysis. Three lectures and one laboratory period of three hours per week. [Crosslisted: CORE 222, Environmental Studies 152]

201 Introductory Geology and Physical Geography (4). .Spring Odd
A general introduction to the physical nature and structure of the solid Earth, including, briefly, its physical geography and a more detailed look at its geology. The environmental implications of these subjects are detailed. Three lectures and one laboratory period of three hours per week plus one overnight field trip and one or two shorter trips. [Cross-listed: CORE 223, Environmental Studies 201, Geography 201]

202 Meteorology and Climate Change (3).
.Fall Odd
Provides a general introduction to meteorology and weather. Climate and climate change in Quaternary times to the present are also considered. The implications of an anthropogenically enhanced greenhouse effect will be addressed, with particular attention given to the impact of these changes on the structure and function of ecosystems. Includes one or two field trips to relevant sites in the region. [Crosslisted: Environmental Studies 202, Geography 202]

A comprehensive introduction to the field of soil science with an emphasis on scientific principles and their application in solutions to practical soil management problems. Two lectures and one three-hour laboratory per week. Prerequisites: Agriculture 111 or Biology 215. [Cross-listed: Agriculture 201]

227 Paleontology (3) .Fall Occasional An introduction to the major fossil plants and animals, and the environments (paleoecology) in which they are found. Three lectures, or two lectures and a two-hour laboratory per week. The course includes several Saturday field trips and one weekend field trip to the Pella area. Prerequisite: Biology 122; or permission of instructor. [Cross-listed: Biology 227]

251 Environmental Chemistry (3)................................................................................................................................................Spring Odd
A study of the nature and transport of chemical species-both natural and human-introduced-in the natural environment (atmosphere, hydrosphere, geosphere, and biosphere). Three lectures per week. Prerequisite: Chemistry 111; or permission of instructor. Prior completion of Chemistry 122 or 225 recommended. [Cross-listed: Chemistry 251, Environmental Studies 251]

252 Environmental Chemistry Laboratory (1)..............................................................................................................................Spring Odd
This lab will include methods of sampling and analysis of samples from natural and/or human influenced environments. Graded on an A-F scale. Corequisite: Chemistry 251. [Cross-listed: Chemistry 252, Environmental Studies 252]

303 Geographic Information Systems and Surveying (4) Fall An introduction to the acquisition, analysis, display, manipulation, and management of geographic information. Course topics will include geographical data input, storage, maintenance, analysis, and retrieval. Students will utilize common GIS software and associated hardware. An overview of survey methods used to gather and quantify features of physical geography will be included. The course will meet in two studio lab classes to provide an integral learn-by-doing experience applying GPS technology, survey methods, and GIS applications. Application of GIS to agriculture, business, environmental management, and other disciplines will be provided in this course. Prerequisite: sophomore standing or above. [Cross-listed: Agriculture 303, Business Administration 303, Construction Management 207, Environmental Studies 303]

370 Agroecology (3)
Fall
An introduction to the principles of agricultural ecology with an emphasis on Christian stewardship of God's world. Topics include the development and characteristics of agroecosystems, ecological disturbance and succession, diversity, pest management, nutrient cycling, environmental quality, energy use, climate change, social capital, conservation practices, and global food production. The interaction of agroecosystems with surrounding ecosystems is studied, and the utilization of ecological principles in agroecosystem design and management are examined. Two lectures and one three-hour laboratory per week. Prerequisites: Agriculture 101, 111 or Biology 122, 215 or Environmental Studies 151, 152; junior or senior standing. [Cross-listed: Agriculture 370]

\section*{Economics}
\begin{tabular}{ll} 
General Major- & \begin{tabular}{l} 
Business Administration 101; Economics 202, 203, 232, 304, 305, 351; Mathematics 152; Statistics 131; 15 credits from \\
Business Administration 201, Economics 303, 309, 315, 321, 334, 341-348, 393, Statistics 203, 215.
\end{tabular} \\
General Minor- & \begin{tabular}{l} 
Economics 202, 203; Mathematics 152; Statistics 131; three courses from Economics 232, 303, 304, 305, 309, 315, 321, 334, \\
341-348, 393. Economics 232 recommended.
\end{tabular}
\end{tabular}

For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 85-98, Teacher Preparation Program.

202 Principles of Economics: Micro (3). Fall, Spring The study of allocation of scarce resources at the level of the individual, household, and firm. Included are human motivation and preferences, the market, the function of prices, supply, demand, perfect and imperfect competition, and selected policy questions. Christian views on the nature of humanity, human motivation, and the market are also studied.

203 Principles of Economics: Macro (3) .Fall, Spring
An introduction to the study of human choice in the allocation of scarce resources, concentrating on the aggregate or national level. Economic systems, national income accounts and analysis, income distribution, fiscal and monetary policy, banking systems, economic growth, and selected economic policy problems are covered. Christian views on the origin and nature of economic resources and humankind's stewardship responsibilities are discussed. Prerequisite: Economics 202; or permission of instructor.

232 Econometrics (3)
Spring Even
This course covers all of the topics in Statistics 201 and topics commonly used in economic applications of statistics: time series and forecasting, linear time series models, moving average, autoregressive and ARIMA models, data analysis and forecasting with time series models and forecasting errors. Meets at the same times as Statistics 201 plus two additional meetings. This course, along with Statistics 131

\section*{UNDERGRADUATE ACADEMIC OFFERINGS: ECONOMICS}
and 203, serves as preparation for Actuarial Exam SRM. Additionally, this course, along with Statistics 131, 203, 320, and 352, serves as preparation for Actuarial Exam MAS I. Credit will not be given for both Statistics 201 and 202. Prerequisites: Statistics 131, 133. [Crosslisted: Statistics 202]
281- Service-Learning (1-3)

\(\qquad\)
Fall, Spring, Summerfinancial institutions; and the Federal Reserve Systems with special emphasis on the impact of monetary policy and financial institutionson the global economy. Prerequisites: Economics 202, 203. Microeconomic theory is based on the notion that individuals (and firms) make choices with well-defined objectives (e.g., maximizing utility or profits) and behave systematically according to the incentives and constraints of their economic environment. This course lays the theoretical framework and provides detailed intermediate-level study of the theory of consumer behavior, production and costs, partial equilibrium analysis of pricing in competitive and monopolistic markets, general equilibrium, welfare, and externalities. A critical reformational Christian perspective will pervade throughout. Prerequisites: Economics 202, 203; Mathematics 152; Statistics 131; or permission of instructor. Economics 232 recommended.

305 Intermediate Macroeconomics: Theory and Policy (3) \(\qquad\) Spring Even
This course provides an intermediate-level study of large scale relationships between macroeconomics, the financial system, and stabilization policy. It is comprised of a theoretical, institutional, and empirical study of national income distribution, price levels, labor markets, and policy-induced economic stabilization. It is particularly concerned with fluctuations in economic activity and the implications of economic disequilibrium for public policy. A reformational Christian perspective will be employed to critically assess prevailing macroeconomic paradigms and systems. Prerequisites: Economics 202, 203; Mathematics 152; Statistics 131; or permission of instructor. Economics 232 recommended.

309 Economic History of the United States (3)
.Spring Odd
A history of the development of the United States from an economic point of view. To set the context for the U.S. experience, the course will trace the roots of American economic development back to European and Medieval Economic thought. The causes and effects of major historical events are analyzed using contemporary economic thought. Some of the economic institutions and policies that played an important role in U.S. economic history will be evaluated from a Christian perspective. Prerequisite: Economics 203; or permission of instructor.

315 Government Finance (3)
Fall Even
A study of government taxing and spending, primarily at the federal level. Christian and secular views on government economic activity, forms of taxation and their effects, debt financing, budget processes and problems are studied. The broad purpose of the course is to help students learn how to apply economic principles in an analysis of the effects of governmental policies, particularly tax and expenditure policies. Emphasis is on analytical skills. Prerequisites: Economics 202, 203; or permission of instructor.

321 Global Economic Development (3)
Fall Odd
A study of economic aspects of poverty and underdevelopment in the modern world. Specific topics include the dimensions and nature of poverty in the world, characteristics and types of developing nations, theories of development, and emerging issues in development. We will also consider the implications of biblical principles for policy to promote economic development and alleviate poverty. Prerequisite: Economics 203; or permission of instructor.

334 Economics of Natural Resources and the Environment (3) Fall Even
A study of economic aspects of Christian stewardship in relation to the environment and use of natural resources. Major topics include biblical norms on creation, property rights, economic justice, the economic dimensions of current environmental problems and trends in resource use, institutions and social structures that affect environmental policy, economic theories related to resource use and environmental quality, and evaluation of current and proposed policies from a Christian point of view. Prerequisite: Economics 202; or permission of instructor. [Cross-listed: Environmental Studies 334]

341- Special Topics (1-3) Occasional
348 These courses will consist of topics not normally covered in other program courses. Specially designed to focus on more specific topics utilizing instructor strengths and consideration of student needs.

351 Senior Business and Economics Ethics Seminar (3) Fall, Spring
An integration of departmental courses involving student research and analysis on current topics in business and economics, with primary emphasis on Christian perspectives for the businessperson and economist. Required for senior majors in business administration, accounting, or economics. [Cross-listed: Business Administration 351]

\section*{Education}

Master of Education Program See Graduate Studies section on page 154.
Teacher Preparation Program The Teacher Preparation Program is built on a liberal arts base and on professional courses that prepare students for teaching in early childhood, elementary, middle, and secondary classrooms. Following successful completion of one or more of the four options listed below, students are recommended for the initial level of licensure granted by the State of Iowa.

Admission to the Program Application for admission to the Teacher Preparation Program is required. Application is completed through the Office of the Director of Teacher Preparation. The standards for admission to the program are described in the Teacher Preparation Program Handbook. Completed applications are evaluated by the education department and approved by the Teacher Preparation Committee.

The Teacher Preparation Committee takes the following formal actions:
- Admits applicants who have met all the criteria for admission.
- Conditionally admits applicants whose deficiencies can be remediated.
- Rejects applicants who do not meet the standards for admission. If denied admission, a student may reapply for admission after one semester by contacting the Director of Teacher Preparation. Generally, acceptance into the Teacher Preparation Program must precede approval for the professional year, including student teaching, by at least one semester. Each applicant is informed in writing of the decision of the Teacher Preparation Committee regarding admission to the program.

The following are the criteria for admission to the Teacher Preparation Program:
- Indicate to the Director of Teacher Preparation intention to apply to the Teacher Preparation Program.
- Demonstrate competency in English and mathematics: a score of 20 or higher on the English portion of the ACT or earn a grade of B- or higher in CORE 120 or equivalent course; a score of 20 or higher on the mathematics portion of the ACT or earn a grade of B - or higher in all mathematics/statistics courses.
- Earn a cumulative GPA of 2.50 or above.
- Earn a GPA of 2.50 or above in each endorsement area.
- Earn a grade of C+ or higher in all level one education courses.
- Complete level one courses with key competencies met as indicated in the Teacher Preparation Candidate Assessment Plan.
- Demonstrate acceptable professional dispositions based on a dispositions for teaching interview with the education department along with recommendations from student services and the education department.
- For secondary and K-12 content majors, a recommendation from the respective content area department.
- Satisfy professional portfolio requirements at level one.
- Submit a current résumé to the candidate's education department advisor.

Approval for the Professional Year and for Student Teaching Student teaching is required of all students preparing for licensure. To receive graduation credit and a recommendation for licensure, student teaching must be completed at Dordt University. Application for approval for student teaching is required. Application forms are distributed or may be obtained from the Director of Teacher Preparation. The criteria for approval for student teaching are described in the Teacher Preparation Program Handbook. Completed applications are evaluated by the education department and approved by the Teacher Preparation Committee. Each applicant is informed in writing of the decision of the Teacher Preparation Committee regarding approval for student teaching.

The following are the criteria for approval for student teaching:
- Submit an application for student teaching.
- Earn a cumulative GPA of 2.60 or above.
- Earn a GPA of 2.60 or above in each endorsement area.
- Gain acceptance into the Teacher Preparation Program at least one semester prior to student teaching.
- Successfully complete level two courses with competencies as indicated in the Teacher Preparation Candidate Assessment Plan.
- Earn a grade of \(\mathrm{C}+\) or higher in all level two education courses.
- Demonstrate acceptable professional dispositions based on a dispositions for teaching interview with the education department along with recommendations from student services and the education department.
- For secondary and K-12 content majors, a recommendation from the respective content area department.
- Satisfy professional portfolio requirements at level two.
- Submit a current résumé to the candidate's education department advisor.

Requirements for Institutional Recommendation for Licensure To be recommended by the Teacher Preparation Committee for initial lowa licensure, the teacher candidate must have completed student teaching and successfully met all standards described in the Teacher Preparation Candidate Assessment Plan. Formal application for licensure is required. Application forms are distributed or may be obtained from the Director of Teacher Preparation. Completed applications are evaluated by the education department and approved by the Teacher Preparation Committee.

\section*{UNDERGRADUATE ACADEMIC OFFERINGS: EDUCATION}

Each graduate is informed in writing of the decision of the Teacher Preparation Committee regarding recommendation for licensure.
The following are the criteria for recommendation for initial lowa teaching licensure:
- Complete an application form.
- Pass an FBI Criminal Background Check (including fingerprinting process).
- Submit payment of \(\$ 160\) to the Iowa Board of Educational Examiners ( \(\$ 85\) licensure fee and \(\$ 75\) background check). Fees are subject to change annually.
- Successfully complete student teaching including satisfactory completion of performance competencies for each teacher preparation program standard.
- Satisfy professional portfolio requirements at level three.

Program Options and Requirements Successful completion of the program of courses in teacher preparation meets requirements for graduation and enables the student to satisfy the requirements for initial licensure from the State of Iowa.

Each program option in teacher preparation includes:
- Core Program requirements.
- Professional education requirements.
- Content course requirements in the selected endorsement program(s).
- Electives (depending on the program option selected).

Note the following Core Program requirements for teacher preparation students:
- Education 145 meets the Core Program Cross-Cultural requirement.
- Mathematics-all teacher preparation students take Statistics 131 or Mathematics 128 and Statistics 138 to meet the Core Program Quantitative Reasoning requirement.
- Education 135 meets the Core Program Persons in Community requirement (CORE 250-259) and a professional education requirement.

Teacher preparation candidates choose from four major emphases. Several endorsement options are available under each emphasis.
Education Major: Education 101, 135, 145, 165, 209, 300, 239 or 369, 381, 382; sixteen credits of student teaching; one of the following sequences of courses:
1. ELEMENTARY SEQUENCE: Education 201, 333, 335 or 336, 338; Mathematics 128; Statistics 138.
2. ELEMENTARY SUBJECT AREA SEQUENCE: Education 201, 265, 335 or 336; Statistics 131.
3. SECONDARY SEQUENCE: Education 203, 265, 336 or 337; Statistics 131.
4. VERTICAL SEQUENCE: Education 201 or 203, 202, 265, 336; Statistics 131.

OPTION I: Elementary General Classroom Content Major: Endorsement 102. Education 155, 220, 331, 332, 334; Geography 151; Mathematics 108; one course from CORE 211, 212, 214, 216; one course from CORE 222, 223, 224, 225; completion of a 12 credit field of specialization from the available options. [Note: certain core requirements are also required for this major: CORE 140, 145, and core English competency requirement. Students with transfer credit for any of these core components must have the courses approved by the education department for the endorsement requirements.] Education 260 strongly recommended.

Fields of Specialization Note: unless indicated, a field of specialization does not provide the student with an endorsement area. A minor or major in any academic area offered by the university fulfills the requirements for a field of specialization.
1. ART: Art 201, 202; one course from Art 207, 208, 209; Art 216 or 218.
2. EARLY CHILDHOOD (PreK-K): Endorsement 103. Education 210, 320, 321, 322, 326.
3. ENGLISH/LANGUAGE ARTS: English 306, 335; one course from English 203, 317, 318; one course from CORE 110, Communication 311, 314.
4. ESL: Education 355; English 335; Linguistics 201, 301.
5. HEALTH: HHP 202, 209, 211; Sociology 225.
6. MATHEMATICS: Mathematics 108, 115, 128, 149; Statistics 138.
7. MUSIC: Music 103, 103L, 104, 104L, 312; one semester each of Music 240 and Music 250.
8. PHYSICAL EDUCATION: three courses from Biology 203, HHP 205, 206, 207, 308; two courses from HHP 212-217.
9. READING: Education 210, 265, 314; Education 320 or 321; English 306.
10. SCIENCE: one course from Biology 125, CORE 211, 212; one course from Chemistry 110, 111, Physics 215; one course from Earth Science 121, 151, 201.
11. SOCIAL STUDIES: History 201 or 202; one course from History 212, 213, 214; Geography 151; Political Science 201.
12. SPANISH: Spanish 201, 202; Spanish 204 or 206; three credits from Spanish \(251-258\) or Spanish 301. Study-abroad courses are recommended.
13. SPECIAL EDUCATION: Education 210, 253, 315, 317.
14. SPEECH COMMUNICATION/THEATRE: Communication 180, 220; CORE 110; Theatre Arts 102; Theatre Arts 103 or 380.
15. THEOLOGY: Theology 110; one course from Theology 211-214; one course from Theology 215-217; Theology 221 or 351.

Elementary Subject Area Minor Completion of the Elementary General Classroom Content Major along with one of the following subject area minors provides an additional endorsement or endorsements to teach in a specialized subject area in grades K-8. (The term "endorsement" and the endorsement numbers are part of the Iowa licensure code.)
1. ART: Endorsement 113. Art 201, 202, 216; two courses from Art 207, 208, 209, 210; two courses from Art 218, 225, 228, 230, 240; one course from Art 302, 316, 318, 325, 328, 330, 340. (Education 350 is required as a professional methods of teaching course.)
2. BIRTH-GRADE 3 INCLUSIVE SETTINGS: Endorsement 1001. Education 170, 210, 315, 320, 321, 322, 326. Education 252 recommended.
3. ENGLISH/LANGUAGE ARTS: Endorsement 119. CORE 110; Education 155; English 306; Theatre Arts 102; English 321 or 322; one course from English 233, 241, 301, 302, 304; one course from English 203, 205, 210, 311, 317, 318; one course from COURSES FOR MAJORS. (Education 333 is required as a professional methods of teaching course.)
4. HEALTH: Endorsement 137. Biology 203; HHP 101, 202, 205, 207, 209, 211; Sociology 225. (Education 360 is required as a professional methods of teaching course.)
5. MATHEMATICS: Endorsements 142 and 1421. Mathematics 108, 115, 128, 149, 152, 207; Computer Science 115; Statistics 138; \(1-3\) credits from mathematics courses numbered 148 or above to reach a minimum of 24 credits in mathematics. (Education 332 is required as a professional methods of teaching course.)
6. MIDDLE SCHOOL: Teacher candidates earn middle school teaching endorsements by completing Education 202, 333, 336, 239 or 369 and at least two of the following fields of specialization. (Education 239 or 369 must be completed in a grade 5-8 classroom.)
A. ENGLISH/LANGUAGE ARTS: Endorsement 1821. English 306; Education 155; one course from English 203, 317, 318; one course from CORE 110, Communication 311, 314.
B. MATHEMATICS: Endorsements 1421 and 1822. Mathematics 108, 149; one course from Mathematics 115, 203, 304; Mathematics 128 or 208; Statistics 131 or 138.
C. SCIENCE: Endorsement 1823. One course from Chemistry 110, 111, Physics 215; one course from Biology 125, CORE 211, 212; one course from Earth Science 121, 152, 201.
D. SOCIAL STUDIES: Endorsement 1824. History 201 or 202; one course from History 212, 213, 214; Geography 151; Political Science 201.
7. MUSIC: Endorsement 144. Music 103, 103L, 104, 104L, 205, 215, 222; one course from Music 206, 207, 208; one course from Music 206, 207, 208, 211, 305, 306, 318-319; four semesters of ensemble participation; Music 19; three semesters of Music 09; one semester each of Music 240 and Music 250. (The following are required as professional methods of teaching courses: Music 312, 313, 316, 317.)
8. PHYSICAL EDUCATION: Endorsement 146. Biology 203; HHP 101, 205, 206, 207, 208, 308; three credits from HHP 212-217, 325. (Education 360 is required as a professional methods of teaching course.)
9. READING: Endorsement 148. Education 145, 155, 165, 210, 265, 314, 320, 321, 339; English 306. (Education 333 and 338 are required as professional methods of teaching courses.)
10. SCIENCE: Endorsement 150. Three courses from CORE 221, Physics 215, 216, Chemistry 110, 122; two courses from CORE 212, Biology 122, 215; two courses from Environmental Studies 151, Astronomy 121, Earth Science 201, 202, 227. Biology 251 or Physics 305 recommended. (Education 334 is required as a professional methods of teaching course.)
11. SOCIAL STUDIES: Endorsement 164. Economics 202; Geography 151; History 201 or 202; one course from History 212, 213, 214; two courses from History 220-225, 230; two courses from Political Science 201, 202, 214, 312. (Education 331 is required as a professional methods of teaching course.)
12. SPANISH: Endorsement 133. Spanish 201, 202, 204 or 206, 300, 301, 302; Linguistics 201; three semesters of Spanish 251-258; one course from Spanish 304, 341-348, 393. Three credits in study-abroad courses are required. (Students completing both the Spanish and ESL endorsements must take Linguistics 301 and Spanish 301L instead of Spanish 301.) (Education 355 is required as a professional methods of teaching course.)
13. SPECIAL EDUCATION: INSTRUCTIONAL STRATEGIST I: MILD/MODERATE: Endorsement 260. Education 145, 165, 210, 252, 253, 314, 317, 339. (Education 315 is required as a professional methods of teaching course.)
14. STEM (SCIENCE, TECHNOLOGY, ENGINEERING, MATHEMATICS): Endorsement 975. One course from Chemistry 110, 111, Physics 215; one course from Biology 125, CORE 211, 212; one course from Earth Science 121, 152, 201; Computer Science 115; Engineering 112; Mathematics 152 or five math courses to include Mathematics 108, 115, 128, 149 and Statistics 138; STEM 111, 112. (Education 353 is required as a professional methods of teaching course.)

\section*{UNDERGRADUATE ACADEMIC OFFERINGS: EDUCATION}

Option II: Elementary Subject Area Classroom Emphasis Major: Completion of the Education Major: Elementary Subject Sequence along with one of the following subject area majors prepares the student for specialized subject area teaching in grades K-8 and allows the student to obtain the endorsement indicated. (The term "endorsement" and the endorsement numbers are part of the Iowa licensure code.)
1. ART: Endorsement 113. Art 201, 202, 216, 370; three courses from Art 207, 208, 209, 210; three courses from Art 218, 225, 228, 230, 240; two courses from Art \(302,316,318,325,328,330,340\). (Education 350 is required as a professional methods of teaching course.)
2. MUSIC: Endorsement 144. Music 103, 103L, 104, 104L, 203, 203L, 205, 215, 222; two courses from Music 206, 207, 208; one course from Music 204, 211, 305; Music 19; six semesters of Music 09; two semesters each of Music 240 and Music 250; four large ensemble credits. (The following are required as professional methods of teaching courses: Music 312, 313, 316, 317.)
3. PHYSICAL EDUCATION: Endorsement 146. Biology 203; HHP 101, 205, 206, 207, 208, 308, 325; two courses from HHP 212-217. (Note: HHP 212-217 are half-courses.) (Education 360 is required as a professional methods of teaching course.)
4. SPECIAL EDUCATION: INSTRUCTIONAL STRATEGIST I: MILD/MODERATE*: Endorsement 260. Education 145, 165, 210, 252, \(253,271,272,314,317,320,339\). (Education 315 is required as a professional methods of teaching course.) *Note: This is not a stand-alone major. It must be combined with an additional content area endorsement.

\section*{5. WORLD LANGUAGE:}
A. FRENCH: Endorsement 123. French 101, 102, 201, 202, 204, 206; Linguistics 201; four semesters of French 251-258. Six credits in study abroad courses to include advanced French study are required. (Education 355 is required as a professional methods of teaching course.
B. SPANISH: Endorsement 133. Spanish 201, 202, 204 or 206, 300, 301, 302, 304; Linguistics 201; one course from Spanish 102, 207, \(341-348,393\); four semesters of Spanish 251-258. Six credits in study-abroad courses are required. (Students completing both the Spanish and ESL endorsements must take Linguistics 301 and Spanish 301L instead of Spanish 301.) (Education 355 is required as a professional methods of teaching course.)

OPTION III: Secondary Subject Area Classroom Emphasis Major: Completion of the Education Major: Secondary Sequence along with one of the following subject area majors prepares the student for specialized subject area teaching in grades 5-12 and allows the student to obtain the endorsement indicated. (The term "endorsement" and the endorsement numbers are part of the Iowa licensure code.)
1. AGRICULTURE:
A. AGRICULTURE: Endorsement 112. Agriculture 101, 105, 111, 201, 221, 232, 252, 290, 302, 312, 322, 370; Biology 125; Chemistry 110 or 111. (Education 353 and Agriculture 391 are required as professional methods of teaching courses.)
B. AGRICULTURE/BIOLOGY: Endorsements 112 and 151. Agriculture 101, 105, 111, 201, 221, 232, 252, 290, 302, 312, 322, 370; Biology 122 or 203; Biology 125; Chemistry 110 or 111; one course from Agriculture 251, 315, 316, 350, Biology 215, 319; one course from Agriculture 233, 234, 235, 238, Biology 320. (Education 353 and Agriculture 391 are required as professional methods of teaching courses.)
2. ART: Endorsement 114. Art 201, 202, 216, 370; three courses from Art 207, 208, 209, 210; three courses from Art 218, 225, 228, 230, 240; two courses from Art 302, 316, 318, 325, 328, 330, 340. (Education 350 is required as a professional methods of teaching course.)
3. BUSINESS-ALL: Endorsement 1171. Business Administration 100, 205, 206; two courses from Business Administration 200, 201, 202; Business Administration 301 or 302; one course from Business Administration 304, 308, 339; Economics 202, 203; one course from English 305, Communication 220, 228. (Education 359 is required as a professional methods of teaching course.)
4. ENGINEERING: Endorsement 974. Completion of an Engineering or Engineering Science Major (see page 98, Engineering). (Education 353 is required as a professional methods of teaching course.) Engineering or Engineering Science is an additional major so students should work with their advisors to plan their academic program completion timeline, which may require additional semesters.
5. ENGLISH/LANGUAGE ARTS: Endorsement 120. Education 155; English 210, 311, 313, 321, 322, 335; two courses from English 233, 241, 301, 302, 304; one course from English COURSES FOR MAJORS; CORE 110. English 203, 312, and 333 recommended. (Education 354 is required as a professional methods of teaching course.)
6. ENGLISH/LANGUAGE ARTS-ALL: Endorsement 1201. Education 155, 265; English 210, 241, 321, 322, 335; English 311 or 313; one course from English 233, 301, 302, 304; one course from English 205, 311, 312, 313, 317, 318; Communication 240, 314; CORE 110; Theatre Arts 102, 382. (Education 354 and 358 are required as professional methods of teaching courses.)
7. HISTORY:
A. AMERICAN HISTORY and WORLD HISTORY: Endorsements 158 and 166. History 201, 280, 380; one course from History 212, 213, 214; three world history electives from History 212, 213, 214, 220, 221, 222, 223, 224, 225, 226, 230, 319, 321, 326, 327, 328, 329, 335, 341344; four American history electives from History 202, 301, 306, 307, 308. History 388 or 389 strongly recommended. (Education 356 is required as a professional methods of teaching course.)
B. WORLD HISTORY: Endorsement 166. History 230, 280, 380; one course from History 212, 213, 214; seven history courses numbered above 201. A maximum of three courses may be from History 202, 301, 306, 307, 308, 345-348. At least three courses must be 300-level. History 388 or 389 strongly recommended. (Education 356 is required as a professional methods of teaching course.)

Students who complete a history major can add an endorsement in American government, economics, psychology, or sociology by completing fifteen semester hours in one of these social sciences:
- Endorsement 157-American Government. Political Science 202, 214, 322, 333, 370.
- Endorsement 160-Economics: Economics 202, 203, 303; two courses from Economics 309, 315, 321, 334. (Note: Economics 309, 315,321 , and 334 are offered in alternate years.)
- Endorsement 163-Psychology. Psychology 201, 210, 362; two courses from Psychology 218, 224, 374, 376.
- Endorsement 165-Sociology. Sociology 201, 216; three electives in sociology.
8. INDUSTRIAL TECHNOLOGY: Endorsement 140. Engineering Technology 101, 112, 113, 114, 202, 211, 212, 213; Statistics 131; CORE 268; a minimum of four credits from Engineering Technology 271-276. (Education 363 is required as a professional methods of teaching course.)
9. MATHEMATICS:
A. MATHEMATICS: Endorsement 143. Mathematics 152, 153, 203, 207, 208, 212, 215, 291, 304, 311, 390, 392; Computer Science 115; Statistics 131. (Education 357 is required as a professional methods of teaching course.)
B. MATHEMATICS/COMPUTER SCIENCE: Endorsements 143 and 278. Mathematics 152, 153, 208, 212, 215, 304, 390; Computer Science 115, 205; Computer Science 215 or 331; two additional credits from Computer Science; Statistics 131. (Education 357 and 361 are required as professional methods of teaching courses.)
C. MATHEMATICS/ENGINEERING: Endorsements 143 and 974. Engineering 112, 113, 114, 115, 116, 117, 170, 202, 204, 208; Engineering 310 or 390; Mathematics \(152,153,208,212,215,304,390\); Physics 231 ; Statistics 131. (Education 353 and 357 are required as professional methods of teaching courses.)
D. MATHEMATICS/PHYSICS: Endorsements 143 and 156. Computer Science 115; Mathematics 152, 153, 208, 212, 215, 304, 390; Physics 231, 232, 324; Statistics 131. (Education 353 and 357 are required as professional methods of teaching courses.)
10. MUSIC:
A. MUSIC-CHORAL MUSIC EDUCATION: Endorsement 145. Music 103, 103L, 104, 104L, 203, 203L, 204, 206, 207, 208, 215, 222, 315, 323 ; one course from Music 205, 211, 305; Music 19; six semesters of Music 09; four semesters of Music 240; one additional semester from Music 240, 250, 260, 270; six semesters of Concert Choir or Chorale. (The following are required as professional methods of teaching courses: Music 312, 313, 316, 317.)
B. MUSIC-INSTRUMENTAL MUSIC EDUCATION: Endorsement 145. Music 103, 103L, 104, 104L, 203, 203L, 204, 206, 207, 208, 215, \(305,315,316-319\); Music 19 ; six semesters of Music 09 ; four semesters of Music 270 ; Music 240 or 04 ; one additional semester from Music 240, 250, 260, 270; six semesters of Band or Orchestra. (The following are required as professional methods of teaching courses: Music 312, 314, 323.)
C. MUSIC-CHORAL/INSTRUMENTAL MUSIC EDUCATION: Endorsement 145. Music 103, 103L, 104, 104L, 203, 203L, 204, 206, \(207,208,215,222,305,315,316-319,323\); Music 19; six semesters of Music 09; four semesters of Music 240; four semesters of Music 270; four semesters of Concert Choir or Chorale; four semesters of Band or Orchestra. (The following are required as professional methods of teaching courses: Music 312, 313, 314.)
11. PHYSICAL EDUCATION: Endorsement 147. Biology 203; HHP 101, 205, 206, 207, 208, 308, 325; two courses from HHP 212-217. (Note: HHP 212-217 are half-courses.) (Education 360 is required as a professional methods of teaching course.)
12. SCIENCES: (Single Academic Program Science Majors)
A. BIOLOGY: Endorsement 151. Biology 122 or 203; Biology 125, 180, 200, 215; three 3- or 4-credit courses from Biology 203 or above, Agriculture 251, 315 (at least seven credits must be in biology); Chemistry 111 or 122 (Chemistry 122 recommended). (Education 351 is required as a professional methods of teaching course.)
B. CHEMISTRY: Endorsement 152 . Chemistry \(111,180,212,225,231,271,360\); three credits from chemistry courses numbered 200 or above; Mathematics 152 . Chemistry 305 recommended. (Education 351 is required as a professional methods of teaching course.) Note: Mathematics 152 will fulfill the Core Program quantitative reasoning requirement for education majors.
C. PHYSICS: Endorsement 156. Physics 231, 232, 305, 324; Mathematics 152, 153; three courses from Physics 220, 325, 326, 331, 337, 393. (Education 351 is required as a professional methods of teaching course.) Note: Mathematics 152 and 153 are pre or corequisites for Physics 231 and 232 and will fulfill the Core Program quantitative reasoning requirement for education majors. Most of the 300 level courses have additional prerequisites.
D. ALL SCIENCES (BIOLOGY, CHEMISTRY, EARTH SCIENCE AND PHYSICS): Endorsement 185. Biology 122 or 203; Biology 125; 1-4 additional credits of biology/life science; Chemistry 111, 122, 180; Earth Science 121, 151; 1-4 additional credits of earth/space science; Physics 215, 216; one course from CORE 221, 222, 225. (Education 351 is required as a professional methods of teaching course.)

SCIENCES: (Multiple Academic Program Majors)
The following endorsements in the sciences may be acquired by meeting the course requirements listed. Endorsements may be added to the single academic program majors (biology, chemistry, or physics) above. Alternatively, combinations of two or more of the endorsement options

\section*{UNDERGRADUATE ACADEMIC OFFERINGS: EDUCATION}
listed below constitute a secondary education major in those endorsement areas.
E. BIOLOGY: Endorsement 151. Biology 122 or 203; Biology 125, 180, 200, 215. (Education 351 is required as a professional methods of teaching course.)
F. CHEMISTRY: Endorsement 152. Chemistry 111, 180, 212, 122 or \(225,251,252\). (Education 351 is required as a professional methods of teaching course.)
G. EARTH SCIENCE: Endorsement 153. Earth Science 151, 201; seven additional credits of earth science. (Education 351 is required as a professional methods of teaching course.)
H. ENGINEERING: Endorsement 974. Chemistry 110 or 111; Engineering 112, 113, 114, 115, 116, 117, 170, 202; Mathematics 152. Physics 215,216 or 231,232 recommended. (Education 351 or 353 is required as a professional methods of teaching course.)
I. PHYSICS: Endorsement 156. Physics 231, 232, 324; Mathematics 152, 153; one course from Physics 220, 325, 326, 331, 337, 393. (Education 351 is required as a professional methods of teaching course.) Mathematics 152 and 153 will fulfill the Core Program quantitative reasoning requirement for education majors. Most of the course options have additional prerequisites.
13. SOCIAL SCIENCES-BASIC: Endorsement 186. History 201, 280, 307; one course from History 212, 213, 214; two courses from History 202, 301, 306, 308; three courses from History 220, 221, 222, 223, 224, 225, 226, 230, 319, 321, 326, 327, 328, 335, 341-348 (students planning to teach in Canada are advised to take 230); Political Science 202, 214; one course from Political Science 210, 322, 333. (Education 356 is required as a professional methods of teaching course.)

Students who complete a social sciences major can add additional subject areas to their endorsement by adding one or more of the following course sequences:
- Economics: Economics 202, 203.
- Geography: Geography 151; Geography 201 or 202.
- Psychology. Psychology 201; one course from Psychology 210, 218, 224.
- Sociology. Sociology 201; one course from Sociology 215, 216, 225.
14. SPECIAL EDUCATION: INSTRUCTIONAL STRATEGIST I: MILD/MODERATE*: Endorsement 261. Education 145, 165, 210, 252, \(253,265,271,272,314,317,339\). (Education 315 is required as a professional methods of teaching course.) *Note: This is not a stand-alone major. It must be combined with an additional content area endorsement.

\section*{15. WORLD LANGUAGE:}
A. FRENCH: Endorsement 124. French 101, 102, 201, 202, 204, 206; Linguistics 201; four semesters of French 251-258. Six credits in study abroad courses to include advanced French study are required. (Education 355 is required as a professional methods of teaching course.
B. SPANISH: Endorsement 134. Spanish 201, 202, 204 or 206, 300, 301, 302, 304; Linguistics 201; one course from Spanish 102, 207, \(341-348,393\); four semesters of Spanish 251-258. Six credits in study-abroad courses are required. (Students completing both the Spanish and ESL endorsements must take Linguistics 301 and Spanish 301L instead of Spanish 301.) (Education 355 is required as a professional methods of teaching course.)

Secondary Subject Area Classroom Emphasis with an Additional Academic Minor Completion of the Secondary Subject Area Classroom Emphasis Major along with a subject area major (described above) may add an additional grade 5-12 teaching endorsement by completing one of the following subject area minors. (The term "endorsement" and the endorsement numbers are part of the Iowa licensure code.)
1. AMERICAN GOVERNMENT: Endorsement 157. Political Science 201, 202, 214, 322, 333, 370; two courses from Political Science 245, 335, Criminal Justice 101. One course taken on the American Studies Program may be substituted for one of the courses. (Education 356 is required as a professional methods of teaching course.)
2. ART: Endorsement 114. Art 201, 202, 216; two courses from Art 207, 208, 209, 210; two courses from Art 218, 225, 228, 230, 240; one course from Art 302, 316, 318, 325, 328, 330, 340. (Education 350 is required as a professional methods of teaching course.)
3. BIBLE: No state endorsement is available. Theology 324, 331; two courses from Theology 211, 212, 213, 214; two courses from Theology 215, \(216,217,323\). (Education 261 is required as a professional methods of teaching course.)
4. BIOLOGY: Endorsement 151. Biology 122 or 203; Biology 125, 180, 200, 215; a minimum of seven additional credits from biology courses numbered above 203, Agriculture 251, 315. (Education 351 is required as a professional methods of teaching course.)
5. CHEMISTRY: Endorsement 152. Chemistry 111, 180, 212, 225, 251, 252; a minimum of seven additional credits from Chemistry 231, 271, \(321,322,323,360,362\). (Education 351 is required as a professional methods of teaching course.)
6. ENGLISH/LANGUAGE ARTS: Endorsement 120. Education 155; English 210, 306, 335; English 321 or 322; English 311 or 313; one course from English 233, 241, 301, 302, 304; one course from English COURSES FOR MAJORS. (Education 354 is required as a professional methods of teaching course.)
7. HEALTH: Endorsement 138. Biology 203; HHP 101, 202, 205, 207, 209, 211; Sociology 225. (Education 360 is required as a professional methods of teaching course.)
8. HISTORY-WORLD: Endorsement 166. History 280, 380; one course from History 212, 213, 214; three courses from History 201, 202, 220, 221, 223, 224, 225, 230; two courses from History 319, 326, 327,329, 335. (Education 356 is required as a professional methods of teaching course.)
9. MATHEMATICS: Endorsement 143. Mathematics 152, 153, 203, 208, 212, 215, 390; Computer Science 115; Statistics 131. (Education 357 is required as a professional methods of teaching course.)
10. MIDDLE SCHOOL: Teacher candidates earn middle school teaching endorsements by completing Education 202, 265, 336, 239 or 369 and at least two of the following fields of specialization. (Education 239 or 369 must be completed in a grade 5-8 classroom.) Teacher candidates must take one methods course from Education \(331,332,333,334,351,353,354,356\) or 357 related to their field of specialization.
A. ENGLISH/LANGUAGE ARTS: Endorsement 1821. English 306; Education 155; one course from English 203, 317, 318; one course from CORE 110, Communication 311, 314.
B. MATHEMATICS: Endorsements 1421 and 1822. Mathematics 108, 149; one course from Mathematics 115, 203, 304; Mathematics 128 or 208; Statistics 131 or 138.
C. SCIENCE: Endorsement 1823. One course from Chemistry 110, 111, Physics 215; one course from Biology 125, CORE 211, 212; one course from Earth Science 121, 152, 201.
D. SOCIAL STUDIES: Endorsement 1824. History 201 or 202; one course from History 212, 213, 214; Geography 151; Political Science 201.
11. PHYSICAL EDUCATION: Endorsement 147. Biology 203; HHP 101, 205, 206, 207, 208, 308; three credits from HHP 212-217, 325. (Note: HHP 212-217 are half-courses.) (Education 360 is required as a professional methods of teaching course.)
12. PHYSICS: Endorsement 156. Physics 231, 232, 324, 325; three elective courses in physics. Most of the course options have additional prerequisites. (Education 351 is required as a professional methods of teaching course.)
13. SPANISH: Endorsement 134. Spanish 201, 202, 204 or 206, 300, 301, 302; Linguistics 201; three semesters of Spanish 251-258; one course from Spanish 304, \(341-348\), 393. Three credits in study-abroad courses are required. (Students completing both the Spanish and ESL endorsements must take Linguistics 301 and Spanish 301L instead of Spanish 301.) (Education 355 is required as a professional methods of teaching course.)
14. SPECIAL EDUCATION: INSTRUCTIONAL STRATEGIST I: MILD/MODERATE: Endorsement 261. Education 145, 165, 210, 252, 253, 314, 317, 339. (Education 315 is required as a professional methods of teaching course.)
15. SPEECH COMMUNICATION/THEATRE: Endorsement 168. Communication 180, 240, 241, 314; CORE 110; Theatre Arts 102, 103, 380, 382. Communication 311 recommended. (Education 358 is required as a professional methods of teaching course.)
16. STEM (grades 5-8): Endorsement 976. One course from Chemistry 110, 111, Physics 215; one course from Biology 125, CORE 211, 212; one course from Earth Science 121, 152, 201; Computer Science 115; Engineering 112; STEM 111, 112; Mathematics 152 or four math courses to include Mathematics 108, 115, 149 and Statistics 131. (Education 353 and Education 357 are required as a professional methods of teaching courses.) This endorsement must accompany a 5-12 science, mathematics, or industrial technology endorsement.

Option IV: Vertical Subject Area Classroom Emphasis Major (provides endorsement to teach a content area at both elementary and secondary, grades K-12, levels): Completion of the Education Major: Vertical Sequence along with one of the following subject area majors prepares the student for specialized subject area teaching in both elementary and secondary and allows the student to obtain the endorsements indicated. (The term "endorsement" and the endorsement numbers are part of the lowa licensure code.)
1. ART: Endorsements 113 and 114. Art 201, 202, 216, 370; three courses from Art 207, 208, 209, 210; three courses from Art 218, 225, 228, 230, 240; two courses from Art 302, 316, 318, 325, 328,330,340. (Education 350 is required as a professional methods of teaching course.)
2. MUSIC:
A. MUSIC-CHORAL MUSIC EDUCATION: Endorsements 144 and 145. Music 103, 103L, 104, 104L, 203, 203L, 204, 206, 207, 208, \(215,222,315,323\); one course from Music 205, 211, 305 ; Music 19; six semesters of Music 09 ; four semesters of Music 240 ; one additional semester from Music 240, 250, 260, 270; six semesters of Concert Choir or Chorale. (The following are required as professional methods of teaching courses: Music \(312,313,316,317\).)
B. MUSIC-INSTRUMENTAL MUSIC EDUCATION: Endorsements 144 and 145. Music 103, 103L, 104, 104L, 203, 203L, 204, 206, 207, 208, 215, 305, 315, 316-319; Music 19; six semesters of Music 09; four semesters of Music 270; Music 240 or 04; one additional semester from Music 240, 250, 260, 270; six semesters of Band or Orchestra. (The following are required as professional methods of teaching courses: Music 312, 314, 323.)
C. MUSIC-CHORAL/INSTRUMENTAL MUSIC EDUCATION: Endorsements 144 and 145. Music 103, 103L, 104, 104L, 203, 203L, 204, 206, 207, 208, 215, 222, 305, 315, 316-319, 323; Music 19; six semesters of Music 09; four semesters of Music 240; four semesters of Music 270; four semesters of Concert Choir or Chorale; four semesters of Band or Orchestra. (The following are required as professional methods of teaching courses: Music 312, 313, 314.)

\section*{UNDERGRADUATE ACADEMIC OFFERINGS: EDUCATION}
3. PHYSICAL EDUCATION: Endorsements 146 and 147. Biology 203; HHP 101, 205, 206, 207, 208, 308, 325; two courses from HHP 212-217. (Note: HHP 212-217 are half-courses.) (Education 360 is required as a professional methods of teaching course.)
4. PHYSICAL EDUCATION AND HEALTH EDUCATION: Endorsements 137, 138, 146 and 147. Biology 203; HHP 101, 202, 205, 206, 207, 208, 209, 211, 308, 325; Sociology 225; two courses from HHP 212-217. (Note: HHP 212-217 are half-courses.) (Education 360 is required as a professional methods of teaching course.)
5. SPECIAL EDUCATION: INSTRUCTIONAL STRATEGIST I: MILD/MODERATE*: Endorsements 260 and 261. Education 145, 165, \(210,252,253,265,271,272,314,317,320,339\). (Education 315 is required as a professional methods of teaching course.) *Note: This is not a stand-alone major. It must be combined with an additional content area endorsement.
6. WORLD LANGUAGE:
A. FRENCH: Endorsements 123 and 124. French 101, 102, 201, 202, 204, 206; Linguistics 201; four semesters of French 251-258. Six credits in study abroad courses to include advanced French study are required. (Education 355 is required as a professional methods of teaching course.)
B. SPANISH: Endorsements 133 and 134. Spanish 201, 202, 204 or 206, 300, 301, 302, 304; Linguistics 201; one course from Spanish 102, 207, \(341-348\), 393; four semesters of Spanish 251-258. Six credits in study-abroad courses are required. (Students completing both the Spanish and ESL endorsements must take Linguistics 301 and Spanish 301L instead of Spanish 301.) (Education 355 is required as a professional methods of teaching course.)

Vertical Subject Area Classroom Emphasis with an Additional Academic Minor Completion of the Vertical Subject Area Classroom Emphasis Major along with a subject area major (described above) may add an additional grade 5-8 teaching endorsement by completing one of the following subject area minors. (The term "endorsement" and the endorsement numbers are part of the lowa licensure code.)
1. MIDDLE SCHOOL: Teacher candidates earn middle school teaching endorsements by completing Education 202, 265, 336, 239 or 369 and at least two of the following fields of specialization. (Education 239 or 369 must be completed in a grade \(5-8\) classroom.) Teacher candidates must take one methods course from Education 331, 332, 333, 334, 351, \(353,354,356,357\) related to their field of specialization.
A. ENGLISH/LANGUAGE ARTS: Endorsement 1821. English 306; Education 155; one course from English 203, 317, 318; one course from CORE 110, Communication 311, 314.
B. MATHEMATICS: Endorsements 1421 and 1822. Mathematics 108, 149; one course from Mathematics 115, 203, 304; Mathematics 128 or 208; Statistics 131 or 138.
C. SCIENCE: Endorsement 1823. One course from Chemistry 110, 111, Physics 215; one course from Biology 125, CORE 211, 212; one course from Earth Science 121, 152, 201.
D. SOCIAL STUDIES: Endorsement 1824. History 201 or 202; one course from History 212, 213, 214; Geography 151; Political Science 201.

\section*{Other Endorsement Options}
1. ATHLETIC COACH K-12: Endorsement 101: In the State of Iowa, you must be licensed to coach at the secondary level in the public school system.

There are two forms of coaching licensure - a coaching authorization and a coaching endorsement. Both the authorization and endorsement allow you to be employed as a head or assistant coach in any interscholastic athletic activity. Both licenses require courses in four conceptual areas: Coaching Theory, Lifespan Development, Physiology, and First Aid and Prevention of Athletic Injuries. These courses may be taken in any sequence over any length of time through Area Education Agency (AEA) workshops or for college credit.

The coaching authorization gives a non-education student the right to coach in the middle school or high school. The person is allowed to be the head or assistant coach for any sport following the completion of the coursework in the previous paragraph and filing an application for the authorization through the Department of Education of the State of Iowa (see contact information below). The coaching endorsement can be obtained by individuals who hold a teaching license and have completed the four required classes for college credit. Coaching Theory, Lifespan Development, and Physiology must be taken for one credit hour each and First Aid and Prevention must be taken for two credit hours. The coaching endorsement is automatically renewed with your teaching license. For information on licensure, see www.state.ia.us/ boee/doc/faqs_cch.asp.
The following courses with an education major qualify an applicant to be a head coach or assistant coach in all sports at all grade levels.
Biology 203/CORE 212 - Human Biology I or HHP 206 - Exercise Physiology and Biomechanics
HHP 207 - First Aid and Athletic Injuries
HHP - Coaching Theory (one from HHP 212-217)
Education 135 - Educational Psychology or Psychology 204 - Lifespan Development
These courses also meet the State of Iowa's requirement for the coaching authorization available for those who have not completed an education major. The coaching authorization allows the holder to be head coach or assistant coach in all sports at all grade levels.
2. COMPUTER SCIENCE 5-12: Endorsement 278: Computer Science 115, 205; Computer Science 215 or 331; two additional credits of Computer Science. (Education 361 is required as a professional methods of teaching course.) This endorsement must accompany a secondary subject area emphasis major.
3. ENGLISH AS A SECOND LANGUAGE (ESL) K-12: Endorsement 104. Education 320, 349, 355; English 335; Linguistics 201, 301. (Students completing both the Spanish and ESL endorsements must take Spanish 301L.) Candidates interested in international education should complete their field experience in an international setting and also complete Education 270.

\section*{Associate of Arts Degree Options}

The education department offers the following option for an A.A. degree leading to paraeducator certification from the State of Iowa (see page 22 for Associate's Degrees Core Program requirements).
1. GENERALIST: Paraeducator Certification 950 . Completion of this option provides certification to work as a paraeducator generalist in prekindergarten through grade twelve classrooms. Education 101, 135, 145, 155, 165, 201, 204, 209; ten additional credits from education courses.

\section*{101 Introduction to Education (2)}

Fall, Spring
Designed to introduce students to the domain of education and to induct them into an initial understanding of teaching and the teaching profession. Emphasis is on the development of a distinctively Christian approach to education. Education 101 is a prerequisite to all other education courses.

104 Pre-Student Teaching Field Experience I (.5)
Fall, Spring An optional 15 hour field experience designed for students who do not complete Education 101 at Dordt University. Candidates will observe various K-12 classrooms and recognize qualities of effective teaching as identified by the Teacher Preparation Program (TPP) standards. Graded on a pass/no record basis.

135 Educational Psychology (3). .Fall, Spring
This course introduces you to the fields of educational psychology and developmental psychology as they help us figure out the teaching and learning environment. This course studies the growth and maturation of children and adolescents, including examination of physical development and activity, cognitive, social, emotional, and spiritual development. We will also look at different roles teachers play such as teacher-as-researcher, teacher-as-observer, and teacher-as-facilitator. This course introduces you to developmental theories and learning theories that impact PreK-12 education today. Prerequisite: Education 101. [Cross-listed: CORE 255]

145 Learner Differences (3) Fall, Spring Examination of individual differences and diverse cultures and communities-ethnicities, SES, immigrant, cognitive (SPED and TAG), gender, learning profiles, as well as English language learners. Focus on designing inclusive learning environments to meet high standards. Prerequisite: Education 101. [Cross-listed: CORE 271]

155 Children's and Adolescent Literature (3) \(\qquad\) Fall Odd, Spring
This course focuses on the classroom use of literature for children and adolescents. It includes a variety of genres, fiction and nonfiction, technology- and media-based information, and non-print materials. It introduces the student to a wide range of authors and literature, including a variety of cultures, linguistic backgrounds, and perspectives. Ways to encourage reading and interacting with texts in the content areas are discussed and practiced. Prerequisite: Education 101.

165 Learning Environments (3)
.Fall, Spring
Focus on designing and implementing developmentally appropriate and challenging learning experiences. Creating individual and collaborative learning environments including competency-based, cooperative learning, technology-supported, experiential, and other environments. Prerequisite: Education 101.

170 Infant/Toddler Instructional Adaptations (1.5) Fall Even
This course will study appropriate infant/toddler programs (birth - age 3) including an overview of typical and atypical development, quality routines, appropriate environments, materials, and activities in the areas of cognition, language development, physical motor, socialemotional, aesthetics, and adaptive behavior. The importance of working with families, teaching through play, and using developmentally appropriate assessments to inform instruction will be emphasized. This course will also study current legislation that affects services provided to families and young children, including those with special needs. Prerequisite: Education 101.

201 Planning, Instruction, and Assessment in Elementary Schools (3). Fall, Spring This course introduces students to an understanding of instructional theory at the elementary school level. Focus is on the planning process and the integral role of instruction and assessment. Emphasis is on the development of a distinctively Christian approach to teaching and learning. Various perspectives on the instructional process are critically examined. Prerequisites: Education 101, 135, 145, 165. Corequisite: Education 209.

202 Planning, Instruction, and Assessment in Middle Schools (1) \(\qquad\) Fall, Spring This course introduces students to an understanding of instructional theory at the middle school level. Focus is on the planning process and the integral role of instruction and assessment. Emphasis is on the development of a distinctively Christian approach to teaching and learning. Various perspectives on the instructional process are critically examined. Prerequisites: Education 101, 135, 145, 165.

\section*{UNDERGRADUATE ACADEMIC OFFERINGS: EDUCATION}

203 Planning, Instruction, and Assessment in Secondary Schools (3) Spring This course introduces students to an understanding of instructional theory at the high school level. Focus is on the planning process and the integral role of instruction and assessment. Emphasis is on the development of a distinctively Christian approach to teaching and learning. Various perspectives on the instructional process are critically examined. Prerequisites: Education 101, 135, 145, 165. Corequisite: Education 209.

204 Paraeducator Field Experience (1.5). Fall, Spring A 45 hour supervised field-based internship in prekindergarten through grade twelve classrooms (placement determined by the certification option selected). This course is required for all paraeducator certification options. Prerequisite: Education 101.

209 Service Learning-Tutoring (1) ..Fall, Spring
A 25-hour field-based experience to be taken concurrently with Education 201 or 203 in which candidates tutor assigned K-12 students. Graded on a pass/no record basis.

210 Assessment and Diagnosis in Remedial and Special Education (3). Fall
Introductory course in the use of assessment techniques in special and remedial education. Various formal and informal assessment techniques are examined and applied to the development of educational programs that meet the needs of the exceptional student. Prerequisite: Education 201 or 203. Statistics 131 or 138 strongly recommended.

220 Teaching the Co-Curricular Areas in Pre-K through Middle School (3).
Fall, Spring Odd
Provides background on methods and materials necessary for teaching physical education, health, wellness, visual arts, and performing arts in preschool, elementary, and middle school classrooms. Prerequisite: Education 201.

239 Service Learning Field Experience (2) Fall
A field experience, designed to be taken in conjunction with Education 335/336/337 during the student's senior year. Students assist in classrooms for a total of 60 hours. Experiences gained in the field are addressed in the concurrent education courses. Prerequisite: admission to the Teacher Preparation Program; or permission of instructor.

252 Introduction to Behavior Management (3). ..Fall
An introduction to understanding and working with behavior problems commonly found in children and adolescents. Students will become familiar with the identification and assessment of problem behaviors, planning classroom interventions, monitoring progress, choosing corrective strategies, and supporting interventions beyond the classroom. This course has implications for both the regular and special education teacher. Prerequisite: Education 201 or 203.

253 Introduction to the Education of Children and Youth with Mild Disabilities (4) Fall
A survey course dealing with the provision of educational services to students with mild disabilities, focusing on the history of special education, legal issues related to the field of special education, and an in-depth study of the characteristics of learners with mild to moderate disabilities. Prerequisite: Education 201 or 203.

260 Teaching Bible in Pre-K through Middle School (1.5).
.Fall Odd
Designed to discuss the role of Bible teaching in the Christian school, to examine curriculum materials, to develop pedagogical skills for teaching Bible, and to involve students in the designing of their own appropriate curriculum materials. Prerequisite: Education 201.

261 Teaching the Bible (3)
Fall Even
This course explores the Reformational approach to teaching the Bible. Its primary goal is to equip lay and professional ministry practitioners and teachers with the skill of preparing and presenting biblical content to diverse audiences. Interpretive attention will be given to the text of Scripture, the situation of the learner, the process of preparation, the art of presentation. The course will cover theological and pedagogical foundations as well as the practical content of teaching Bible. This course is relevant for those teaching in a local church context as well as for those developing curriculum to teach the Bible in a high school classroom setting. [Cross-listed: Theology 254]

265 Content Area Literacy (1.5).
Fall, Spring
The emphasis of this course is on using instructional strategies in the various content subjects to developing reading, writing, and studying skills to benefit all learners in today's diverse society. As children progress from elementary to middle and high school levels, much of their learning depends on how well they are able to read in the various subject areas. Responsibilities of the Christian educator in helping students develop their potential in reading in content areas will be addressed. Prerequisite: Education 201 or 203.

270 Comparative and International Education (3)
Occasional This course in comparative and international education helps pre-service teachers to develop an awareness of the strengths, challenges, and debates impacting education in different locations. An increased knowledge of the culture and education systems explored provide students with greater insights into their own educational systems and will allow them to recognize how a global understanding of education has important implications for what happens within their own context. Corequisite: EXCH 271.

Special Education Field Experience I (2.5).
A supervised field experience in the fall semester that allows the student to aid/observe in a special education classroom. The field experience is provided in a setting appropriate for the endorsement sought. Graded on a pass/no-record basis. Prerequisite: Education 201 or 203. Corequisite: Education 253.

272 Special Education Field Experience II (2)

\section*{Spring}

A supervised field experience in the spring semester that allows the student to aid/observe in a special education classroom. The field experience is provided in a setting appropriate for the endorsement sought. Graded on a pass/no-record basis. Prerequisite: Education 201 or 203. Corequisite: Education 315.

281- Service-Learning (1-3).
..Fall, Spring, Summer
283 See page 37, Service-Learning
300 History and Philosophy of Education (3)
.Fall, Spring
This course examines how our societal perspectives and personal core beliefs affect the ways we "do school," see students, plan teaching and learning, and make curriculum. Students will draw on a variety of resources - those from the tradition of Reformed, Christian education, some more broadly Christian, and those from outside faith-based education thought, to construct a statement describing their own educational philosophy. While this course meets a requirement in the Teacher Preparation Program, it does not assume a background in teacher preparation. Students from outside teacher preparation are welcome. Prerequisite for teacher preparation students: Education 201 or 203; Prerequisite for all students: CORE 200.

314 Diagnosis and Remediation of Language/Reading Difficulties (3).
.Spring
A study of the causes of reading difficulties in the preschool, elementary, middle-level, and secondary school, their diagnosis and correction in both classroom and remedial setting. Prerequisite: Education 201; or permission of instructor. Corequisite: Education 339.

315 Instructional Methods and Strategies for the Education of Students with Mild Disabilities-Preschool, Elementary, and Middle School (4) Spring
Deals with the instruction of students with mild disabilities such as learning disabilities, mild behavior disorders, and cognitive disabilities. Focus is on strategies directed toward the successful integration of students with mild disabilities into the regular elementary or middle level classroom. Includes embedded field experience. Prerequisite: Education 201 or 203; Education 210.

317 Transitional Collaboration (1) .Spring
Acquaints students with sources of services, organizations, and networks that provide transitional, career, and vocational supports for students with disabilities at all levels of development with particular focus on the needs of students transitioning from elementary to middle school, middle school to high school, and high school to post high school experiences. Prerequisite: Education 201 or 203; Education 210, 253.

320 Phonics (1.5) Spring The content of this course focuses on the knowledge and instruction of phonics and word identification strategies commonly used by reading professionals, early childhood professionals, and those teaching English as a second language. Planning, instructing, and assessing using strategies that reflect best practices in early literacy instruction will be a central focus. Prerequisite: Education 201 or 203; or permission of instructor.

321 Early Childhood Literacy (1.5).
..Spring
This course is designed to cover the stages involved in the development of literacy in children up to the age of eight. Teaching methods and materials will be considered. The ability to communicate is a wonderful gift from God. It is amazing to work with and teach young children as they develop this gift. Prerequisite: Education 201 or 203; or permission of instructor.

322 Introduction to Early Childhood (4)
.Fall Odd
Designed to provide an overview of the field of early childhood education. Included are the following topics: growth and development of children from ages birth to eight; current trends in early childhood education; age appropriate lesson planning; what constitutes a supportive environment for young children; and the development of a professional Christian attitude towards children. Includes a 20-hour field experience in a child development center for children ages 0-5. Prerequisite: Education 201.

326 Organization and Administration of Early Childhood Programs (3) Fall Even This course focuses on the administrative aspects of running a preschool. Topics include legal and licensing issues, as well as the development of a facility that is safe and organized in a way that promotes child development. Issues related to assessing program quality in terms of curriculum and personnel and ways to foster positive child-family-school relationships will be addressed. Prerequisite: Education 201.

331 Teaching Social Studies in Pre-K through Middle School (3) Spring
An introduction to a basic framework for social studies teaching with focus on methodologies, lesson and unit planning, learning resources, classroom organization, and new-tech media. Includes practical application activities for each major topic. Prerequisite: Education 201.

\section*{UNDERGRADUATE ACADEMIC OFFERINGS: EDUCATION}

332 Teaching Mathematics in Pre-K through Middle School (3) Fall
Examines the principles of teaching mathematics including materials, pedagogy, lesson design, goals, and evaluation. Particular focus is placed on application of the Iowa Core Characteristics of Effective Instruction and the Iowa and National Core standards for mathematical practice and content as well as standards from the National Council of Teachers of Mathematics (NCTM). Prerequisite: Education 201; Mathematics 108. Corequisite: Education 239 or 369.

333 Teaching Literacy in Pre-K through Middle School (3) Fall
Designed to cover basic principles involved in the teaching of language arts. Special attention will be given to reading and writing. Handwriting, spelling, grammar, listening, speaking, and viewing will also be addressed. Various approaches and materials will be studied. Prerequisite: Education 201 or 203. Corequisite: Education 338.

334 Teaching Science in Pre-K through Middle School (3) Spring A basic course in the principles and techniques of teaching natural sciences. The primary focus is on the development of materials for use in the elementary and middle-level science classroom. Prerequisite: Education 201.

335 Applied Educational Psychology for Elementary Teachers (3) Fall Examines the unique emotional, physical, intellectual, social and spiritual development of elementary students. Emphasis on developing a biblical view of the student through developmentally appropriate differentiation. Significant focus on the development of positive learning environments utilizing appropriate motivation and classroom management strategies. Prerequisite: Education 201.

336 Applied Educational Psychology for Middle School Teachers (3). Fall
Examines the unique emotional, physical, intellectual, social and spiritual development of early to mid-adolescence. Emphasis on developing a biblical view of the student through developmentally appropriate differentiation. Significant focus on the development of positive learning environments utilizing appropriate motivation and classroom management strategies. Prerequisite: Education 201 or 203.

337 Applied Education Psychology for Secondary Teachers (3) ........................................................................................................................................
Examines the unique emotional, physical, intellectual, social and spiritual development of early to mid-adolescence. Emphasis on developing a biblical view of the student through developmentally appropriate differentiation. Significant focus on the development of positive learning environments utilizing appropriate motivation and classroom management strategies. Prerequisite: Education 203.

338 Reading Field Experience I (1). Fall
A 25 -hour field-based experience to be taken concurrently with Education 333 in which candidates apply their learning through literacy instruction of K-8 students. Corequisite: Education 333.

339 Reading Field Experience II (0.5) .Spring
A 15 -hour field-based experience to be taken concurrently with Education 314 in which candidates apply their learning through literacy instruction of K-8 students. Corequisite: Education 314.

\section*{341- Special Topics (1-3)} Occasional
348 These courses will consist of topics not normally covered in other program courses. Specially designed to focus on more specific topics utilizing instructor strengths and consideration of student needs.

349 Supervised Field Experience in English as a Second Language (1.5). Fall Even A 45 hour field-based experience. This course provides pre-service teachers who are seeking to complete the Iowa English as a Second Language (ESL) endorsement an opportunity to gain valuable experience in K-12 ESL classrooms. Students will complete a designated number of hours in a supervised field experience. They will identify learning needs of \(\mathrm{K}-12\) students and design and evaluate strategies appropriate for English language learners. Prerequisite: Education 201 or 203. Corequisite: Education 355. Graded on a pass/no record basis.

350 Methods of Teaching Art in K-12 Schools (3). .Fall Even Methods and techniques of organizing and motivating art on the secondary school level. Media explored depends on the needs and interests of the class. Prerequisite: Education 201 or 203.

351 Methods of Teaching Sciences in High Schools and Middle Schools (3) ..Fall Odd
A review of recent trends in science teaching in middle and secondary schools. Use of audio-visual materials pertinent to the various sciences, methods of evaluation, laboratory techniques, and textbook evaluations are included. Students give several class presentations and observe actual teaching situations. Prerequisite: Education 203.

352 Methods of Teaching Agriculture in Middle and High Schools (3) \(\qquad\) ..Occasional
Students will examine recent trends in agriculture teaching in secondary schools. Use of audio-visual materials, methods of evaluation, laboratory techniques, and textbook evaluations are included. The course will emphasize the development of a distinctively Christian approach to teaching agriculture. Students participate in an extensive, 40 -clock hour, field experience in a local agriculture classroom, give several presentations, and observe actual teaching situations. Prerequisite: Education 203.

Methods of Teaching STEM in K-12 Schools (2)
This course explores the integrated nature of learning with an interdisciplinary curriculum approach in the areas of science, technology, engineering and math. Emphasis is on the unique curriculum planning, teaching methods, and career preparation opportunities in teaching integrated STEM programs. Field-based applications take place in local K-12 schools and/or in Dordt University lab-based courses. Prerequisite: Education 201 or 203.

354 Methods of Teaching English and Language Arts in High Schools and Middle Schools (3)
Fall Even
Discussion of a Christian approach to the teaching of English in middle and secondary schools. Methods and approaches to teaching literature, reading, language, and composition, as well as micro-teaching in these areas. Attention is given to lesson, unit, course, and curriculum planning and to the use of audio visual materials. Prerequisite: Education 203.

355 Methods of Teaching a Second Language (3 or 4)
Fall Even
Presentation of various methods for teaching a second language. Theories of second language acquisition will be examined. Students will learn strategies for teaching oral language, vocabulary, reading, and writing to language learners. Planning of standards-based language instruction that develops the four language skills and takes into account differing learning styles, interests, and varying levels of language proficiency will be emphasized. Students may choose one endorsement area (teaching foreign language OR teaching ESL/EFL) for three credits or do both endorsement areas for four credits. Prerequisite: Education 203.

356 Methods of Teaching History and Social Studies in High Schools and Middle Schools (3). \(\qquad\) Fall Even Discussion of a Christian approach to the teaching of history and social studies in middle and secondary schools. Emphasis is on current methods and consideration of practical suggestions in classroom procedure. Prerequisite: Education 203.

357 Methods of Teaching Mathematics in High Schools and Middle Schools (3) Fall Even Methods of effective teaching of mathematics in middle and secondary schools. Prospective teachers attain understanding of the basic mathematics taught at the secondary level. Prerequisite: Education 203.

358 Methods of Teaching Speech, Communication, and Theatre Arts in High Schools and Middle Schools (1) \(\qquad\) Arranged This course provides pre-service teachers who are seeking to complete the Iowa English/Language Arts-All endorsement an opportunity to gain valuable experience in high school/middle school speech and/or theatre arts classrooms. Students will complete a minimum of 20 clock hours in a supervised field experience. They will identify learning needs of secondary level students and design and evaluate strategies appropriate for the speech/theatre arts setting. Graded on a pass/fail basis. Prerequisite: Education 203.

359 Methods of Teaching Business in High Schools and Middle Schools (3).
Fall Even Examination of the role of business education in the curriculum and current concerns in business education. Study of methods and materials for courses in business education at the secondary and higher education levels. Prerequisite: Education 203.

Methods of Teaching Physical Education and Health Education in K-12 Schools (3) Fall Even This course builds on the knowledge of the skills and methods of teaching physical education and health, providing opportunities to put that knowledge into practice. Topics include designing and organizing instruction to provide a high quality learning experience for K-12 students, developing a personal philosophy of physical and health education in light of a Christian perspective of teaching, developing confidence in the ability to plan and teach physical and health education. Prerequisite: Education 201 or 203

361 Methods of Teaching Computer Science in High Schools and Middle Schools (2) \(\qquad\) Spring Even This course is designed to foster the development of effective teaching strategies for information technology and computer science teachers. This course emphasizes computing concepts, problem-solving strategies, project-based learning, collaborative learning, and developing technological self-efficacy for learning about new tools and approaches for teaching. This course also includes an emphasis on developing digital citizenship, including social, ethical, legal, and safe use of hardware, software, peripherals, and networks. Prerequisite: Education 203.

363 Methods of Teaching Industrial Technology in High Schools and Middle Schools (2) .Spring This course explores the integrated nature of learning with an interdisciplinary curriculum (science, technology, engineering and mathematics) approach to industrial technology. Emphasis is on the unique curriculum planning, teaching methods, and career preparation opportunities in teaching industrial technology. Field-based applications take place in local K-12 schools and/or in Dordt University lab-based courses. Prerequisite: Education 203.

PDS Internship (3)
A 240 -hour field experience designed to develop your content expertise, pedagogical skillset, and teaching dispositions. You will have the opportunity to apply the teaching and learning strategies examined in the methods courses taken concurrently with Education 369. The course includes reflective observation and practice in P-12 classrooms. Participants will observe classroom instruction by qualified teachers as well as co-plan and co-teach lessons to gain the practical experience necessary to reflect, evaluate and improve upon their teaching effectiveness.

370 Student Teaching Internship-Early Childhood (4-8)
.. Fall, Spring
The teaching internship in a pre-school setting is the capstone experience of the Teacher Preparation Program. Student interns co-teach, to the greatest extent possible, with qualified mentor teachers in local Professional Development Schools (PDS) or in other partner schools.

\section*{371 Student Teaching Internship-Elementary (4-16)}

Fall, Spring
The teaching internship in an elementary (grades K-6) setting is the capstone experience of the Teacher Preparation Program. Student interns co-teach, to the greatest extent possible, with qualified mentor teachers in local Professional Development Schools (PDS) or in other partner schools.

372 Student Teaching Internship-Middle Level (4-8)
Fall, Spring
The teaching internship in a middle school (grades 5-8) setting is the capstone experience of the Teacher Preparation Program. Student interns co-teach, to the greatest extent possible, with qualified mentor teachers in local Professional Development Schools (PDS) or in other partner schools.

373 Student Teaching Internship-Secondary (4-16)
.Fall, Spring
The teaching internship in a secondary school (grades 5-12) setting is the capstone experience of the Teacher Preparation Program. Student interns co-teach, to the greatest extent possible, with qualified mentor teachers in local Professional Development Schools (PDS) or in other partner schools.

374 Student Teaching Internship-Vertical (4-16) Fall, Spring
The teaching internship in a P-12 school setting is the capstone experience of the Teacher Preparation Program. Student interns co-teach, to the greatest extent possible, with qualified mentor teachers in local Professional Development Schools (PDS) or in other partner schools.

375 Student Teaching Internship-English as a Second Language (4-8) Fall, Spring
The teaching internship in an ESL setting is the capstone experience of the Teacher Preparation Program. Student interns co-teach, to the greatest extent possible, with qualified mentor teachers in local Professional Development Schools (PDS) or in other partner schools.

376 Student Teaching Internship-Reading (4-8)
Fall, Spring
The teaching internship in an elementary (grades K-6) setting is the capstone experience of the Teacher Preparation Program. Student interns co-teach, to the greatest extent possible, with qualified mentor teachers in local Professional Development Schools (PDS) or in other partner schools.

377 Student Teaching Internship-Elementary Instructional Strategist (4-8).
Fall, Spring The teaching internship in an elementary (grades \(\mathrm{K}-8\) ) inclusive classroom or in a classroom serving students with mild disabilities is the capstone experience of the Teacher Preparation Program. Student interns co-teach, to the greatest extent possible, with qualified mentor teachers in local Professional Development Schools (PDS) or in other partner schools.

378 Student Teaching Internship-Secondary Instructional Strategist (4-8) .................................................................................Fall, Spring The teaching internship in a secondary (grades 5-12) inclusive classroom or in a classroom serving students with mild disabilities is the capstone experience of the Teacher Preparation Program. Student interns co-teach, to the greatest extent possible, with qualified mentor teachers in local Professional Development Schools (PDS) or in other partner schools.

379 Student Teaching Internship-Multiple Endorsements (4-16) Fall, Spring The teaching internship is the capstone experience of the Teacher Preparation Program. Student interns co-teach, to the greatest extent possible, with qualified mentor teachers in local Professional Development Schools (PDS) or in other partner schools.

381 Senior Seminar I (1) Fall
Education 381 is scheduled in the fall semester prior to the student teaching internship. Emphasis is on developing professional skills including communication with the home and colleagues, motivation techniques, effective classroom management, and understanding legal and ethical issues applicable to the teaching profession. Graded on a pass/fail basis.

382 Senior Seminar II (1).
.Fall, Spring
Education 382 is scheduled in the semester concurrent with the teaching internship. Emphasis is on developing a coherent biblical philosophy of education, appropriate motivation techniques, effective classroom management, and understanding legal and ethical issues applicable to the teaching profession. Graded on a pass/fail basis.

391- Individual Studies (1-3) ..............................................................................................................................................Fall, Spring, Summer
393 See page 36, Individual Studies

\section*{Engineering}

The Dordt University engineering program strives to provide serviceable insight in the field of engineering from a distinctively Christian perspec-
tive while demonstrating the highest quality undergraduate teaching and learning; an education that will equip students for the task of life-long Christian discipleship.

In harmony with the department's mission statement and guided by the four curricular coordinates of The Educational Framework of Dordt University, graduates of the Dordt University engineering program will...
1. ... be rooted in the Word of God that calls all of creation to serve and glorify its Creator, Redeemer, and Lord. As image-bearers of the risen Lord, called and empowered by the Spirit of Christ, they will strive to responsibly develop technology while critically assessing how current cultural trends impact the direction of engineering. (Religious Orientation)
2. .... engage in life-long learning out of love for the Creator and in humble and worshipful recognition of the diversity and coherence of the entire creation which proclaims His glory. Their care-filled attentiveness will delight in both detailed study and broad application of science, technology, engineering, and mathematics. (Creational Structure)
3. ... embrace God's call for humanity to flourish the creation via responsible unfolding of its technological potential, while simultaneously taking account of the historical distortions of sin and shortcomings of human understanding embedded in past, present, and future culturemaking such as technicism, scientism, reductionism, dehumanization, and enslavement of technology to economics or efficiency. (Creational Development)
4. ... faithfully move from theory and engineering insight to committed action in grateful kingdom service to God and neighbor. They will be guided by a desire to act justly, love mercy, and walk humbly with our God. Knowing that they are engaged in Christ's work, they will not grow weary or lose heart, but with tenacity and perseverance, in prayer for the Spirit's guidance, wisely develop responsible technology that appropriately addresses contemporary needs while expressing the joy, playfulness, and imagination that reflects a Creator who is making all things new. (Contemporary Response)

The following curricular outcomes provide specific means of achieving the institutional and program educational objectives. Students will have...
0. Faithfulness and Responsibility. ...an ability to articulate and faithfully practice responsible engineering that grows out of Christ's all-encompassing work as Creator, Sustainer, and Redeemer.
1. Fundamentals. ...an ability to identify, formulate, critically evaluate, and solve complex engineering problems by applying principles of engineering, science, and mathematics faithful to the analytical, sensory, biotic, physical, kinematic, spatial, and numeric aspects of creation.
2. Design. ...an ability to holistically design systems, components, or processes that flow from a vision of responsible engineering, giving consideration to models of normative technology faithful to the fiduciary, ethical, juridic, aesthetic, economic, social, lingual, and cultural aspects of creation.
3. Communication. ...an ability to openly, honestly, and effectively communicate with a broad range of audiences using a variety of oral, written, and graphical forms.
4. Context. ...an ability to recognize how professional and ethical engineering grows out of our faithful response to the cultural mandate and therefore must be grounded in an understanding of contemporary issues within the broader context of historical, cultural, societal, global, economic, and environmental development.
5. Teamwork. ...an ability to function effectively on a team by serving alongside others to provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. Experimental Development and Analysis. ...an ability to develop and conduct appropriate experiments, analyze and interpret data, and use holistic judgment to draw conclusions.
7. Lifelong Learning. ...an ability to humbly acquire and apply new knowledge, insights, and skills as faithful stewards of creation.

In addition to the standard admission requirements of the university, the following high school courses and preparatory indicators are recommended for students considering an engineering degree at Dordt University:
- Complete four units or more of college preparatory mathematics, one unit of chemistry, and one unit of physics. Preparation in computer programming/analysis is also helpful.
- Earn a combined SAT score (Math, Verbal) of 1100 or higher or a composite ACT score of 24 or higher. A minimum mathematics SAT score of 600 or ACT score of 25 is highly desirable. Students who have maintained a cumulative high school GPA of 3.4 or higher are more likely to successfully complete the Dordt University engineering program. The average composite ACT score of Dordt University engineering graduates is 28 .

After completing three semesters in an engineering curriculum (with a minimum of one semester at Dordt University), students seeking the B.S.E. degree will apply to be officially accepted into the engineering program. To be accepted into the engineering program students must:
- Review the program mission, along with the curricular objectives and outcomes of the engineering program. Students will reaffirm their commitment to the program objectives and outcomes as they partner with faculty in the learning process.
- Declare a specific concentration in the engineering program and provide an updated program of study plan.
- Achieve a C- or better in each of Engineering 112, 113, 114, 115, 116, 117, Chemistry 111, Mathematics 152, 153, 204, Physics 231, 232, along with an overall GPA of 2.5 or higher.

Every student in the engineering major will be assigned an engineering faculty member as his or her academic advisor.
The engineering program is accredited by the Engineering Accreditation Commission (EAC) of ABET, https://www.abet.org, under the General Criteria. To earn a Bachelor of Science in Engineering degree from this ABET accredited program, students must successfully complete the major requirements outlined below.

\section*{UNDERGRADUATE ACADEMIC OFFERINGS: ENGINEERING}

Engineering Major- \(\quad\) Foundation (common to all concentrations): Engineering 112, 113, 114, 115, 116, 117, 200, 208, 220, 295, 310, 379, 380, 381, 390; Chemistry 111; Computer Science 115; Mathematics 152, 153, 201, 204; Physics 231, 232.

Students must select one of the following concentrations:
Biomedical: Foundation; Engineering 209, 212, 213, 302, 357, 358; four courses, at least two of which must be biology, from Biology 125, 203, 325, 326, Chemistry 225, 322, 360, Mathematics 203, 209, 212, Physics 222, 324, Statistics 131, 201, 215, 216; four courses from Engineering 205, 221, 225, 300, 303, 304, 314, 316, 319, 322, 354, 355, 360, 362 and 365.

Chemical: \(\quad\) Foundation; Engineering 300, 302, 303, 312, 313, 354, 355, 358, 362, 366; one course from Engineering 205, 212, 221, \(225,306,319\); four courses, at least two of which must be from chemistry, from Chemistry 212, 225, 231, 251 and 252, Mathematics 203, 209, 212, Physics 222, 324, Statistics 131, 201, 215, 216.

Civil: \(\quad\) Foundation; Engineering 202, 212, 213, 302, 306, 317, 318, 319, 351, 352, 353; two courses from Engineering 205, 209, \(225,300,314,358\), Construction Management 101, 102, 207, 220, 240, 270, 280; one course from Biology 122, 125, 203, Chemistry 212, 225, 231, 251 and 252, Earth Science 201, 202, 251, 303, Mathematics 203, 209, 212, Physics 324, 325, 326, 337, Statistics 131, 201, 215, 216.

Environmental: Students interested in a civil engineering concentration with an interdisciplinary environmental emphasis may substitute Environmental Studies 251 and 252 for either Engineering 351 or 352 and Environmental Studies 201 or 202 for one of the Engineering/Construction Management electives.

Electrical-Computer: Foundation; Engineering 205, 221, 225, 304, 322, 326, 360, 362, 365; Computer Science 116; Physics 324; one course from Computer Science 215, 270, 315, 340, Engineering 300, 302, 303, 319, 353, 358; one course from Biology 122, 125, 203, Chemistry 212, 225, 231, 251 and 252, Earth Science 201, 202, 251, 303, Mathematics 203, 209, 212, Physics 222, 325, 337, Statistics 131, 201, 215, 216.

Mechanical: Foundation; Engineering 202, 209, 212, 213, 225, 300, 302, 303, 312, 313, 316, 350, 362, 365 or 366; one course from Engineering 205, 221, 306, 314, 317, 319, 322, 353, 354, 355, 357, 358, 360; one course from Biology 122, 125, 203, Chemistry 212, 225, 231, 251 and 252, Earth Science 201, 202, 251, 303, Mathematics 203, 209, 212, Physics 325, 326, 337, Statistics 131, 201, 215, 216.

Mechatronics: Students interested in a mechanical engineering concentration with an interdisciplinary mechatronics emphasis may substitute three courses from Engineering 205, 221, 304, 322 for Engineering 300, 303, 312, 313, 350.

Students in the biomedical concentration are encouraged to consider adding a biomedical sciences minor. Students in the chemical concentration are encouraged to consider adding a chemistry minor. Students in the computer concentration are encouraged to consider adding a computer science minor. Students interested in engineering research or engineering graduate school are encouraged to consider adding an applied mathematics minor.

\section*{Engineering Science Major}

The engineering science major shares the same mission as the engineering major but puts greater emphasis on basic science and allows more flexibility in course selection. The engineering science major has not been examined nor accredited by the Engineering Accreditation Commission (EAC) or any other commission of ABET, https://www.abet.org. To earn a bachelor of arts degree in engineering science, students must successfully complete the major requirements outlined below.

Engineering Science- Foundation (common to all emphases): Engineering 112, 113, 114, 115, 116, 117, 310, 390; Chemistry 110 or 111; Mathematics 152, 153; Physics 231, 232; one course from Mathematics 201, 204, Statistics 131.

Students must select one of the following emphases:
General: \(\quad\) Foundation; 15 credits of engineering course electives not included in the foundation; 18 additional credits of agriculture, astronomy, business, biology, chemistry, computer science, construction management, engineering, environmental science, mathematics, or physics courses not included in the foundation.

Architecture: \(\quad\) Foundation; Art 201, 202, 240; three courses from Art 207, 208, 209, 210; Engineering 208, 212, 295; one course from Environmental Studies 151, 201, 202; minimum of nine credits from Construction Management 101, 102, 207, 220, 240, 270, 280; minimum of six credits from Engineering 202, 302, 303, 317, 318, 319, 350, 351, 352.

Construction Management: Foundation; Business Administration 205; Communication 220 or 222; Construction Management 101, 102, 207, 220, 225, 240, 270, 280, 370; Engineering 208, 212, 317, 318; one course from Engineering 202, 220, 295, 300, 302, 319, 350, 351, 352.

To ensure a coherent course sequence, students must have all the courses in their proposed program of study approved by the engineering department before declaring a general engineering science major.

Engineering and Engineering Science majors may complete a secondary (grades 5-12) engineering teaching endorsement. This is an additional major so students should work with their advisors to plan their academic program completion timeline, which may require additional semesters.

For descriptions of an EDUCATION major and engineering teaching endorsement, see pages 85-98, Teacher Preparation Program.

\section*{112 Introduction to Computer Aided Engineering and Design (1). Fall, Spring}

The design studio experience introduces concepts of graphical communication for engineers and develops basic 2-D and 3-D design skills with the use of a solid modeling software package. The course meets for one design studio per week. [Cross-listed: Engineering Technology \(112]\)

113 Introduction to Engineering Energy and Economics (1)
An engineering foundations course that introduces students to engineering design economics (energy, material, time, and money) within the broader norms of engineering stewardship. Basic engineering analysis and problem-solving tools will be practiced.

114 Introduction to Engineering Design (1)
An engineering foundations course that introduces students to Christian discipleship as expressed in the field of engineering. Students are exposed to the concept of a biblically guided engineering design process. Students are given the opportunity to learn about engineering by doing engineering as they participate in a project-based engineering analysis and design activities.

115 Introduction to Engineering Statics and Structures (1)
Fall
An introduction to the engineering analysis and design of structures. Students will explore principles of statics and mechanics within the broader context of engineering analysis and design. The course meets for one studio session per week. Corequisite: Mathematics 152 .

116 Introduction to Engineering Analysis (3). Spring An introduction to engineering mathematics such as statistics, linear algebra, numerical analysis, and computational tools in the context of engineering problem solving. The course introduces a perspective on how the activities of both math and science can inform and constrain our ability to design normatively. The course meets for one lecture session and one studio session per week. Corequisite: Mathematics 152.

117 Introduction to Engineering Electronics (1) Fall
An introduction to electrical engineering fundamentals relating to electrical energy and circuit analysis. Concepts in digital logic and digital electronics are also introduced. Students will explore principles of electronic systems within the broader context of engineering analysis and design. The course meets for one studio session per week. Corequisite: Mathematics 152.

170 Engineering Programming (3) .Occasional An introduction to computer programming. Basic notions of abstraction, elementary composition principles, the fundamental data structures, and object-oriented programming technique are introduced. Topics include variables, control structures, arrays, and input/output. This course is intended for students in the teacher preparation program pursing an engineering endorsement. [Cross-listed: Computer Science 115]

200 Engineering Program Admission (0). ..Spring
Formal application to the engineering program leading to the B.S.E. degree is required after completing three semesters in an engineering curriculum with a minimum of one semester at Dordt University. Completion of this course confirms that all engineering program admissions requirements have been met. Prerequisites: Engineering 112, 113, 114, 115, 116, 117; Chemistry 111; Mathematics 152, 153, 204; Physics 231, 232.

202 Elements of Materials Science (4) Fall
Studies the relationship between structure and properties of various materials, including metals, ceramics, polymers, and semiconductors. Students will learn how atomic and molecular arrangements, as well as manufacturing processes, influence the mechanical, electrical, and thermal properties of a material. Introductory topics in metallurgy in this course include the examination of effects of processing (heat treatment and manufacturing) and service environment on microstructure and properties. Laboratory explorations in materials engineering introduce concepts in experimental design and data analysis. Prerequisites: Chemistry 111. Corequisite: Physics 232. [Cross-listed: Physics 222]

205 Computer Systems and Digital Circuits (4). Spring An introduction to the organization and inner workings of a modern digital computer and its components. Topics include introductory digital logic and circuits, CPU components, memory systems, input/output, storage systems, and introductory operating systems concepts. Digital circuits are covered, from simple logic gates through elementary microprocessor architecture. Laboratory provides hands-on experience in logic design, digital circuits, and computer systems. This course serves both computer science and engineering students. Strong algebra skills required. [Cross-listed: Computer Science 205]

Statics (2) Fall A mechanics course that examines the effects of forces and moments applied to rigid and deformable bodies in equilibrium. Students will analyze concentrated and distributed force systems applied to static particles, rigid bodies, trusses, frames, and machines. Prerequisites: Engineering 115; Physics 231. [Cross-listed: Physics 208]

209 Dynamics (2) Fall
A mechanics course that examines the kinematics and kinetic analysis of particle systems and rigid bodies. Prerequisite: Engineering 208. [Cross-listed: Physics 209]

212 Mechanics of Materials (3) .Spring
A solid mechanics course that examines the stresses, strains, and deformations that develop when various loads (tension, compression, torsion, bending, or any combination of these loads) are applied to deformable bodies. Elements of structural design are introduced using safety factors and failure criteria for ductile materials. Prerequisite: Engineering 208.

213 Mechanics of Materials Design Lab (1). .Spring
A mechanics of materials design laboratory which provides an introduction to experimental methods, hands-on experience applying and using strain gages and investigating beam loading, and an introduction to finite-element analysis (FEA) software. Pre or corequisite: Engineering 212.

220 Linear Circuits and Electronics (4) Spring
Assumes a prerequisite knowledge of DC electrical circuits, including the definitions of electrical quantities, circuit elements (sources, resistors, capacitors, inductors), understanding of Kirchhoff's laws and basic concepts in AC circuits such as frequency and phase. Topics in this course include: general linear circuit analysis including Norton's and Thevenin's theorems; superposition; nodal and loop analysis; natural and forced responses in RLC circuits; and sinusoidal steady state analysis. The course also gives introductions to operational amplifier circuits, single stage BJT transistor circuits, and steady-state balanced 3-phase power calculations. The lab includes a formal design project. Prerequisite: Engineering 117 or Physics 232 or Physics 216. Corequisite: Mathematics 204. [Cross-listed: Physics 220]

221 Signals and Systems (3) .Fall Even
Advanced techniques for the analysis of analog electrical systems using differential and difference equations, superposition, convolution, and frequency response, with an emphasis on continuous-time signals and systems. Specific topics include frequency domain analysis, Laplace transforms, Fourier series, Fourier transforms, transfer functions, Bode plots, system stability, sampling theory and aliasing, and continuous versus discrete signal analysis. Single input-output systems will be modeled using linear difference equations, block diagrams, state-variables, and MATLAB computer code. Digital Signal Processing (DSP) and z-transform methods are introduced. Prerequisite: Engineering 220.

225 Mechatronics and Instrumentation (3) Fall
An introduction to engineering mechatronics with applications of engineering measurement, data acquisition, instrumentation, sensors, actuators, digital and analog signal fundamentals, automatic control, and other electro-mechanical system interfacing. Prerequisite: Engineering 220; Computer Science 115 ; or permission of instructor.

281- Service-Learning (1-3).
.Fall, Spring, Summer
283 See page 37, Service-Learning
295 Introduction to Thermal-Fluids (3)
..Spring
An introduction to the principles of thermodynamics, fluid mechanics, and heat transfer principles, including energy, work, heat, properties of pure substances, the first and second laws, and other thermal-fluid relations. Prerequisite: Physics 232.
 Engineering thermodynamics applied to chemical, energy, and environmental systems. Students will study cycles and efficiencies, mixtures and solutions, chemical reactions, chemical and phase equilibrium, combustion thermodynamics, availability analysis, gas mixtures and psychrometrics, and thermal-fluid systems analysis. Applications to chemical reactors, combustion systems, emissions measurement, efficiency assessment, and indoor/outdoor air quality will be explored. Prerequisite: Engineering 295.

302 Fluid Mechanics (3) Fall
A comprehensive, introductory course in fluid mechanics covering: hydrostatics; control volume approach to the continuity, momentum, and energy equations; dimensional analysis, similitude, and modeling; introductory boundary layer theory; fluid drag and lift; flow through conduits, pumps and compressors; and hydraulics and open channel flow. All students participate in team design projects involving design of water supply, irrigation, air handling system, or other complex fluid dynamics system. Prerequisite: Engineering 295. Corequisite: Mathematics 204.

Heat Transfer (3) Spring
Studies of the three modes of heat transfer (conduction, convection, and radiation) with application to heat exchangers. Computer methods are used extensively for heat transfer design and analysis. A formal heat exchanger design project is included in this course. Prerequisite: Engineering 295; or permission of instructor.

\begin{abstract}
304 Embedded Microcontroller Systems (4) ..Spring
A course on the design of microprocessor and microcontrollerbased systems and the associated software and hardware. Intermediate digital circuit topics related to synchronous state machine design and register level concepts are introduced. The course concludes with topics in microprocessor architecture that include elementary assembly language and microcontroller interfacing. Lab exercises provide design experience using a particular microcontroller or a soft-processor foundation in an FPGA. Prerequisites: Engineering 205 or 225, 220; Computer Science 115; or permission of instructor.
\end{abstract}

306 Hydrology and Hydraulics (3) Spring
An introduction to hydrology and hydraulics principles, including both classwork and hands-on laboratory work. Topics include basic hydrology (infiltration, runoff, detention, etc.) and basic hydraulics, pumping systems, water distribution systems, reservoirs, groundwater, and storm sewer collection. Prerequisite: Engineering 302.

\begin{abstract}
310 History of Science and Technology (3) Fall
Enables the student to examine from a Reformed, biblical perspective the narrative of scientific unfolding and technological development as two human activities that are manifest in all cultures. Emphasis is on the major paradigms and events that have shaped the development of science and technology in the West and most recently in North America. The course focuses on the historical activity of engineers and artisans, while investigating the interrelationship between scientific thought and technological development. Events and ideas such as the philosophical origins of Western science, the Copernican revolution, Enlightenment rationalism, the industrial revolutions, 20th century positivism, the Einsteinian revolution, and the modern systemization ethic are discussed. Pre or corequisite: CORE 200.
\end{abstract}

312 Thermal-Fluids Lab I (1)
.Spring
A fluid mechanics and advanced thermodynamics lab with an emphasis on experimental design, the acquisition, analysis, and interpretation of data, along with technical communication and report writing. Pre or corequisite: Engineering 302. Corequisite: Engineering 300.

313 Thermal-Fluids Lab II (1)
A thermal-fluids and heat transfer lab with an emphasis on experimental design, the acquisition, analysis, and interpretation of data, along with technical communication and report writing. Prerequisite: Engineering 312. Corequisite: Engineering 303.

314 Computational Mechanics (3).
.Spring
A senior-level computational modeling and design course focused on the application of finite element analysis (FEA) and other computer simulation tools for stress, deflection, thermal, kinematic, or dynamic modeling. Prerequisite: Engineering 212; or permission of instructor.

316 Machine Design (3) Spring A senior-level design course in the analysis and design of machine elements. The first half of the course covers materials processing; stressstrain analysis; as well as failure criteria for static and dynamic loading. The second half of the course applies these fundamentals to the specification and design of several machine elements such as, shafts, bearings, gears, springs, fasteners, clutches, brakes, and slider cranks, four-bar linkages, cams. Students will complete an open-ended mechanical design project. Familiarity with computer software capable of solving iterative design problems is required. Prerequisite: Engineering 212.

317 Structural Analysis (3)
A study of the analysis of trusses, beams, and framed structures. Students will learn how to determine loads on structures, including dead loads, live loads, and environmental loads. Shear, moment, and deflected shape diagrams will be considered. Deformation calculations, approximate analysis methods, flexibility methods, and stiffness methods for the analysis of indeterminate beams and frames will be considered. Influence lines for determinate and indeterminate beams will be introduced. Prerequisite: Engineering 212.

\section*{318 Soil Mechanics and Foundation Design (4)}

Fall
A study of the engineering principles relating to soil properties and foundation design. The material properties of soil including structure, index properties, permeability, compressibility, and consolidation will be explored. Methods of soil testing, identification, and remediation will be covered. Principles of settlement and stresses in soils will be considered. Slope stability, retaining walls, and bearing capacity of shallow foundations will be introduced. The soils lab will provide hands-on opportunities to determine water content, perform sieve analyses, and test liquid, plastic, and shrinkage limits. Soil classification, compaction, compression, and consolidation testing will be explored. Prerequisite: Engineering 212 or Construction Management 214. [Cross-listed: Construction Management 318]

319 Environmental Engineering (3).
Spring
An introduction to water supply and wastewater treatment, solid waste management, hazardous waste disposal, pollution control equipment, and other topics relating to the engineer's role for ensuring clean air and providing clean water to communities. Methods and equipment for monitoring and testing air and water quality will be examined. Prerequisites: Chemistry 111.

\section*{UNDERGRADUATE ACADEMIC OFFERINGS: ENGINEERING}
322 Electronic Devices and Circuits (4) .................................................................................................................................................Fall Even
A study of the flow of electricity in, and application of, semiconductor devices. Topics include basic signals and amplifier characteristics,
operational amplifiers models and applications, diodes and applications, field effect transistors, bipolar junction transistors, methods of
amplification, frequency response, and stability. The laboratory includes a number of short design problems. Prerequisite: Engineering 220 .

323 Advanced Electronics (4) .Occasional
A study of advanced electronic devices and their applications. Topics include biasing strategies for discrete and integrated circuit designs, current mirrors, differential and multistage amplifiers, frequency response, feedback, and stability. The laboratory includes design exercises that introduce students to topics such as power output stages, tuned amplifiers, and demodulator circuits. Prerequisite: Engineering 322.

326 Electromagnetic Fields (4) .Fall Odd
Review of vector calculus; divergence, curl, Gauss' and Stoke's theorems; electro- and magneto-statics; polarization; boundary conditions; Laplace and Poisson equations; magnetic vector potential; energy; Maxwell's equations for time varying fields; wave propagation; and Poynting's theorem. Applications related to energy transmission and electrical power machinery with be explored. Prerequisites: Mathematics 204; Physics 232. Corequisite: Mathematics 201. [Cross-listed: Physics 326]

341- Special Topics (1-3) Occasional
348 These courses will consist of topics not normally covered in other program courses. Specially designed to focus on more specific topics utilizing instructor strengths and consideration of student needs.

344 Fluidization Engineering (1) .Occasional
A special topics course for chemical and energy systems engineers, exploring the theory and applications of fluidized bed reaction and conversion systems. The course will be offered in an independent study format with integral laboratory research and design projects.

345 Biorenewable Systems Engineering (1) .Occasional
A special topics course for chemical and energy systems engineers, exploring the theory and applications of biorenewable technology, products, and processes. The course will be offered in an independent study format with integral laboratory research and design projects.

350 Sustainable Energy Systems Design (3) Fall
A senior-level design course that focuses on designing energy systems for conservation, sustainability, and efficiency. Methods of auditing energy utilization and design principles for energy conservation are addressed as are solar and renewable energy technologies for meeting residential, commercial, and industrial energy needs. A variety of computer tools will be used for system analysis. A design studio component may incorporate tours, community service projects, and design projects relating to energy utilization and conservation. Prerequisites: Engineering 300, 302.

351 Reinforced Concrete Design (3) .Spring Even
Analysis and design of reinforced concrete beams, columns, one-way slabs, and frames. The design of members for axial load, flexure, shear, deflections, bond, and anchorage will be considered. Design will be based primarily on ACI strength design methods. Pre or corequisite: Engineering 317.

352 Structural Steel Design (3)
Spring Odd
A study of design and behavior of steel members and structures. The design of steel beams, columns, tension members, frames, trusses, and simple connections will be considered. Design will be based primarily on AISC specifications related to the load and resistance factor design method. Allowable stress design will be introduced. Pre or corequisite: Engineering 317.

353 Introduction to Transportation Engineering (3) Fall
An introduction to transportation engineering and design. Students will study geometric design of highways, pavement design, traffic flow theory, highway capacity, traffic control devices, and transportation planning. A primary aim of the course is to introduce students to fundamental principles and approaches in transportation engineering. Secondary objectives of the study include gaining a better understanding of how to be an active steward in God's creation, how to care for the safety of fellow citizens, and learning the basic concepts behind transportation and why it is so important in our culture today. Prerequisite: junior or senior standing.

354 Separation Processes and Mass Transfer (3)
Spring Even A study of equilibrium and non-equilibrium mass transport in chemical engineering applications. Methods for analyzing continuous contacting and multistage separation processes are explored. Mass transfer principles are applied to the design of distillation, gas absorption, extraction, evaporation, and humidification systems. Prerequisites: Chemistry 111; Engineering 300, 302; Mathematics 204.

355 Chemical Kinetics and Reactor Design (3) .Spring Odd
An introduction to chemical kinetics and the design of chemical reactors. Differential and integral analysis of homogeneous reaction and heterogeneous reactions using kinetic data are explored. Ideal reactor designs, non-isothermal reactor designs, and the design of catalyzed reactors are addressed. Prerequisites: Chemistry 111; Engineering 300, 302; Mathematics 204.

Biomechanics (3)
.Spring Odd
An introduction to applying the principles of mechanical engineering - primarily solid mechanics and dynamics - to living systems. The course will focus on the biomechanics of human movement, particularly the process of inverse dynamics during locomotion, and also on the mechanical properties of biological tissues. Open-ended project work will be a significant component of the course. No prior biological knowledge will be assumed. Prerequisites: Engineering 209, 212; or permission of instructor.

\begin{abstract}
358 Engineering Research and Methods (3) .Fall
A research course that explores the techniques and knowledge necessary to design and conduct experiments. It will include the nature and scope of a research project, how to conduct literature searches, and how to design methods and protocols for problem solving. In collaboration with a faculty mentor(s), students will choose and conduct a research project. Project results will be presented in a departmental seminar. Prerequisite: junior or senior standing; or permission of instructor.
\end{abstract}

360 Introduction to Power System Analysis (3) ..Fall Odd
An introduction to the design, planning, and operation of electric power utilities. Includes principles of economic dispatch and politics that impact design and operating strategies. Topics include power transmission lines, transformers, generators, system modeling, load flow analysis, faults, and system stability. Prerequisite: Engineering 220.

\begin{abstract}
362 Dynamic Systems and Process Control (3).
.Spring
A study of the dynamics and automatic control of systems. Topics include dynamic system modeling, feedback, steady-state operation, transient response, root loci, state-space representation, frequency response, stability criteria, and compensation. A variety of system types are modeled and analyzed, including mechanical, electrical, hydraulic, pneumatic, thermal, and chemical systems. Structured modeling approaches using Laplace transform methods and state equations are explored. Prerequisites: Engineering 220; Mathematics 204; Physics 232. Corequisite: Engineering 365 or 366 .
\end{abstract}

363 Introduction to Communication Systems (3). \(\qquad\) .Occasional
A study of analog and digital communication systems performance and theory with applications in radio, satellite, telephone, computer networking, and radar systems. Topics include linear modulation (AM, SSB, etc.), exponential modulation (FM and PM), sampling theory, the discrete-time and discrete-frequency domains, and basic digital modulation methods such as \(m\)-ary PSK, DPSK, OFDM, etc. The topic of noise is considered at the most elementary level sufficient to distinguish the performance of various modulation methods in the presence of noise. Prerequisite: Engineering 220.

365 Control Systems Lab (1) ..................................................................................................................................................................Spring
A laboratory course in the dynamic modeling and automatic control of mechanical and electrical systems. Corequisite: Engineering 362.
366 Process Control Lab (1)..................................................................................................................................................................Spring A laboratory course in the dynamic modeling and automatic control of thermo-chemical processes. Corequisite: Engineering 362.

371- Engineering Internship (1-6)......................................................................................................................................Fall, Spring, Summer
376 An off-campus experience that is intended to provide the engineering major with an opportunity to apply knowledge, principles, and skills gained in the classroom in an engineering workplace environment. Written and oral summary reports by participants bring reflection on the technical experience into subsequent classes. Graded on a pass/fail basis. Prerequisite: completion of six engineering courses or junior standing in the engineering program.

379 Senior Design I (2) .Fall
The first of two project courses providing students with the opportunity to use, in an integrated manner, the knowledge and skills that have been acquired to this point in their education. This design studio course is devoted entirely to the research, planning, analysis, and report writing required in the first phase of the senior design project. Students work in teams on a design project. Prerequisites: Engineering 200; one course from Engineering 302, 304, 317, 322, 362; senior standing; minimum cumulative engineering GPA and overall GPA of 2.5.

380 Senior Design II (2) .Spring
The second course devoted to senior design project activities. This design studio course requires students to complete the design, experimentation, analysis, and communication components of their project. Work on the project, while culminating in this course, starts in Engineering 379 the previous semester. Teams confer weekly with members of the engineering department staff. Prerequisite: Engineering 379.

381 Engineering Economics (2) ............................................................................................................................................................Spring
A course on the fundamentals of engineering economics and system cost analysis. An introduction to engineering economic topics such as, cost estimating, economic decision-making, time-value analysis, depreciation, taxes, cash flow, cost-benefit, and risk assessment will be addressed in the context of stewardship principles of engineering design. Prerequisite: Engineering 379; or permission of instructor.

390 Technology and Society (3)........................................................................................................................................................................................... An examination and critique of the relationship of technology to other areas of Western society. During the first half of the course students examine a Christian philosophy of technology and application is made to such problems as the role of the computer, technocracy, appropriate technology, and the historical two-cultures dualism. During its second half, the course focuses on the question of engineering ethics,

\section*{UNDERGRADUATE ACADEMIC OFFERINGS: ENGINEERING TECHNOLOGY}
with particular emphasis on such questions as safety and risk, professional responsibility and authority, whistle blowing, normative socioeconomic structures, and morality in career choice. This course requires the student to write and orally present a significant thesis paper. Prerequisites: CORE 200; junior or senior standing. [Cross-listed: Computer Science 390, CORE 267]

391- Individual Studies (1-3) ..............................................................................................................................................Fall, Spring, Summer
393 See page 36, Individual Studies

\section*{Engineering Technology}
The engineering technology programs share a similar mission to the engineering program but focus on the technical skills needed for technology
implementation and integration. The engineering technology programs have not been examined nor accredited by the Engineering Accreditation
Commission (EAC) or any other commission of ABET, https://www.abet.org.
General Major- \(\quad\)\begin{tabular}{l} 
Foundation (common to all emphases): Chemistry 110 or 111; Computer Science 115 or Engineering 202; Engineering \\
\begin{tabular}{l}
\(112,113,114,115,116,310 ;\) Engineering 117 or Engineering Technology 115; Engineering Technology 101, 210, 211, 212, \\
\(213,263,279,280,283 ; ~ a ~ m i n i m u m ~ o f ~ s e v e n ~ c r e d i t s ~ f r o m ~ E n g i n e e r i n g ~ T e c h n o l o g y ~ 271-276 ; ~ M a t h e m a t i c s ~ 152 ~ o r ~ S t a t i s t i c s ~\)
\end{tabular} \\
131; completion of one of the Engineering Technology (A.S.) emphases listed below.
\end{tabular}

Students must select one of the following emphases:
\begin{tabular}{|c|c|}
\hline Construction/Facilities Management: & Foundation; Engineering 208, 212, 295; a minimum of six credits from Engineering 317, 318, 319, 351, 352, 381, Construction Management 101, 102, 207, 220, 225, 240, 270, 280, 370; Physics 231, 232. (Physics 231 has a prerequisite of Mathematics 152.) \\
\hline General Engineering Technology: & Foundation; Engineering 202, 208, 212, 295; a minimum of six credits from Engineering or Construction Management; Physics 231, 232. (Physics 231 has a prerequisite of Mathematics 152.) \\
\hline Industrial Networks/Programming: & Foundation; Computer Science 120, 204, 205, 215, 245; Engineering 204; a minimum of six credits from Computer Science 270, 315, 319, 331, 340, 355. (Computer Science 204 has a prerequisite of Computer Science 115.) \\
\hline Mechanical/Energy Systems: & Foundation; Engineering 208, 212, 295; a minimum of six credits from Engineering 204, 209, 300, 303, 312, 313, 314, 316, 381; Physics 231, 232. (Physics 231 has a prerequisite of Mathematics 152.) \\
\hline Associate of Science Degree Option & Engineering Technology (see page 22 for Associate's Degrees Core Program requirements) Foundation (common to all emphases): Engineering Technology 101, 112, 115, 210, 211, 212, 213, 263, 283; a minimum of seven credits from Engineering Technology 271-276. \\
\hline \multicolumn{2}{|l|}{Students must select one of the following emphases:} \\
\hline \multicolumn{2}{|l|}{Automation, Programming, and Instrumentation: Computer Science 109, 115, 116, 204, 205, 215.} \\
\hline Manufacturing and Industrial Processes: & Engineering Technology 113 or 123, 114, 117, 202, 251, 252, 253. \\
\hline
\end{tabular}

\section*{101 Introduction to Manufacturing (4)} Fall A foundations course that introduces a framework for faithfully responding to the Lord's call to work for his kingdom within the field of manufacturing. Key elements of the product development process from design to production are examined. Emphasis is placed on safety, quality, continuous improvement, lean and just-in-time processes, sustainability, and maintenance in manufacturing. An understanding of the diverse roles in manufacturing service is introduced via industry tours.

112 Introduction to Computer Aided Engineering and Design (1) Fall, Spring
The design studio experience introduces concepts of graphical communication for engineers and develops basic 2-D and 3-D design skills with the use of a solid modeling software package. The course meets for one design studio per week. [Cross-listed: Engineering 112]

113 Introductory Welding (1)
.Spring
An introduction to the principles of metal joining and cutting techniques. Students will evaluate methods and techniques for metal joining and cutting. The course will cover principles and practice of shielded metal arc welding (SMAW), gas metal arc welding (GMAW), oxyacetylene welding, and cutting. Curriculum aligns to federally endorsed national standards for production workers.

114 Dimensioning, Tolerancing, Measurement, and Inspection (2) Fall
Develops and applies size tolerancing, geometric dimensioning, thread and fastener specifications, detail and assembly drawings, weldments, external references, bill of materials and standardized drawing formats, engineering parts inspection, and reverse engineering processes.

115 Introduction to Electricity (1.5) Fall
This course is an introduction to electricity including electrical safety. Lecture and hands-on activities will focus on the study of voltage, current, and resistance while constructing circuits and performing calculations using Ohm's law to prove circuit values. This course provides hands-on activities constructing circuits and interpreting schematics. Students will perform measurement and diagnostics of series, parallel, and combination series-parallel circuits with an electrical multimeter to develop proficiency in troubleshooting, reading, and calculating electrical values. Course meets in a studio format during the second half of the semester.

117 Introduction to Machining and Computer Aided Manufacturing (4) Spring
An introduction to machining principles and practices used in manufacturing processes. Manual lathes, mills, and other foundational machining and fabrication tools are used to manufacture components according to design drawings and specifications. Computer Numerical Control (CNC) manufacturing is introduced for an increased level of dimensional control, automation, and production efficiency. Prerequisite: Engineering Technology 112.

123 Intermediate Welding (1) .Spring
Students will learn and utilize intermediate techniques for metal joining and cutting. The course will cover intermediate level concepts, skills, and practices of shielded metal arc welding (SMAW), gas metal arc welding (GMAW), oxyacetylene welding and cutting. The course will focus on project-based learning activities Prerequisite: Engineering Technology 113; or permission of instructor.

202 Introduction to CNC Manufacturing (3). Fall A continuation of Engineering Technology 117 using the advanced CNC manufacturing capability of mills, lathes, plasma cutting tables, and press brakes. Machining proficiencies are expanded using G-code and M-code programming, incorporating both long-hand programming and Computer Aided Manufacturing (CAM) software. Proper manufacturing planning for complex set-ups are practiced. Prerequisite: Engineering Technology 117.

210 Relay Logic and Motor Controls (3). Spring
This course is an introduction to discrete control circuits, relay logic, and motor starters. Discrete input and output field devices will be wired to relays to create the desired circuit operation. Students will learn electrical device symbols and create electrical line diagrams associated with relay logic circuits. Short lectures will be followed by extensive hands-on activities developing line diagrams, wiring devices and relays, and performing circuit diagnostics with an electrical multimeter. Power supplies, timers, proximity switches, limit switches, photo eyes, solenoid valves, and air cylinders will be wired. Wiring configurations for Delta and Wye transformers will be included. Prerequisite: Engineering Technology 115 or Engineering 117.

211 Electricity and Electronics (3)
Spring
An introduction to industrial electrical wiring methods, industrial electronic sensors, and electrical safety. NEC (National Electrical Code) will be studied and wiring to NEC standards will be performed. This course provides extensive hands-on activities in industrial wiring methods including utilization of raceways and conduit such as EMT (Electrical Metallic Tubing) and Rigid Conduit. Transistor-based electronic sensors and power supplies will be studied including hands-on activities wiring these devices for the purpose of diagnostics and troubleshooting their functionality. Extensive use of electrical meters will be a part of all phases of this course to evaluate and troubleshoot electrical and electronic circuits. Prerequisite: Engineering Technology 115 or Engineering 117.

212 Programming, Instrumentation and Data Acquisition (3). Fall
An introduction to programming and the principles of interfacing with a microcomputer for data acquisition using devices such as temperature probes, proximity sensors, pressure transducers, relays, analog-to-digital converters, digital-to-analog converters, timers, counters, and the software to operate these devices. Prerequisite: Engineering Technology 210.

213 Controls and Automation (3) Spring
A continuation of Engineering Technology 212 using advanced tag-based PLC and HMI systems to control and automate manufacturing processes. Advanced calibration methods, feedback control, and control loop tuning procedures are practiced. Prerequisite: Engineering Technology 212.

251 Production Management and Lean Systems (2) Fall
Application of lean manufacturing concepts and lean tools in structuring industrial manufacturing processes in efforts to minimize manufacturing costs, enhance workplace safety, improve work flow, eliminate process variations, and to shorten products delivery time. Develops concepts related to rapid prototyping and enables critical thinking in new product development, process building, sustainability, and innovation theories. Ethical implications to workers and the community in design consideration are investigated.
253 Quality and Continuous Improvement (3) ..... Spring
Application of quality principles to process improvement and reduction of variation. Application of statistical techniques and conceptsused in quality control; acceptance sampling; quality cost; reliability; applications of computers, software and other quality control tools toquality improvement. Prerequisite: Engineering Technology 251.
263 Professional Networking for Internship (1) ..... SpringStudents will develop and apply professional networking competencies in the process of securing their summer internship. Example activi-ties include exploring and identifying internship sites, networking with company representatives to identify possible options, applying toand interviewing for positions, and completing pre-employment paperwork.
271- Engineering Technology Internship (1-6)Fall, Spring, Summer
276 An off-campus experience that provides technology students with opportunities to work with a mentor and apply knowledge, principles,skills, and attitudes gained in the program's courses in a workplace environment. Prerequisite: admission to the Internship Program.
279 Senior Design I (2) ..... FallThe first of two project courses providing students with the opportunity to use, in an integrated manner, the knowledge and skills that havebeen acquired to this point in their education. This design studio course is devoted entirely to the research, planning, analysis, and reportwriting required in the first phase of the senior design project. Students work in teams on a design project. Prerequisites: completion ofEngineering 113, 114, 115, 116, 117, 212, 295 and an Associate of Science degree in Engineering Technology. (Engineering Technology 279and Engineering 379 meet together.)
280 Senior Design II (2) ..... SpringThe second course devoted to senior design project activities. This design studio course requires students to complete the design, experi-mentation, analysis, and communication components of their project. Work on the project, while culminating in this course, starts inEngineering Technology 279 the previous semester. Teams confer weekly with members of the engineering department staff. Prerequisite:Engineering Technology 279. (Engineering Technology 280 and Engineering 380 meet together.)
283 Engineering Technology Internship Closeout (1) ..... Fall
Students will reflect on, evaluate, and share outcomes from their summer internships. Example activities include written reflections, exit interviews, discussions with peers, and presentations to summarize their activities and learning.
3) . .Fall, Spring, Summer
393 See page 36, Individual Studies

\section*{English}

General Major- \(\quad\) Foundation (common to both emphases): English 311, 312, 313, 321, 322, 323, 333.
Students must select one of the following emphases:
Literature: Foundation; English 317; English 335 or 336; one course from English 220, 233, 238, 301, 302, 304, 307; five additional courses from COURSES FOR MAJORS including Theatre Arts 365 or 366.

Writing: Foundation; English 220; English 335 or 336; one course from English 241, 242, Communication 244, 261; four courses from English 233, 238, 301, 302, 304, 305, 307, 310; one additional course from COURSES FOR MAJORS.

\section*{General Minors-}

English: English 210; one course from English 220, 233, 238, 301, 302, 304, 305, 307; four additional courses from COURSES FOR MAJORS.

Writing: English 210, 220; one course from English 203, 205, 321, 322; four courses from English 233, 238, 301, 302, 304, 305, 307,310 , and 335 or 336.

For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 85-98, Teacher Preparation Program.

100 Basic Writing for College Students (3) .Spring
An intensive introduction to and review of the skills college-level writing requires, focusing on the larger issues of presenting, developing, and supporting ideas, on issues of correctness at the sentence level (grammar, usage, punctuation, and mechanics), on developing the element of voice, as well as on learning various essay styles for effective academic writing. Intended for students with special needs in written
composition (i.e., for those with an ACT score below 18 on the English component of the test). Completing this course, with a grade of C or better, meets the Core Program writing requirement. Prerequisite: AEC 100.

105 Workplace Writing (3) Fall, Spring
Workplace Writing focuses on the processes and strategies for creating written communication within a workplace setting. Examines audience awareness, stylistic conventions, and document design. Emphasizes the preparation of a variety of written documents, such as resumes, internal and external correspondence, descriptions, proposals, instructions, summaries, and reports. Credit will not be given for English 105 if English 100 or CORE 120 have been completed.

105L Workplace Writing Lab (1).
Fall, Spring
An additional one credit tutorial session for students with a score below 18 on the English portion of the ACT. Corequisite: English 105.

\section*{COURSES FOR MAJORS}

200 Reading for Life (1.5)...............................................................................................................................................................Occasional This shorter course focuses on a particular topic that will affect students' lives throughout adulthood. Typically, students will read a book before class and discuss it in its entirety. They will learn to read thoroughly, critically, and charitably, and they will practice dialoguing with others about books and reading. Instructors will select topics that center around a genre, author, time period, or key cultural idea; past topics have included J.R.R. Tolkien; creative memoirs; Philip K. Dick; and Victorian novels. English majors may take up to, but no more than, two Reading for Life courses for credit towards the English major. This course is appropriate for both majors and non-majors.

\section*{203 American Multicultural Literature (3)}

Fall Odd
In this course, students will read, discuss, and write about literature from several different American groups of various identities, including Native American, African-American, Asian-American, and Latinx. Students will examine various cultural understandings of what it means to be American and explore American ethnic subcultures through field trips. Writers discussed will vary but may include Joy Harjo, Louise Erdrich, Toni Morrison, Ta-Nehisi Coates, Viet Than Nguyen, Li-Young Lee, Sandra Cisneros, and Junot Diaz. [Cross-listed: CORE 277]

205 Reading and Writing Children's Literature (3) .Spring Even This course focuses on reading classic and contemporary works of adolescent literature. Students will consider this genre and its audiences, analyze several adolescent novels and stories, and think critically about the religious orientation and historical context of each work. The course will also explore contemporary issues crucial to adolescents and teenagers, including identity and adolescent psychology, sexuality, and social conformity. This course is appropriate for both majors and non-majors.

210 Introduction to Literary Studies (3) Spring Provides students with a foundation of knowledge and skills for work in the major. It does so by introducing them to the subject matter, critical schools and methods, research strategies, forms of responsive and critical writing, and major contested issues of the discipline.

220 Introduction to Creative Writing (3) .Spring A course in which students will read and write in four genres: poetry, fiction, creative nonfiction, and screenwriting/playwriting. The course will emphasize reading and research as the foundation for creative writing. It will also introduce students to workshopping creative writing and to an integrated understanding of faith and writing. Satisfies Core Program writing-intensive requirement.

221 The Short Story (3) ..Occasional Introduces students to the contemporary short story. In addition to reading broadly in the genre through anthologies, students will study specific contemporary writers such as Alice Munro, Raymond Carver, Jane Smiley, Larry Woiwode, Carol Bly, or John Gardner via collections of their work. Tests and short papers will be required.

223 Science Fiction (3).
Fall Even
This course surveys the genre of science fiction and its widespread impact on 20 th and 21 st century cultures. We will investigate many philosophical, theological, and scientific assumptions and debates in science fiction. Topics in course texts may include artificial intelligence, genetic engineering, space exploration, and the progress or destruction of civilization. We will also survey a variety of media: novels, short stories, films, TV shows, graphic novels, and video games. The course is appropriate for majors and non-majors alike.

225 Film and Literature (3) \(\qquad\) Occasional Introduces students to film art and film criticism, compares and contrasts films to novels and stories, and examines worldviews of the various artists. The course will examine how filmmakers and writers use film language or print to imply or express their views. It will also examine the degree to which filmmakers merely reproduce the themes of a book or make their own statements, even undercutting the source.

233 Reading and Writing of Poetry (3)
Spring Odd
In this writing course, students read and write various poems with fixed forms and in free verse. They will explore how other poets get started and where they get their ideas for poems. Time in class will be spent discussing each other's poems, and each student will have at least three personal conferences with the instructor. By the end of the semester, each student will have a portfolio of at least a dozen poems. English 220 recommended.

238 Songwriting (3)
A study in the craft of songwriting, particularly in lyrical composition. The course will cover listening, reading, and analyzing songs and song structure. Students will write and workshop songs. No ability to write music is required. English 220 recommended.

241 Introduction to Journalism (3)
Fall
An overview of how journalists should tell the world's stories and how journalism can be used to sustain and build communities in a free society. The course emphasizes storytelling. Students practice several types of creative but factual journalism for print, audio, and video media. Students also will explore the reporter's role and mandate in society, the current state of the news media, and how Christians can use journalism to serve the public good by helping citizens better understand and then confront their community's challenges. [Cross-listed: Communication 241]

242 Feature Writing (3) Spring This course is designed to help students craft compelling true stories using creative writing techniques from the world of fiction. Students will examine key story elements found in captivating narratives such as structure, point of view, character, scene, action, dialogue, and theme. We will also analyze numerous award-winning feature articles to see how professional writers use these methods to tell human interest stories that are no less engaging because they are true. Students then will hone their own storytelling skills by writing about people they find around the campus and the community. Satisfies Core Program writing-intensive requirement. [Cross-listed: Communication 242]

281- Service-Learning (1-3). \(\qquad\) Fall, Spring, Summer
283 See page 37, Service-Learning
301 Advanced Non-fiction Writing (3).
Fall
This course will introduce students to types of non-fiction writing sought by online and print publications. It will seek to improve students' narrative writing skills, especially an engaging voice. Major assignments include the profile, the review, and the personal essay. Students will also read and react to various types of non-fiction writing, both essays and longer works. Significant class time is spent in workshop format, with students reading and discussing their own work. Satisfies Core Program writing-intensive requirement. English 220 recommended. [Cross-Listed: Communication 301]

302 Advanced Argumentative Writing (3).
Spring Even
The primary goal of this course is to help students argue and persuade well in writing, in preparation for careers that demand high-level argumentation-such as seminary, law school, graduate school, political work, and research and grant writing. Students will study the art of rhetoric, writing for specific audiences in order to persuade, dissuade, or inspire them. They will also incorporate research, at an advanced level. Satisfies Core Program writing-intensive requirement. [Cross-listed: Communication 302]

304 Fiction Writing (3) Spring
Introduces students to the task of writing fiction. In addition to significant reading in the genre, the course will require several exercises in various aspects of the craft, as well as the completion of one original short story. Time will be spent in workshop format and discussing technique, as well as the ways in which one's faith affects the work of writing fiction. Prerequisite: English 220.

305 Business and Technical Writing (3). .Spring
Students will study the process, application, and characteristics of business and technical writing, and the way in which writing style, strategies, content, and clarity will relate practically to one's profession. Concentrates on developing competence in a variety of writing tasks commonly performed in business, law, industry, social work, engineering, agriculture, and medicine. Satisfies Core Program writing-intensive requirement. [Cross-listed: Communication 305]

306 Writing Workshop for Teachers (3). Fall
Designed to help pre-service teachers from across the disciplines to improve their writing and understanding of writing. Using an inquirybased approach, students will seek to answer questions like-why do teachers write? What is successful writing? How does one improve their writing? Through reading and writing assignments, students will practice a variety of writing tasks. Satisfies Core Program writing-intensive requirement.

307 Screenwriting (3).
Spring Even
Students will gain insight into the process and the techniques involved in scriptwriting by studying film scripts and creating their own. Students will receive hands-on instruction in concept development, character development, plot structures, dialogue, and visualization. English 220 recommended.

310 Advanced Writer's Workshop (3) Fall Odd, Summer Odd Students will write a focused writing project in the genre of their choice (e.g., short stories, poetry, screenplays). The course will include craft lectures, writing and workshop time, and guest lectures and readings. Students will meet together in early May for \(1-2\) weeks, and then will work with a faculty mentor throughout the summer, producing regular packets of original works, responses to assigned texts, and thorough revision. Prerequisites: one course from English \(233,301,304,307\). Students may be allowed into the course without a prerequisite, pending a writing sample approved by the English department faculty.

A survey of earlier British literature from the beginnings through the 17th century, including Beowulf, Chaucer, Sidney, Spenser, Shakespeare (his poems), Donne, Herbert, Jonson, and Bunyan. Special attention will be given to the Scriptural tradition that this literature evokes. Throughout, the course focuses on how the literature of these eras addresses fundamental questions about human nature.

312 Shakespeare and Elizabethan Drama (3). Fall Odd
Primary emphasis on a study of Shakespeare's plays: comedies, histories, and tragedies. Some attention to Shakespeare's sonnets, to other Elizabethan playwrights, and to background. One paper required.

313 Later British Literature (3). .Spring Odd
A survey of British literature from the late 1700 s through the 1990s, including poetry, novels, plays, and other creative writings in English by authors in or from the United Kingdom. The course will study the major literary, cultural and aesthetic trends that impacted most of the world. Those include neo-classicism, romanticism, realism, naturalism, and modernism.

317 World Literature I (3).
.Fall Even
This course offers the study of ancient and medieval texts that are foundational to any study of history, culture, literature and art. It will deal with the major forms of ancient literature, including epic poetry, tragedies, comedies, and lyric poetry. It will discuss the historical transition from literature written during the pre-Christian to the Christian era. Although emphasis may be placed on the ancient literatures foundational to Western Civilization (e.g., Hebrew, Greek, Roman), the instructor may use ancient Egyptian, Babylonian, Hindu, Chinese or other influential literatures from elsewhere in the world. [Cross-listed: Spanish 207]

\section*{318 World Literature II (3)}
.Occasional
This course discusses the major literary texts from the Enlightenment to the 20th century, focusing only on texts from the non-Englishspeaking world. Texts may be chosen from France, Spain, Italy, Japan, Africa, or anywhere else besides the United Kingdom and the United States. The instructor may connect these texts to discuss historical trends and important issues, such as science, colonialism, nationalism, and globalization. [Cross-listed: Dutch 208, French 208, Spanish 208]

321 American Literature I (3)
Fall Odd
This course surveys the literature of colonial North America and the early United States republic (1492-1860), including poems, novels, magazines, and newspapers. We will examine the influence of Calvinism, Catholicism, and the Enlightenment on American culture, and we will place American literature in a transatlantic and global context. Authors and texts include Edgar Allan Poe and other American Romantics, Benjamin Franklin, slave narratives, Puritan poetry, and Native American writings.

322 American Literature II (3).
Spring Even This course surveys the selected prose, poetry plays, and other creative writing by Americans, from 1865 to the 1990s. It will investigate a number of major literary, cultural, and aesthetic trends that impacted the lives and history of Americans and beyond, including realism, naturalism, and modernism. Students will discuss literary works in relationship to major historical events and their lasting cultural effects, which may include the Civil War, World War I and II, the Great Depression, and the Civil Rights movement.

323 Contemporary Literature (3)
Fall Even
The study of selected contemporary literature, particularly novels, written in the last fifty years to the present. Students will be exposed to acclaimed living writers. This course will consider global contemporary literature from non-Western cultures. Writers may include Margaret Atwood, David Foster Wallace, Marilyn Robinson, Khaled Hosseini, and Chimamanda Ngozi Adichie.

333 History and Theory of Literary Criticism (3) \(\qquad\) Spring Even Major works of literary criticism and theory of criticism, both classic works from Plato through Eliot and key works drawn from the ferment of contemporary theory will be analyzed, with the aim of formulating clearer Christian theories of literature. Prerequisite: CORE 200.

335 History of the English Language (3). Spring Odd Surveys the Indo-European languages; the emergence, development, and flowering of the Anglo-Saxon language; the seven English dialects; the Chaucerian dialect; and the contributions of the Greek, Latin, and French language and cognate words.

336 English Grammar (3) Fall A study of traditional and rhetorical grammar. Students will approach English grammar as not only a technical subject but also a craft, a field for research and scholarship, and a domain with socio-cultural, political, and ethical dimensions. As they develop their own arguments, voice, and editing skills, they will explore various topics through readings, discussions, practice exercises, research projects, and writing activities that require them to apply grammar knowledge in context.

338 Topics in Literature (3) .Occasional A focused course that will concentrate on a particular author, group of authors, idea, theme, genre, or historical period-typically one not covered by the regular English-major curriculum. The course will consider its topic in terms of religious orientation and worldview, the historical development of literature, and contemporary responses to literature. Topics will be selected by instructors. Possibilities including environmental literature, the fantasy genre, or post-colonial literature.
341- Special Topics (1-3) ..............................................................................................................................................................................................................
348 These courses will consist of topics not normally covered in other program courses. Specially designed to focus on more specific topics utilizing instructor strengths and consideration of student needs.
391- Individual Studies (1-3) .............................................................................................................................................Fall, Spring, Summer
393 See page 36, Individual Studies

\section*{English for Academic Purposes}

For information on an ESL teaching endorsement, see the "Teacher Preparation Program,"English as a Second Language K-12, page 93.

\begin{abstract}
101 Public Speaking and Academic Interaction (3) \(\qquad\) Fall Develops academic speaking and listening skills, enabling students to participate to the best of their ability in the classroom and in independent study. Listening, note-taking, discussion, and presentation skills with a focus on North American English pronunciation patterns are practiced. Vocabulary is expanded throughout the course. Satisfies Core Program communication competency requirement. Open to non-native English speakers only.
\end{abstract}

102 Academic Writing (3).....................................................................................................................................................................Spring
While engaging in a review of academic English grammar and usage, students learn to properly incorporate ideas from academic sources into their own writing. Skills such as critical reading, effective note-taking, proper summarizing, paraphrasing, and citation are presented and practiced. Satisfies Core Program English competency requirement. Open to non-native English speakers only.

103 North American English Pronunciation (2). This course, which introduces students systematically to the sounds and rhythms that shape clear North American English speech, leading to better listening and clear speaking, is required for non-native speakers of English whose scores on the Entrance Interview for International and ESL Students qualify them. The course is also recommended for all non-native speakers of English who wish to or who are advised to take steps to improve their listening and speaking in English. Open to non-native English speakers only.

\section*{Environmental Studies}

The major in environmental studies seeks to cultivate stewardship of the creation as a lifestyle and profession through an interdisciplinary program of study. This program asks: 1) how does the world work; 2) what is right for us as Christians in our relationship to the rest of creation; and 3) how should we then live and work to be obedient stewards?

General Major- Foundation (common to all emphases): Environmental Studies 151, 152, 161, 303, 325; Biology 200; Mathematics 152 or Statistics 131, 133; one course from Chemistry 305, Engineering 310, Philosophy 206, 350, Social Work 313.

Students must select one of the following emphases:
Environmental Science: Foundation; Biology 122, 125, 215; Chemistry 111; Environmental Studies 251, 252; one course from Chemistry 122, 212, 225, 312; two courses from Biology 316, Environmental Studies 270, 320; two courses from Agriculture 201, 370, Environmental Studies 201, 202; one course from Agriculture 315, Biology 302, 310, 324; two courses from Community Development 201, Environmental Studies 334, Political Science 333, Theology 310 or 323. Students must also complete one of the following: the Environmental Studies 358 and 380 sequence, a departmentally approved summer internship (Environmental Studies 373) or a departmentally approved off-campus course that complements their program.

Natural Resource Management: Foundation; Biology 122, 125, 215, 316; Chemistry 111; Environmental Studies 251, 252, 270, 320; one course from Community Development 201, Environmental Studies 334, Political Science 333, Theology 310, 323; one course from Agriculture 291, 315, 316, Biology 310, 324; one course from Agriculture 201, 311, 370, 371, Environmental Studies 201, 202. Students must also complete one of the following: the Environmental Studies 358 and 380 sequence, a departmentally approved summer internship (Environmental Studies 373) or a departmentally approved off-campus course that complements their program. One course from Chemistry 122, 225, 312 recommended.

Policy and Management: \(\quad\) Foundation; Business Administration 205; Chemistry 110 or 111; Communication 311 or 314; Economics 202; Engineering 390; Environmental Studies 334; Political Science 245, 312, 333; Political Science 202 or 214; Political Science 210 or 370; Theology 310 or 323; one course from Agriculture 290, Community Development 201, Economics 321; one course from Biology 125, 316, CORE 216, Environmental Studies 270, 320. Students must also complete one of the following: the Environmental Studies 358 and 380 sequence, a departmentally approved
summer internship (Environmental Studies 373), or a departmentally approved off-campus course that complements their program.

Courses in the following off-campus programs may substitute for up to four of the above with approval of the chair of environmental studies: Latin American Studies Program, Au Sable Institute of Environmental Studies, Creation Care Studies Program, or other approved off-campus study.

\section*{General Minors-}

Environmental Science: Environmental Studies 151, 152, 161, 251, 252, 325; one course from Agriculture 370, 371, Biology 200; one course from Agriculture 201, Environmental Studies 201, 202, 303; one course from Biology 316, Environmental Studies 270, 320.

Environmental Studies: Environmental Studies 151, 152, 161, 303, 325; one course from Agriculture 201, Environmental Studies 201, 202; one course from Biology 316, CORE 216, Environmental Studies 270, 320; one course from Environmental Studies 334, Political Science 333, Theology 310, 323.

151 Introduction to Environmental Studies I (3) Fall
An introduction to contemporary environmental studies and creation care, with emphasis on class discussion of relationships between human population and resource use in light of biblical teaching about environmental stewardship. Particular attention is given to the biotic and ecological dimensions of creation stewardship and planetary distress. Corequisite: Environmental Studies 161. [Cross-listed: Community Development 151, CORE 211, Earth Science 151]

152 Introduction to Environmental Studies II (4) Spring Flowing from a foundation in physical and earth sciences, this course offers an introduction to energy and material use in Western society and examines the resulting impact on the environment. Contemporary practices and their historical roots are critiqued in light of Biblical norms for stewardship. An emphasis on evaluation and implementation of practical steps toward sustainability permeates the course with the goal of motivating and equipping students to become lifelong stewards. The laboratory portion of the course combines tours, laboratory measurements, economic analysis, and environmental analysis. Three lectures and one laboratory period of three hours per week. Environmental Studies 151 is not a prerequisite. [Cross-listed: Earth Science 152, CORE 222]

161 Field and Laboratory Investigations in Environmental Studies (1) Fall
A field and laboratory exploration of fundamental issues, concepts, and techniques of contemporary environmental studies with a biological and ecological focus. Includes visits to sites of natural history and stewardship interest both locally and regionally. Also includes an introduction to important technological tools in environmental studies and analysis of physical and biotic parameters of the environment. Required for students majoring or minoring in Community Development or Environmental Studies. Corequisite: Environmental Studies 151. [Cross-listed: Community Development 161]

201 Introductory Geology and Physical Geography (4). ..Spring Odd
A general introduction to the physical nature and structure of the solid Earth, including, briefly, its physical geography and a more detailed look at its geology. The environmental implications of these subjects are detailed. Three lectures and one laboratory period of three hours per week plus one overnight field trip and one or two shorter trips. [Cross-listed: CORE 223, Earth Science 201, Geography 201]

202 Meteorology and Climate Change (3). .Fall Odd
Provides a general introduction to meteorology and weather. Climate and climate change in Quaternary times to the present are also considered. The implications of an anthropogenically enhanced greenhouse effect will be addressed, with particular attention given to the impact of these changes on the structure and function of ecosystems. Includes one or two field trips to relevant sites in the region. [Crosslisted: Earth Science 202, Geography 202]

251 Environmental Chemistry (3) Spring Odd
A study of the nature and transport of chemical species-both natural and human-introduced-in the natural environment (atmosphere, hydrosphere, geosphere, and biosphere). Three lectures per week. Prerequisite: Chemistry 111; or permission of instructor. Prior completion of Chemistry 122 or 225 recommended. [Cross-listed: Chemistry 251, Earth Science 251]

252 Environmental Chemistry Laboratory (1). \(\qquad\) .Spring Odd This lab will include methods of sampling and analysis of samples from natural and/or human influenced environments. Graded on an A-F scale. Corequisite: Environmental Studies 251. [Cross-listed: Chemistry 252, Earth Science 252]

270 Avian Biology and Conservation (3). \(\qquad\) .Spring Even
The identification, natural history, ecology, and stewardship of birds. Topics include morphological and physiological ecology of birds, habitat selection, communication, migration, reproductive ecology, territoriality, taxonomy, and conservation. The connections between avian ecology and creation stewardship will be explored. Recognition of a diverse set of birds by sight and sound is an important component of the course. Two lecture/discussion sessions and one three-hour lab per week. Field work will concentrate on local birds, but at least one trip to a distant site will be included. Prerequisite: one of Agriculture 101, Biology 122, CORE 212, Environmental Studies 151.
281- Service-Learning (1-3)

\(\qquad\)
 Fall, Spring, Summergeographical data input, storage, maintenance, analysis, and retrieval. Students will utilize common GIS software and associated hardware.An overview of survey methods used to gather and quantify features of physical geography will be included. The course will meet in twostudio lab classes to provide an integral learn-by-doing experience applying GPS technology, survey methods, and GIS applications. Applica-tion of GIS to agriculture, business, environmental management, and other disciplines will be provided in this course. Prerequisite: sopho-more standing or above. [Cross-listed: Agriculture 303, Business Administration 303, Construction Management 207, Earth Science 303]
320 Wildlife Ecology and Stewardship (3)Spring OddAdvanced examination of animal (especially terrestrial vertebrate) populations, communities, and habitats, particularly as such analysisis applied to the manipulation and exploitation of animal populations and communities to regulate their abundance and distributionand/or to restore them. Considerable exploration and critique of the development and practice of wildlife management, particularly asit compares to biblical principles for creation stewardship. Two lecture/discussion sessions and one three-hour lab per week. Additionalactivities include an overnight field trip and attending a wildlife conference. Prerequisite: one course from Agriculture 370, 371, Biology200. [Cross-listed: Biology 320] on ecological restoration. Principles and practices of the discipline of restoration ecology will be explored and then utilized to develop a holistic restoration plan for a specific location. Conference attendance and regional travel to restoration sites are important components of the course. Prerequisites: Environmental Studies 151; junior or senior standing.

333 Philosophy of the Environment (3) ............................................................................................................................................................................ ronment. Prerequisites: CORE 200; junior or senior standing. [Cross-listed: Philosophy 333]

334 Economics of Natural Resources and the Environment (3)
Fall Even
A study of economic aspects of Christian stewardship in relation to the environment and use of natural resources. Major topics include biblical norms on creation, property rights, economic justice, the economic dimensions of current environmental problems and trends in resource use, institutions and social structures that affect environmental policy, economic theories related to resource use and environmental quality, and evaluation of current and proposed policies from a Christian point of view. Prerequisite: Economics 202; or permission of instructor. [Cross-listed: Economics 334]

341- Special Topics (1-3) .Occasional
348 These courses will consist of topics not normally covered in other program courses. Specially designed to focus on more specific topics utilizing instructor strengths and consideration of student needs.

358 Introduction to Biological Research (1)....................................................................................................................................Fall, Spring This is a mini-course designed to prepare students for directed senior research. The course will introduce the idea and practice of biological research. It will include the nature and scope of a research project, how to conduct literature searches, and how to design methods and protocols for problem solving. The class will meet weekly in seminar or tutorial format. Students will make weekly presentations of their progress, finalize their proposal for Environmental Studies 380, and (if appropriate) begin the work for the directed research project. Graded on a pass/no record basis. Prerequisites: Environmental Studies 151, 152; Biology 122, 200, 215. [Cross-listed: Biology 358, Chemistry 358]

373 Environmental Studies Internship (3).......................................................................................................................Fall, Spring, Summer Students apply the principles of environmental science and/or policy in an off-campus setting working with businesses or non-profit organizations. Students will spend at least 120 hours at their placement site. Learning goals relevant to each situation will be developed and assessed. Weekly logs, a final written paper, and a poster or formal presentation are required. Prerequisite: junior or senior standing in the Environmental Studies Department.

Fall, Spring
Focuses on identifying a stewardship problem and bringing rigorous analytical and critical thinking to bear in examining the problem, reporting on it, and making recommendations for its resolution. The research project will be chosen and conducted under the guidance of a faculty mentor and may investigate a problem from a natural science perspective in the field and/or laboratory or from a social science perspective. With approval, the research may be conducted at an off-campus location. Prerequisite: Environmental Studies 358. [Crosslisted: Biology 380, Chemistry 380]

\section*{French}
\begin{tabular}{ll} 
General Minor- & \begin{tabular}{l} 
French 201, 202, 206; Linguistics 201; one course from French 102, 341-348; French 204 or 208; three semesters of \\
French conversation 251-258. Study-abroad courses are required.
\end{tabular} \\
For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 85-98, Teacher Preparation Program.
\end{tabular}

101 Elementary French I (4) ..................................................................................................................................................................Fall Even skills in a communicative context, combined with the study of cultural etiquette and social customs.

102 Elementary French II (3) .........................................................................................................................................................Spring Odd
Continuation of French 101. Passing this class with a good grade will enable students to be successful at the DELF (Diplôme d'études en langue française) A1 proficiency exam. Prerequisite: one year of high school French or French 101.

201 Intermediate French I (3)
Fall Odd
An intermediate course that continues the study of the language in a communicative context with considerable emphasis upon precision and expansion of linguistic skills. Emphasis on the development of cultural understanding and sensitivity with a study of the people's values and beliefs as expressed in their economic, political, and religious systems. Comparison of this culture with our culture in the light of the cultural mandate. Prerequisite: two years of high school French or French 102.
202 Intermediate French II (3) .........................................................................................................................................................Spring Even Prerequisite: French 201 or its equivalent.

204 Literary and Cultural Readings (3)
.Occasional This course continues the development of French language skills, and an understanding and appreciation of Francophone cultures through literary readings with an emphasis on contemporary literature. Prerequisite: French 202 or its equivalent. This course will be taken in an off-campus program; consult the Department of Language Studies for a list of possibilities.

206 French Culture (3)
Occasional
Designed to cover many aspects of the French way of life. Listening and speaking skills will be developed through the classroom activities. Prerequisite: French 202 or its equivalent. This course will be taken in an off-campus program; consult the Department of Language Studies for a list of possibilities.

208 World Literature II (3) ..........................................................................................................................................................Spring Even
See English 318 for course information. [Cross-listed: Dutch 208, English 318, Spanish 208]
251- Conversation (1)......................................................................................................................................................................Fall, Spring
258 These courses are designed to give the student practice in listening and speaking. The content of the courses will be altered each year. The class will meet two times each week. Graded on a pass/no-record basis. Prerequisite: French 201; or permission of instructor.

281- Service-Learning (1-3)..............................................................................................................................................Fall, Spring, Summer
283 See page 37, Service-Learning
341- Special Topics (1-3)
.Occasional
348 These courses will consist of topics not normally covered in other program courses. Specially designed to focus on more specific topics utilizing instructor strengths and consideration of student needs.

391- Individual Studies (1-3) .Fall, Spring, Summer
393 See page 36, Individual Studies

\section*{General Studies}

Associate of Arts Degree Options General Studies Concentration (see page 22 for Associate's Degrees Core Program requirements)
Seven courses that have been designed in consultation with and approved by the registrar to meet specific educational goals of the student.

\footnotetext{
151 World Regional Geography: Peace and Justice on the International Stage (3) Fall
A survey of major geographical regions of the world including politics, economics, and cultures. Emphasis is on the interrelatedness of regions and how peace and justice are linked to human flourishing. [Cross-listed: CORE 265]
}

201 Introductory Geology and Physical Geography (4) .Spring Odd
A general introduction to the physical nature and structure of the solid Earth, including, briefly, its physical geography and a more detailed look at its geology. The environmental implications of these subjects are detailed. Three lectures and one laboratory period of three hours per week plus one overnight field trip and one or two shorter trips. [Cross-listed: CORE 223, Earth Science 201, Environmental Studies 201]

202 Meteorology and Climate Change (3)
.Fall Odd
Provides a general introduction to meteorology and weather. Climate and climate change in Quaternary times to the present are also considered. The implications of an anthropogenically enhanced greenhouse effect will be addressed, with particular attention given to the impact of these changes on the structure and function of ecosystems. Includes one or two field trips to relevant sites in the region. [Cross-listed: Earth Science 202, Environmental Studies 202]

\section*{Health and Human Performance}

General Major- Foundation (common to all emphases): Health and Human Performance (HHP) 101, 206, 207, 208, 308, 325; Biology 203.

Students must select one of the following emphases:
Exercise Science: Foundation; HHP 202, 209, 211; one course from HHP 361, 362, 371, 393. Chemistry 110 and 122 strongly recommended.

General: Foundation; four elective courses from HHP 202, 205, 209, 211, 212, 213, 214, 215, 216, 217, 371, 393. (Note: 212-217 are half courses.)

General Minor- Six approved courses within the HHP course offerings. Courses may be tailored to meet individual goals. The HHP department chairperson must approve the six courses.

Coaching Authorization-Licensure to Coach in the State of Iowa - see page 92. For information on licensure, see web site www.state.ia.us/boee/ doc/faqs_cch.asp.

For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 85-98, Teacher Preparation Program. For a description of the Master of Education program, see page 154.

\section*{I. ACTIVITIES AND INTERCOLLEGIATE SPORTS PARTICIPATION}

As part of the Core Program requirements, every student must complete an activity component that may include participation in intercollegiate athletics. Graded on a pass/no-record basis.

011 Intercollegiate Athletics (.5) Fall, Spring Students participating in intercollegiate athletics will automatically receive this credit through their eligibility by the athletic department. Credit will only be given one time regardless of the number of years and/or sports a student participates in.

\section*{II. CLASSROOM COURSES}

101 Introduction to Health, Physical Education, and Sports Management (3) \(\qquad\) .Fall, Spring Designed to be the entry-level course for those interested in exploring the areas of health, physical education, and sports management. The course will provide the student with an overview of the body of knowledge, the historical background, and career opportunities in each of the areas. The student will also develop and articulate a Christian perspective on health, physical education, and sports management.

202 Substance Abuse and Consumer Health (3) Spring The first half of the course is devoted to introducing the student to the use, misuse, and abuse of drugs. Emphasis is placed on the psychological and physiological effects of drugs. The second half of the course will provide the student with basic health-related information that will aid the student in making sound decisions regarding personal health.

Provides the student with the necessary background in organizing and administering a desirable curriculum in physical education and health (elementary and high school), including intramurals and adaptive programs.

A study of the anatomy of human movement, including the application of physical laws of motion to the human body and how the body functions in and responds to exercise. Biology 203 strongly recommended.

A study of accepted methods used to prevent athletic injuries. Instruction in administering first aid practices in emergencies. Fall semester emphasizes the elementary school child; spring semester focuses on participants in interscholastic sports. Priority will be given to students majoring in HHP or pursing a coaching endorsement. Prerequisite: junior or senior standing; or permission of instructor.

208 Assessment in Physical Education and Health (3) ...............................................................................................................................Fall
A study of elementary statistical procedures, the preparation and administration of physical fitness tests, health assessment procedures, and various athletic skills. A grading system in physical education and health is formulated.

209 Personal and Public Health (3) \(\qquad\) Fall, Summer This course examines the physical, mental, social, emotional, spiritual, and occupational dimensions of health. Emphasis is on the utilization of health information in making good health choices. Satisfies CORE 130 requirement.

This course will focus on the basic science of foods and their components including relationships to health and disease. The implications of personal decision making and behavior change, as well as social, economic, and cultural influences, will be discussed. Does not count toward the biology major. [Cross-listed: Biology 210]

212 Coaching Theory of Basketball (1.5)
Spring
Seven-week course with emphasis on coaching skills, philosophies, and techniques of basketball. Not open to freshmen.

213 Coaching Theory of Track and Field (1.5).
Spring Even
Seven-week course with emphasis on coaching skills, philosophies, and techniques of track and field. Not open to freshmen.
214 Coaching Theory of Volleyball (1.5).......................................................................................................................................Spring Odd
Seven-week course with emphasis on coaching skills, philosophies, and techniques of volleyball. Not open to freshmen.
215 Coaching Theory of Baseball/Softball (1.5)...........................................................................................................................Spring Even
Seven-week course with emphasis on coaching skills, philosophies, and techniques of baseball and softball. Not open to freshmen.
216 Coaching Theory of Soccer (1.5)...............................................................................................................................................Spring Odd
Seven-week course with emphasis on coaching skills, philosophies, and techniques of soccer. Not open to freshmen.
217 Coaching Theory of Football (1.5) .................................................................................................................................................Spring
Seven-week course with emphasis on coaching skills, philosophies, and techniques of football. Not open to freshmen.

281- Service-Learning (1-3). \(\qquad\) Fall, Spring, Summer
283 See page 37, Service-Learning
308 Motor Learning and Development (3).Fall

The course introduces the major concepts of motor control and motor learning as they are expressed across the human lifespan. The course emphasizes the practical application of these theories in teaching, coaching, and therapy settings. The course will also explore how a reformed view of the person informs our understanding of motor learning and the resulting implications for teaching, coaching, and therapy. Prerequisites: Biology 203, HHP 206.

325 Psychosocial Dimensions of Physical Activity (3) Fall This course adds to students' understanding of physical activity by exploring the psychological and sociological aspects of human physical activity. Also, students will demonstrate a Reformed Christian understanding of human movement in discussion of a variety of issues related to health and human performance. Prerequisites: Psychology 201 or 204 or Sociology 201; junior or senior standing.

341- Special Topics (1-3)
Occasional
348 These courses will consist of topics not normally covered in other program courses. Specially designed to focus on more specific topics utilizing instructor strengths and consideration of student needs.

Sport and Exercise in Society and Culture (3). Spring Even This course studies sport, exercise, and physical activity within the contexts of society and culture by investigating and analyzing contemporary views and a Reformed perspective. Including a cross-cultural element, an evaluation of physical culture will be examined between the United States and Scotland with the semester culminating in a two-week trip to Scotland in May to experience the country's sport and societal customs. Activities include: experiencing Highland Games events, curling, hiking in the Highlands, touring a Glasgow club soccer stadium, walking the home of golf at St. Andrews, attending a cathedral worship service, volunteering at a Glaswegian church, learning about John Knox and the Scottish Reformation, sightseeing castles and cathedrals, traversing lochs and battlefields, and exploring the cities of Edinburgh, Glasgow, Stirling, Inverness, and St. Andrews. [Cross-listed: CORE 288]

361 Field Experience in Physical Therapy (3). .Fall, Spring
Designed to give students enrolled in the pre-physical therapy program a field experience in physical therapy. The student will work with a registered physical therapist for three hours each week of the semester. This course is open to junior and senior students enrolled in the pre-physical therapy program.

362 Field Experience in Sports Management or Strength and Conditioning (3). Fall, Spring Designed to give students the opportunity to do a practicum in a sports management or strength and conditioning setting. The student will work under the supervision of a professional sports management or strength and conditioning leader for three hours each week of the semester.

371- Health, Physical Education, Sports Management Internships (3-9) \(\qquad\) Fall, Spring, Summer Intended to provide the HHP major the opportunity to apply knowledge principles and skills gained from the classroom into a workplace environment. Prerequisite: completion of no less than seven courses in the major. See HHP internship coordinator for approval.

391- Individual Studies (1-3) \(\qquad\) Fall, Spring, Summer
393 See page 36, Individual Studies

\section*{History}

General Major- Foundation (common to both emphases): History 201 or 230; one course from History 212, 213, 214; History 280, 380; History 388 or 389.

Students must select one of the following emphases:
General: Foundation; eight additional history courses above 214, at least three of which must be at the 300-level (must choose at least two courses from History 202, 301, 306, 307, 308 and at least three courses from History 220-226, 230, 319, 321, \(326,327,328,329,335)\).

Museum Studies: Foundation; History 260, 365; seven history courses above 214, at least three of which must be at the 300 -level (must choose at least two courses from History 202, 301, 306, 307, 308 and at least three courses from History 220-226, 230, 319, 321, 326, 327, 328, 329, 335); Business Administration 100; Communication 228 or 260; Political Science 214 or 245; one course from Art 207, 208, 209, 240, Theatre Arts 103. Education 101 or Psychology 204 recommended, but not required.

For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 85-98, Teacher Preparation Program.

201 Survey of American History (3) \(\qquad\) Fall
A survey of the main contours of American history from 1750 to the present. CORE 140 recommended.
202 Themes in American History (3) Spring This course leads students through historical inquiry of selected main themes in American society such as sports, war, politics, and culture. Students will gain an understanding of the historical and cultural development of these themes in the contemporary world. CORE 140 recommended.

212 History of the Muslim World (3). .Spring Odd
A survey of the history of the Muslim world focusing on the Middle East, North Africa, and Southwest Asia. Primary emphasis is on the development and features of Muslim society and culture, the relations between Muslim and Western civilizations, and the sources of tension in the modern Muslim world. Not open to first-semester freshmen. Prerequisite: CORE 140. [Cross-listed: CORE 272]

213 Latin America (3). .Fall Odd
A selective survey of the history of Latin America from pre-Columbian times to the present. Attention will be given to the indigenous and
colonial origins of Latin American culture and society. Twentieth-century developments will be explored through a series of case studies. Not open to first-semester freshmen. Prerequisite: CORE 140. [Cross-listed: CORE 273]

\section*{214 East Asia (3)}

Spring Even
The history of East Asia, paying special attention to China, Japan, and Indonesia in the early-modern and late-modern periods. The primary emphasis will be on east Asian responses to the challenges represented by Western ideas, commerce, and imperialism in its various expressions. Not open to first-semester freshmen. Prerequisite: CORE 140. [Cross-listed: CORE 274]

This course surveys the development of ancient Western civilization from Egypt and Mesopotamia, through Greek and Roman civilizations, to the decline of the Roman empire. Among the themes focused on in the course are the diversification of culture and the migration of people, the development and diffusion of ideas, arts and technology, resources, and the formation of a "Western culture" up to the fall of Rome. Prerequisite: CORE 140.

221 Medieval Europe (3)
.Spring Odd Surveys Medieval Europe from the decline of the Roman empire circa 400 A.D. to the emergence of the Renaissance circa 1350 A.D. This survey focuses on the development of European civilization, particularly the formation of political, economic, ecclesiastical, and intellectual structures, and the relations between these. Prerequisite: CORE 140.

222 Witch Hunts, Wars, and Reformations (3).
Spring Even The course explores European history and cultures from the late medieval origins of religious reform movements to the Treaty of Westphalia in 1648. Themes such as humanism, the Renaissance, the Protestant and Catholic Reformations, the Witch Hunts, the Wars of Religion, and the emergence of the secular state will be included. Prerequisite: CORE 140.

223 Early Modern Europe (3).
.Occasional
The history of Europe from the close of the Reformation period to the French revolution and Napoleonic wars, with particular reference to the rise of modern science, the emergence of the European states system, and the thought of the enlightenment. Prerequisite: CORE 140.

224 Age of Empires: 19th Century Europe (3).
Fall Even
The history of Europe from the Congress of Vienna to the outbreak of the First World War in 1914. The primary emphasis will be on the cultural, political, social, and economic developments in this period, with particular reference to the relations between the great powers and between Europe and other parts of the world. Not open to freshmen, except by permission of the instructor. Prerequisite: CORE 140.

225 War and Peace: 20th Century Europe (3)
.Spring Odd
The history of Europe from the immediate pre-First World War period to the end of the post-Second World War period as marked by the reunification of Germany and the 1991 Maastricht Treaty on European Union. The primary emphasis will be on the cultural, political, social, and economic developments in this period, with particular reference to the destructiveness of nationalism, the cold war, and the processes of European integration. Prerequisite: CORE 140.

226 Themes in European and World History (3).
..Occasional
This course leads students through historical inquiry of main themes in European and world history, including global interactions and encounters, various cultural phenomenon, and multi-confessional religious reformation. Students will gain an understanding of the historical and cultural developments of these themes in the contemporary world, and the process by which historical themes become relevant in the contemporary world. Prerequisites: CORE 140, 145; or by permission of instructor.

230 Survey of Canadian History (3)
Occasional A survey of Canada's history from the age of discovery and exploration to the present. The various forces and individuals that contribute to the making of Canadian nationhood will be stressed, but due time will also be devoted to the racial and sectional issues that have worked against national unity. Prerequisite: CORE 140; or permission of instructor.

Introduction to Museum Studies (3).
.Occasional
This course will provide introductory exposure to the main aspects of museum work. Topics will include structure and administration, funding and government relations, function, and exhibit design and display. Students will also address ethical, moral, and legal issues within the field from the perspective of a Christian historian. Prerequisites: CORE 140; History 280.

Introduction to Historical Studies (3) Spring An introduction to the basic skills, methods, and resources of historical scholarship including the types of historical literature and scholarship, biblical foundations for historical interpretation, historiographical schools of interpretation, and uses of historical scholarship. Satisfies Core Program writing-intensive requirement. Prerequisite: CORE 140; or permission of instructor.

301 Colonial North America (3)
...Fall Odd
An exploration of 16th and 17th century European colonial endeavors with particular attention to comparative cross-cultural encounters between Native Americans, Africans, and Spanish, French, Dutch, English, and Swedish colonists. Prerequisite: CORE 140. Some early modern European history recommended.

306 From Puritanism to Pluralism: Religion in American Culture (3). ...Spring Odd Studies the development of religious movements and beliefs in the context of American history and culture. More specifically, this course examines the influence of religion in forming American social, political, and intellectual culture as well as how those aspects of American culture have shaped religious belief and practice. A special theme will be the relationship between the Reformed tradition and American culture. Previous study of American history is advised. Prerequisite: CORE 140. History 201 recommended.

307 American Civil War and Reconstruction Era (3). .Fall Even This course examines the period in United States history from the 1820 s through 1880 focusing upon the causes and significance of the Civil War and its aftermath, Reconstruction. The course will examine the social, political, military, economic, and diplomatic issues of the period. A field trip to Civil War battlefields is an integral component of the class. Prerequisite: CORE 140. History 201 recommended.

308 Media and Power: A History of Modern American Culture (3) . Spring Even Examines the influence of mass media on the development of modern American culture. Typical topics include the role of the media in the resurgence of the Ku Klux Klan, the FDR administration, the civil rights movement, the 1960 presidential election, the counterculture movement, Vietnam, and the Gulf War. Prerequisite: CORE 140. History 201 recommended.

319 Modern Middle East (3)
.Spring Even
An in-depth study focusing on developments in the Middle East during the 20th century. Topics include de-colonization; "modernization" and the tension between western ideologies and Islam; Palestine, Israel, and the peace process; regional and global relations during and after the Cold War; the impact of the oil economy; urbanization; gender and family relations; and contemporary issues like water resources, ethnic conflict, human rights, and leadership change. Prerequisites: CORE 140; History 212; or permission of instructor.

321 The Crusades: History and Memory (3). ...Spring Odd This course provides a solid historical foundation in the crusading movement and the role that crusades played in the development of the medieval church and theology. This course will also explore, evaluate, and analyze the process by which historical events, and more importantly the "memory" of those events, become relevant in, and even appropriated by, the modern world (specifically the modern West and Middle East). Finally, this course equips students with the necessary research skills of the historian with a major research project. Prerequisites: CORE 140, 145; or by permission of instructor.

326 Thought and Society in Modern Europe (3) .. Occasional This course examines the main trends in the development of Western (i.e. European and North American) thought from the French Revolution to the rise of post-modernism. The course focuses on the general theme of changing views about the relationships between God, humanity, and nature, with special attention given to developments in, and the interaction between, philosophy, theology, social theory, and natural sciences. These themes are examined in relation to changing religious commitments, especially secularization, and social structures like industrialization. Prerequisites: CORE 140. Previous study of modern European or U.S. history or modern philosophy recommended.

327 Topics in the History of the British Isles (3) .Fall Even Special attention is given to the distinctive histories and national cultures of England, Ireland, Scotland, and Wales, the origins of Great Britain, the British experience of American independence, the acquisition and loss of empire, the crisis of 1940, and the historical origins of contemporary constitutional problems. Prerequisite: CORE 140.

328 Forward to Revolution: Russian History and Culture (3) \(\qquad\) ..Fall Odd
This class provides a solid historical foundation in Russian history through the lens of Russian literature with a secondary focus on art, music, and dance. Students will gain a better understanding of how the arts can become a vehicle for social commentary and criticism in a highly autocratic society where the government has placed sever limits on direct political and social discourse. Students will examine how a non-Western tradition of Christianity and other world and life view shaped and inspired historical and cultural development. Prerequisites: CORE 140, 145; or by permission of instructor.

329 Dante's Divine Comedy and the Italian Renaissance (3) Fall Odd This course begins as an in-class seminar during fall semester and concludes with a week-long trip to Italy in January. After spending several of our on-campus weeks on Dante's Comedy, we will explore the transition between the medieval period and the Italian Renaissance, looking at how politics, art, business, science, and literature developed together under a Catholic worldview in Florence. After finishing the classroom part of the course, we will take a great trip to Florence, where we will see and study the city in person. [Cross-listed: CORE 289]

335 History of Calvinism (3) \(\qquad\) .Occasional A study of historic Calvinism as it was expressed by John Calvin and those who followed in his name. Explores the permutations and applications of Calvinism through time including, but not limited to, Counter Remonstrants, English and American Puritans, Hungarian Calvinists, Afrikaners, and the modern Dutch Calvinist movement. Prerequisites: CORE 140, 200. Some European history recommended.

\begin{abstract}
341- Special Topics (1-3)
Occasional
348 These courses will consist of topics not normally covered in other program courses. Specially designed to focus on more specific topics utilizing instructor strengths and consideration of student needs.

365 History Internship (3)
Occasional This course is designed to give students the opportunity to practically apply the concepts, theories, and knowledge they have acquired in the classroom in a professional setting. Students will be supervised by a faculty monitor and on-site supervisor. Prerequisites: junior or senior standing and approval of the department; Business Administration 100.

380 Historiography (3) ...........................................................................................................................................................................................Spring
This course covers the nature and meaning of history and the nature of the historian's task and responsibilities. Emphasis is on review and evaluation of the various schools of history and of the philosophies of leading historians. Prerequisite: CORE 140 . History 280 and advanced academic standing recommended.

388 History Seminar-United States History Emphasis (3) Fall Focuses on writing a research paper about some aspect of the history of the United States. Students select a topic for in-depth study in order to implement and develop various skills learned in previous history courses. Emphasis is on mature evaluation of evidence, developing a historical interpretation in light of a biblical understanding of history, and constructing a narrative depicting the results of research. Open to juniors and seniors only. Prerequisites: CORE 140; History 280, 380.

389 History Seminar-World History Emphasis (3) Fall
Focuses on writing a research paper about some aspect of world history. The course description and requirements are the same as History 388. Open to juniors and seniors only. Prerequisites: CORE 140; History 280, 380.

391- Individual Studies (1-3) .........................................................................................................................................................Fall, Spring, Summer
393 See page 36, Individual Studies

\section*{Individual Studies}

The individual studies major provides an opportunity for specially qualified students to plan a specific program in an area of study not formally developed by the university as a major. The individual studies major is intended for a limited number of students who are self-motivated and mature, in addition to having the ability to articulate clear and concise goals, work independently, and carry a project to completion. A student desiring to complete an individual studies major must submit a proposal to the registrar no later than the end of the junior year. The proposal must include a rationale for why an individual studies major meets the educational goals of the student, and a sequence of courses that meet those goals and will make up the student's major. This major should be no less than 45 credits that ensure depth and breadth of understanding in the area(s) selected. Students who wish to plan an individual studies major should see the registrar to discuss the specific requirements and policies (students must have a 2.50 GPA with a minimum of 30 credits to be eligible). The registrar will work with the student to find a faculty member to assist the student in writing the proposal and serve as faculty advisor for the student. If, at any time, it becomes apparent that the student is not qualified to continue or is not carrying out the program as approved, the faculty advisor and/or the registrar can terminate the individual studies major.
\end{abstract}

\section*{281 Service-Learning (1).}

Fall, Spring, Summer
Open to qualified students with permission from the department, director of service-learning, and the registrar. See page 37, ServiceLearning for application procedures and policies governing service-learning courses. Graded on a pass/no-record basis.

282 Service-Learning (2)
.Fall, Spring, Summer
Open to qualified second semester freshmen, sophomores, juniors, and seniors with permission from the department, director of ser-vice-learning, and the registrar. See page 37, Service-Learning for application procedures and policies governing service-learning courses. Graded on an A-F scale.

283 Service-Learning (3) ..............................................................................................................................................................Fall, Spring, Summer Same as Service-Learning 282.

391 Individual Studies (1) ...........................................................................................................................................................Fall, Spring, Summer Open to qualified students with permission from the department and the registrar. See page 36, Individual Studies for application procedures and policies governing service-learning courses. The student will study a topic not normally included in regular course offerings that is interdepartmental in nature or that has a service-learning component. Graded on a pass/no-record basis.

392 Individual Studies (2).
Fall, Spring, Summer Open to qualified juniors and seniors with permission from the department and the registrar. See page 36, Individual Studies for application procedures and policies governing service-learning courses. The student will study a topic not normally included in regular course offerings that is interdepartmental in nature or that has a service-learning component. Graded on an A-F scale.

\section*{Kuyper Honors Program}

The Kuyper Honors Program (KHP) is an honors program that invites highly motivated and academically strong students to participate in a hospitably challenging learning community. In this program, Kuyper Scholars will be introduced to foundational Christian and Reformed thought and will actively engage in Christian research and scholarship in a supportive and challenging community. Throughout their undergraduate experience, participating students work closely with the KHP faculty mentors to reach their goals. The program seeks to prepare our Kuyper Scholars for Kingdom service as potential leaders in the Christian community and the rest of the world while also enriching the academic atmosphere for all students and faculty at Dordt University. The Kuyper Honors Program is co-directed by Dr. Abby Foreman and Professor Donald Roth in consultation with a committee.

Admission to the Program Student admission into the Kuyper Honors Program depends on an entrance essay, letters of recommendation, and demonstrated academic ability. (For new freshmen, academic ability is demonstrated by letters of recommendation, a composite ACT score of 28 or higher, and a cumulative high school GPA of at least 3.50. For students with at least one semester of university work, requirements include two letters of recommendation from university faculty, a committee-approved academic record, and a GPA of at least 3.25.) Of primary importance are the entrance essay and letters of recommendation; these must demonstrate the student's character and potential for academic excellence in the pursuit of serviceable insight in the area of Christian scholarship. Interested freshman students should apply through the university admissions office. Students with a semester of university work should contact a Kuyper Honors Program co-director.
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Course Requirements - Kuyper Honors Program General Minor-
KHP 110
KHP }150\mathrm{ or CORE 150, KHP }33
KHP }200\mathrm{ or CORE 200, KHP }33
KHP }399\mathrm{ or CORE 399, KHP }33
KHP Contracts (9 credits) - credits earned in 1-3 credit increments, depending on work completed
- Scholarly Service KHP 310-3
- Scholarship KHP 320-3
- Shared Learning KHP 330-3, 335, 336, }33

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    For each activity that Kuyper Scholars propose to engage in to meet one of these contract requirements, the student (or students, in the case of
    KHP 331-3) will be required to submit documentation and present a brief oral defense. This process will require students to explain what they
    hope to accomplish through the experience and how that experience will meet the requirements of the particular KHP contract applied for.
 The course introduces you to the ways in which we seek to communicate in the public square in order to create, maintain, and change culture. Emphasis is placed on research, listening, and rhetorical analysis applied to oral and written communication. You will also engage the question of the concept of Christian scholarship, worldview and the impact of a Christian perspective in our scholarly calling. Substitutes for CORE 120 and CORE 110 in the Core Program. Prerequisite: admission to KHP or an English ACT of 30 and permission of instructor.

150 Biblical Foundations, Theology, and Imagination (3). Spring
In this course, we will survey biblical revelation in its progressive unfolding of key ideas and institutions against their cultural-historical background and within their covenant setting. We emphasize the normativity of Scripture that reaches its fullness and fulfillment in Christ for all academic work. You will also engage the question of how to root your identity in the metanarrative of Scripture as well as some emphasis on Biblical theology. Substitutes for CORE 150 in the Core Program. Prerequisite: admission to KHP; other interested students are welcome and encouraged to seek permission of instructor.

200 Christian Philosophy, Ethics, and Humanity (3).
Using figures from the history of Western philosophy as our guide, this class will challenge you to examine your own life, see why you do what you do, and evaluate how your actions are shaped by certain religious commitments. It will demonstrate the need for wisdom and discernment and will begin to equip you with the tools you will need (critical thinking, self-reflection, clear communication) to discern how we are called to live as Christian disciples in today's day and age. You will further engage the question of how practice shapes your identity, how we understand our identity as image-bearers, and how we can discern deformative spirits of our age and respond to them as Christian disciples. Substitutes for CORE 200 in the Core Program. Prerequisite: admission to KHP; other interested students are welcome and encouraged to seek permission of instructor.

310-3 Scholarly Service Contracts (1-3). .Fall, Spring, Summer A key aspect of the calling to Christian scholarship is the need to put your gifts to work in service to your community, be that within the institution or broader society. As Kuyper Scholars, you will actively contribute to the community through practical, meaningful service. These opportunities may take the form of working with a Dordt University faculty member on their research projects or working with a campus department or community nonprofit on a project to advance the mission of the organization.

The core of the calling to Christian scholarship is learning to join the broader scholarly conversation taking place in society. As Kuyper Scholars, you will work with a Dordt University faculty member in contracted learning experiences, typically as a supplement to a course you are enrolled in within your discipline. You will be able to guide your individual learning and scholarship on academic topics of your choosing. You will be encouraged and expected to submit your works of scholarship for publication or presentation in appropriate scholarly venues.

330-3 Shared Learning Contracts (1-3) \(\qquad\) Fall, Spring, Summer The calling to Christian scholarship is a call to lifelong learning. As Kuyper Scholars, you will join together with one another and with Dordt University faculty members to engage in study that mirrors the way that learning occurs outside of the academy: through book discussions, focused studies, or special experiential learning opportunities that encourage you to explore your passion for the task of learning.

335 Shared Learning Contract: Theology and Imagination (1) .Fall, Spring You will expand on the topics of CORE 150 by engaging the question of how to root your identity in the metanarrative of Scripture as well as some emphasis on Biblical theology.

336 Shared Learning Contract: Ethics and Humanity (1) Fall, Spring
You will expand on the topics of CORE 200 by engaging the question of how practice shapes your identity, how we understand our identity as image-bearers, and how we can discern deformative spirits of our age and respond to them as Christian disciples.

337 Shared Learning Contract: Engaging Culture (1) .Fall, Spring
In this course, we will expand on the topics of CORE 399 by engaging further with readings that focus on engaging culture from a Christian worldview.

399 Engaging Culture as Christian Scholars (3).

\section*{.Spring}

This is an inter-disciplinary, capstone course that helps you reflect upon issues you encounter in your life, evaluate them from a Christian perspective, and practically engage what it means to live out your biblical perspective as a disciple of Christ. You will develop detailed reflections on your personal commitment to your Christian calling as well as a summative engagement with your education in the Core program. Substitutes for CORE 399 in the Core Program. Prerequisites: CORE 140; KHP 150, 200; second-semester junior or senior standing.

\section*{Latin}

101 Elementary Latin I (4).
Fall Odd
An introductory study of the language through which students are taught how to understand and translate Latin prose and poetry, while becoming familiar with Latin grammar and syntax. The course will also focus on vocabulary acquisition, features of Roman history, life, and culture, as well as the nature of the impact of Latin on the English language.
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102 Elementary Latin II (3)
(3) ..................................................................................................................................................
.Spring Even

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    Continuation of Latin 101. Prerequisite: Latin 101 or one year of high school Latin with permission from the instructor.
201 Intermediate Latin I (3) .............................................................................................................................................................Fall Even
    Students will further a foundational understanding of verb conjugations and noun and adjective declensions, expand their Latin vocabu-
    lary, develop an understanding of Latin grammar, and sharpen Latin reading skills in the areas of classical prose and poetry. Prerequisite:
    Latin 102 or two years of high school Latin with permission from the instructor.

391- Individual Studies (1-3) \(\qquad\) Fall, Spring, Summer
393 See page 36, Individual Studies

\section*{Legal Studies}

General Minor- Communication 302, 314; Criminal Justice 325; Philosophy 202; Business Administration 301, 302 or Criminal Justice 323, 324.

\section*{Linguistics}

Interdisciplinary Minor-Linguistics 201, 301, 393; two courses from Dutch 102, 201, English 335, 336, French 102, 201, Biblical Languages 112, 211, Latin 102, 201, Spanish 102, 201; two courses from Communication 314, CORE 270, 281, 283, Education 355, English 317, 318, Philosophy 202, Psychology 218, 362, Theology 221.

Introduction to Linguistics (3) Spring
An introduction to the basic principles of linguistics, including phonetics (the sounds of language), morphology (the words of language), syntax (the sentence patterns of language), and sociolinguistics (how language functions in society). Data from different dialects of English and a variety of other languages will be used. Special attention will be given to a biblical view on language. No previous knowledge of linguistics is required.

\begin{abstract}
301 Applied Linguistics and English Phonology (3) Fall
An in-depth study of specific areas of linguistics, such as neurolinguistics (brain and language), psycholinguistics (language acquisition), computational linguistics (computer processing and language), and language change (how language has changed and still changes). One-third of the course is geared at the special interests of the students. ESL students will study the phonology (the study of sound patterns) of English and learn how to teach English pronunciation. Other students do research in a linguistic area of their interest, culminating in a research paper. Prerequisite: Linguistics 201.
\end{abstract}

391- Individual Studies (1-3) \(\qquad\) Fall, Spring, Summer
See page 36, Individual Studies

\section*{Mathematics}
\begin{tabular}{|c|c|}
\hline General Major- & Computer Science 115; Mathematics \(152,153,201,203,212,291,303,304,311,390,392\); one three credit mathematics course numbered above 201; one course from Mathematics 341-348. \\
\hline \multicolumn{2}{|l|}{\[
\begin{aligned}
\text { Mathematics/Computer Science Major- } & \text { Computer Science 115, 116, 120, 204, 205, 215, 315, 340; one course from Computer Science 290, } 319,331 ; \\
& \text { Mathematics } 152,153,203,207,209,212,304,390 \text {; one course from Mathematics 201, 204, } 215 \text { and } 216, \\
& 303 .
\end{aligned}
\]} \\
\hline \multicolumn{2}{|l|}{General Minors-} \\
\hline Applied Mathematics: & Mathematics 152, 153, 291; three courses from Mathematics 201, 203, 204, 209, 303, 315; Statistics 131, 133. \\
\hline Mathematics: & Mathematics 152, 153, 203, 212, 291; one course from Mathematics 303, 304, 311, 315; one three credit mathematics course numbered above 201. \\
\hline \multicolumn{2}{|l|}{For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 85-98, Teacher Preparation Program.} \\
\hline
\end{tabular}

\section*{100}

Mathematics for College (4)
Fall, Spring
This course prepares students for college-level mathematics through the study of algebra and geometry. The use of mathematical models will be woven throughout the course, providing students with the opportunity to see, understand, and use mathematics in a variety of applications. Also woven throughout is the understanding that mathematics is a creation of God, and must be used appropriately and responsibly. A one-hour tutorial session twice per week required. Prerequisite: ACT mathematics score below 18 or ALEKS score below 30 .

108 Number and Operations for the Elementary Teacher (3)
Fall Odd, Spring
The course seeks to build a deep and flexible understanding of problem solving, number systems (wholes, rational, and integers), computational arithmetic, number theory, and algebra necessary for elementary and middle school teachers. The topics show that mathematics is part of God's creation and can be used to help understand and care for the creation. Prerequisite: elementary education major or middle school mathematics endorsement; ACT mathematics score of 18 or higher or Mathematics 100 .

115 Algebra for College (3) \(\qquad\) Fall, Spring
This course is a study and review of standard algebraic topics as a preparation for calculus. Main topics include linear and quadratic equations, functions, exponents, logarithms, rational expressions, and trigonometry. Solving equations, problem solving, graphing techniques, and the concept of function are unifying themes for the course. The main emphases include understanding the language of algebra and finding patterns and relationships in the structure of algebraic properties. While the course reviews essential rules for algebra, the focus will also be on practical, real-world applications of algebraic principles. Prerequisite: ACT mathematics score of 18 or higher or ALEKS score of 30 or higher or Mathematics 100.

116 Functions and Trigonometry (1)....................................................................................................................................................................... Fall
This course is a study and review of functions and trigonometry as a preparation for calculus. Main topics include notation, composition, and applications of functions as well as trigonometry including the unit circle, trigonometric functions, and identities. The concept of function is the unifying theme engaged through algebraic thinking, problem solving, and graphical interpretation. Pre or corequisite: Mathematics 115 or equivalent.

\section*{128 Geometry for the Elementary Teacher (1.5).}
.Spring
The course seeks to build a deep and flexible understanding of geometry and probability necessary for elementary and middle school teach-
ers. The topics show that mathematics is part of God's creation and can be used to help understand and care for the creation. Prerequisite: elementary education major or middle school mathematics endorsement; ACT mathematics score of 22 or higher or Mathematics 100 or Mathematics 108.

148 Financial Mathematics (4)
This course covers topics in interest theory including interest, force of interest, annuities, and amortization as well as basic concepts in derivatives markets including stocks, bonds, calls, and spreads. Advanced topics in the course include progressing annuities, duration, convexity, immunization, and swaps. The course includes discussion of Christian perspectives on investments and risk management. This course also serves as preparation for Actuarial Exam FM/2. Prerequisite: an ACT mathematics score of 22 or higher or Mathematics 115 or ALEKS score of 55 or higher. [Cross-listed: Statistics 148]

149 Explorations in Modern Mathematics (3) Spring This course is focused on exploring college-level mathematics relevant for all students, regardless of discipline. We will investigate modern mathematical topics including number theory, modeling, fractals, infinity, probability, making meaning from data, and decision-making. Mathematical thinking, reasoning, and pattern discovery will be particularly emphasized. A guided discovery approach will be utilized, and we will discuss how a Reformed perspective impacts our view of the quantitative world. Prerequisite: ACT mathematics score of 22 or higher or one course from Mathematics 100, 108, 115.

152 Calculus I (4) ...................................................................................................................................................................................................... A study of the basic concepts and techniques of calculus for students in all disciplines. Topics include limits, differentiation, integration, and applications. This course is intended for students without any previous calculus credit. Prerequisite: grade of C- or higher in Mathematics 116 or equivalent or ALEKS PPL score of 70 or higher, or ACT mathematics score of 27 or higher.

153 Calculus II (4) \(\qquad\) .Fall, Spring Continuation of Mathematics 152; a study of transcendental functions, integration techniques, Taylor series approximations, calculus in polar coordinates, vectors, calculus of vector valued functions and applications of calculus. Students with one semester of calculus credit should take this course instead of Mathematics 152. Prerequisite: grade of C - or higher in Mathematics 152 or equivalent.

201 Multivariable Calculus (3)
..Spring
A study of differential and integral calculus of functions of several variables, and line and surface integrals. Prerequisite: grade of C- or higher in Mathematics 153.

203 Elementary Linear Algebra (3). Fall
An introductory study of vectors, matrices, linear transformations, vector spaces, determinants, and their applications, with particular emphasis upon solving systems of linear equations. Pre or corequisite: Mathematics 153 ; or permission of instructor.

204 Differential Equations (3)
An introduction to the theory and techniques of solving elementary differential equations and the use of these techniques in applied problems. Prerequisite: grade of C - or higher in Mathematics 153.

207 Number Theory (3).
Spring Even An introduction to the main topics of elementary number theory, including divisibility, prime numbers, factorization congruences, number theoretic functions, and number theoretic equations. Pre or corequisite: Mathematics 212; or permission of instructor.

208 Modern Geometry (3)
Fall Even A study of the basic concepts of modern geometry, both Euclidean and non-Euclidean, with some attention given to finite and projective geometry. Prerequisite: grade of C- or higher in Mathematics 152; or permission of instructor.

209 Numerical Analysis (3). .Spring Odd A study of numerical methods for integration, differentiation, calculus of finite differences, and applications, using the computer. Prerequisites: grade of C- or higher in Mathematics 153; Computer Science 115.

212 Discrete Structures (3)
A study of topics in discrete mathematics that are relevant to computer science and mathematics, including logic and proof, induction and recursion, elementary set theory, combinatorics, relations and functions, Boolean algebra, and introductory graph theory. Prerequisite: grade of C - or higher in Mathematics 152; or permission of instructor.

215 Univariate Probability (2) ...Spring Odd
An introduction to the theory and techniques of general probability and common univariate probability distributions. Topics include but are not limited to basic set theory, introductory probability rules (independence, combinatorials, conditionals, Bayes theorem, etc.), common univariate distributions (e.g., binomial and normal) and expected value/variance. This course, along with Statistics 216, also serves as preparation for Actuarial Exam P/1. Offered first half of the semester. Prerequisite: Mathematics 152. [Cross-listed: Statistics 215]

Multivariate Probability (2)
Spring Odd
An introduction to multivariate probability distributions. Topics include but are not limited to joint probability density functions, conditional and marginal probability distributions, moment generating functions, covariance and correlations, transformations and linear combinations of independent random variables. This course, along with Mathematics 215, also serves as preparation for Actuarial Exam P/1. Offered second half of the semester. Prerequisites: Mathematics 152, 215. [Cross-listed: Statistics 216]

281- Service-Learning (1-3).
Fall, Spring, Summer
283 See page 37, Service-Learning
291 Problem-solving Seminar (1) ..................................................................................................................................................................Fall Odd
Problem-solving is at the heart of doing mathematics. This seminar provides unity to the concepts and approaches learned throughout the mathematics major and minors as it examines various problem-solving techniques. Weekly sessions will be devoted primarily to presenting problem-solving techniques and solving a variety of problems. Open to sophomores, juniors, and seniors. Graded on a pass/no-record basis. Prerequisite: grade of C- or higher in Mathematics 152; or permission of instructor.

303 Advanced Linear Algebra (3)
Spring Even
An advanced study of vector spaces including matrices, linear transformations, orthogonality, the singular value decomposition, and applications. Prerequisite: Mathematics 203; or permission of instructor.

304 Abstract Algebra I (3)
Fall Even
An introduction to algebraic structures focused on rings and fields. Connections between the ring of integers and the ring of polynomials over a field are developed and explored. Brief attention is given to groups. Prerequisite: grade of C- or higher in Mathematics 212; or permission of instructor.

305 Abstract Algebra II (3)
.Spring Odd
A continuation of Mathematics 304. A more extensive study of algebraic structures, focused primarily on groups. If time permits, the Galois correspondence will be explored. This course is offered as an individual studies course unless there is sufficient enrollment to warrant otherwise. Prerequisite: grade of C- or higher in Mathematics 304.

311 Real Analysis I (3)
Fall Odd
An introduction to the content and methods of single-variable real analysis: infinite sets, the real number system, sequences, limits, series, continuity, differentiation, and integration. Prerequisite: grade of C- or higher in Mathematics 212 ; or permission of instructor.

315 Complex Analysis (3). Occasional A study of the complex number system, functions of complex numbers, integration, differentiation, power series, residues and poles, and conformal mappings. Prerequisite: grade of C- or higher in Mathematics 201; or permission of instructor.

341- Special Topics (1-3) ............................................................................................................................................................................Spring Even
348 These courses will consist of topics not normally covered in other program courses. Specially designed to focus on more specific topics utilizing instructor strengths and consideration of student needs.

390 History of Mathematics (3).
.Fall Odd
A survey of the history of mathematics from ancient times into the 20 th century, in cultural context, with attention given to how the philosophy of mathematics relates to the development of mathematics. Prerequisite: grade of C- or higher in Mathematics 152 ; or permission of instructor.

391- Individual Studies (1-3)
..Fall, Spring, Summer
393 See page 36, Individual Studies. Permission of instructor required.

\section*{Medical Laboratory Science}

The medical laboratory science major consists of three years of preparatory courses in biology, chemistry, and mathematics, with a fourth clinical year at an institution with an accredited medical laboratory science program. During the beginning of the third year, students will apply for acceptance to this program. After successful completion of the final year, students will graduate with a bachelor of science degree from Dordt University.

General MajorBiology \(122,125,310,325,326,357\); Biology 225 or 251 ; Chemistry 111, 225, 323 ; Chemistry 321 or 322 ; one course from Biology 304, 335, Chemistry 212, 312; Statistics 131; completion of the one year clinical program at a COMTE-certified college. Chemistry 360 and English 305 strongly recommended.

Students are advised to consult with the medical laboratory science program advisor to help choose other suitable courses in their area of interest.
\begin{tabular}{ll} 
General Major- & Foundation (common to all emphases): Music 103, 103L, 104, 104L, 203, 203L, 204, 206, 207, 208, 215, 222, 315; \\
& Music 19; six semesters of Music 09*; six semesters of large ensembles; Philosophy 206. \\
& *Participation in a European Organ Study Tour fulfills one semester of Music 09.
\end{tabular}

Students must select one of the following emphases:
Church Music: Foundation; Music 210, 211, 305, 313; Music 283 or 393; Theology 241; six semesters of Music 240, 250, 260, or 270 selected in consultation with an advisor; one additional semester of Music \(240^{*}\).
*For students who choose voice as their applied area of study for six semesters, the additional semester of Music 240 will be waived.

General: \(\quad\) Foundation; six credits of electives in music; six semesters of Music 240, 250, 260, or 270 selected in consultation with an advisor.

Music Management: Foundation; Business Administration 200 or 201; Business Administration 205, 206, 207; Business Administration 304 or Political Science 245; Communication 260; Music 373. Business Administration 100, English 305, and private music lessons recommended.

Performance and Pedagogy: Foundation; Music 211; Music 205 or 305; Psychology 204 (fulfills Core Program persons in community requirement); all of the courses in one of the following performance categories:
1. Organ: Six semesters of Music 260; Music 360 and 361; Music 393.
2. Piano: Six semesters of Music 250; Music 350 and 351; Music 326, 393.
3. Voice: Six semesters of Music 240; Music 340 and 341; Music 323, 393.
4. Instruments: Six semesters of Music 270; Music 370 and 371; Music 305, 391; one course in performance area selected from Music 316, 317, 318, 319.
Note: Students in performance and pedagogy must audition for acceptance into the program by the end of the sophomore year. Students in performance and pedagogy are required to present a half junior recital and a full senior recital. They must audition for the recital during the semester or year prior to the recital.

Students intending a career in Music Therapy should elect a general music major and a psychology minor.

\section*{General Minors-}

Church Music:
Music 103, 103L, 104, 104L, 210, 211, 215; Music 019; three semesters of Music 09; six semesters of Music 240, 250, 260 , or 270 selected in consultation with an advisor, including at least one semester of Music 240; two semesters of large ensembles. Music 313 strongly recommended.

Music: \(\quad\) Music 103, 103L, 104, 104L, Music 205; one course from Music 206, 207, 208; a second course from Music 206, 207, 208 or one course from Music 211, 215, 222, 305; three semesters of Music 09 ; any combination of private lessons and ensembles adding up to a minimum of four credits.

Music Performance: \(\quad\) Music 103, 103L, 104, 104L; one course from Music 205, 206, 207, 208; one course from Music 323, 326 or three courses from Music 316-319; three semesters of Music 09; four semesters of lessons in one performance area (240, 250,260 , or 270); one course from Music 340, 350, 360, 370; four semesters of large ensembles.
Note: Music performance minors must audition for acceptance into the minor program no later than the spring semester of their sophomore year. Music performance minors are required to present a half recital. They must audition for the recital during the semester or year prior to the recital.

For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 85-98, Teacher Preparation Program. For a description of the Worship Arts program, see page 152.

\section*{Ensembles (Graded on a pass/no-record basis)}

018 Small Vocal Ensemble (.5) ..... Fall, SpringA variety of small vocal ensembles, including 4th Avenue Singers, Bella Voce, and Canons of Dordt.
020 Chamber Orchestra (.5) Fall, SpringStudy and performance of music for string orchestra.
021 Northwest Iowa Symphony Orchestra (NISO) (.5) Fall, SpringStudy and performance of music for full symphony orchestra.
Classroom Courses
009 Performance Class (0) ..... Fall, Spring
Concert and recital attendance; presentations of special topics related to music.
103 Music Fundamentals (3) ..... Fall
skills in notation, analysis, and composition as well as exposure to basic music literature.
103L Ear Training I (1) ..... Fall
The development of basic skills in the reading and notation of rhythm and of diatonic melodies in major and minor, in hearing and playing primary triads, and in identifying major and minor scales and simple intervals. Corequisite: Music 103 or advanced placement.
104 Diatonic Harmony (3) ..... SpringContinuation of Music 103 through all aspects of diatonic harmony. Prerequisite: Music 103 or advanced placement.
104L Ear Training II (1). ..... Spring
Continuation of Music 103L. The further development of skills in the reading and notation of more complex rhythms and of diatonic melo- dies, in singing in alto clef, in hearing and singing all simple diatonic intervals, in hearing and singing all diatonic triads, and in identifying major, minor, and some modal scales. Prerequisite: Music 103L or advanced placement.
203 Chromatic Harmony (3) ..... FallContinuation of Music 103-104, with focus on advanced and chromatic harmony. Prerequisite: Music 104 or advanced placement.
203L Ear Training III (1) ..... FallContinuation of Music 104L. The further development of skills in the reading and notation of complex rhythms and chromatic melodies,in singing in both alto and tenor clef, in hearing and singing compound intervals, in identifying major, minor, modal, and whole tone scales,and in reading figured bass and lead sheet. Prerequisite: Music 104L or advanced placement.
A study of musical theories, compositional techniques, and literatures of the 20th and 21st centuries with emphasis on the development of personal commitments to and strategies for promoting a Christian vision of life as a musician. Prerequisite: Music 203 or advanced placement.
205 Introduction to Music Literature (3).

\section*{Spring Even}
A survey of the basic repertoire and of masterpieces in several genres (art songs, symphonies, concerti, major choral works, etc.), involving extensive and intensive listening, and study of style and form.
206 Music History and Literature I (2)
Fall Even Study of the literatures, cultural contexts, and intertextual relationships of Western music, from Antiquity through the 15th century. Prerequisite: Music 104; or permission of instructor.
207 Music History and Literature II (2). .Spring Odd Study of the literatures, cultural contexts, and intertextual relationships of Western music, from the 15th through the 18th century. Prerequisite: Music 104; or permission of instructor.

Music History and Literature III (2) Study of the literatures, cultural contexts, and intertextual relationships of Western music, from the 18th through the 19th century. Prerequisite: Music 104; or permission of instructor.

210 History of Music in the Church (3) ment with pertinent repertoire. Students will gain a historical understanding of the music of the church, from chant to the present day, with concentration on Luther and Calvin's contributions to congregational song, psalmody, and hymnody. The course will expose students to
a vast repertoire of music for congregations, choirs, instruments, and soloists, and inform students' historical perspectives, provide insight, and equip them with skills for service as church musicians in the 21st century.
\begin{tabular}{|c|c|}
\hline \multirow[t]{6}{*}{211} & Worship and Liturgy (3) ......................................................................................................................................Spring Even \\
\hline & A study of the various liturgical worship practices of Christian denominations, with primary focus on music in the Reformed denomination \\
\hline & Experiences such as field trips and participation in various Christian worship practices will deepen the student's familiarity with liturg \\
\hline & and practical (musical) skills needed in a worship context. Students will receive instruction on planning music for worship, gain expo \\
\hline & a variety of materials and methods, and cultivate their own musical skills by designing liturgies, culminating in the development \\
\hline & Reformed philosophy of church music. The course will help to prepare students to serve aptly in a church setting. \\
\hline
\end{tabular}An introduction to conducting technique.
222 World Music (3) Spring EvenExamination of music heard in various contemporary world cultures, its aesthetic and stylistic aspects as well as its functions and underpin-ning ideas and values. [Cross-listed: CORE 278]
281- Service-Learning (1-3) Fall, Spring, Summer
See page 37, Service-Learning
305 Orchestration (3) ..... Spring OddA study of transposition, instrumental ranges, and balance by arranging keyboard and choral works for instrumental ensembles.
306 Music and Digital Technology (3) ..... Spring Odd
The course surveys modern uses of digital technology relating to sound and develops skills relating to the most common types of manipulat- ing digital sound.
312 Teaching General Music (3). ..... Fall Even
Teaching techniques and materials for the prospective music educator. This course will address philosophical foundations, content, meth- odologies, materials, technologies, and curriculum development for K-12 general music. Prerequisite: Education 201 or 203; or permission of instructor.
313 Choral Music Education (3) Fall Odd
Teaching techniques and methods for the prospective vocal music educator. Designed for those preparing to teach choral music in elemen- tary and secondary schools, this course also deals with repertoire selection and rehearsal planning and techniques, and is therefore suitable for those preparing to enter the field of church music. Prerequisite: Education 201 or 203; or permission of instructor.
314 Instrumental Music Education (3) ..... Fall Even
Teaching techniques and materials for those planning to teach elementary and/or secondary instrumental music. Prerequisite: Education 201 or 203; or permission of instructor.
315 Advanced Conducting (2) Spring EvenContinued study of conducting with attention to specific choral and instrumental techniques. Prerequisite: Music 215.
341- Special Topics (1-3) ..... Occasional
348 These courses will consist of topics not normally covered in other program courses. Specially designed to focus on more specific topicsutilizing instructor strengths and consideration of student needs.
373 Music Management Internship (1-3) ..... Fall, Spring Intended to provide the music management major the opportunity to apply the knowledge, principles, and skills gained in the classroom in an actual music management environment. Prerequisite: junior or senior status; 2.00 minimum GPA.
391- Individual Studies (1-3)

\(\qquad\)
Fall, Spring, Summer
393 See page 36, Individual Studies
Pedagogy
316 Brass Pedagogy (1) ..... Fall Even
Methods of teaching brass instruments.
317 Woodwind Pedagogy (1) ..... Spring Odd
Methods of teaching woodwind instruments.
318 String Pedagogy (1) ..... Spring Even
Methods of teaching string instruments.
1).Fall OddMethods of teaching percussion instruments.
323 Vocal Pedagogy (2).

\(\qquad\)
Spring EvenMethods of teaching voice.326 Piano Pedagogy and Literature (3).OccasionalStudy of techniques and methods of teaching piano and survey of literature for the piano.

\section*{Private Instruction}
Private instruction is available to music majors and non-majors in the following areas. Instrumental lessons will be transcripted indicating the specific instrument (e.g., trumpet or violin). All lessons are graded on an A-F basis and can be repeated for credit each semester.
\(\qquad\)04 Group Voice Lessons (1)Fall, Spring
05 Group Piano Lessons (1) ..... Fall, Spring
07 Group Instrumental Lessons (1) ..... Fall, Spring
19 Piano Proficiency (0 credit) ..... Fall, Spring
Passing the piano proficiency requirement is necessary for certain majors and minors in music. Piano proficiency is demonstrated by passinga test administered by the music department. Preparation for this test may be gained through taking piano lessons.
240 Private Voice Lessons (1). ..... Fall, Spring
250 Private Piano Lessons (1). ..... Fall, Spring
260 Private Organ Lessons (1) ..... Fall, Spring
270 Private Instrument Lessons (1) ..... Fall, Spring
280 Composition Lessons (1) ..... Fall, Spring
Admission to give a half or full recital is by audition; dates of the qualifying juries are posted in the music building. Students approved to give a half or full recitalshould register for the following courses. Note: the regular lesson fee will apply to advanced lessons in preparation for a recital, and an overload fee, if applicable tothe student, will not be waived. Instrumental lessons will be transcripted indicating the specific instrument (e.g., trumpet or violin).
340 Advanced Voice Study (2) ..... Fall, Spring
Advanced voice literature and preparation of a half junior or senior recital.
341 Advanced Voice Study (3) Fall, SpringAdvanced voice literature and preparation of a full senior recital. Prerequisite: Music 340
350 Advanced Piano Study (2) ..... Fall, SpringAdvanced piano literature and preparation of a half junior or senior recital.
351 Advanced Piano Study (3) Fall, Spring
Advanced piano literature and preparation of a full senior recital. Prerequisite: Music 350
360 Advanced Organ Study (2) ..... Fall, Spring
Advanced organ literature and preparation of a half junior or senior recital.
361 Advanced Organ Study (3) ..... Fall, Spring
Advanced organ literature and preparation of a full senior recital. Prerequisite: Music 360
370 Advanced Instrument Study (2) ..... Fall, SpringAdvanced instrumental literature and preparation of a half junior or senior recital.
371 Advanced Instrument Study (3) ..... Fall, SpringAdvanced instrumental literature and preparation of a full senior recital. Prerequisite: Music 370.

\section*{Nursing}

The bachelor of science in nursing (B.S.N.) is a four-year program of study. Students will complete CORE courses, pre-requisite courses, and nursing courses on Dordt University's campus. Clinical will be in area hospitals and in the surrounding community. Students will be eligible for NCLEXRN state board licensure upon completion of the B.S.N.

The Dordt B.S.N. program is approved by the Iowa Board of Nursing. Accreditation was granted by the Commission on Collegiate Nursing Education in 2012 and 2021. (CCNE, 655 K Street NW, Suite 750, Washington, D.C. 20001, (202) 887-6791)

General Major- Biology 203, 204, 210, 302; Chemistry 102; Psychology 204, 224; Sociology 201; Statistics 131; Nursing 180, 190, 201, 202, 203, 204, 207, 208, 212, 213, 214, 217, 218, 228, 237, 301, 302, 310, 311, 312, 317, 325, 390.
\(\qquad\)
180 Introduction to Nursing Practice (1) Fall, Spring
This course introduces nursing majors to the practice of nursing as they explore nursing as a verb and a noun. As the student explores their vocation as a Christian nurse, foundational concepts studied include caring, compassionate accompaniment, and advocacy. Students are introduced to nursing's scope of practice and ethics in health care.

190 Understanding Nursing Education (1) .....................................................................................................................................Fall, Spring
This course introduces nursing majors to the study of nursing practice as a preparation for licensure and for life-long learning as a professional nurse. Conceptbased learning is introduced, and curricular links and clinical competencies are examined. Students learn and integrate study habits and test taking skills. Students commence their learning of the practice concepts of personal protection, quality and safety, the nursing process and ways of knowing as well as evidence-based practice. Prerequisite: Nursing 180.

201 Wellness in Self and Others (3) Fall
The course emphasis is on caring for the whole person, to include oneself, in light of God's command to care for his creation. Concepts investigated incorporate wellness in light of caring for oneself. Students analyze concepts further and apply them to individuals across the lifespan. The lab emphasis is on applying course concepts of wellness in light of caring for self and to others in the nurse's care. Using appropriate clinical reasoning, activities include wellness assessments and interventions among self, other individuals, and groups. Satisfies CORE 130 requirement. Prerequisites: enrollment in BSN program; Nursing 180, 190.

202 Health Promotion in Community (4) .Spring
Continuing the emphasis on caring for the whole person in light of God's command to care for his creation, students apply health promotion across the lifespan and within specific vulnerable populations. Students discriminate influences from the environment in maintaining health. Students integrate the concepts of stress management, maladaptive behaviors, and mental health as part of health promotion in community. Concepts will be applied in lab time each week as students prepare for clinical practice. Prerequisites: enrollment in BSN program; Nursing 201, 207. Corequisites: Nursing 208, 212, 217; or permission of instructor.

203 Chronic Illness Dynamics (4) Fall
The course extends the concepts of health and wellness of Nursing 201 and 202. Students deconstruct new concepts that include hydration, mobility, homeostasis in hormonal, neuro, and thermal regulation, gas exchange, glucose regulation, and elimination. Students analyze hemodynamics and the role of nursing care of patients as well as the management of chronic pain. Students learn aspects of integrated care planning. Includes two-hour lab each week. Prerequisites: enrollment in BSN program; Nursing 202, 208, 212. Corequisites: Nursing 213, 218, 310.

204 Dimensions of Predictable Health Conditions (4). Spring In the course students analyze concepts common to predictable health conditions and outcomes. The study of reproductive health care and the childbirth experience, fetal development, and genetics are included. Students integrate care coordination and related therapeutic procedures to the predictable health conditions studied. Aspects of creational development are emphasized. Includes two-hour lab each week. Prerequisites: enrollment in BSN program; Nursing 203, 212, 213. Corequisites: Nursing 214, 237; or permission of instructor.

\section*{207 Professionalism in Nursing Practice (2)}

This course focuses on concepts of professionalism in nursing practice to include confidentiality, health information security, and patient rights. The concept of professionalism is deconstructed. Additional concepts include formal and informal professional relationships, interdisciplinary interactions, communication and collaboration among individuals, groups, as well as patients and their families. Students are introduced the processes of grief, dying, and death. Included are interrelationships among legal and ethical directives in health care. Through reflection, student's self-awareness as part of God's creational structure and their personal response is constructed. Prerequisites: Nursing 180, 190. Corequisite: Nursing 201.

208 Pharmacology in Nursing Practice I (2).
Spring
This is part one of a three-part course that focuses on foundational pharmacological concepts that include drug categories, pharmacokinetics, expected actions and untoward outcomes. Discussions include methods to understand mathematical calculations, pharmacological

\section*{UNDERGRADUATE ACADEMIC OFFERINGS: NURSING}
abbreviations, and administration techniques. Students differentiate principles of ethical indications, legal precautions, and administrative responsibility. Prerequisite: enrollment in BSN program; math competency requirement met; or permission of instructor.

212 Health Promotion in Community (Clinical) (3) Spring Clinical experiences in community settings introduce students to competencies applicable to the course concepts as well as opportunities to implement their competencies in professionalism, and transcultural nursing practice. Students will perform selected, applicable nursing skills. Graded on a pass/fail basis. Prerequisite: enrollment in BSN program; Nursing 201, 207. Corequisites: Nursing 202, 208, 217; or permission of instructor.

213 Chronic Illness Dynamics (Clinical) (4)
Clinical experiences include caring for patients with chronic illness across the lifespan in a variety of practice settings. Previously learned nursing practice competencies will be reinforced. Students apply additional, selected, applicable nursing skills. Graded on a pass/fail basis. Prerequisites: enrollment in BSN program; Nursing 202, 208, 212. Corequisites: Nursing 203, 218.

214 Dimensions of Predictable Health Conditions (Clinical) (4)..........................................................................................................Spring Clinical experiences include application of nursing concepts studied in Nursing 204. The student will focus on caring for patients across the lifespan who have health conditions with predictable courses and outcomes. It provides opportunities for continuing development of clinical competency in the performance of selected, increasingly complex nursing skills. The students demonstrate knowledge of standards of nursing practice, professionalism, and transcultural nursing practice. Graded on a pass/fail basis. Prerequisites: enrollment in BSN program; Nursing 203, 213. Corequisites: Nursing 204, 237.

217 Standards of Nursing Practice (2)
.Spring The focus of the course is to introduce the student to concepts relevant to standards in nursing practice, while integrating knowledge from Nursing 207. Students analyze the ethical standards of nursing ethical as well as a variety of other professional standards. Students discuss informed consent, clinical judgement, errors and variances, and reporting responsibilities. Students are introduced to common healthcare resources, technology and informatics in health care, and distinction of nursing practice among different practice settings. Prerequisites: enrollment in BSN program; Nursing 201, 207. Corequisite: Nursing 202; or permission of instructor.

218 Pharmacology in Nursing Practice II (2) Fall
This is part two of a three-part course. The course focus is on in-depth systems-based pharmacological therapeutics. Students identify and translate mechanisms of action, indications, contraindications, and side effects of identified drug classes. Additionally, students learn specific nursing responsibilities in medication administration and respective patient assessments for identified drugs. Students synthesize and incorporate aspects of applicable patient education into their pharmacological nursing interventions. The course reinforces and expounds on the content from Nursing 208. Prerequisite: enrollment in BSN program; Nursing 202, 208. Corequisite: Nursing 203; or permission of instructor.

Pharmacology in Nursing Practice III (2).
.Spring This is part three of a three-part course. The course focus is on in-depth systems-based pharmacological therapeutics. Students identify and translate mechanisms of action, indications, contraindications, and side effects of identified drug classes. Additionally, students learn specific nursing responsibilities in medication administration and respective patient assessments for identified drugs. Students synthesize and incorporate aspects of applicable patient education into their pharmacological nursing interventions. The course reinforces and expounds on the content from Nursing 208 and 218. Prerequisites: enrollment in BSN program; Nursing 203, 208. Corequisite: Nursing 204; or permission of instructor.

237 Healthcare Systems and Nursing Practice (1). Spring In this course the students discuss healthcare organization and systems, health policy and other applicable influences of law in health care, the economics of health care to include compensation and reimbursement. Students reflect on maintaining the integrity of their role as Christian nurses while meeting the expectations of employing organizations. Prerequisites: Nursing 217, 310. Corequisites: Nursing 204, 214.

295 Understanding Canadian Healthcare (1). ..Spring
Emphasis on Canadian healthcare is an elective course specifically emphasizing the entry into practice domains required for licensure in Canada. Students will spend time learning about the five entry into practice domains emphasized by the Canadian Healthcare System: professional responsibility and accountability, Knowledge-based practice, ethical practice, service to the public, and self-regulation. Emphasis will be placed on Canadian Healthcare, Canada's Nursing Code of ethics, and aboriginal populations. Prerequisite: enrollment in BSN program.

Exploring Nursing (1) ..Fall, Spring, Summer
This elective course is preparation for nursing practice. A student will commit to a CNA internship at a local facility, at least eight hours per week. The student will experience teamwork and collaboration, communication, professionalism, safety, caring, and basic patient care skills. During the internship, the student will journal about their experiences and meet monthly with faculty to discuss the clinical experiences and clinical competencies. Additionally, the student will read and discuss how to connect their work to God; thus relating all future work to glorifying God. Prerequisite: CNA certification.
301 Care of Acute and Complex Patients (4) ..... Fall
The focus of the course is on concepts particular to the care of persons with acute and complex health conditions. Students analyze hemodynamics, metabolic demand, and acid-base balance. Students study the influencing aspects of family dynamics while caring for patients with acute or complex health conditions. Students extrapolate aspects of crisis intervention and emergency management applicable to nursing practice. Prerequisites: enrollment in BSN program; Nursing 204, 213, 214. Corequisite: Nursing 311; or permission of instructor.

\begin{abstract}
302 Integration and Readiness (2) Spring
During this preceptorship seminar, students conduct formative discussions on the integration of program concepts and competencies with their clinical experiences during the nursing preceptorship. Students generate Christian nursing concepts and translate them into personal behaviors with measurable outcomes. This course also involves student review of all program concepts and clinical competencies. Students hone test-taking skills, and practice testing for the National Council Licensure Examination for Registered Nurses (NCLEX-RN) examination. Students analyze their strengths and weaknesses as they prepare for licensure. Students complete administrative steps required for application to test. Prerequisite: enrollment in BSN program; Nursing 301, 311. Corequisites: Nursing 312, 317, 390; or permission of instructor.
\end{abstract}
310 Faith and Cultural Aspects in Health Care (3)....................................................................................................................................Fal Students engage in an introductory study of culture and its influence on behavior. Discussions include specific cross-cultural issues that affect healthcare delivery. Students consider the worldviews of modern cultures and the implications for Christian discipleship within nursing practice; define health and illness as Christian individuals and part of the community as a whole; and comprehend traditional and alternative health care practices, incorporating religious beliefs, practices, and rituals. A phenomenological assessment is applied to the populations studied. Prerequisites: enrollment in BSN program; Nursing 207, 217; or permission of instructor. Corequisites: Nursing 203, 213, 218. [Cross-listed: CORE 275]
311 Care of Acute and Complex Patients (Clinical) (4) Fall
Clinical experiences emphasizing integration of concepts learned in Nursing 301 with additional selected nursing competencies required in caring for patients with acute and/or complex health conditions. Students continue to integrate previously acquired knowledge and skills. Graded on a pass/fail basis. Prerequisites: enrollment in BSN program; Nursing 204, 214. Corequisite: Nursing 301; or permission of instructor.
312 Nursing Preceptorship (Clinical) (4)............................................................................................................................................ Spring Clinical experiences include 120 hours of practicum along with med-surg clinical practice in acute care. Clinical focuses on the application and refinement of all nursing program concepts and skill competencies. Clinical experiences may vary depending on the particular, selected practicum setting. Graded on a pass/fail basis. Prerequisite: enrollment in BSN program; Nursing 301, 311. Corequisite: Nursing 302; or permission on instructor.

317 Leadership in Nursing Practice (2) ............................................................................................................................................ Spring
Concepts related to leadership in nursing practice are the focus of this course. Servant-leadership is emphasized as a reflection of the Christian Nurse's reformational response to God's calling in their life. Students discuss key characteristics and essential behaviors involved in being preceptors and mentors. Students learn aspects of delegation, chain of command, and conflict resolution within health care, and nursing practice. Prerequisite: Nursing 325. Corequisites: Nursing 302, 312; or permission of instructor.

\begin{abstract}
325 Health Assessment (3) Fall
This course facilitates the students' integration of all program concepts structuring assessment skills, decision-making, and intervention responses into three distinct categories: health promotion, risk assessment, and failure-to-rescue. Health assessments include physical, psychological, socio-cultural, and faith dimensions of the individual across the lifespan. Includes two classroom hours and one hour lab time each week. Prerequisites: enrollment in the BSN program; Nursing 237, 310. Corequisites: Nursing 301, 311; or permission of instructor.
\end{abstract}

341- Special Topics (1-3)
Occasional
348 These courses will consist of topics not normally covered in other program courses. Specially designed to focus on more specific topics utilizing instructor strengths and consideration of student needs.

390 Professional Practice Development in Society (3)...........................................................................................................................Spring This capstone course concentrates discussion of Christian nursing practice within a broader perspective of a Reformed Christian worldview. It examines conflicting worldviews, prominent theoretical frameworks used to explain and guide professional nursing practice, and the integration of Christian caring while performing the various roles of the professional nurse. Students develop their individual philosophical perspective of nursing practice. The ability to conceptualize issues, apply critical thinking, theoretical reflection, and serviceable insight to political, economic, and psychosocial issues and trends affecting nursing and health care is facilitated. Prerequisites: enrollment in BSN program; CORE 200. Corequisites: Nursing 302, 312, 317; or permission of instructor.

391- Individual Studies (1-3) \(\qquad\) Fall, Spring, Summer

\section*{Philosophy}
\begin{tabular}{ll} 
General Major- & \begin{tabular}{l} 
CORE 200; Philosophy 301, 302, 303, 304, 309; five elective courses in philosophy; electives may include Engineering \\
390 and/or one course from Political Science 310 or 312.
\end{tabular} \\
General Minor- \(\quad\) CORE 200; five elective courses in philosophy.
\end{tabular}

202 Logic (3)......................................................................................................................................................................................Fall Even An introduction to the study of logic, both deductive and inductive, focusing on its systematic, philosophical, and historical development.

206 Aesthetics (3) ..Spring
A study of the aesthetic dimension of creation, the nature and qualifying function of artistic activity, and artifacts, and an introduction to general aesthetic theory and its history. Prerequisite: CORE 200.

281- Service-Learning (1-3) \(\qquad\) Fall, Spring, Summer
283 See page 37, Service-Learning
301 Ancient Philosophy: The Dawn of Western Thought (3)
Fall Odd
A study of the pagan roots of the thought patterns that shape our contemporary world. Designed for students interested in the philosophical and historical origins of our modern scientific culture. Readings in primary sources and a paper.

302 Medieval Philosophy: Medieval Roots of Modern and Contemporary Thought (3).
Spring Even A study of the medieval thought patterns that shaped our contemporary world. Designed for students interested in the history of philosophy, theology, and science. Readings in primary sources and a paper.

303 History of Modern Philosophy (3) \(\qquad\) Fall Even A survey of philosophical problems and movements in the Western world from the end of the 15th century to the middle of the 19th century. Readings in primary sources.

304 History of Contemporary Philosophy (3). .Spring Odd A survey of philosophical problems and movements in the Western world from the middle of the 19th century to the present. Readings mainly in primary sources.

309 History of Christian Philosophy (3).
.Spring Odd
An analysis of the origin and development of Christian philosophy since the Reformation, in the context of Western thought. Prerequisite: CORE 200. Philosophy majors are advised to complete the history of philosophy sequence before taking Philosophy 309.

310 Systematics of Christian Philosophy (3) .................................................................................................................................Spring Even
In-depth study of selected topics in the systematic philosophy of 20th century Christian philosophers. Specific attention will usually be given to the conceptions of such people as Dooyeweerd, Stoker, Vollenhoven and/or those who follow in their line. Prerequisite: CORE 200.

320 Place, Grace, and Humans in Community (3).
Occasional A study of the philosophical foundations of social relationships. Possible topics explored include the relationship between groups of people and their physical environment, the possibility of understanding people from different cultures than our own, and whether we can hold other communities to the standards of our own communities. Prerequisite: CORE 200. [Cross-listed: Community Development 320, CORE 356]

333 Philosophy of the Environment (3)
Occasional
 ronment. Prerequisites: CORE 200; junior or senior standing. [Cross-listed: Environmental Studies 333]

341- Special Topics (1-3)
348 These courses will consist of topics not normally covered in other program courses. Specially designed to focus on more specific topics utilizing instructor strengths and consideration of student needs.

350 Faith, Emotions, and Being Human (3)
Fall Even A survey of different non-Christian views about the nature, place, and task of man, and a study of the main themes of a Christian theory of man. Prerequisite: CORE 200. Open to juniors and seniors in all disciplines.

391- Individual Studies (1-3) ..............................................................................................................................................Fall, Spring, Summer
393 See page 36, Individual Studies

\section*{Physics}
\begin{tabular}{ll} 
General Major- & \begin{tabular}{l} 
Physics 231, 232, 305, 324, 325, 326, 331, 337, 358; Chemistry 111; Computer Science 115; Mathematics 152, 153, 201, \\
204; three courses from (but not more than one 200-level mathematics course) Chemistry 333, 365, Computer Science
\end{tabular} \\
215, Mathematics 203, 209, 212, 215 and 216, 303, 304, 311, 315, Physics 208 and 209, 220, 222, 393.
\end{tabular} General Minor- \(\quad\)\begin{tabular}{l} 
Physics 231, 232; two courses from Physics 324, 325, 326, 331, 337. (Note required prerequisites for courses when plan- \\
ning program of study.)
\end{tabular} For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 85-98, Teacher Preparation Program.

208 Statics (2)................................................................................................................................................................................................................... Fall
A mechanics course that examines the effects of forces and moments applied to rigid and deformable bodies in equilibrium. Students will analyze concentrated and distributed force systems applied to static particles, rigid bodies, trusses, frames, and machines. Prerequisites: Engineering 115; Physics 231. [Cross-listed: Engineering 208]

209 Dynamics (2) .......................................................................................................................................................................................................... Fall
A mechanics course that examines the kinematics and kinetic analysis of particle systems and rigid bodies. Prerequisite: Engineering 208. [Cross-listed: Engineering 209]

215 General Physics I (4) Fall
An introduction to the study of the physical aspect of reality. Topics covered include mechanics, kinetic theory, heat, and thermodynamics. Three lectures and one laboratory per week.

216 General Physics II (4) Spring
Continuation of Physics 215. Waves, sound, light, electricity and magnetism, and topics in modern physics, e.g., quantum theory, relativity, physics of the atomic nucleus. Three lectures and one laboratory period per week. Prerequisite: Physics 215.

220 Linear Circuits and Electronics (4)
Spring
Assumes a prerequisite knowledge of DC electrical circuits, including the definitions of electrical quantities, circuit elements (sources, resistors, capacitors, inductors), understanding of Kirchhoff's laws and basic concepts in AC circuits such as frequency and phase. Topics in this course include: general linear circuit analysis including Norton's and Thevenin's theorems; superposition; nodal and loop analysis; natural and forced responses in RLC circuits; and sinusoidal steady state analysis. The course also gives introductions to operational amplifier circuits, single stage BJT transistor circuits, and steady-state balanced 3-phase power calculations. The lab includes a formal design project. Prerequisite: Engineering 117 or Physics 232 or Physics 216. Corequisite: Mathematics 204. [Cross-listed: Engineering 220]

222 Elements of Materials Science (4) Studies the relationship between structure and properties of various materials, including metals, ceramics, polymers, and semiconductors. Students will learn how atomic and molecular arrangements, as well as manufacturing processes, influence the mechanical, electrical, and thermal properties of a material. Introductory topics in metallurgy in this course include the examination of effects of processing (heat treatment and manufacturing) and service environment on microstructure and properties. Laboratory explorations in materials engineering introduce concepts in experimental design and data analysis. Prerequisite: Chemistry 111. Corequisite: Physics 232. [Cross-listed: Engineering 202]

231 Introductory Physics I (4)
Spring
An introduction to the study of the physical aspect of reality for students intending to continue in the physical sciences and engineering. Linear and rotational kinematics and dynamics, statics, and gravitation will be covered. Three lectures and one laboratory period per week. Pre or corequisite: Mathematics 152.

232 Introductory Physics II (4)
Fall
Continuation of Physics 231. Topics covered include fluid, oscillations, waves, heat and thermodynamics, and electricity. Three lectures and one laboratory per week. Prerequisite: Physics 231.

281- Service-Learning (1-3)................................................................................................................................................................Fall, Spring, Summer
See page 37, Service-Learning

305 Perspectives in Physical Science (3) Fall Even Historical, philosophical, and theological perspectives on the physical sciences are discussed and developed. The historical and contemporary roles of Christianity and other influential forces in science are considered. Prominent positions in the philosophy of science are examined. Aspects of the complex interactions between Christian faith and the physical sciences are discussed. Prerequisites: CORE 200; completion of the Core Program natural science requirement with a physical science course (Astronomy, Chemistry, Physics, or CORE 220-229). [Cross-listed: Chemistry 305]

324 Introduction to Light, Energy, and Matter (4)
.Spring Odd
Advanced classical and introduction to modern physics topics. Optics, advanced waves, semiconductors, and modern physics topics in particle, nuclear, and quantum physics are covered. Prerequisite: Physics 232. Pre or corequisite: Mathematics 204.

325 Classical Mechanics (4)
.Occasional
Lagrangian and Hamiltonian dynamics, general rigid body motion, theory of vibrations and waves, planetary motion, and chaos are studied. Prerequisites: Mathematics 204; Physics 231. Corequisite: Mathematics 201.

326 Electromagnetic Fields (4)
.Fall Odd
Review of vector calculus; divergence, curl, Gauss' and Stoke's theorems; electro- and magneto-statics; polarization; boundary conditions; Laplace and Poisson equations; magnetic vector potential; energy; Maxwell's equations for time varying fields; wave propagation; and Poynting's theorem. Applications related to energy transmission and electrical power machinery with be explored. Prerequisites: Mathematics 204; Physics 232. Corequisite: Mathematics 201. [Cross-listed: Engineering 326]

331 Thermodynamics and Statistical Mechanics (3)
Spring Even The study of heat, the laws of thermodynamics, thermodynamic generating functions, Maxwell's relations, kinetic theory, partition functions, and classical and quantum statistics. Three lectures per week. Prerequisites: Chemistry 111; Mathematics 152, 153; Physics 215, 216 or 231, 232; Chemistry 231 or Physics 324. [Cross-listed: Chemistry 331]

337 Modern Physics (4)
Spring Even
Developments in modern physics: special relativity, atomic nature of matter and electricity, wave and particle aspects of electrons and light, quantum theory and applications to the study of atomic and molecular structure, condensed matter physics, particle and nuclear physics. Three lectures and one laboratory period per week. Prerequisites: Mathematics 204; Physics 232. Corequisite: Mathematics 201.

341- Special Topics (1-3)
..Occasional
348 These courses will consist of topics not normally covered in other program courses. Specially designed to focus on more specific topics utilizing instructor strengths and consideration of student needs.

358 Physics Research and Methods (3) ...........................................................................................................................................Occasional A physics research course for senior-level physics students that focuses on developing problem solving and critical thinking skills involved in physics research. In collaboration with one or more faculty mentors, students will choose and conduct a research project. The course will be offered in a project-based format with regular progress reports, an integral literature review, and experimental design projects. Research results will be presented in a departmental seminar. Prerequisite: junior or senior standing.

391- Individual Studies (1-3) .............................................................................................................................................Fall, Spring, Summer
393 See page 36, Individual Studies

\section*{Political Science}
\(\begin{array}{ll}\text { General Major- } & \text { Political Science 201, 202, 210, 214, 319, 370; Political Science } 245 \text { or 333; Political Science } 310 \text { or 312; Political Science } \\ 322 \text { or Criminal Justice 323; Political Science } 373 \text { or } 393 \text {; Statistics 131. A preapproved off-campus program can substi- }\end{array}\) tute for Political Science 373 or 393.

\section*{General Minors-}
\begin{tabular}{ll} 
Political Science: & \begin{tabular}{l} 
Political Science 201, 202, 210, 333, 370; Political Science 310 or 312; one from Criminal Justice 305, Economics \\
321, Political Science 373, Sociology 216.
\end{tabular} \\
International Politics: & \begin{tabular}{l} 
Political Science 201, 210, 312, 370; Economics 321 or Theology 331; one course from History 225, History 319, \\
Political Science 319 or an off-campus international program pre-approved by department. [Note necessary \\
prerequisites for non-departmental courses.]
\end{tabular} \\
Public Policy and Administration: \(:\) & \begin{tabular}{l} 
Political Science 201, 202, 214, 245, 333; one from Agriculture 290, Communication 228, Criminal Justice \\
203, Economics 315, Political Science 373, Sociology 216, depending on vocational goals/interests. [Note \\
necessary prerequisites for non-departmental courses.]
\end{tabular}
\end{tabular}

For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 85-98, Teacher Preparation Program.

201 Introduction to Politics (3) Spring
An introduction to the political dimension of life from a biblically-oriented perspective. Laying the foundation for political thought and practice, the course will examine scripture, models of how the church relates to culture, and examples of Christian engagement with the
political world. It will also provide a brief survey of each of the fields of political science and raise practical questions about political involvement. [Cross-listed: CORE 262]

202 American National Politics (3)
A general introduction to the American political process-its foundations, external influences, institutions, political actors, and policymaking. [Cross-listed: CORE 264]

210 International Relations (3).
An introduction to the contemporary relations among states with a consideration of the issues of war and peace, international organizations, law, integration, political economy, interdependence, and relations among the superpowers.

214 State and Local Politics (3) Spring Even
Provides a basic introduction to the political process at the state and municipal level, examining the role of the individual citizen, various groups, and governmental institutions. Attention is given to the special policy needs at the state and community level, their links with the federal government, and the particular character of local politics.

245 Introduction to Public Administration (3)
Fall Odd
Provides an introduction to the interdisciplinary field of Public Administration. Subjects to be considered include the role of the public service in society, public service values and ethics, accountability and political control of the public service, the budgetary process, organizational forms in government, human resources, principles of public management, and new forms of delivering government services.

281- Service-Learning (1-3) \(\qquad\) Fall, Spring, Summer
283 See page 37, Service-Learning
310 Ancient and Medieval Political Thought (3)
Fall Even
This course will examine the major ideas and trends in political thought from ancient times through the medieval period up to the early modern era. Philosophers to be studied include Plato, Aristotle, Augustine, Aquinas, Protestant reformers and Machiavelli. Relevance to the politics of our time will be included.

312 Modern Political Thought (3)
Major ideas and trends in political thought from the early modern era of the 1600 s to the present will be examined. The first portion of the course will be a survey of major political philosophers. This will set the stage for understanding modern ideologies (populism, libertarianism, conservatism, liberalism, totalitarianism, and other -isms).

319 Comparative Politics (3)
Spring Odd
This course will introduce the field of comparative politics. Nation-states will be compared to one another and to the United States. We will cover a range of topics including history, ethnic groups, political parties, and government structures. The diversity of nations and norms of human government will be examined from a Christian perspective. The course will focus on a specific region or continent of the world. Specific geographic focus to be announced.

322 American Constitutional Law (4)
.Spring This course focuses on the American Constitution as interpreted by the Supreme Court. Through analysis of landmark cases, this course will study both historical and recent developments in constitutional law with the goal of gaining deeper insight into the way our system works and the reasons for the freedoms we hold dear. Prerequisite: Political Science 202; junior standing; or permission of instructor. [Cross-listed: Criminal Justice 325]

333 Public Policy (3). .Spring
Provides a general introduction to the public policy process in the United States, including an exploration of the socioeconomic and cultural context, the defining characteristics of the political system, and various phases in the policy process. Special attention is given to selected policy issues such as energy and the environment, criminal justice, poverty, health care, and immigration.

341- Special Topics (1-3) .................................................................................................................................................................Occasional
348 These courses will consist of topics not normally covered in other program courses. Specially designed to focus on more specific topics utilizing instructor strengths and consideration of student needs.

370 Global Security Issues (3). .Spring Odd This seminar course examines the challenges facing world security in the twenty-first century, including arms proliferation, ecological threats, economic globalization, ethnic conflict, resource scarcity, political economy, and human rights.

373 Field Experience in Politics (3) \(\qquad\) Fall, Spring Students complete a limited field experience in a politics-related area. The experience is aimed at providing exposure to the type of activities in which political science graduates are likely to be involved as professionals. Three hours of course credit is to be based on the completion of 8-10 hours on the site per week plus one hour of work determined in consultation with the supervising member of the political science department
for 14 weeks. Deadline for application for the spring semester is November 1; deadline for the fall and summer semester is April 1. Prerequisites: political science minor or major; junior or senior standing; approval of the department.

391- Individual Studies (1-3) ..................................................................................................................................................Fall, Spring, Summer
393 See page 36, Individual Studies

\section*{Psychology}

\section*{General Major-}

General Minor- \(\quad\) Psychology 201, 204, 224; four psychology electives (12 or more credits).
For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 85-98, Teacher Preparation Program.

201 Introduction to Psychology (3) Fall, Spring
Explaining human behavior is a wonderfully complex task, and this course introduces students to the scientific study of topics such as memory, personality, development, social influence, disorders, and others. Along the way, we will use a bio-psycho-social (spiritual) model to frame our study and will compare a biblical perspective on being human to several historical perspectives in psychology.

204 Lifespan Development (3) \(\qquad\) Fall, Spring, Summer
This course studies the growth and maturation of persons throughout the entire lifespan, including examination of physical, cognitive, personality, social changes, faith development, and other developmental tasks. This course will also focus on evaluating the theoretical issues and descriptive information portraying the growth of an individual from conception through late adulthood. Students will develop a biblicallyinformed vision of who we are as image-bearers of God and what it means to be humans living in God's creation. [Cross-listed: CORE 251]

210 The Social Psychology of Persons (3)
Fall, Spring
We influence and are influenced by culture, social structures, groups, personality, family, and the media, just to name a few. Studying the situational and personal/interpretive factors that influence an individual's social behavior can reveal new insights about the grace and sin at work in our relationships and social situations. Utilizing a biblical perspective on the social psychology of persons, this class will explore how students can function as faithful Christians within all of these situations. [Cross-listed: CORE 252, Sociology 210]

218 Biopsychology (3). . Fall
This course introduces students to the physiological/biological functions of human psychology-with emphasis placed upon the Christian perspectives of soul/mind, brain, and body interactions. Essential neurocognitive functions such as learning, memory, motivation, emotion, sleep, sensation, and behavior will be considered in the context of overall nervous system functioning. Special topics (e.g., depression, traumatic brain injury, stroke, schizophrenia, Parkinson's Disease, Alzheimer's Disease) will also be addressed. Prerequisite: Psychology 201 or Biology 203.

224 Psychopathology (3). \(\qquad\) .Fall, Spring
This course examines the development and symptoms of emotional and behavioral problems. Topics covered include the clinical assessment of affective disorders, schizophrenia, personality disorders, psychosomatic disorders, anxiety disorders, and the process of adjustment to stress. Attention will be given to personality, social, and religious factors, and their role in mental health. Prerequisite: Psychology 201 or 204 or 210.

230 Research Methods (3). Spring This course introduces students to the research process, including formulation of hypotheses, design, interpretation, and communication of results. The course will include a review of statistical procedures with an emphasis on selection and interpretation of analyses and an introduction to computer data analysis with R. Methods of research are discussed from a reformed, Christian perspective. Students complete research proposals. Prerequisite: sophomore standing or above. Pre or corequisite: Statistics 131, 133. [Cross-listed: Statistics 230]

260 Ethics (1) \(\qquad\) .Fall Odd This seminar course considers the American Psychological Association's published "Ethical Principles of Psychology" and the practical application of those standards in reallife situations. Students also wrestle with how those standards fit with Christian ethics and the complexities of practice in a diverse social context. Prerequisite: Psychology 201.

281- Service-Learning (1-3) ..................................................................................................................................................Fall, Spring, Summer
See page 37, Service-Learning
318 Psychology of Aging (3).
Spring Even
This course examines the inevitable process of aging-including an advanced, comprehensive analysis of its physical, neuropsychological,
sociological, and spiritual aspects. Students will be encouraged to consider not only how aging affects others but also how their own aging will affect themselves, and they will be challenged to embrace aging as an essential step in the process of walking more closely and faithfully with God-and ultimately transitioning into an eternal home with Him. Finally, students will have an opportunity to meaningfully interact with older adults through assigned tasks and/or through occasional classroom presentations. Prerequisites: Psychology 204 or 218; junior or senior standing.

341 Special Topics (1-3) ......................................................................................................................................................................Occasional utilizing instructor strengths and consideration of student needs.

362 Cognitive Psychology (4)......................................................................................................................................................Spring Even
A survey of contemporary research and theory on human cognition and higher mental functioning approached from an informationprocessing perspective. Topics include attention, concept formation, perception, language, mental representation, and problem solving. Students will be challenged to critique both theory and research methods from a reformed, Christian perspective. Two lectures and a twohour lab each week. Prerequisite: junior or senior standing.

364 Learning: Theory and Application (4)
.Spring Odd
This course focuses on the study of the basic processes of conditioning and learning and the major theories, research, and applications associated with learning issues. The main areas to be examined will focus on human models of learning but will also include animal models of learning. Activities, discussions, and lab work will include concepts of behavioral research with animals and clinical, educational, and other applied settings for humans. Students will be challenged to critique both theory and application from a reformed Christian perspective. Two lectures and a two-hour lab each week. Prerequisite: junior or senior standing.

366 Senior Research Project (4) Fall
This highly interactive course develops students' collaborative, cognitive, and communication skills as they design, conduct, and present psychological research as a service to campus or community groups. Students also consider tensions that face Christian psychologists as they conduct research and enter the profession of psychology. Weekly labs involve opportunities to practice new learning in a just-in-time approach that prepares students for the next step in their own research. Satisfies Core Program writing-intensive requirement. Prerequisite: Psychology 230.

370 Helping Skills (3) Spring
Class focus is on developing the foundational interpersonal and helping skills required for psychology students interested in human service practice. Topics include active listening, attending, problem-solving, challenging, brainstorming, and group counseling skills. The course is organized around an experiential learning model and students are given feedback on their helping skills. Prerequisites: Psychology 224; junior or senior psychology major or minor.

371- Field Experience in Psychology (3)..........................................................................................................................................Fall, Spring
372 The field experience is designed to provide a sample of the type of activities in which psychologists and other human service professionals are engaged; it is not intended to develop competence to the level of a beginning practitioner. Requirements include the completion of eight hours on site per week plus one hour of consultation with psychology department supervisor. Deadline for application for the spring semester is November 1; deadline for the fall (and summer) semester is April 1. Prerequisites: Psychology 224; junior or senior standing; approval of department. Psychology 370 strongly recommended

374 Counseling Theories (3)..............................................................................................................................................................Fall Even
This introductory course in counseling theory emphasizes the dynamics of the counseling process and characteristics of the counseling relationship in the light of biblical directives concerning human nature, purpose, responsibility, and conduct. Prerequisites: Psychology 224 ; junior or senior standing.

376 Personality Theories (3).................................................................................................................................................................Fall Odd A comparative analysis of the major theoretical perspectives on personality in the field of psychology, including psychoanalytic, trait, learning, cognitive, humanistic, and existential views. Significant topic areas include disorders of personality, the principles and methods used to assess personality, and a reformed anthropological model of personality. Prerequisite: Psychology 201 or 204 or 210; junior or senior standing.

\footnotetext{
378 Psychometrics (2) Fall Odd Course covers basic psychometric theories, principles of test construction, and a survey of common personality, achievement, and intelligence tests. Not open to non-majors. Prerequisite: Psychology 224.

382 Health Psychology (3). Spring
Survey course examines the contributions of psychology to the understanding, prevention, and treatment of a variety of health concerns. Topics include stress, pain management, cancer, eating disorders, exercise, and health promotion. Prerequisites: Psychology 218 or 224 ; junior or senior standing; or permission of instructor.
}

History of Psychology and Worldview (3) Fall A brief study of the historical development of psychological theories from the ancient world to the present, with extended treatment given to major contemporary movements or perspectives in psychology (such as psychoanalysis, behaviorism, and humanism) and to recent attempts by Christians to "integrate" theology and psychology. Prerequisites: CORE 200; Psychology 201; senior standing.
\(\qquad\) Fall, Spring, Summer

\section*{Social Work}

The social work program is built upon a strong liberal arts base and foundational courses in the social sciences. The program is designed to equip students with the requisite knowledge and skills for beginning social work practice. The program is fully accredited by the Council on Social Work Education (1986). Admission to the social work program and completion of the major will require a formal two-part application process. Graduates will receive the bachelor of social work degree.

Admission to the Program Application for admission to the program is required and should be filed during the spring semester of the sophomore year prior to spring break. Forms may be obtained from the chairperson of the Social Work Program Committee. The Social Work Program Committee reviews completed application forms, and admission to the program is based on the following criteria:
- A minimum cumulative GPA of 2.20; completion of at least 39 credits; completion of or current enrollment in CORE 120 or English 100, CORE 110, 140, 150, 160, 180, 200, 212, Economics 202 or Political Science 201, Psychology 201, Sociology 201, Statistics 131, Social Work 200, 215, 216, and 225.
- A written statement of personal interest that indicates an ability to communicate effectively and a commitment to social work as a vocation.
- A letter of reference indicating acceptable physical and psychological health.
- Enrollment in practice courses is limited to students who have been admitted to the program.

Upon review of the application, the committee will take one of the following actions:
- Accepted-meets all criteria
- Accepted conditionally-some criteria require further attention.
- Denied-some or all criteria inadequate.

The student will receive written notice of status.

Admission to the Professional Semester The second part of the application process is an application to participate in the professional semester that includes an intensive field work experience. This application should be filed during the spring semester of the junior year, prior to spring break. Forms may be obtained from the chairperson of the Social Work Program Committee. The Social Work Program Committee will review the application, and admission to the professional semester will be based on the student's meeting the following criteria:
- A minimum cumulative GPA of 2.50 .
- Completion of the required courses as listed under the major.
- Senior standing (anticipated).
- Professional letter of reference indicating acceptable physical, intellectual, and psychological suitability.
- A written statement that demonstrates acceptable communication skills and a mature and knowledgeable interest in social work.
- An interview that demonstrates the student's suitability to social work in terms of interest, knowledge, maturity, personality, and physical and mental health.

Upon review of the application, the committee will take one of the following actions:
- Accepted-meets all criteria.
- Accepted conditionally-some criteria require further attention.
- Denied-some or all criteria inadequate.

The student will receive written notice of status.
The Social Work Program Committee reserves the right to refuse admission or continuation in the program, to any student who does not maintain a 2.50 GPA , or who, in the judgment of the committee, has physical, mental, or personality difficulties or limitations that would be detrimental to the student and/or to the welfare of potential clients. Academic credit for life experience or previous work experience shall not be given, in whole or in part, in lieu of the field practicum or of the courses in the professional foundation areas.

\section*{Course Requirements, B.S.W. - Social Work Program}

Core Program (see page 21) Social work majors must complete all of the Core Program requirements for students seeking a bachelor's degree, with the following guidelines:
- Social work majors must take CORE 212 as part of the natural science requirement.
- Statistics 131 meet the quantitative reasoning requirement.
- Spanish is the recommended foreign language.
Major (54 credits)
Social Work 200 (3)
Freshman or Sophomore
Social Work 216 (3) Freshman or Sophomore
Social Work 225 (3) Sophomore
Social Work 307 (3) ..... Junior
Social Work 308 (3) ..... Junior
Social Work 310 (3) ..... Junior
Social Work 311 (3) ..... Junior
Social Work 313 (3) ..... Junior
Social Work 309 (3) ..... Senior
Social Work 312 (3) ..... Senior
Social Work 315 (3) ..... Senior
Social Work 325 (3) ..... Senior
Social Work 374* (12) ..... Senior
*Social Work 374 (Field Work Experience) must be taken at Dordt University to receive graduation credit toward the social work major.200 Introduction to Social Work (3)FallA survey of the major fields of social work practice and of the problems with which they deal. It will include agency field visits. Overarch-ing this survey will be a concern for the Christian's individual and collective responsibility for the health and welfare of his neighbor andcommunity.
215 Vulnerable Populations (3) ..... SpringA historical and contemporary analysis of groups considered vulnerable by economic and social standards in American society. Causes,consequences, and implications for society are examined from a biblical view of humankind with an emphasis on social work practice.[Cross-listed: CORE 256, Sociology 215]
3).Fall, SummerStudents examine the historical and contemporary factors related to diversity and inequality in North America and increase their apprecia-tion for the contributions of diverse groups in culturally-pluralistic societies. The course assumes that human diversity is created good andexplores how to discern that goodness after the Fall. Students assess their own biases in light of course material and increase their sensitivityto diversity. [Cross-listed: CORE 276, Criminal Justice 216, Sociology 216]

This course examines the family system from sociological and practice-oriented viewpoints. Students will evaluate contemporary and traditional views of the family within a Christian perspective. Students will also be introduced to historical and contemporary child and family welfare practice and policy. [Cross-listed: Sociology 225]

281- Service-Learning (1-3)...............................................................................................................................................Fall, Spring, Summer
See page 37, Service-Learning
307 Methods of Social Science Research (3) Fall
An introduction to the research process as applied to the study of problems/issues in social science. Problem selection, research design, measurement, methods of observation and data collection, data analysis and interpretation, and report writing will be emphasized. A module on microcomputer utilization and the application of descriptive statistics is presented for application in student projects. Prerequisites: Statistics 131, 133; junior or senior standing. [Cross-listed: Sociology 307, Statistics 307]

308 Human Behavior in Social Environment I (3)
Spring Through multidisciplinary, theoretical, and conceptual frameworks of human behavior in the social environment, students will explore bio-psycho-social-spiritual factors in human development from prenatal experience through adolescence. Students will develop assessment and intervention skills that focus on the interrelationship between uniquely created people and individual, family, small groups, and society. Students and instructor will address issues of ethnicity, race, diversity, cultural background, gender, sexuality, social class, and age as pertinent to the understanding of human behavior. Prerequisites: CORE 212; Psychology 201; Sociology 201.

309 Human Behavior in Social Environment II (3). bio-psycho-social-spiritual factors in human development from young adulthood through end of life. Students will develop assessment and intervention skills that focus on the interrelationship between uniquely created people and individual, family, small groups, and society. Students and instructor will address issues of ethnicity, race, diversity, cultural background, gender, sexuality, social class, and age as pertinent to the understanding of human behavior. Prerequisites: Social Work 308.

\begin{abstract}
310 Fundamentals of Social Work Practice (3)
The focus is on acquiring the foundation interpersonal and problem-solving skills for social work practice. Development of self-awareness and self-knowledge related to growth in skills and a beginning identity as a social work professional will also be emphasized. The course is organized around experiential learning models. Prerequisites: Social Work 200, 215; English 100 or CORE 120; CORE 110.

311 Practice Methods I: Social Work with Groups (3) ..........................................................................................................................Spring
An overview of general systems theory as a basis for developing an integrated social work practice model. Special emphasis will be given to the development of problem-solving skills related to groups found within social work practice with a variety of intervention strategies presented. Prerequisite: Social Work 310.

312 Practice Methods II: Social Work with Organizations and Communities (3) Fall
This course explores social change and organizational theories along with an emphasis on practice at the organizational and community level. A continuation of Social Work 310 and 311 with an emphasis on practice at the agency and community levels. Prerequisites: Social Work 310, 311.

313 Church, State, and Social Welfare (3). .Fall, Spring This course examines the question of which societal sphere is responsible for protecting vulnerable people. The course will follow the historical path of development of the modern social welfare institution, with a particular focus on the Progressive Era and the birth of social work and public administration. Students will examine structure, development, and contemporary response through discussion, research and varied readings on the biblical call to care for our neighbor, charity, social justice, and the normative role of the state and the church. Students will wrestle with this fundamental question: "How must I, acting alone, or in combination with others, behave towards vulnerable people?" Prerequisite: CORE 200.
\end{abstract}

315 Social Welfare Policy (3)
Spring
Students work within a social welfare policy analysis framework that allows their critique and development of recommendations for current and past social welfare policies. The course explores both faith-based and secular attempts at addressing social problems through policy. Two special features within this are the analysis of welfare reform within the United States and political advocacy.

325 Integrative Seminar in Social Work (3)
.Spring
An opportunity for students to reflect on and integrate the academic and field work experience with a special emphasis on ethical and value dilemmas confronted by the student in the field. (Open only to senior social work majors who have completed the professional semester admission process.) Corequisite: Social Work 374.

341- Special Topics (1-3) Occasional
348 These courses will consist of topics not normally covered in other program courses. Specially designed to focus on more specific topics utilizing instructor strengths and consideration of student needs.

374 Field Work Experience (12) Spring
The field work course is designed to provide the student with the opportunity to apply classroom knowledge, principles, and skills in a community agency under the supervision of a professional social worker. (Open only to senior social work majors who have completed the professional semester admission process.) Corequisite: Social Work 325.

391- Individual Studies (1-3) \(\qquad\) Fall, Spring, Summer
393 See page 36, Individual Studies

\section*{Sociology}

General Minor- Sociology 201, 210, 215, 216; two courses from Criminal Justice 101, Philosophy 320, Social Work 200, Sociology 202, 225, 305, 307, Statistics 131.

For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 85-98, Teacher Preparation Program.

201 Sociology and Social Justice (3)
..Fall, Spring, Summer Includes an examination of culture, socialization, social structure, group behavior, and inequalities (of class, race, and gender), as well as identifying and analyzing the pressing problems in our world that requires an understanding of social change that occurs through collective action and social movements. Through an exploration of predominant sociological theories, students are able to contrast those with a biblical worldview that challenges them to articulate how a reformed Christian understanding of creation (and norms) sin, redemption, and consummation may be used to positively affect social interaction, organizations, and institutions. [Cross-listed: CORE 261]

202 Criminology (3).
A theory-based course that studies crime causation, typologies of crime, and crime control. It looks at both historical and modern .......................................................................................................
including those that look to individual, social, and structural causes. It also broadly analyzes the guardianship and enforcement functions of the criminal justice system. Students will be able to identify criminology theories in modern media and engage in theory-building exercises. Prerequisite: sophomore standing. [Cross-listed: Criminal Justice 304]

210 The Social Psychology of Persons (3) Fall, Spring We influence and are influenced by culture, social structures, groups, personality, family, and the media, just to name a few. Studying the situational and personal/interpretive factors that influence an individual's social behavior can reveal new insights about the grace and sin at work in our relationships and social situations. Utilizing a biblical perspective on the social psychology of persons, this class will explore how students can function as faithful Christians within all of these situations. [Cross-listed: CORE 252, Psychology 210]

A historical and contemporary analysis of groups considered vulnerable by economic and social standards in American society. Causes, consequences, and implications for society are examined from a biblical view of humankind with an emphasis on social work practice. [Cross-listed: CORE 256, Social Work 215]

216 Diversity and Inequality (3) Fall, Summer Students examine the historical and contemporary factors related to diversity and inequality in North America and increase their appreciation for the contributions of diverse groups in culturally-pluralistic societies. The course assumes that human diversity is created good and explores how to discern that goodness after the Fall. Students assess their own biases in light of course material and increase their sensitivity to diversity. [Cross-listed: CORE 276, Criminal Justice 216, Social Work 216]

\section*{225 Family System and Practice (3)}
.Spring
This course examines the family system from sociological and practice-oriented viewpoints. Students will evaluate contemporary and traditional views of the family within a Christian perspective. Students will also be introduced to historical and contemporary child and family welfare practice and policy. [Cross-listed: Social Work 225]

281- Service-Learning (1-3)...............................................................................................................................................Fall, Spring, Summer
283 See page 37, Service-Learning
305 Victimology and Family Violence (3) .Spring Odd The victimology section will look at the various harms suffered due to crime, how victims interact with various agencies and players, public reaction to victims, the victims' rights movement, and how to better serve the victims of crime through our criminal justice system. Students will also identify and describe the problem, measure its true dimensions, and review evidence and hypotheses of victimologists. In the Family Violence portion, theories on family violence will be analyzed, the consequences of family victimization will be considered, as well as how to recognize child abuse and understand the dynamics of partner violence. Students will analyze legal and enforcement responses, consider how institutional responses can prevent or lessen revictimization, and look to how a Restorative Justice model can alleviate some of the harms of victimization. Prerequisite: junior standing; or permission of instructor. [Cross-listed: Criminal Justice 305]

307 Methods of Social Science Research (3).................................................................................................................................................Fall An introduction to the research process as applied to the study of problems/issues in social science. Problem selection, research design, measurement, methods of observation and data collection, data analysis and interpretation, and report writing will be emphasized. A module on microcomputer utilization and the application of descriptive statistics is presented for application in student projects. Prerequisites: Statistics 131, 133; junior or senior standing. [Cross-listed: Social Work 307, Statistics 307]

341- Special Topics (1-3) \(\qquad\) Occasional
348 These courses will consist of topics not normally covered in other program courses. Specially designed to focus on more specific topics utilizing instructor strengths and consideration of student needs.

391- Individual Studies (1-3) ............................................................................................................................................Fall, Spring, Summer
393 See page 36, Individual Studies

\section*{Spanish}

General Major- Spanish 201, 202, 204, 300, 302, 304; Spanish 206 or CORE 281; Spanish 301 or 301L; Linguistics 201; one course from Spanish 102, 207, 208, 341-348, 393; four semesters of Spanish conversation 251-258. Six credits in study-abroad courses are required.

General Minor- Spanish 201, 202, 204; Spanish 300 or 302; Spanish 301 or 301L; Spanish 206 or CORE 281; Linguistics 201; three semesters of Spanish conversation 251-258. Three credits in study-abroad courses are required.

For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 85-98, Teacher Preparation Program.

\begin{abstract}
101 Elementary Spanish I (4) Fall
An introductory study of the language and culture of Spanish-speaking people. Emphasis on the acquisition of oral and written language skills in a communicative context combined with the study of Hispanic cultures. The course includes a weekly session with advanced students or native speakers to practice oral skills.

\section*{3)..} Spring
Continuation of Spanish 101. The course includes a weekly session with advanced students or native speakers to practice oral skills. Prerequisite: Spanish 101 or our on-line placement test score of 296-360.
201 Intermediate Spanish I (3) ..... Fall

An intermediate course that continues the study of the language in a communicative context with considerable emphasis upon precision and expansion of linguistic skills. Some attention given to the nature of language. Emphasis on the development of cultural understanding and sensitivity, with a study of the people's values and beliefs as expressed in their economic, political, and religious systems. Comparison of this culture with our culture in the light of the cultural mandate. Prerequisite: Spanish 102 or our on-line placement test score of 361-439.

\section*{202 Intermediate Spanish II (3)}

Spring
This is a second intermediate Spanish course that provides students with continued opportunities to strengthen their language skills, to develop their cultural competency, and to reinforce their knowledge and use of grammatical structures. Its focus is on communicating in meaningful contexts to further develop and consolidate students' speaking, listening, reading, and writing skills. This course will be conducted in Spanish. Prerequisite: Spanish 201 or our on-line placement test score of 440 and up.

204 Literary and Cultural Readings (3)
Fall
Designed to strengthen speaking, listening, reading and writing skills in Spanish through a variety of readings, to develop the ability to value diverse communities and an appreciation for Hispanic cultures and literature. This course will be conducted in Spanish. Prerequisite: Spanish 201 or 202 or equivalent; or permission of instructor.

206 Hispanic Cultures and Civilizations (3) ..........................................................................................................................................Spring Designed to give insight into Hispanic cultures and civilizations, and a more global understanding of the issues and challenges that the Spanish-speaking world has faced and is facing. Listening and speaking abilities will be enhanced through classroom activities. The course will be conducted in Spanish. Prerequisite: Spanish 201 or 202 or equivalent; or permission of instructor.
\end{abstract}

207 World Literature I (3). Fall Odd
This course offers the study of ancient and medieval texts that are foundational to any study of history, culture, literature and art. It will deal with the major forms of ancient literature, including epic poetry, tragedies, comedies, and lyric poetry. It will discuss the historical transition from literature written during the pre-Christian to the Christian era. Although emphasis may be placed on the ancient literatures foundational to Western Civilization (e.g., Hebrew, Greek, Roman), the instructor may use ancient Egyptian, Babylonian, Hindu, Chinese or other influential literatures from elsewhere in the world. [Cross-listed: English 317]

208 World Literature II (3) Occasional See English 318 for course information. [Cross-listed: Dutch 208, English 318, French 208]
\(\qquad\)
258 Designed to give the student practice in listening and speaking. The content of the courses will be altered each year. The class will meet two times each week. (Graded on a pass/no record basis.) Prerequisite: Spanish 201; or permission of instructor.

281- Service-Learning (1-3)................................................................................................................................................Fall, Spring, Summer
283 See page 37, Service-Learning
300 Advanced Spanish Grammar and Composition I (3) This course includes an in-depth study and practice of Spanish grammar and a rigorous component in writing. Emphasis is given to more complex grammatical structures that tend to present difficulties for learners of Spanish as a foreign or second language. The course will be conducted in Spanish. Prerequisite: Spanish 201, 202 or equivalent; permission of instructor.

301 Applied Linguistics and Spanish Phonology (3) Fall
An in-depth study of specific areas of linguistics, such as neurolinguistics (brain and language), psycholinguistics (language acquisition), computational linguistics (computer processing and language), and language change (how language has changed and still changes). Onethird of the course is geared at the special interests of the students. Spanish students will study the phonology (the study of sound patterns) of Spanish and learn how to teach Spanish pronunciation. Prerequisites: Linguistics 201; Spanish 102 or 201.

301L Spanish Phonology (1) Fall Students will study the phonology (the study of sound patterns) of Spanish and learn how to teach Spanish pronunciation. This one-credit lab is meant for students who are also registered for Linguistics 301 because they want to graduate with both an ESL and a Spanish education endorsement. Prerequisites: Linguistics 201; Spanish 102 or 201. Corequisite: Linguistics 301.

\section*{302 Advanced Spanish Grammar and Composition II (3)}

Fall Even
Continues an in-depth study and practice of Spanish grammar and a rigorous component in writing. The course will be conducted in Spanish. Prerequisite: Spanish 201, 202 or equivalent; permission of instructor.

304 Hispanic Literature (3)........................................................................................................................................................................Spring Even An understanding and a historical introduction to Hispanic narrative, poetry, and drama. A study of each genre's origins, major developments, and figurative language will engage students in analytical exercises. An overview of periods, movements, significant authors, and literary currents in Spain and Latin America. This course will be conducted in Spanish. Prerequisites: Spanish 300 or 302.

341- Special Topics (1-3) ................................................................................................................................................................................. Occasional
348 These courses will consist of topics not normally covered in other program courses. Specially designed to focus on more specific topics utilizing instructor strengths and consideration of student needs.

391- Individual Studies (1-3) \(\qquad\) Fall, Spring, Summer
393 See page 36, Individual Studies

\section*{Statistics}

General Major- Computer Science 115; Data Science 290, 313; Mathematics 152, 153, 201, 203; Mathematics 303 or 311; Statistics 131, 133, 201, 203, 210, 212, 215, 216, 230, 320, 371.

Applied Statistics Minor- Statistics 131, 133, 371; Statistics 201 or 202; Computer Science 115 or Mathematics 152; a minimum of ten credits from Data Science 290, 313, Statistics 203, 210, 212, 215, 216, 230 or 307, 320.

131 Introductory Statistics (3).......................................................................................................................................................Fall, Spring
An introductory course in statistical techniques and methods and their application to a variety of fields. Topics include data analysis, design of experiments, and statistical inference including confidence intervals and hypothesis testing for means and proportions, Chi-square, ANOVA, and regression. Prerequisite: an ACT mathematics score of 22 or higher or one course from Mathematics 100, 108, 115 or ALEKS score of 45 of higher.

133 Introduction to Statistical Programming (1) ...................................................................................................................................... Fall, Spring This course accompanies Statistics 131 to introduce students to statistical software. Students will use R, or other appropriate software, to solve problems in the Statistics 131 curriculum. Additionally, students will complete a substantive project including data collection and inferential statistical analysis. Pre or corequisite: Statistics 131.

138 Probability and Statistics for the Elementary Teacher (1.5).

\section*{.Spring}

The course seeks to build a deep and flexible statistics necessary for elementary and middle school teachers with an additional focus on the statistics for assessment in education. The topics show that statistics is a part of God's creation and can be used to help understand and care for the creation, including educational settings. Prerequisite: elementary education major or middle school mathematics endorsement; Mathematics 128.

148 Financial Mathematics (4) Fall This course covers topics in interest theory including interest, force of interest, annuities, and amortization as well as basic concepts in derivatives markets including stocks, bonds, calls, and spreads. Advanced topics in the course include progressing annuities, duration, convexity, immunization, and swaps. The course includes discussion of Christian perspectives on investments and risk management. This course also serves as preparation for Actuarial Exam FM/2. Prerequisite: an ACT mathematics score of 22 or higher or Mathematics 115 or ALEKS score of 55 or higher. [Cross-listed: Mathematics 148]

201 Applied Statistical Models (2) Spring This course surveys multivariable design and statistical methods used across various disciplines and seen in peer-reviewed research. Topics include multiple and non-linear regression, general linear models, multivariable statistical models, and multifactor experimental design emphasis is on active-learning using group activities and projects, critiquing research, and statistical software. Credit will not be given for Statistics 201 and 202. Prerequisites: Statistics 131, 133.

202 Econometrics (3) ..Spring Even This course covers all of the topics in Statistics 201 and topics commonly used in economic applications of statistics: time series and forecasting, linear time series models, moving average, autoregressive and ARIMA models, data analysis and forecasting with time series models and forecasting errors. Meets at the same times as Statistics 201 plus two additional meetings. This course, along with Statistics 131 and 203, serves as preparation for Actuarial Exam SRM. Additionally, this course, along with Statistics 131, 203, 320, and 352, serves as preparation for Actuarial Exam MAS I. Credit will not be given for both Statistics 201 and 202. Prerequisites: Statistics 131, 133. [Crosslisted: Economics 232]

\section*{UNDERGRADUATE ACADEMIC OFFERINGS: STATISTICS}

203 Generalized Linear Models (3)
.Fall Odd
This course covers simple linear regression and associated special topics, multiple linear regression, indicator variables, influence diagnostics, assumption analysis, selection of 'best subset', nonstandard regression models, logistic regression, and nonlinear regression models. This course, along with Statistics 131 and 202, also serves as preparation for Actuarial Exam SRM. Additionally, this course, along with Statistics 131, 202, 320 and 352, serves as preparation for Actuarial Exam MAS I. Prerequisite: Statistics 201 or 202.

\section*{210 Experimental Design (3)}

Fall Even
Principles, construction and analysis of experimental designs. Designs include completely randomized, randomized complete block, Latin squares, Graeco Latin squares, factorial, and nested designs. Analysis will include fixed and random effects, expected mean squares, multiple comparisons, and analysis of covariance. Prerequisite: Statistics 201 or 202.

212 Statistical Programming in R (3)
Fall Even
This course covers many aspects of using software packages for statistics. Topics include data acquisition, cleaning, and management in R; use of regular expressions; functional and object-oriented programming; graphical, descriptive, and inferential statistical methods; random number generation; Monte Carlo methods including resampling, randomization, and simulation. Prerequisites: Computer Science 115; Statistics 201 or 202.

\section*{215 Univariate Probability (2)}
.Spring Odd
An introduction to the theory and techniques of general probability and common univariate probability distributions. Topics include but are not limited to basic set theory, introductory probability rules (independence, combinatorials, conditionals, Bayes theorem, etc.), common univariate distributions (e.g., binomial and normal) and expected value/variance. This course, along with Statistics 216, also serves as preparation for Actuarial Exam P/1. Offered first half of the semester. Prerequisite: Mathematics 152. [Cross-listed: Mathematics 215]

216 Multivariate Probability (2) .Spring Odd
An introduction to multivariate probability distributions. Topics include but are not limited to joint probability density functions, conditional and marginal probability distributions, moment generating functions, covariance and correlations, transformations and linear combinations of independent random variables. This course, along with Statistics 215 , also serves as preparation for Actuarial Exam P/1. Offered second half of the semester. Prerequisites: Mathematics 152; Statistics 215. [Cross-listed: Mathematics 216]

230 Research Methods (3). Spring This course introduces students to the research process, including formulation of hypotheses, design, interpretation, and communication of results. The course will include a review of statistical procedures with an emphasis on selection and interpretation of analyses and an introduction to computer data analysis with R. Methods of research are discussed from a reformed, Christian perspective. Students complete research proposals. Prerequisite: sophomore standing or above. Pre or corequisite: Statistics 131, 133. [Cross-listed: Psychology 230]

307 Methods of Social Science Research (3)................................................................................................................................................................................... An introduction to the research process as applied to the study of problems/issues in social science. Problem selection, research design, measurement, methods of observation and data collection, data analysis and interpretation, and report writing will be emphasized. A module on microcomputer utilization and the application of descriptive statistics is presented for application in student projects. Prerequisites: Statistics 131, 133; junior or senior standing. [Cross-listed: Social Work 307, Sociology 307]

320 Mathematical Statistics (4)
Spring Even
This course covers many of the theoretical underpinnings of statistical methods. Topics covered include the theory and applications of hypothesis testing, analysis of estimators, usage of nonparametric methods, an introduction to Bayesian methods, as well as other selected topics. This course, along with Statistics 352 and 353 , serves as preparation for Actuarial Exam FAM. Additionally this course, along with Statistics 131, 202, 203, and 352, serves as preparation for Actuarial Exam MAS I. Additionally this course, along with Data Science 290 and Statistics 353, serves as preparation for Actuarial Exam MAS II. Prerequisites: Mathematics 153; Statistics 201 or 202 and 216.

341- Special Topics (1-3) Occasional
348 These courses will consist of topics not normally covered in other program courses. Specially designed to focus on more specific topics utilizing instructor strengths and consideration of student needs.

352 Long Term Actuarial Mathematics (4) .Fall Odd This course covers the theoretical basis of life contingent actuarial models and the application of those models to insurance and other financial risks. Key topics include morality models, present value random variables, and premium calculations. This course, along with Statistics 320 and 353, also serves as preparation for Actuarial Exam FAM. Additionally this course, along with Statistics 131, 202, 203 and 320, serves as preparation for Actuarial Exam MAS. Prerequisites: Statistics 148, 216.

353 Short Term Actuarial Models I (3) .Fall Even This course covers product-oriented information relating to short-term insurance (e.g., health, property, and liability) and the topics of modeling (severity, frequency, and aggregate), pricing, reserving, and credibility. This course, along with Statistics 320 and 352, also serves
as preparation for Actuarial Exam FAM. Additionally this course, along with Data Science 290 and Statistics 320, serves as preparation for Actuarial Exam MAS II. Prerequisites: Statistics 148, 216.
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354 Short Term Actuarial Models Il (3)

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``` Spring Odd This course covers product-oriented information relating to short-term insurance (e.g., health, property, and liability) and an advanced study of the topics of coverage modifications, pricing, reserving, credibility, and modeling (severity, aggregate, and parametric). This course, along with Statistics 320 and 353, also serves as preparation for Actuarial Exam ASTAM. Prerequisite: Statistics 353.
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## 371- Statistics Internship (3)

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.Fall, Spring, Summer
374 A semester-long research experience that involves a significant use of multivariable statistics in an applied research project or internship. Students will identify and work with a primary faculty mentor to develop a project proposal prior to enrolling; students will also be supervised by a statistics professor. Part of the course will include an oral and written presentation of results. The course will be offered as needed and is run as an individual study. May be repeated for up to 12 credits. Permission of instructor required. Prerequisite: Statistics 201 or 202.
391- Individual Studies (1-3)
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``` Fall, Spring, Summer
393 See page 36, Individual Studies
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## STEM

111 Robotics for the K-12 STEM Educator (2) ..... Spring EvenThis course explores the field of robotics and a variety of multidisciplinary topics from science, mathematics, and technology necessary tounderstand the fundamentals of designing, building, and programming robots. Topics of focus include programming logic and problem-solving models. Prerequisite: Computer Science 115.
112 STEM Field Experience (1) Fall, SpringA 30-hour supervised field-based internship in a K-12 STEM classroom.

## Theatre Arts



## 001 Theatre Practicum (1-3)

 Fall, SpringStudents apply for one to three hours of academic credit for work on a theatre production. Registration for credit is required in the semester in which the project is to be produced. In addition to rehearsal, performance, or technical work, regular meetings and some written work are required.

102 Making Theatre (3). bring a play from the page to the stage.

103 Applied Crafts I: Stagecraft (1.5) .........................................................................................................................................................Fal
An introduction to set construction, the materials used, and safe scene shop practices with hands-on application of learned techniques.
113 Scenography I: Fundamentals of Theatrical Design (3)
.Spring Odd
An introduction to the elements of design and color theory in the realms of scenic, lighting, sound, props, and costume design.
120 Dance I: Fundamentals of Dance (1.5)
Fall
An exploration of dance history, styles, and improvisation methods. A program focusing on the art and movement technique of various dance styles. The course is tailored to each student's abilities while challenging their knowledge and understanding. Practice and repetition will be key elements in this class, and will progress from the basics, adding more detailed analysis of the exercises. Satisfies one CORE activity requirement.

203 Scenography II: Advanced Theatrical Design (3).
Spring Even This advanced theatrical design course will take a more in depth look at scenic design, as well as other design areas connected to the departmental productions for the academic semester. It will explore the materials needed, principles used, and practices of these design areas. This course will enable students to feel comfortable with and be employable in an introductory position in scenic design and the other design areas covered. Prerequisite: Theatre Arts 113; or permission of instructor.

204 The Actor's Instrument: Voice and Movement (1.5) Spring Even An integrated approach to developing vocal and physical agility in order to improve the expressive capability of performers and public speakers. This course includes performer well-being practices and foundational training in stage combat.

207 Improvisation: Generating for Performance (1.5) Spring Even Improvisational thinking is a valuable skill for leaders, creatives, and anyone in collaborative and/or generative contexts. This course considers our human capacity for improvisation, its value in our lives, and its applications in any vocation. Students will expand their improvisational capacities in an active learning environment.

220 Dance II: Dance as Art (1.5)
Spring Odd
A deeper exploration of dance history, styles, and improvisation methods than 120. A program focusing on the art and movement technique of various dance styles, implementing information learned into beginning choreography. The course is tailored to each student's abilities while challenging their knowledge and understanding. Practice and repetition will be key elements in this class, and will progress from the basics, adding more detailed analysis of the exercises. Satisfies one CORE activity requirement.

230 Applied Crafts II: Introduction to Stage Management (1.5)
.Fall Odd
A focused study of the skills and mechanics necessary to contribute well to the production process as a stage manager with an emphasis on organization, leadership, and communication.

231 Applied Crafts III: Lighting and Sound Technologies (1.5)
.Fall Odd
A hands-on look at the programs and materials used to create successful lighting and sound designs for the stage.
232 Applied Crafts IV: Costume and Make-up Studio (1.5)
.Spring Odd

281- Service-Learning (1-3) $\qquad$ Fall, Spring, Summer
283 See page 37, Service-Learning
307 The Actor's Process: Character Development (3). .. Spring Even
An exploration of approaches to developing a role for the stage or screen. Students will study and experience various methods in character development and practice the specific skills required to adapt to different genres, periods, and mediums, including dialects, imagination work, movement and mask work, and styles of acting.

320 Dance III: Dance Choreography and Performance (1.5)
Spring Even
Apply foundational dance skills and improvisation to advance understanding of choreography techniques. Focus on creating dances of various styles for solos, small groups, and large groups, culminating in the choreography and performance in a live dance concert. Satisfies one CORE activity requirement. Prerequisite: Theatre Arts 120 or 220; or permission of instructor.

## 341- Special Topics (1-3)

Occasional
348 These courses will consist of topics not normally covered in other program courses. Specially designed to focus on more specific topics utilizing instructor strengths and consideration of student needs.

365 Theatre in Cultural Context (3)
Spring Even An overview of the global history of theatre including movements and representative plays and playwrights from Western and non-Western traditions. This course will focus on the ways in which social and political conversations are carried out on stage and how cultural climate
has both influenced and been influenced by playwrights, performers, and theater makers. May not be taken on a pass/fail basis. Not recommended for freshmen students. Satisfies Core Program writing-intensive requirement.
366 Theatre Today (3).
.Spring Odd
Examines current trends, achievements and problems in contemporary western and non-westerns theatre and dramatic literature. Students
will read dramatic theory, contemporary dramatic literature, and situate their developing understandings within a Reformed worldview.
Not recommended for freshmen students.
371 Applied Theatre: Capstone Production Project (2-6)
Fall, Spring
The course content (directing, design, acting, technical theatre, playwriting, producing, research/writing) will be designed for each indi-
vidual in consultation with a departmental supervisor. Work on the project will be done in two or three semesters with enrollment in the
final semester. May not be taken on a pass/fail basis. Open only to majors and minors with junior or senior standing.
372 Scene Study (3)
.Spring Odd
Apply foundational acting skills and advanced methods to develop roles for stage and screen. Students will work collaboratively to rehearse
and perform scenes and develop audition repertoire. Recommended for students who have already taken other performance courses or
have experience acting in Dordt productions.
380 Writing for Performance (1.5)
Fall Even
Students will engage in the exploration and practice of writing for performance, in any medium, but concentrating on theatre. The students
will explore effective ways to translate ideas, insights, politics, and passions into words that will be performed, in the myriad rhythms of
human dialogue and monologue, within an effective story structure.
382 Advanced Directing (3).
.Fall Odd
Build on foundational skills to advance understanding of directing for the stage. Students will study concepts central to successful direct-
ing and apply them in and outside of class, culminating in the direction of a one-act play. Prerequisite: Theatre Arts 102; or permission of
instructor.
386 Majors Seminar (3)
.Fall Odd
A course on the arts and vocation, specifically related to theatre. Students will investigate all aspects of their calling as theatre artists includ-
ing: professional practices (such as goal setting, resume writing and auditioning), career wellness and sustainability, and the place of theatre
arts in God's kingdom.
391- Individual Studies (1-3) ............................................................................................................................................Fall, Spring, Summer
393 See page 36, Individual Studies

## Theology

General Major- Foundation (common to all emphases): CORE 150; Theology 110, 111, 210, 221, 310, 361; one course from Theology 211, 212, 213, 214; one course from Theology 215, 216, 217.

Students must select one of the following emphases:
Biblical Studies: Foundation; three courses from Theology 211, 212, 213, 214, 215, 216, 217; Biblical Languages 111, 112 or 113, 114. Biblical Greek and Biblical Hebrew are each strongly recommended for Biblical Studies. See Biblical Languages for course offerings.

Mission and Ministry: Foundation; Theology 231; three courses from Theology 241, 254, 331, 332, 351, 352; three credits from Theology 281, 282, 283, 371.

Theological Studies: Foundation; Theology 321,323, 324, 325; one theology course numbered 200 or above.
Youth Ministry: $\quad$ Foundation; Theology 231, 241, 254, 351, 352; Psychology 204 or 370; six credits from Theology 371, 372.
General Minor-
Theological Studies: Theology 111; Theology 110 or 210; four theology courses numbered 200 or above.
Admission to the Youth Ministries Program: Formal application for admission to the youth ministries program is required. Application should be made to the theology department at the end of the Discernment of Ministry (Theology 111) course, which should be taken in the freshman or sophomore year. Application will be based on the various statements developed in this course. The following are requirements for admission to the youth ministry program:

## UNDERGRADUATE ACADEMIC OFFERINGS: THEOLOGY

- Completed application form
- Minimum GPA of 2.00 in all theology courses to date
- Students may apply to the youth ministry program after their first academic year and must apply before their final academic year.

Once each year the members of the department will discuss each student's fitness to continue in the youth ministry program. A majority of the department members must approve a student to graduate with a youth ministry major. If a student's initial application is not accepted, the student may take additional courses for the major and reapply after each semester or may appeal to the division dean to have three professors outside of the theology department evaluate his/her application and supporting materials.

Theology courses are open to all majors and especially serve emphases in the following majors: Agriculture, Business Administration, Community Development, Theatre Arts, and Worship Arts.

For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 85-98, Teacher Preparation Program. For a description of the Worship Arts program, see page 152.

110 Biblical Studies Methods (3) Fall
This course introduces interpretive approaches and practices for reading the Bible using a Reformed hermeneutical method. Students will become familiar with major resources for biblical study, interpret a variety of Old Testament and New Testament texts, and discuss the manner in which the varied contexts (e.g., social, cultural, theological) of the biblical world and contemporary readers inform exegetical study. This is a foundational course in the theology program to develop skills in biblical studies and theological writing. Open to all students seeking to develop their reading, understanding, and application of Scripture.

111 Spiritual Formation (3) .Spring What does the Christian life of faith and discipleship look like? This course will explore the history and practice of the spiritual disciplines by studying the faith lives of important figures in the history of Christianity. The purpose of this exploration is to help students see how God is at work in the history of the church so they can begin to articulate their experience of God's work in their own lives. This is a foundational course in the theology program. It is open to any student interested in learning more about spirituality and discipleship.

210 Theological Methods (3) Fall What are interpretive approaches and practices for studying theology from a Reformed perspective? In this course, themes for discussion include the doctrines of God, Christology, scripture, creation, fall, redemption, and eschatological consummation. Students will have an opportunity to study both the historical development of these theological topics, as well as their contemporary application.

211 Old Testament: Pentateuch (3)
.Fall, every fourth year This course will introduce students to detailed study of the content, themes, and purposes of the Torah (Genesis, Exodus, Leviticus, Numbers, and Deuteronomy), as well as to the scholarly tools commonly used to interpret them. Students will practice close readings of portions of the Pentateuch and discuss the ways that the varied contexts in which these texts are read (e.g., canonical, theological) inform meaningful interpretation within the context of a historical-redemptive approach to scripture.

212 Old Testament: Prophets (3).
.Fall, every fourth year
This course will introduce students to detailed study of the content, themes, and purposes of the Prophetic books (Isaiah, Jeremiah, Ezekiel, Daniel, and the Book of the Twelve), as well as to the scholarly tools commonly used to interpret them. Students will practice close readings of portions of the Prophets and discuss the ways that the varied contexts in which these texts are read (e.g., canonical, theological) inform meaningful interpretation within the context of a historical-redemptive approach to scripture.

213 Old Testament: Wisdom and Writings (3) .Fall, every fourth year This course will introduce students to detailed study of the content, themes, and purposes of the Wisdom books and Writings (Job, Psalms, Proverbs, Song of Songs, Ruth, Ecclesiastes, Lamentations, and Esther), as well as to the scholarly tools commonly used to interpret them. Students will practice close readings of portions of these writings and discuss the ways that the varied contexts in which these texts are read (e.g., canonical, theological) inform meaningful interpretation within the context of a historical-redemptive approach to scripture.

214 Old Testament: Historical Books (3)
Fall, every fourth year This course will introduce students to detailed study of the content, themes, and purposes of the Historical Books (Joshua, Judges, 1-2 Samuel, 1-2 Kings, 1-2 Chronicles, Ezra, and Nehemiah; as well as 1-2 Maccabees), as well as to the scholarly tools commonly used to interpret them. Students will practice close readings of portions of these books and discuss the ways that the varied contexts in which these texts are read (e.g., canonical, theological) inform meaningful interpretation within the context of a historical-redemptive approach to scripture.

215 New Testament: Gospels (3).
. Spring, every third year This course will introduce students to detailed study of the content, themes, and purposes of each of the four canonical Gospels, as well as to the scholarly tools commonly used to interpret them. Students will practice close readings of portions of the Gospels and discuss the ways that the varied contexts in which these texts are read (e.g., canonical, theological) inform meaningful interpretation within the context of a historical-redemptive approach to scripture.

New Testament: Epistles (3)
Spring, every third year This course will introduce students to detailed study of the content, themes, and purposes of Paul's letters (Romans, 1-2 Corinthians, Galatians, Ephesians, Philippians, Colossians, 1-2 Thessalonians, 1-2 Timothy, Titus, Philemon) and the General Epistles (Hebrews, James, 1-2 Peter, 1-2-3 John, Jude), as well as to the scholarly tools commonly used to interpret them. Students will practice close readings of portions of the letters and discuss the ways that the varied contexts in which these texts are read (e.g., canonical, theological) inform meaningful interpretation within the context of a historical-redemptive approach to scripture.

217 New Testament: Acts, Revelation (3) $\qquad$ . Spring, every third year This course will introduce students to detailed study of the content, themes, and purposes of Acts and Revelation, as well as to the scholarly tools commonly used to interpret them. Students will practice close readings of portions of Acts and Revelation and discuss the ways that the varied contexts in which these texts are read (e.g., canonical, theological) inform meaningful interpretation within the context of a historical-redemptive approach to scripture.

221 The Great Tradition (3) ............................................................................................................................................................................................................. two thousand years as it has responded to challenges and defined its understanding of the Christian faith with a view to faith today.

231 Foundations of Mission and Ministry (3)...........................................................................................................................................Fall
A study of the Bible's teaching about the mission of the people of God and how the Christian Church understands mission and ministry. The course also explores the contextualization of the gospel in the Western and global Church.

241 Foundations of Worship (3) .......................................................................................................................................................Fall Even
A study of the Scriptural foundation for worship and of the components of worship. There will be a brief study of historic patterns of worship, leading to the preparation of liturgies and the practice of worship-leading skills. [Cross-listed: Worship Arts 241]

242 Worship in Contemporary Context (3)
Fall Odd
This course engages the theological and cultural issues that shape contemporary worship practices of the church. By exploring diverse worship practices students will develop a deeper understanding of the relationship between Christian worship and culture. The focus on this course is to help students cultivate discernment as they lead worship in a variety of cultural contexts. [Cross-listed: Worship Arts 242]

254 Teaching the Bible (3)
Fall Even
This course explores the Reformational approach to teaching the Bible. Its primary goal is to equip lay and professional ministry practitioners and teachers with the skill of preparing and presenting biblical content to diverse audiences. Interpretive attention will be given to the text of Scripture, the situation of the learner, the process of preparation, the art of presentation. The course will cover theological and pedagogical foundations as well as the practical content of teaching Bible. This course is relevant for those teaching in a local church context as well as for those developing curriculum to teach the Bible in a high school classroom setting. [Cross-listed: Education 261]

261 Encountering the Land of Israel (3) Summer Occasional Travel on location in Israel for a two-week, transformative immersion course covering the land, culture, and story of the Bible. Biblical study takes on new meaning as you relate it directly to your surroundings through activities and experiences that engage all your senses. Assignments include readings and lectures on the history, culture, archaeology, and geography of Israel, all framed within a Reformational perspective on how to read the Bible well and how to engage important political and religious issues that continue today. [Cross-listed: CORE 287]

281- Service-Learning (1-3) $\qquad$ Fall, Spring, Summer
283 See page 37, Service-Learning
310 Christian Ethics (3)
.Fall Even
What does it mean to pursue the good life and how do we so as faithful disciples of Christ? What do we owe to God, neighbor, stranger, and enemy? Answers to these questions are more difficult to come by than we might expect - or hope. We live in a world rife with sin, corruption, and moral disagreement. Even faithful Christians can arrive at profoundly different moral judgments about life in the church and the world. This course aims to equip students with theological and ethical tools that they can use to reflect critically on what it means to live faithfully in contemporary society. Prerequisite: CORE 200 or Theology 210.

321 Modern and Contemporary Theology (3).
.Fall Even
By surveying important theological trends from the Reformation to the present, students will critically engage major theological issues that shape Christian thought and life today. Prerequisite: CORE 200 or Theology 210.

323 Christian Mind and Heart (3)
..Spring Odd
In conversation with great thinkers of the past, we will discuss the biblical foundation for Reformed thinking, the responsibility of humans to fulfill our mission as image-bearers in God's world, and the development of a Reformed world and life view for actual Christian thinking and living. Students will explore significant issues of Christian life through personal and group projects that engage particular aspects of their major studies or life vision. Prerequisite: CORE 200 or Theology 210.

324 Theology of the Reformation (3) .Spring Even This course focuses on Luther and Calvin against their historical and theological backgrounds in order to understand the foundation of Protestant theology and thought. By studying both their classical works and secondary sources, students will critically understand how the fundamental doctrines began to be shaped in the 16th century and how they developed in the centuries following. Theological method, spirituality, and culture of the Reformation theology will be discussed along with the landmark doctrines concerning Scripture, sin and grace, salvation, and church. Prerequisite: CORE 200 or Theology 210.

325 Ancient and Medieval Theology (3)
.Fall Odd
By surveying important theological trends from the ancient church to the Reformation, students will critically engage major theological issues that shape Christian thought and life today. Prerequisite: CORE 200 or Theology 210.

331 Engaging World Religions (3) ...................................................................................................................................................................................... An exploration of how the major world religions function in human life. Major topics will include systems of religious belief and worldview, sacred literature, symbols, rituals, and practices. Students will explore diverse religious practices by bringing the biblical and theological perspective of the Reformed tradition into dialogue with different religious systems. The goal of this exploration is to use the tools of the Reformed tradition to gain a practical understanding of different religions in order to engage people of different faiths with the gospel. Theology 231 recommended.

332 Engaging Mission and Ministry (3)
.Spring Odd
An in-depth study of the contemporary issues that the Church faces in understanding and carrying out its mission and ministry in the 21st century and a global context. The course identifies issues such as contextualization and the relation of verbal proclamation to social involvement. It engages practical, biblical, and theological responses in mission and ministry at a personal and communal level. Prerequisite: Theology 231.

333 Psalms, Hymns, and Spiritual Songs (3) ...............................................................................................................................Spring Even
An overview of the role of music in worship, worship music repertoire, and information and skills needed to plan music for worship. [Crosslisted: Worship Arts 333]

334 Elements of Praxis in Worship (3).
.Spring Odd
The focus on this course is to equip students with the practical insight needed to lead worship in a contemporary context. This includes learning how to use equipment, how to organize and lead a practice, cultivating a stage presence, how to develop excellent sound, and incorporating a diversity of instruments into worship. Prerequisite: Theology 241, 242. [Cross-listed: Worship Arts 334]

341- Special Topics (1-3)
Occasional
348 These courses will consist of topics not normally covered in other program courses. Specially designed to focus on more specific topics utilizing instructor strengths and consideration of student needs.

351 Gospel, Church, and Culture (3)
..Fall Odd
Study of a Reformed approach to ministry in the context of the congregation and contemporary culture. The course includes the study of a Reformed philosophy of ministry, the nature of the church, cultural dynamics that affect both ministry and the church, and the character of leadership that takes all these factors into account. Theology 231 recommended.

352 Leadership and Discipleship (3) ............................................................................................................................................Spring Even This course explores leadership from a Reformational perspective by focusing on such issues as discipleship, character formation, working with teams, conflict resolution, leading small groups, and communication. The purpose of this course is to help students cultivate the insight and discernment needed to develop a biblical approach to leadership in dialogue with the fields of communication, organizational theory, and Christian ethics. Theology 231 recommended.

361 Senior Seminar (3) .Spring
This is the capstone course for Theology majors, but it is open to minors also. This course is to help those who have studied in theology consolidate their theological education to focus on contemporary issues in the church and develop the biblical message to address contemporary life in effective public address. [Cross-listed: Worship Arts 361]

371- Ministry Practicum (3-6)..........................................................................................................................................Fall, Spring, Summer
372 Students will engage in field experience in a ministry related area under the guidance of both a site and a department supervisor. Three hours of course credit will be based on 126 hours of involvement. This course requires instructor permission prior to pre-registration.

391- Individual Studies (1-3) $\qquad$ Fall, Spring, Summer
393 See page 36, Individual Studies

## Worship Arts

| General Major- | Foundation (common to all tracks): Business Administration 215; Communication 222; Theology 110, 111, 221, 351, 352; Worship Arts 241, 242, 333, 334, 361; Philosophy 206 or Theology 310; a minimum of six credits from: Worship Arts 018, 281, Music 010-020, 240-270, Music, Theology, or Worship Arts Internship. |
| :---: | :---: |
| Students must select one of the following tracks: |  |
| Art: | Art 201, 202; one course from Art 207, 208, 209, 210; one course from Art 216, 218, 225, 228, 230, 240. |
| Communication: | Communication 220, 222, 228, 240. |
| Digital Media: | Art 201, 240; Communication 240, 250. |
| English: | English 220, 301, 322; one course from English 233, 304, 307. |
| Modern Worship | Music 103, 103L, 104, 104L; off campus semester on Contemporary Music Center program. |
| Music: | Music 103, 103L, 104, 104L, 215; two courses from Music 206, 207, 208. |
| Theatre Arts: | Theatre Arts 102, 103, 230, 231, 380; Theatre Arts 204 or 207; Theatre Arts 113 or 382. |
| Theology: | Two courses from Theology 211-214; two courses from Theology 215-217. |
| General Minor- | Music 103, 103L; Theology 110, 111; Worship Arts 241, 242; one course from Business Administration 215, Worship Arts 333, 334; Music 019 or 250; two credits from Music 010-020, 240-270; two credits from Worship Arts 018, 281; two additional credits from Music 010-020, 240-270, Worship Arts 018, 281. |

## 018 Worship Arts Ensemble Participant (.5)

 Fall, SpringA worship music ensemble involving weekly participation, reflection, and coaching.
241 Foundations of Worship (3)
Fall Even
A study of the Scriptural foundation for worship and of the components of worship. There will be a brief study of historic patterns of worship, leading to the preparation of liturgies and the practice of worship-leading skills. [Cross-listed: Theology 241]

242 Worship in Contemporary Context (3)
.Fall Odd
This course engages the theological and cultural issues that shape contemporary worship practices of the church. By exploring diverse worship practices students will develop a deeper understanding of the relationship between Christian worship and culture. The focus on this course is to help students cultivate discernment as they lead worship in a variety of cultural contexts. [Cross-listed: Theology 242]

281 Worship Arts Ensemble Leader (1)
Fall, Spring
Develop knowledge, confidence, skill, and character as a worship leader and participant through leadership of a worship music ensemble.
333 Psalms, Hymns, and Spiritual Songs (3) $\qquad$ Spring Even An overview of the role of music in worship, worship music repertoire, and information and skills needed to plan music for worship. [Crosslisted: Theology 333]

334 Elements of Praxis in Worship (3). .Spring Odd
The focus on this course is to equip students with the practical insight needed to lead worship in a contemporary context. This includes learning how to use equipment, how to organize and lead a practice, cultivating a stage presence, how to develop excellent sound, and incorporating a diversity of instruments into worship. Prerequisite: Worship Arts 241, 242. [Cross-listed: Theology 334]

341- Special Topics (1-3)
Occasional
348 These courses will consist of topics not normally covered in other program courses. Specially designed to focus on more specific topics utilizing instructor strengths and consideration of student needs.

361 Senior Seminar (3) Spring
This is the capstone course for Theology majors, but it is open to minors also. This course is to help those who have studied in theology consolidate their theological education to focus on contemporary issues in the church and develop the biblical message to address contemporary life in effective public address. [Cross-listed: Theology 361]

391- Individual Studies (1-3) $\qquad$ Fall, Spring, Summer
393 See page 36, Individual Studies

## Graduate Studies

## Master of Education and Master of Special Education Program Description

Dordt University's undergraduate and graduate programs in education grow out of a Christian perspective rooted in the Reformed tradition. Dordt faculty and students approach the teaching profession as a calling to help guide young people to a greater understanding of God's creation and a greater commitment to lives of discipleship. We believe that teachers and students are created for a relationship with God as his image bearers and must treat one another with integrity and dignity. In the graduate education programs, new ideas for teaching and leading are developed and critiqued in light of biblical principles. Graduates of the Dordt M.Ed. and MSpEd programs will be better able to articulate a Christian perspective for education. They will also be prepared to translate that perspective into practice within their classroom, school, and community.

Licensure.....The Dordt University M.Ed. and MSpEd programs have been approved by the Iowa Department of Education. Specializations in the curriculum and instruction track may lead, in conjunction with undergraduate courses, to license endorsements in developmental reading and early childhood education. Some endorsements may be required by the state to have additional student teaching hours. Six semester hours from this track meet the requirements to convert an initial license to a standard license within the State of Iowa. This track also meets the master's degree requirements for the Master Educator's license. The School Leadership specialization in the Administration track leads to the Initial Administrator license in the State of Iowa. The Initial Administrator license is the entry level license for all new administrative licensees in the State of Iowa. Tracks in the MSpEd degree can lead to endorsements in mild/moderate, behavior disorders/learning disabilities, or intellectual disabilities. An additional option is national certification in Applied Behavior Analysis.

## Master of Public Administration Program Description

Dordt's Master of Public Administration (MPA) program will equip you with the management and leadership skills needed to thrive in public or nonprofit institutions. The MPA, which is sometimes referred to as the public sector MBA, will give invaluable experience in program evaluation, public finance, and organizational theory that will be beneficial in a variety of fields including social work, criminal justice, city management, and nonprofit work. By earning a degree in Dordt's MPA program, students feel equipped to serve others in management positions in a variety of industries.

Drawing on the depth of the Kuyperian tradition that Dordt was founded on, Dordt's MPA program is not only informed by a deep Christian worldview but is also rooted in a vision of Christian engagement that emphasizes the value of societal institutions.

## Master of Social Work Program Description

Through Dordt's Master of Social Work (MSW) program, students will learn about diverse communities and broadening perspectives on social justice all while remaining rooted in the belief that all people are image bearers of God. Students will also be equipped to serve others professionally in non-profit agencies, counseling clinics, schools, and government agencies. The mission statement for the Dordt University Social Work Program states, "The Dordt University Social Work program empowers students for evidence-informed professional practice and lives of service in the name of Christ. Through engaging perspectives on social justice and practice in communities, the program prepares students for work with diverse populations, recognizing that all people are made in the image of God."

## Graduate Studies Expectations

Undergraduate studies teach us how to learn and be ready to enter a profession. Graduate studies teach us how to think more deeply and make more focused professional contributions. Since college graduates are assumed to know how to study and learn quite effectively already, Dordt University expects coursework for graduate credit to be at a higher level than undergraduate work. This means even greater levels of critical and creative thinking (e.g., analysis, synthesis, evaluation, and creative application) are built into course requirements. Although the minimum number of clock hours for a graduate course is similar to that of an undergraduate course, we expect graduate students to possess or develop the ability for more efficient and deeper reading and more effective amounts of writing and other academic productivity than they most likely exhibited in their undergraduate courses. Many graduate courses also require a significant synthesizing paper or project, often with immediate professional application opportunities. Additionally, many graduate courses provide rich opportunities to collaborate with others with similar professional experiences and aspirations, creating a vibrant learning community enlivened by much more than just the instructor's credentials and years of experience. Graduate courses at Dordt also expect students' spiritual insight to develop into a deeper and more farreaching contemporary response to course content.

## Graduate Academic Calendar

| 2023-24 (tentative) |  | DayActivity |
| :---: | :---: | :---: |
| August 29 | Tuesday | M.Ed., MSpEd , MSW, MPA fall module I classes begin |
| September 4 | Monday | Last day of drop/add period |
| October 19 | Thursday | MPA fall module I session ends |
| October 19 | Thursday | End of first set of half-courses (M.Ed. and MSpEd) |
| October 20 | Friday | Beginning of second set of half-courses (M.Ed. and MSpEd) |
| October 20 | Monday | MPA fall module II classes begin |
| November 6 | Monday | Registration for spring semester |
| November 6 | Monday | Last day to withdraw from a course |
| December 19 | Tuesday | Fall semester ends (M.Ed., MSpEd, MSW, MPA) |
| January 11 | Thursday | M.Ed., MSpEd, MSW, MPA spring module I classes begin |
| January 17 | Wednesday | Last day of drop/add period |
| March 1 | Friday | End of first set of half-courses (M.Ed. and MSpEd) |
| March 1 | Monday | MPA spring module I session ends |
| March 13 | Wednesday | Beginning of second set of half-courses (M.Ed. and MSpEd) |
| March 13 | Wednesday | MPA spring module II classes begin |
| March 27 | Wednesday | Registration for fall and summer terms |
| March 28 | Friday | Last day to withdraw from a course |
| May 9 | Thursday | Spring semester ends (M.Ed., MSpEd, MSW, MPA) |
| May 10 | Friday | Commencement-10 a.m. |
| May 15 | Wednesday | MPA and MSW summer module I classes begin |
| June 3 | Monday | M.Ed. and MSpEd summer session begins |
| July 2 | Tuesday | MPA and MSW summer module I classes ends |
| July 4 | Thursday | MPA and MSW summer module II classes begin |
| July 29 | Monday | M.Ed. and MSpEd summer session ends |
| August 21 | Wednesday | MPA and MSW summer module II classes end |

## Graduate Admissions

## Master of Education Admission

Applications for admissions are received and accepted through the year.
Regular Admission for Curriculum and Instruction and Administration Regular admission is granted to all candidates who have met all of the admission criteria:

1. An undergraduate grade point average of at least 3.0 from an accredited institution in education.
2. Official transcripts sent to the Director of Graduate Studies from your undergraduate institution as well as transcripts from any graduate level course that you would like to have considered for transfer into the program.
3. Resume.
4. A recommendation form completed by your administrator or supervisor.
5. Successful teaching experience at the P-12 level for a minimum of one year.
6. Applicants for whom English is a second language must have an adequate command of English as demonstrated by their performance on the Test of English as a Foreign Language (TOEFL). Institutional code is 6171 and the department code is 3101.

Regular Admission for Sport Leadership Regular admission is granted to all candidates who have met all of the admission criteria:

1. An undergraduate grade point average of at least 3.0 from an accredited institution.
2. Official transcripts sent to the Director of Graduate Studies from your undergraduate institution as well as transcripts from any graduate level course that you would like to have considered for transfer into the program.
3. Resume.
4. A recommendation form completed by your administrator or supervisor.
5. Completion of 24 hours of undergraduate coursework in sport management, physical education, education, business, or psychology or 500 hours of direct coaching, teaching, or related supervisory experience (e.g., camp counseling).
6. Applicants for whom English is a second language must have an adequate command of English as demonstrated by their performance on the Test of English as a Foreign Language (TOEFL). Institutional code is 6171 and the department code is 3101 .

Administrative License Only Administrative license only status may be granted to candidates applying for admission to the School Leadership specialization who already have a master's degree in education that includes the curriculum and instruction courses required in this specialization. Students with this status will not earn an additional master's degree but will be recommended for an lowa administrative license upon completion of their licensing-only plan of study. Students meeting the following criteria may be granted this status:

1. A bachelor's degree from an accredited institution and completion of at least 24 hours of undergraduate course work in education. A graduate degree in education that includes three or more courses equivalent to Education $501,502,503,504,505,560,561,562,563$, and 564. The overall GPA earned in this previous program must be 3.0 or above, and the grade point in each accepted equivalent course must be 3.0 or above. Courses used for equivalencies must not be more than 10 years old at the time of completion of the Dordt University plan of study.
2. Official transcripts sent to the Director of Graduate Studies from both your undergraduate and graduate programs.
3. Resume.
4. A recommendation form completed by your administrator or supervisor.
5. Successful teaching experience at the P-12 level for a minimum of one year or a minimum of 500 hours of verified experiences in teaching or direct coaching beyond the bachelor's degree.
6. Applicants for whom English is a second language must have an adequate command of English as demonstrated by their performance on the Test of English as a Foreign Language (TOEFL). Institutional code is 6171 and the department code is 3101.

Endorsement Only Endorsement only status may be granted to candidates applying for admission to the Special Education, Developmental Reading, or Early Childhood Education specializations who already have a teacher's license and wish to add an endorsement area to that license. Students with this status will not earn a master's degree but will be recommended for an lowa license endorsement upon completion of their endorsement-only plan of study. Taking only the required courses in these specializations may not fully qualify one for an endorsement, which requires meeting all requirements of the endorsement (including as necessary appropriate courses in one's undergraduate program). Students meeting the following criteria may be granted this status.

1. A bachelor's degree from an accredited institution and a teacher's license. The overall GPA earned in the undergraduate program must be 3.0 or above. Undergraduate courses older than 10 years old may need to be retaken or updated with additional graduate courses for the endorsement.
2. Official transcripts sent to the Director of Graduate Studies from both your undergraduate and graduate programs.
3. Resume.
4. A recommendation form completed by your administrator or supervisor.
5. Successful teaching experience at the P-12 level for a minimum of one year or a minimum of 500 hours of verified experiences in teaching or direct coaching beyond the bachelor's degree.
6. Applicants for whom English is a second language must have an adequate command of English as demonstrated by their performance on the Test of English as a Foreign Language (TOEFL). Institutional code is 6171 and the department code is 3101.

Conditional Admission Conditional admission may be granted to applicants who do not currently meet all of the criteria for regular admission. Status of conditionally admitted students will be reviewed after nine hours of graduate course work have been completed. The grade point average in graduate course work of the student needs to be at least 3.0 before the conditional admission status can be changed to regular admission status.

Special Admission Special admission may be granted to those who do not plan to become candidates for a master's program but wish to participate in one or more graduate courses. Admission may be granted by providing the following:

1. A completed application for program admission.
2. A transcript of all undergraduate and graduate credit received.

## Master of Public Administration Admission

Applications for admissions are received and accepted through the year.

Regular Admission Regular admission is granted to all candidates who have met all of the admission criteria:

1. An undergraduate grade point average of at least 3.0 from an accredited institution.
2. Official transcripts sent to the Director of Graduate Studies from your undergraduate institution as well as transcripts from any graduate level course that you would like to have considered for transfer into the program.
3. Resume.
4. A recommendation form completed by your supervisor or advisor or a letter of recommendation addressing the prospective student's suitability for graduate study, especially in public administration.
5. Applicants for whom English is a second language must have an adequate command of English as demonstrated by their performance on the Test of English as a Foreign Language (TOEFL). Institutional code is 6171 and the department code is 3101.

Conditional Admission Conditional admission may be granted to applicants who do not currently meet all of the criteria for regular admission. Status of conditionally admitted students will be reviewed after nine hours of graduate course work have been completed. The grade point average in graduate course work of the student needs to be at least 3.0 before the conditional admission status can be changed to regular admission status.

Special Admission Special admission may be granted to those who do not plan to become candidates for a master's program but wish to participate in one or more graduate courses. Admission may be granted by providing the following:

1. A completed application for program admission.
2. A transcript of all undergraduate and graduate credit received.

## Master of Social Work Admission

Applications for admissions are received and accepted through the year.
Regular Admission Regular admission is granted to all candidates who have met all of the admission criteria:

1. An undergraduate grade point average of at least 3.0 from an accredited institution.
2. Official transcripts sent to the Director of Graduate Studies from your undergraduate institution as well as transcripts from any graduate level course that you would like to have considered for transfer into the program.
3. Resume.
4. Completion of an essay on your Christian perspective on the social work profession and why you wish to pursue the MSW degree at Dordt University.
5. Two recommendations, one professional recommendation form completed by your supervisor or advisor and one academic letter of recommendation addressing the prospective student's suitability for graduate study, especially in social work. If students do not have access to an academic reference, two professional references can be submitted.
6. Applicants for whom English is a second language must have an adequate command of English as demonstrated by their performance on the Test of English as a Foreign Language (TOEFL). Institutional code is 6171 and the department code is 3101 .

Advanced Standing Preference for admittance to Advanced Standing will be given to those students who completed their BSW degree no more than seven years prior to application. If students completed their BSW more than seven years before applying to the MSW program, they must demonstrate that they have engaged in continuing education and professional social work practice during a majority of the years since their baccalaureate education. Those whose BSW degrees are more than seven years old (advanced plus standing) will be asked to complete three foundationyear courses: SOWK 520: Practice I Individuals, SOWK 521: Practice II Families \& Groups, and SOWK 513: Social Work Research Methods.

A copy of the Field Evaluation from BSW field experience(s) documenting satisfactory generalist practice experience and skills in the internship is required. While prospective students may be admitted conditionally based on their performance in the field, full admission is contingent upon receipt of final field evaluation. When the final field evaluation is not available, the applicant must submit the Field Verification Form. These students will be required to take nine credits of foundation courses.

Regular Standing Students who have not completed a BSW will be admitted into the program with the status of Regular Standing.
Conditional Admission Conditional admission may be granted to applicants who do not currently meet all of the criteria for regular admission. Status of conditionally admitted students will be reviewed after nine hours of graduate course work have been completed. The grade point average in graduate course work of the student needs to be at least 3.0 before the conditional admission status can be changed to regular admission status.

Special Admission Special admission may be granted to those who do not plan to become candidates for a master's program but wish to participate in one or more graduate courses. Admission may be granted by providing the following:

1. A completed application for program admission.
2. A transcript of all undergraduate and graduate credit received.

## Master of Special Education Admission

Applications for admissions are received and accepted through the year.

## GRADUATE STUDIES: ADMISSIONS

Regular Admission Regular admission is granted to all candidates who have met all of the admission criteria:

1. An undergraduate grade point average of at least 3.0 from an accredited institution.
2. Official transcripts sent to the Director of Graduate Studies from your undergraduate institution as well as transcripts from any graduate level course that you would like to have considered for transfer into the program.
3. Resume.
4. A recommendation form completed by your supervisor or advisor or a letter of recommendation addressing the prospective student's suitability for graduate study, especially in special education.
5. Applicants for whom English is a second language must have an adequate command of English as demonstrated by their performance on the Test of English as a Foreign Language (TOEFL). Institutional code is 6171 and the department code is 3101.

Conditional Admission Conditional admission may be granted to applicants who do not currently meet all of the criteria for regular admission. Status of conditionally admitted students will be reviewed after nine hours of graduate course work have been completed. The grade point average in graduate course work of the student needs to be at least 3.0 before the conditional admission status can be changed to regular admission status.

Special Admission Special admission may be granted to those who do not plan to become candidates for a master's program but wish to participate in one or more graduate courses. Admission may be granted by providing the following:

1. A completed application for program admission.
2. A transcript of all undergraduate and graduate credit received.

## Transfer of Credit

Graduate work completed at other regionally accredited graduate institutions may be accepted in partial fulfillment of the requirements for a master's degree at Dordt University subject to the following conditions:

1. Transfer credit will not be allowed for any graduate level course in which the grade received was lower than a B (3.0).
2. A maximum of six semester hours may be transferred from regionally-accredited institutions who are not ARCU members. Three additional hours may be transferred from any institution belonging to the Association of Reformed Colleges \& Universities (ARCU). ARCU institutions currently include the following: Calvin University, Covenant College, Dordt University, Geneva College, Institute for Christian Studies, King's University College, Providence Christian College, Redeemer University College, and Trinity Christian College.
3. Each request for transfer of graduate credit will be considered on an individual basis. The value of the course content in relationship to the applicant's program will be considered in the decision.
4. Any graduate work undertaken at another institution after admission to the Dordt University graduate program must be approved in advance by the Director of Graduate Studies.
5. Correspondence credits will be accepted toward the master's degree program only with prior approval of the Director of Graduate Studies.
6. Courses older than 10 years at the end of a student's Dordt studies will not be accepted for transfer credit.
7. Course equivalents from previous graduate degrees used as licensing requirements in the Administrative Licensing Only status in the M.Ed. are not considered transfer courses. Students in this status are not degree seeking, and these former courses, though necessary for a state licensing recommendation, are not "transferred in" for credit toward a degree.

## Graduation

To be eligible for the Master of Education degree the student must have:

1. Completed all admission to candidacy requirements.
2. Completed all required credits. (Note: The Action Research Project for EDUC 510 must be complete by the end of March for a student's inclusion in the May commencement bulletin and program.)
3. Achieve a minimum grade point average of 3.0 for the total graduate program, with no more than three hours of grade " C " range for required courses and with no "D" or "F" grades for required courses.
4. Completed a formal application for graduation with a $\$ 100.00$ program completion fee.

To be eligible for the Master of Public Administration degree the student must have:

1. Completed all admission to candidacy requirements.
2. Completed all required credits.
3. Achieve a minimum grade point average of 3.0 for the total graduate program, with no more than three hours of grade "C" range for required courses and with no "D" or "F" grades for required courses.
4. Completed a formal application for graduation with a $\$ 100.00$ program completion fee.

To be eligible for the Master of Social Work degree the student must have:

1. Completed all admission to candidacy requirements.
2. Completed all required credits.
3. Achieve a minimum grade point average of 2.50 for the total graduate program, with no " D " or " F " grades for required courses.
4. Completed a formal application for graduation with a $\$ 100.00$ program completion fee.

To be eligible for the Master of Special Education degree the student must have:

1. Completed all admission to candidacy requirements.
2. Completed all required credits.
3. Achieve a minimum grade point average of 3.0 for the total graduate program, with no more than three hours of grade " C " range for required courses and with no "D" or " F " grades for required courses.
4. Completed a formal application for graduation with a $\$ 100.00$ program completion fee.

## Graduate Finances

## Expenses

Tuition and fees assessed are designed to cover the costs incurred by the university in providing a quality education at a reasonable price.

| Tuition for Graduate Programs |  |
| :--- | :---: |
| Master of Education courses per credit hour | $\$ 405$ |
| Master of Public Administration courses per credit hour | $\$ 560$ |
| Master of Social Work courses per credit hour | $\$ 790$ |
| Master of Special Education courses per credit hour | $\$ 405$ |
| Fees |  |
| One-time technology fee (M.Ed./MPA/MSW/MSpEd) | $100 / 100 / 300 / 100$ |
| Program completion fee (all programs, licensure, and endorsements) | 100 |
| Optional commencement fees |  |
| Master's Hood (for purchase) | 30 |
| Thesis hardcopy (for Teacher Leadership students) | 105 |

## Registration and Payment of Fees for Graduate Students

Students will register through their student portal in April for the summer and fall semesters and in November for the spring semester. A late registration fee will be charged for registrations after the given deadline for each semester. New student computer accounts will be activated upon registration. Appropriate course materials will be sent to the student. Tuition and applicable fees are due and payable at the beginning of each session. A finance charge of .75 percent per month (nine percent annual percentage rate, accrued monthly) is charged on all unpaid accounts. Students may not register for a new session if their account balance is not paid in full. The university will withhold transcripts and grade reports until accounts are paid in full.

Online Payment Option Credit Card or online bank payments can be initiated through Dordt's third-party servicing agent, ACI. Dordt University uses ACI for collection of online payments. For credit/debit card payments, ACI charges a fee of $2.65 \%$ ( $\$ 3.95$ minimum). For ACH payments from your checking account, ACI charges a fee of $\$ 0.75$.

If you choose not to make an online payment, you may send a check or money order to the Dordt University Business Office, 700 7th Street NE, Sioux Center, IA 51250. If you have further questions, contact studentaccounts@dordt.edu.

The Canadian Exchange Rate is determined the 1st and 15th of each month and can be viewed online or by contacting the Business Office at 712-722-6013.

Refund Policy When a student registers for one or more courses, computer accounts are activated and the student is entered into the registration database. If a student completely terminates enrollment (i.e., cancels his/her registration, withdraws, or is dismissed) during the semester, the student's refundable charges and financial aid will be prorated if the student has been enrolled for 60 percent of the semester or less. If a student has been enrolled for more than 60 percent of the semester, the student is not eligible for a reduction in charges. The withdrawal date is the later of (1) the date the student begins the withdrawal process by providing official notification (oral or written) of the intent to withdraw; or (2) the student's last date of attendance at an academically related activity. A student who wishes to withdraw must contact the Director of Graduate Studies to initiate and complete the appropriate paperwork.

The percentage of the semester completed is calculated by dividing the number of days enrolled by the number of calendar days in the semester, including weekends and holidays, but excluding breaks of five or more consecutive days. For example, if there are 107 calendar days
in a semester and a student's withdrawal date is on the 50th day, the student's refundable charges and financial aid will be prorated to reflect enrollment for 46.7 percent of the semester ( 50 days divided by 107 days).

## Financial Aid

Dordt University provides financial aid to graduate students in the form of federal loan programs. Costs are kept as reasonable as possible in an effort to make a graduate education available to as many people as possible. Grants from federal sources are not available for graduate study. No institutional grants are available because the university has already designed the program to have a very low tuition rate.

To receive financial aid, a student must complete a FAFSA (Free Application for Federal Student Aid) to determine the amount a student (and spouse) can contribute from their own resources. If applying for aid in the summer, please use the upcoming year's FAFSA. Once the family contribution has been established, any additional need can be met through one of the federal loan programs.

Generally, a graduate student is considered an independent student for financial aid purposes. This means only student (and spouse) information is required rather than parental information. An exception to this would be students who are taking graduate and undergraduate courses at the same time. These students would be treated as undergraduate students and would have their dependency status determined according to the rules currently in place for undergraduate students.

In order to receive financial aid, a student must be at least a half-time student for U.S. financial aid programs. A Canadian student will be required to be full-time to receive a Canada Student Loan. The following loans may be available to students applying for financial aid:

Federal Unsubsidized Stafford Loan Program This is a federal loan program. A Federal Stafford Loan for graduate students is always unsubsidized. This means interest will accrue as soon as the loan is disbursed. Interest rates are determined on July 1 for the upcoming school year.

Canada Student Loan Program These loans are available to the full-time Canadian students in most provinces. The interest rate is determined at the time repayment begins. The amount of the loan varies, but usually ranges between $\$ 6,000-\$ 7,000$ Canadian dollars. Applications can be obtained at the Provincial Office of Education and should be applied for well before the funds are needed.

Veterans' Education Benefits Dordt University is approved to offer education to students who are eligible for benefits under the terms of the Veterans' Post 9/11 GI Bill. Eligible students should write to their regional Veterans' Administration Office to obtain the application information. Dordt University also participates in the Yellow Ribbon Program.

For students utilizing the GI Bill, Dordt University will not impose any penalty including: 1) the assessment of late fees; 2) the denial of access to classes, libraries or other institutional facilities and /or 3) the requirements that a Chapter 31 or Chapter 33 recipient borrow additional funds to cover the individual's inability to meet his or her financial obligations to the institution due to the delayed disbursement of a payment by the U.S. Department of Veterans Affairs.

Enrollment Status Students who are registered in a fall or spring semester for at least nine semester-hours are considered full-time in the program. Students registered for fewer than nine credits are considered part-time.

## Scholarships

Dordt University Donor-Funded Annual Scholarships Donor-funded scholarships vary in dollar amounts and in recipient selection criteria. Typically, the application process includes an application form and recommendation and a scholarship committee that selects the recipients. Scholarship descriptions and application instructions can be found online at www.dordt.edu/academics/graduate-degrees/master-education-program/tuition-and-fees. Students may also contact the Office of Graduate Studies (grad@dordt.edu) with inquiries.

Marion and Jan Van Soelen School Leadership Scholarship The $\$ 2,000$ scholarship will be awarded over the full length of the student's program, at $\$ 200$ per three-credit course. This scholarship will be awarded to a first-time Master of Education student specializing in school leadership starting the program at the beginning of the graduate academic year (summer). Financial need will be considered including employer reimbursement or assistance programs. Preference will be given to students from populations underrepresented in this program.

The Missio Dei School Leadership Scholarship The annual $\$ 2,000$ scholarship will be awarded over the full length of the student's program studies at $50 \%$ reduction per credit. This scholarship will be awarded to a Master of Education student specializing in school leadership. The Scholarship will be awarded to a student who demonstrates financial need. Funding available through an employer reimbursement or assistance program will also be considered when evaluating financial need. Preference will be given to students from populations underrepresented in this program. Special priority will be given to current and aspiring school administrators employed by Presbyterian Christian Schools in Belize, Central America. Recipients must reapply for the annual $\$ 2,000$ scholarship until the completion of their program.

## Graduate Academic Policies

All general academic policies as listed in the undergraduate section at the front of the university academic catalog apply to graduate studies as well unless a university policy is modified specifically for graduate programs as listed below.

Academic Advisor The Graduate Studies Academic Advisor serves as the advisor to all graduate students.
Academic Alert Students who finish a term with a cumulative or term GPA below the graduation requirement ( 3.00 for M.Ed., MPA, MSpEd or 2.50 for MSW ) will be alerted to their academic status at the beginning of the following semester. Students will be urged to talk with a faculty member or the Office of Graduate Studies to create a remediation strategy. Alerts may also be issued during a semester when an instructor reports that a student is in danger of failing his or her course. Academic alerts do not result in any additional restrictions of activity or loss of financial aid but are intended to inform students of their current situation so they can take action to correct it.

Academic Probation Students who finish a semester with a cumulative GPA below 2.50 for M.Ed., MPA, MSpEd or 2.00 for MSW will be placed on academic probation. Students are notified by letter when placed on probation. The graduate studies committee will set certain requirements for a student on probation, including a minimum GPA to be attained in the following semester. A student who has been placed on academic probation and fails to meet the requirements established by the committee the following semester will be subject to academic suspension. Probation may result in the loss of certain forms of financial aid.

Academic Standing A graduate student is expected to maintain a minimum cumulative GPA of 3.00 for M.Ed., MPA, MSpEd or 2.50 for MSW to graduate. Students with a GPA falling below 2.50 for M.Ed., MPA, MSpEd or 2.00 for MSW are put on academic probation and must remedy this situation in their next term of coursework. Students with GPAs below 3.00 for M.Ed., MPA, MSpEd or 2.50 for MSW are provided a warning and monitoring by the Office of Graduate Studies until the GPA is 3.00 for M.Ed., MPA, MSpEd or 2.50 for MSW or above.

Academic Suspension Students who do not remedy a GPA below 2.50 for M.Ed., MPA, MSpEd or 2.00 for MSW within their next term of coursework are subject to academic suspension from the university for a period of one semester. Students suspended from the university will be notified of their suspension immediately in writing and may be given an opportunity to file a letter of appeal prior to the start of the next semester. Students filing an appeal must do so in writing to the registrar by the time indicated in the notification of suspension. The letter of appeal should explain the situation leading up to the suspension, including extraordinary circumstances such as serious illness, injury, or family crisis, and include a specific plan for correcting the problems. Students allowed to return on the basis of an appeal will be placed on academic probation as described above. Students allowed to return on appeal will be subject to suspension without appeal or dismissal if they ever fail to meet the terms established by the graduate studies committee. Students who do not file a letter of appeal or whose appeal is not granted may apply for readmission after a lapse of one semester. Readmission is not automatic but is based on evidence that the circumstances leading up to the suspension have been resolved.

Academic Dismissal Students who have been suspended and readmitted and who fail to meet the requirements specified by the graduate studies committee will be subject to permanent academic dismissal.

Audit and Institutional Visitor Policies Auditor and visitor status are not available for graduate courses.
Class Attendance All students are expected to participate in all class and related functions, whether synchronous or asynchronous. Dordt's online learning management system allows instructors to check the course resources accessed and the time spent on various parts of the course webpages. Penalties for non-participation are left to the individual instructors. The instructor may lower a student's grade if there have been excessive absences or periods of non-participation. The instructor may also alert the graduate studies office.

Credits A three-credit course offered during a 16 -week semester requires $8-10$ hours of student work per week. A three-credit course offered during an 8 -week summer term requires $15-20$ hours of student work per week. A three-credit course offered during a 7.5 -week module requires 16-21 hours per week. A three-credit course offered during a 7 -week module requires 19-24 hours per week. Graduate students should carefully plan (and perhaps read ahead) to fit their studies into their professional and personal commitments.

Dropping Courses Changes in registration must be completed during the add/drop period (within one week after the opening of a fall or spring semester, within the first three days of a summer session). Courses dropped during the add/drop period do not appear on the student's transcript. After the add/drop period, a student may withdraw from a course with permission of the instructor and registrar until the two-thirds point of the semester or term is reached. Withdrawn courses appear on a transcript with a grade of W . All courses dropped after the two-thirds point of the semester will be recorded as F.

Enrollment in Other Schools Students who are enrolled at Dordt University will not be permitted to take work for academic credit in the same semester in other schools without permission from the Director of Graduate Studies, who along with the registrar, must approve in advance all courses taken at other institutions.

Grade Point Average Students must have a minimum cumulative GPA of 3.00 for M.Ed., MPA, MSpEd or 2.50 for MSW (with no more than three hours for M.Ed., MPA, MSpEd of grade "C" range for required courses and with no "D" or "F" grades for required courses) in courses taken at Dordt University to meet graduation requirements for a graduate degree. The GPA is determined by dividing the total number of grade points by the total number of hours attempted. A grade of D or F in a course (including pass/fail courses) will be computed in the student's GPA, but the course will need to be repeated with at least a C- to satisfy degree requirements. A student who withdraws from a course prior to the expiration of 10 weeks in a semester or 5 weeks in a summer term will not have the W computed in his/her GPA.

Grading System Grades in the graduate program have the following meaning:

| Grade | Points Per Hour | Description |
| :--- | :---: | :---: |
| A | 4.00 | Exceptional |
| A- | 3.67 |  |
| B+ | 3.33 | Good |
| B | 3.00 |  |
| B- | 2.67 |  |
| C+ | 2.33 |  |
| C | 2.00 | Passing but below graduation requirements |
| C- | 1.67 |  |
| D+ | 1.33 |  |
| D | 1.00 | Unsatisfactory, credits not applicable to degree |
| D- | 0.67 |  |
| F | 0 | Failure |
| P | 0 | Pass |
| W | 0 | Withdrawn |
| WM | 0 | Withdrawn - Medical Withdrawal |

Graduation Students must make application for graduation the semester or term prior to their graduation. Commencement exercises are only held at the end of the spring semester. In order to participate in commencement, the student must have completed all coursework for the degree.

Incompletes Under exceptional circumstances and with prior permission of the course instructor and director, a student may request additional time to complete assignments. However, after three months from when grades are due, all incompletes will receive a grade based on the materials submitted at that point.

Registration Registration takes place before each semester. Students will be sent instructions and appointments several weeks prior to the registration dates. Registration is not completed until tuition and fees have been paid. A late registration fee is charged if registration is not completed on the designated registration day each semester.

Repeating Courses Any course with a grade of B(3.00) or lower may be repeated. The original grade remains on the transcript with a reference to the repeated course. Only the last instance of the course on the transcript is factored into the cumulative GPA.

Residence Requirement Graduate students must take all courses listed in their program requirements as described below. A maximum of six transfer credits from other institutions is granted or nine credits from institutions belonging to the Association of Reformed Colleges \& Universities (ARCU).

Student Load Since $30-36$ credits are required for the Master's of Education degree specializations, students who plan to complete these specializations in two to three years must average 10-18 credits per year. This generally means taking one course each fall and spring semester for two years and two or three courses each summer. Students taking three years to complete their program should take courses during two-thirds of their semesters in the program and should take two courses each summer. These plans assume students are working full time during the semesters but have more flexible hours during the summer term. Students are not permitted to take more than two courses (with field hours if applicable) per semester or more than three courses (nine credits) in an 8 -week summer term.

Students enrolled in the Master of Public Administration program are required to complete 36 credits. Students who plan to complete the program in two years will average 18 credits a year. Fall and spring semesters have two seven and a half-week modules in which students take one three-credit course in each module. The summer semester has two seven-week modules in which students take one three-credit course in each module. These plans assume students are working full time during the semesters. Students are not permitted to take more than one threecredit course in a seven or seven and a half-week module. Students who withdraw from a course may retake the course the next time the course is offered. Students needing more than two years to complete the program work with the Graduate Studies Academic Advisor to develop an alternative plan of completion.

The Master of Social Work program admits students under regular or advanced standing. Students without a BSW will be considered regular standing and will be required to complete 18 credits of foundational courses along with 6 credits ( 450 hours) of foundational practicum. These students will take an additional 15 credits of advanced courses, 6 credits ( 450 hours) of advanced practicum, and 15 credits of practice
specializations of their choice for a total of 60 credit hours. Students may have some foundation coursework waived if the requirement was met in their undergraduate coursework. Students seeking advanced standing but have a BSW older than seven years old will be required to complete 9 credits of foundations courses (Social Work Research Methods, Practice I Individuals, Practice II Families and Groups). These students will take an additional 15 credits of advanced courses, 6 credits ( 450 hours) of advanced practicum, and 15 credits of practice specializations of their choice for a total of 45 credit hours. Advanced standing students who have completed a BSW within the last seven years will be required to complete 15 credits of advanced courses, 6 credits ( 450 hours) of advanced practicum, and 15 credits of practice specializations of their choice for a total of 36 credit hours. Students have a choice of completing the program full-time or part-time. Students will work with the Graduate Studies Academic Advisor to develop a plan of completion. Students are allowed to take a maximum of twelve credits per semester. If a student is placed on probation, they will be limited to a maximum of nine credits until they are no longer on probation.

The Master of Special Education degree requires $30-55$ credits, students who plan to complete these tracks in two to three years must average 10-18 credits per year. Students seeking an initial teaching license will need 16 additional hours of student teaching. Those seeking Applied Behavior Analysis (ABA) certification may need an additional 1-6 field hours. This generally means taking one course each fall and spring semester for two years and two or three courses each summer. Students taking three years to complete their program should take courses during two-thirds of their semesters in the program and should take two courses each summer. These plans assume students are working full time during the semesters but have more flexible hours during the summer term. Students are not permitted to take more than two courses (with field hours if applicable) per semester or more than three courses (nine credits) in an 8 -week summer term.

Time Limit All degree requirements must be completed within six years from the beginning of the first graduate coursework at Dordt University. Approval of the graduate studies committee is needed for an extension. Coursework taken more than six years prior to completing degree requirements may be updated and validated by examination. Requests for such examination must be made to the Director of Graduate Studies.

Withdrawal from School A student who wishes to withdraw from school must obtain the necessary withdrawal form from the graduate studies office. The form must be signed by representatives from the financial aid, registrar, and business offices. Refunds are based upon the date of approval. Students who withdraw before the end of the semester will receive a grade of W in each course. Students should be advised that withdrawing may affect their financial aid.

## Graduate Academic Offerings

## Master of Education Course Listings and Descriptions

Dordt University offers a Master of Education degree with five specializations in the Curriculum and Instruction track: Developmental Reading, Early Childhood Education, Educational Technology, Instructional Coach, and Teacher Leadership and two specializations in the Administration track: School Leadership and Sport Leadership.

Curriculum and Instruction (students must select one of the following specializations):

| Developmental Reading: | Education 501, 502, 503a, 504, 505, 506, 508, 511, 513, 521, 522 ( 30 credits). <br> (Meets the master's degree requirements for a master educator license in the State of Iowa and in conjunction with undergraduate courses in reading may lead to a developmental reading endorsement.) |
| :---: | :---: |
| Early Childhood Education: | Education 501, 502, 503a, 505, 508, 511, 512, 513, 522, 531, 532, 533 ( 30 credits). <br> (Meets the master's degree requirements for a master educator license in the State of Iowa and in conjunction with undergraduate courses in early childhood may lead to an early childhood endorsement.) |
| Educational Technology: | Education 501, 502, 503a, 504, 508, 541, 542, 544, 545, 551; one course from Education 505, 506, 507, 560, 561, 563 (30 credits). <br> (Meets the master's degree requirements for a master educator license in the State of Iowa.) |
| Instructional Coach: | Education 501, 502, 503a, 504, 505, 506, 507, 522, 523, 551, 559, 561 (30 credits). <br> (Meets the master's degree requirements for a master educator license in the State of Iowa.) |
| Teacher Leadership: | Education 501, 502, 503a, 503b, 504, 505, 506, 507, 508, 510, 551 (30 credits). <br> (Meets the master's degree requirements for a master educator license in the State of Iowa.) |

Administration (students must select one of the following specializations):
School Leadership: Education 501, 502, 503, 504, 505, 560, 561, 562, 563, 564 (30 credits).
Those seeking the initial Administrator License in the State of Iowa must take six additional credits of field experience: Education 560L, 561L, 563L, 564L.
(Meets initial Administrator License 189 plus the evaluator approval 190 requirements in the State of Iowa.)

## graduate Academic offerings: COURSE LISTINGS AND DESCRIPTIONS

| Sport Leadership: | Education 501, 560,563 ; HHP 505, $510,515,520,525,530$; one elective from HHP 530 (may be repeated once), |
| :--- | :--- |
|  | MPA 513, $514,515,552$ ( 30 credits). |
| (Does not lead to licensure.) |  |

The 500-level courses are graduate education courses, closed to undergraduate students unless they have completed all degree requirements except student teaching.

EDUC 501 Issues in Education (3) $\qquad$ Summer, Fall, Spring This course critically examines the philosophical and historical background and context of contemporary educational practice. The focus is on key issues currently affecting the areas of teaching, curriculum, learning, and the school as an institution. Emphasis falls on relating philosophical and historical contexts to daily classroom practice. Course participants are equipped to use philosophical analysis as part of their reflective practice drawing on understandings and commitments in this course.

EDUC 502 Learner Development and Principles of Learning (3) Summer, Spring
This course examines a biblical model of the teacher, learner, and the learning process. Consideration is given to the application of a biblical model as it relates to teaching and learning. This model is weighed and examined against other psycho-educational theories of development and learning. This course will equip leaders to create learning environments that celebrate image bearing.

EDUC 503 Interpreting and Applying Educational Research (3) Summer, Fall
This course provides you with a conceptual introduction to the essential principles and appropriate methods of educational research. You will be equipped to analyze and interpret existing research and critique contemporary methods, techniques, and trends in education as well as develop a research-based proposal for school improvement. You will examine what it means to consume and produce research through a biblical framework.

EDUC 503a Interpreting Educational Research (1.5)
Summer, Fall
This course provides teachers and leaders with a conceptual introduction to the essential principles and appropriate methods of educational research. Course participants will be equipped to analyze and interpret existing research and critique contemporary methods, techniques, and trends in education. Corequisite: Education 503b.

EDUC 503b Action Research Proposal (1.5)
A continuation of Education 503a for teacher leaders, this course allows students to apply concepts from Education 503a to propose and begin an action research project in their own classrooms or schools. Corequisite: Education 503a.

EDUC 504 Curriculum Development and Evaluation (3).. Summer, Fall Framed in a biblical orientation, this course examines and develops curricular structures. Consideration will be given to how state, provincial, and Core Curriculum standards fit within these curricular decisions. Topics include an examination of content delivery models, appropriate instructional design models, and methods for implementing curricular change.

EDUC 505 Foundations of Special Education (3). .Summer, Fall, Spring This course focuses on the characteristics of individuals with special learning needs and the implications resulting from those needs for the development of educational programming. As we explore the field of special education, we will become more familiar with information and issues related to teaching children and adolescents who have been identified as exceptional. Specifically, we will consider definitions and terminology in the field of special education, characteristics of students within the various categories of exceptionality, historical perspective towards those with disabilities, Christian perspective on disability, and the impact of disability on the family, community, and society at large. We will also explore approaches for instruction, special education services, and assistive technology to meet the needs of exceptional learners. This course assumes that students have previously taken an overview of exceptionalities course.

EDUC 505a Foundations of Special Education (1)
Summer, Fall, Spring
This course focuses on the characteristics of individuals with special learning needs and the implications resulting from those needs for the development of educational programming. As we explore the field of special education, we will become more familiar with information and issues related to teaching children and adolescents who have been identified as exceptional. Specifically, we will consider definitions and terminology in the field of special education, characteristics of students within the various categories of exceptionality, historical perspective towards those with disabilities, Christian perspective on disability, and the impact of disability on the family, community, and society at large. We will also explore approaches for instruction, special education services, and assistive technology to meet the needs of exceptional learners. This course assumes that students have previously taken an overview of exceptionalities course. The one-credit version of this course is available only to students who have already had graduate special education courses elsewhere but need a state-approved administrative focus on foundations special education.

Best Practices in Instructional Strategies (3)
Summer Odd
This course examines practices and theories in advanced pedagogy and instruction. Geared for the classroom teacher who wants to take instruction to the next level as well as the instructional coach working with colleagues, the course uses a biblical foundation to explore the nature of teaching and learning and to examine a variety of research-based, objectives-driven teaching and instructional
strategies. Education 556 and 557 in conjunction may be used as a course substitution with permission from the Graduate Studies Office.

EDUC 507 Classroom Assessment Strategies (3)........................................................................................................................................... Fall This course seeks to align assessment practices with a biblical understanding of the roles of teacher and learner. The course invites the examination and evaluation of formative and summative assessment strategies; application and design of appropriate assessment strategies for effective and developmentally appropriate learning environments; proficiency in multiple forms of assessment; and the development of skills and strategies to help students become effective self-assessors.

## EDUC 508 Teaching and Learning with Technology (3).

 Spring This course is designed to foster creative and divergent thinking regarding the application and integration of technology into the processes of teaching and learning. The intent is to "distinguish sharply, think critically, and judge wisely" how technology is changing the teaching/learning environment. Hands-on technology training will provide a basis upon which participants will reconstruct curriculum and instructional techniques to support the learning needs of their students.
## EDUC 510 Action Research Project (3)

This course is the fruitful interaction of faith, educational theory, and practice and will allow teacher leaders to explore in depth an issue or idea that will help improve instruction in their classrooms or school. The action research project allows teacher leaders to add to the body of educational knowledge by exploring problems and issues from a biblical perspective.

## EDUC 511 Assessment of Learning Difficulties (3).

$\qquad$ Fall Even This course is an advanced course in assessment which focuses on assessment of learning difficulties, emphasizing language and processing deficits and how they interfere with academic achievement and social relationships. Various formal and informal assessments are examined, and consideration is given to how the results can be applied to the development of educational programs that meet the needs of exceptional students with mild or moderate disabilities. Significant time is spent in gaining experience administering and scoring various tests with target students. Prerequisite: Education 505.

## EDUC 512 Advanced Behavioral and Social Interventions for Exceptional Children (3).

$\qquad$ Summer Odd This course is an advanced course for understanding and working with children and adolescents with mild or moderate behavior difficulties. The course examines research and theories on behavior assessment, interventions, and monitoring with special emphasis on providing leadership on behavior interventions in a school or district. You will be encouraged to reflect on children's normal emotional/behavioral development in order to see problems in their proper perspective. The emphasis is on the instructional process for managing behavior of students within the context of a Christian approach to teaching. [Cross-listed: Social Work 677]

## EDUC 513 Instructional Decisions (3)

 .Spring Even This course offers applied training in advanced practical aspects of the instruction of students with mild or moderate disabilities who qualify for special education under IDEA and in providing leadership in special education programming in a school or district. We will consider the role of the special education teacher in writing IEPs and IFSPs, in providing individualized instruction to students with disabilities, in supporting students with medical complications, in providing professional consultation and collaboration, and in implementation of strategies directed toward the successful integration of students with disabilities into the school and the general education classroom to the extent possible. We will also consider topics related to early intervention, assistive technology, and transition. Prerequisite: Education 505.
## EDUC 514 Transition Support and Collaborative Partnerships (3).

Fall Odd
This course prepares teachers and administrators to effectively plan for and support students with mild or moderate disabilities as they move from school to adult life. Course topics include preparing for the transition planning process, transition-related assessments, instructional strategies, developing functional skills, vocational training, development of family and community supports, setting up collaborative partnerships, and the preparation of Individualized Transition Programs. Prerequisite: Education 505.

EDUC 515 Assessment of Behavior and Learning Difficulties (3) Fall Even This advanced course in assessment focuses on assessment of learning and behavioral difficulties, including language and processing deficits, and how they interfere with academic achievement, social relationships, and activities of daily living. This course contributes to the development of your knowledge of the concepts and principles of Applied Behavior Analysis (ABA). We will consider the topics of assessing the strengths and challenges of the learner, determining whether an individual has a need for intervention, and prioritizing goals for learning and behavior change. Various formal and informal assessments are examined, and consideration is given to how the results can be applied to the development of educational programs that meet the needs of exceptional students. Significant time is spent in learning how to conduct assessments and gaining experience administering and scoring various tests with target students. Another important course topic is conducting a functional analysis of problem behavior and interpretation of functional assessment data. We will also consider various methods for conducting a preference assessment.

## graduate Academic offerings: COURSE LISTINGS AND DESCRIPTIONS

tions, and monitoring with special emphasis on providing leadership on behavior interventions in a school or district. You will be encouraged to reflect on children's normal emotional/behavioral development in order to see problems in their proper perspective. The emphasis is on the instructional process for managing behavior of students within the context of a Christian approach to teaching. Prerequisite: Education 505.

EDUC 517 Instructional Decisions (3)........................................................................................................................................Spring Even
This course offers applied training in advanced practical aspects of the instruction of students with behavior disorders and learning disabilities who qualify for special education under IDEA and in providing leadership in special education programming in a school or district. We will consider the role of the special education teacher in writing IEPs and IFSPs, in providing individualized instruction to students with disabilities, in supporting students with medical complications, in providing professional consultation and collaboration, and in implementation of strategies directed toward the successful integration of students with disabilities into the school and the general education classroom to the extent possible. We will also consider topics related to early intervention, assistive technology, and transition. Prerequisite: Education 505.

EDUC 518 Transition Support and Collaborative Partnerships (3)
.Fall Odd
This course prepares teachers and administrators to effectively plan for and support students with behavior disorders and learning disabilities as they move from school to adult life. Course topics include preparing for the transition planning process, transition-related assessments, instructional strategies, developing functional skills, vocational training, development of family and community supports, setting up collaborative partnerships, and the preparation of Individualized Transition Programs. Prerequisite: Education 505.

EDUC 521 Advanced Content Reading and Children's Literature (3).
Summer Odd
This course provides a graduate level examination of teaching reading in the content areas and thematic integration of children's literature in the curriculum. The course focuses on current theories and best practices.

EDUC 522 Advanced Pedagogies for Teaching Literacy (1.5).......................................................................Spring Odd (1st or 2nd 8 weeks) This course provides a research-based, objective driven focus on the subject matter, content standards, pedagogy, and issues related to the learning and teaching of P-12 language arts for all students. The course examines the speaking, listening, reading, and writing experiences of young children and the continued development of literacy into adolescence. Students develop strategies and applications specific to literacy learning needs in challenging situations. Students complete a reading and writing learning analysis, diagnostic assessment, and implementation plan for a specific learning situation or challenge.

EDUC 523 Advanced Pedagogies for Teaching Math (1.5)
Summer Odd
This course provides in-depth focus on the subject matter, content standards, pedagogy, and issues related to the learning and teaching of math for all students. Students develop strategies and applications specific to math learning needs in challenging situations. Students complete a math learning analysis, diagnostic assessment, and implementation plan for a specific learning situation or challenge.

EDUC 528 Student Teaching Internship- Developmental Reading (1-8) .Fall, Spring The teaching internship in an elementary (grades PK-5) reading education setting is the capstone experience of the M.Ed. Developmental Reading specialization. Interns co-teach, to the greatest extent possible, with qualified mentor teachers in classroom settings appropriate for their intended developmental reading license.

EDUC 531 Issues in Early Childhood Education and Curriculum (3) ....................................................................................Summer Even This course examines the spectrum of early childhood education from birth through age eight. History, program applications, and current trends and issues in early childhood education are evaluated. Course projects focus on planning, implementing, and evaluating developmentally appropriate, evidence-based curriculum for young children with diverse backgrounds. Students practice aligning learning objectives to the Iowa Quality Preschool Program Standards.

EDUC 532 Organization and Administration of Early Childhood Education (1.5)
Summer Odd This course focuses on the organization and management of early childhood and childcare programs from a Christian perspective with emphasis on planning, organizing, managing, and evaluating programs and facilities for young children. Specific skills addressed are licensing procedures, hiring, motivating, and evaluating staff and parent involvement. General leadership skills addressed include budgeting, scheduling, communication, and visioning as applied to early childhood learning environments. This course requires 20 hours of field experience. The latest Iowa Quality Preschool Program Standards Report is used to evaluate best practices in childhood education.

EDUC 533 Infant and Toddler Education (1.5) .Fall Odd
This course focuses on the rapid cognitive, physical, and social development during the first three years of life. This stage is critically important for infants and toddlers as they develop foundations for lifelong learning. The course focuses especially on developmental issues with special needs infants and toddlers. The Iowa Quality Preschool Program Standards are examined and applied to various infant and toddler care and learning environments.

The teaching internship in an early childhood (birth - age 8) education setting is the capstone experience of the M.Ed. Early Childhood specialization. Interns co-teach, to the greatest extent possible, with qualified mentor teachers in classroom settings appropriate for their intended early childhood education license.

EDUC 541 Technology Integration (3). Summer Odd This course provides examination of and practice in technology integration strategies in classroom environments, using various applications, instructional, and productivity software. Students practice evaluating tools and resources and developing integrated instructional activities. Students produce a problem-based learning unit of instruction that integrates technology meaningfully and effectively.

EDUC 542 Emerging Technologies (3) Summer Odd This course explores the use of emerging technologies such as virtual worlds, games, and simulations. YouTube, social networking, and mobile apps for use as education tools. Students evaluate the technologies using ISTE standards and create projects for us in their educational environment.

EDUC 544 E-Learning Design (3) ..............................................................................................................................................Summer Even This course applies learning theory, principles of visual literacy, and graphic design techniques for instructional media development. Emphasis is on various models of online delivery, content organization, and graphic design. Course participants create a fully developed online course.

EDUC 545 Portfolio - Educational Technology (1.5) .....................................................................................................Fall, Spring, Summer This course is the culmination of the educational technology specialization and requires the significant expansion and polishing of three major projects from the various emphases of the whole program. Students are expected to prepare all three projects for possible presentation to a school board, faculty development event, or professional conference. The expectation is that at least one will be actually presented in such a venue.

EDUC 551 High Impact Coaching (3). .Summer Even Participants in this course will examine instructional coaching practices that are proven to have significant positive impact on student learning, engagement, and achievement. Assignments will engage participants in practicing skills and strategies associated with non-evaluative, reflective communication with colleagues that lead to collaboration, ongoing dialogue and feedback, and to productive change.

EDUC 559 Internship in Instructional Coaching (1.5)............................................................................................................................................ ${ }^{2}$. Spring Participants will apply and integrate the knowledge and skills of instructional coaching through one-on-one coaching cycles with individual teacher partners or teaching teams within their school or district. Participants will be challenged to thinking critically about their teacher leadership/coaching roles as they facilitated their school's Professional Learning Communities around best practices in teaching and learning.

EDUC 560 Foundations of Educational Leadership (3). Fall, Spring
This course provides a comprehensive overview of the field of educational administration from a distinct perspective of what it means to lead Christianly. Content includes an examination of theories of leadership, leadership traits, leadership behaviors, contemporary approaches, and the Iowa School Leadership Standards. The course includes 40 hours of field experience. Concurrent enrollment in Education 560L is recommended.

EDUC 560L Field Experience I in Educational Leadership (1.5)
Fall, Spring In this course, participants engage in a field-based learning experience of an additional 60 hours under the joint supervision of a school administrator and Dordt University faculty. Activities are aligned with Education 560 and serve as evidence of meeting State of Iowa administrative licensing standards. Concurrent enrollment in Education 560 is necessary for students seeking administrative licenses with a substantial number of required field hours. Graded on a pass/no-record basis.

EDUC 561 Instructional Leadership (3) ........................................................................................................................................Fall, Spring This course will provide a theoretical and practical overview of the supervision and evaluation of instruction, recognizing the implications of teachers and students being created in the image of God. Practical, interactive exercises will be used to develop skills in the clinical process and developmental approach to supervision. Attention will also be given to supervision of the school/ district professional development programs. One of two evaluator approval elements required by lowa licensure is met through this course. The course includes 40 hours of field experience. Concurrent enrollment in Education 561L is recommended.

EDUC 561L Field Experience II in Educational Leadership (1.5)
Fall, Spring
In this course, participants engage in a field-based learning experience of an additional 60 hours under the joint supervision of a school administrator and Dordt University faculty. Activities are aligned with Education 561 and serve as evidence of meeting State of Iowa administrative licensing standards. Concurrent enrollment in Education 561 is necessary for students seeking administrative licenses with a substantial number of required field hours. Graded on a pass/no-record basis.

Examination of the fundamental issues of law and ethics as they are applied to the classroom teachers and school administrators. Areas to be studied include educational structure and governance, church/state relations, students' rights, teachers' rights and responsibilities, and tort liability.

EDUC 563 Collaborative Leadership (3) Fall, Spring
This course focuses on organizational influences on leadership, communications in schools, decision making, managing conflict, and facilitating change in schools. The course also emphasizes a recognition of the role schools play in community restoration and reconciliation processes. The course includes 40 hours of field experience. Concurrent enrollment in Education 563L is recommended.

EDUC 563L Field Experience III in Educational Leadership (1.5)
Fall, Spring In this course, participants engage in a field-based learning experience of an additional 60 hours under the joint supervision of a school administrator and Dordt University faculty. Activities are aligned with Education 563 and serve as evidence of meeting State of Iowa administrative licensing standards. Concurrent enrollment in Education 563 is necessary for students seeking administrative licenses with a substantial number of required field hours. Graded on a pass/no-record basis.


#### Abstract

EDUC 564 Management and School Improvement (3) Fall This course focuses on the presentation and development of methods for creating a climate of continuous, systemic improvement in schools. Participants will gain understanding of how the relationships among the development of learning communities, teacher leadership, school effectiveness, and site-based accountability can positively improve schools. Also covered are the basic principles and purposes of effective personnel practices and policies. Attention will be focused on the various approaches to personnel staffing, budgeting, and contract negotiations. The second of two evaluator approval elements required by the state of lowa are met in this course. The course includes 40 hours of field experience. Concurrent enrollment in Education 564L is recommended.


EDUC 564L Field Experience IV in Educational Leadership (1.5) .Fall, Spring
In this course, participants engage in a field-based learning experience of an additional 60 hours under the joint supervision of a school administrator and Dordt University faculty. Activities are aligned with Education 564 and serve as evidence of meeting State of Iowa administrative licensing standards. Concurrent enrollment in Education 564 is necessary for students seeking administrative licenses with a substantial number of required field hours. Graded on a pass/no-record basis.

EDUC 565 Celebration of Learning (0). Fall, Spring, Summer
This is the culminating licensing assessment of the School Leadership track and is necessary to meet National Educational Leadership Preparation (NELP) standards. Other states and provinces have similar requirements that can be met by this final assessment. Students register for this experience in the final term of their program and give the presentation to their peers at the end of the term. A presentation of cornerstone artifacts created and collected throughout the program provides an overview of a student's achievements with NELP and Dordt program standards. Graded on a pass/fail basis.

EDUC 577 Student Teaching Internship- Elementary Instructional Strategist (1-8). .Fall, Spring The teaching internship in an elementary (grades K-8) special education setting is the capstone experience of the M.Ed. Special Education specialization. Interns co-teach, to the greatest extent possible, with qualified mentor teachers in classroom settings appropriate for their intended special education license.

EDUC 578 Student Teaching Internship- Secondary Instructional Strategist (1-8).
Fall, Spring
The teaching internship in a secondary (grades 5-12) special education setting is the capstone experience of the M.Ed. Special Education specialization. Interns co-teach, to the greatest extent possible, with qualified mentor teachers in classroom settings appropriate for their intended special education license.

EDUC 579 New Teacher Supervision and Mentoring (1). .Fall, Spring The objective of this course is to provide supervision and mentoring to new teachers to help them effectively fulfill their role in the special education classroom. Throughout the semester, the new teacher will be encouraged to reflect on their classroom experience and to set goals for continued refinement of their skills. As part of the collaborative process, the new teacher will be provided with guidance related to classroom procedures such as problem solving and decision making; designing, implementing, and monitoring of student programs; and observation, assessment and collection of data.

EDUC 591- Individual Studies (1-3) ............................................................................................................................................................... Fall, Spring
See page 36, Individual Studies
HHP 505 Being the CEO of Your Own Program (3). Summer Odd
This course develops skills and concepts for organizational and financial management of an athletic program. Specific focus is on external relations, culture building, and program management.

Leadership Principles in Sport (3)
This course, through readings, assignments, and applied projects, will help develop an advanced perspective on sport leadership with emphasis on developing sportsmanship and personal growth among players, coaches, and others. Issues such as human potential and responsibility, diversity, competition, and faithfulness to one's neighbor are examined through a Christian lens.

## Ethics and Sport (3)

 Fall EvenThis course, through readings, assignments, and applied projects, will help develop an advanced perspective on ethics in sports with emphases on addressing pressing ethical issues in contemporary sports and formulating a biblically faithful response in this area to God and one's neighbor. Genuine biblical insight is sought in examining issues such as the physical and emotional health of players, strategizing with the rules on and off the field, boosters and marketing/branding, scholarships, life after sports, and a balanced and fit life.

HHP 520 Christian Perspectives on Advanced Sport Psychology (3) .......................................................................................Spring Even This course will help develop an advanced level of understanding for sport leadership, coaching, administration, and physical activity by exploring the psychological and sociological aspect of human movement. Secondly, the student will develop a reformed understanding of human movement via discussions, written assignments, and presentations on a variety of issues related to the areas of health and exercise, sport, and leadership.

HHP 525 Administration of Interscholastic Sports (3).........................................................................................................Summer Even This course, through readings, assignments, and applied projects, will help develop an advanced perspective on interscholastic sports administration with emphases on addressing community needs, responsible resource and personnel management, servant leadership in a highly visible position, and personal growth as a manager and shaper of attitudes. Issues such as faithfulness, stewardship, fairness, wisdom, and providing a positive example in the school and community are examined through a Christian lens.

HHP 530 Practicum Series (3) ....................................................................................................................................Fall, Spring, Summer
This practicum experience may be repeated twice for a total of six credits over an entire school year. The practicum provides opportunity for real-world, hands-on application and practice of the leadership principles studied throughout the program. Emphasis is on synthesizing theories and strategies to form a genuinely Christian stance on all aspects of sport leadership. Special emphasis is on making a difference in the lives of players, coaches, and others and on personal growth as a leader and public figure.

HHP 591- Individual Studies (1-3) $\qquad$ Summer, Fall, Spring

## Master of Public Administration Course Listings and Descriptions

Dordt's Master of Public Administration program is designed to equip those called to service in the public and nonprofit sector with the tools of stewardship, servant leadership, and discernment needed to achieve success in management and leadership roles. Each specialization requires a total of 36 credits for program completion.

Foundation (common to all specializations): MPA 501, 511, 512, 513, 522, 531, 532, 580.
Students must select one of the following specializations:
General: Foundation; four additional MPA courses.
Nonprofit Management: $\quad$ Foundation; MPA 552, 553; two additional MPA courses.
Police Administration: Foundation; MPA 542, 543; two additional MPA courses.
On petition, MPA 593 may be substituted for one or more specialization (non-Foundation) courses.

MPA 501 Introduction to Public Administration (3)................................................................................................................................Fall
This course will survey the field of public administration with specific attention given to the development of public administration as a profession. The history of public administration as well as the major theoretical disagreements in the field between science and values will be covered in detail. Students will explore their own approaches to administration and public service in light of these theories.

MPA 511 Organizational Theory (3).
.Fall Odd, Module I; Summer Even, Module II This course will study contemporary theories and practices which undergird the management of organizations, with special emphasis on those in the public and nonprofit sector. This includes topics in organizational strategy and business planning, collaboration, leadership, developing and maintaining organizational culture, improvement and evaluation, and instituting/managing change.

Leadership (3) .Summer Odd, Module II; Fall Even, Module I This course will examine the theory and practice of organizational leadership, with an emphasis on leadership in public and nonprofit organizations. This includes a study of the ethical dimensions of leadership as well as aspects of self-knowledge and evaluation that will help students develop effective personal leadership strategies. [Cross-listed: Social Work 686]

MPA 513 HR Management (3).
.Spring Odd, Module I
This course will introduce and discuss the major topics in Human Resource Management (HRM), particularly as they pertain to employment in the public and nonprofit sector. This course will address the major HRM tasks of workforce design and planning, managing employee competencies, and managing employee attitudes and behaviors while moving through the employment cycle from recruitment, selection, and compensation to evaluation, training, development, and retention. [Cross-listed: Social Work 687]

Public Relations (3). .Spring Even, Module II This course will introduce the field of public relations and equip students with the tools they need to make wise, timely, and tactically sound decisions when in leadership roles, particularly in the public and nonprofit sector. Students will learn to identify their target audience and its characteristics while tailoring effective messaging which makes strategic use of varied media, including print, broadcast, electronic, trade, and social media. Emphasis will be placed on ethical practice and how values can shape an organizations relationship with its publics through case studies and other course assignments.

MPA 515 Project Management (3) .Fall Odd, Module II This course provides students with the principles and techniques of project management. Focus will be given to event and planning implementation as well as an exploration of technological tools available to assist in project management. Students will also learn about and apply theories of organizational change in the context of project management.

MPA 516 Crisis Intervention (3).
Summer Even, Module I This course will introduce students to a new and growing field of literature on crisis intervention. Special attention will be paid to mental health issues, emergency preparedness and other crises that require coordinated responses and intervention. Students will learn about and apply best practices in crisis intervention in an organizational setting. Students will think critically about the role of the nonprofit and public sector in the community in times of crisis. [Cross-listed: Social Work 678]

MPA $521 \quad$ Government and Bureaucracy (3).........................................................................................................................Alternate Years This course will study the development of public policy through political process. This involves a study of the theories behind public policy as well as a study of the various actors in the formation process. Special emphasis will be focused on the challenges of democratic governance as policy works from proposal to legislation, implementation, regulation, and evaluation.

MPA 522 Budgeting and Public Finance (3) .Fall Even, Module II This course will introduce basic principles of budgeting and finance as it relates to the public and nonprofit sector. Students will gain competencies in reading, creating, and developing budgets. Forecasting for future sustainability will be addressed in content and in course assignments. [Cross-listed: Social Work 684]

MPA 531 Program Evaluation (3).............................................................................................................................Spring Odd, Module II
This course will build upon basic quantitative skills to develop a greater understanding of using quantitative analysis in research, both practical and academic, and in program evaluation. Developing skills in evaluating effective and efficient programs will be central to this course. Undergraduate work in statistics is a prerequisite for this course. [Cross-listed: Social Work 683]

MPA 532 Policy Analysis (3) .Summer Odd, Module I This course will include the tools and frameworks of policy analysis. Theories of policymaking and analysis will be presented and utilized in course projects. Students will employ policy analysis tools to evaluate governmental or organizational policies.

MPA 542 Contemporary Policing (3) .Spring Even, Module I This course will focus on the development, operation, and evaluation of both evidence-based policing methods and community initiatives, including developing effective public-private partnerships in this area. Students will learn to develop effective crimeprevention programs through critical analysis of case studies and current research with a goal of identifying the key factors that influence effective policies and the challenges of implementation.

MPA 543 Advanced Criminal Procedure (3)
.Spring Even, Module II This course will foster a nuanced understanding of the logic and caselaw which animates the guarantees of the 4th, 5th, and 6th Amendments to the U.S. Constitution. Students will study foundational cases in the field, trace their development to modern standards, and discuss the decisions both made and anticipated which sit at the cutting edge of current law. Prerequisite: Undergraduate work or professional training in criminal procedure.

MPA 551 Nonprofit Administration and Organizational Theory (3). Summer Even, Module I This course will focus on administrative matters that are often unique to the nonprofit sector. Students will explore the nonprofit
sector as a reflection of civil society creation and development. Topics such as volunteer management, commitment to mission and other management areas will be addressed. [Cross-listed: Social Work 681]


#### Abstract

MPA 552 Grant Writing and Fundraising (3) $\qquad$ ..Spring Even, Module I This course will prepare students to pursue funding opportunities for nonprofit organizations. Event planning, social media campaigns and other activities of fundraising will be covered as well as an introduction into grant writing. Students will apply their learning with projects from their real-life work. [Cross-listed: Social Work 685]

\section*{MPA 553 Nonprofit Law (3)} .Fall Odd, Module II This course provides an overview of the law as it relates to the nonprofit sector, students will be given a foundation in a Christian legal perspective along with an overview of legal issues in several areas relevant to nonprofits. In each area, students will explore foundational concepts, emerging issues, and practical application to a chosen nonprofit organization. Areas of potential coverage include formation, governance, employment, operations, fundraising/donations, advocacy, partnerships, and taxation.

MPA 580 Jurisprudence and Lawmaking (3) $\qquad$ Summer, Module II This course will study the major philosophies of governance, with an emphasis on practical application and just lawmaking, particularly within a Kuyperian worldview. Students will be introduced to classical thought in this field while also studying contemporary application as an avenue for analysis and critical evaluation of the views of human nature, theories of change, and implementation of incentives that drive modern policymaking.

MPA 591- Individual Studies (1-3) ..Fall, Spring, Summer See page 36, Individual Studies


## Master of Social Work Course Listings and Descriptions

The MSW Program offers three program specializations to help students focus their learning for their projected career path. All regular standing students take the Foundation courses before advancing to the Advanced course year. In these courses, these students will be joined by Advanced Standing students. Students holding a BSW older than seven years will be accepted under advanced plus standing and will need to take three foundation courses. In the Foundation and Advanced years, there are required courses (see below), but the practice specialization courses allow students to pursue a (1) Advanced Generalist, (2) Clinical, or (3) Community Practice \& Administration track.

Foundation courses (regular standing): Social Work 501, 511, 513, 514, 520, 521; 6 credits from Social Work 553. (Students not holding a BSW degree)

Foundation courses (advanced plus standing): Social Work 513, 520, 521.
(Students with BSW degree older than seven years)
Advanced courses (all students): Social Work 600, 610, 612, 615, 621; 6 credits from Social Work 653.
Students must select one of the following specializations:
Advanced Generalist:
Students will choose five practice specialization courses. Courses may be chosen from the Clinical and Community Practice \& Administration specializations ( 15 credits).

Social Work 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687.

| Clinical: | Students will choose five practice specialization courses. Four courses must be from the Clinical <br> specialization courses below and up to one can be from the Community Practice \& Administration <br> specialization (15 credits). |
| :--- | :--- |
| Community Practice \& Administration: $\quad$Clinical Specialization: Social Work 670, 671, 672, 673, 674, 675, 676, 677, 678, 679. |  |
| Students will choose five practice specialization courses. Four courses must be from the Community <br> Practice \& Administration specialization courses below and up to one can be from the Clinical <br> specialization (15 credits). |  |

Community Practice \& Administration: Social Work 680, 681, 682, 683, 684, 685, 686, 687.

## graduate Academic offerings: COURSE LISTINGS AND DESCRIPTIONS

## Foundation Courses ( 24 credits including the Foundation Field Experience and Seminar)


#### Abstract

SOWK 501 Foundations of Social Work (History, Philosophy, \& Theory) (3). Foundations of evidence-based practice with individuals, families, organizations, and communities within a framework of core social work values and practice obligations. Students will examine how their value commitments align with professional social work values. Situations are viewed from an ecological perspective, targeting for change all client and community systems that are contributing to client problems. The history and dominant philosophies of the profession will be introduced.


#### Abstract

SOWK 511 Human Behavior and the Social Environment (3) Fall This course introduces a foundational commitment in social work practice to recognizing the whole person. It includes a presentation of a theoretical and conceptual framework for understanding bio-psycho-social and spiritual factors in human development across the life cycle. With a focus on the impact of individual relationships, family systems, group dynamics, and societal structures, students will analyze the impact of viewing person through a holistic practice approach.

SOWK 513 Social Work Research Methods (3) Spring Focused on quantitative and qualitative research methods knowledge and skills with an emphasis on Social Work practice. Includes an emphasis on evidenced-based practice along with a critical evaluation of empirical literature and basic research methodology including construct operationalization; study design; selection, development, implementation, and evaluation of measures and instruments.


#### Abstract

SOWK 514 Policy Planning \& Analysis (3) Spring This course will introduce the tools and frameworks of policy analysis. Theories of policymaking and analysis will be presented and utilized in course projects. Students will employ policy analysis tools to evaluate social welfare and organizational policies through a variety of evaluative frameworks including professional social work ethics and Christian interpretations of justice and mercy. The students will use planning tools to create change plans to improve policies.

SOWK 520 Practice I Individuals (3) Fall This course provides an in-depth study of several theories of personality and behavior and their implications for social work practice. Theories and therapeutic approaches will be taught as well as implications for assessment, diagnosis, and treatment of individuals across the life span. Application to broader systems are reviewed.


$\qquad$
This course provides knowledge and experience of working with families and groups as a system. This includes reviewing and application of assessment and treatment models for groups and families and direct practice in implementing skills needed to lead and facilitate groups.


#### Abstract

SOWK 553 Foundation Field Experience and Seminar (3). Fall, Spring, Summer The Foundation field experience and seminar is designed to provide you with the opportunity to apply generalist social work knowledge, values, and skills in a community agency under the supervision of a professional social worker. Through field education, you will develop and refine your conceptualizations and ways of thinking analytically about human behavior, societal structure, and social policies; the options for intervention; and your own practice. The field experience is recognized as the signature pedagogy of professional social work education. Field, therefore, is educationally focused and guided by the goals of the Social Work program and the needs of the students. In addition, the field experience and seminar are designed so that learning can be generalized beyond the specific agency setting. As part of the field experience, you will work with your supervisor to create a learning contract reflecting the tasks you will perform to meet the CSWE competencies in the 2015 EPAS. All students must complete 6 credits of Foundation Field Experience and Seminar which includes 450 hours in their practicum setting and 90 hours of coursework. Prerequisites: Social Work 501, 520.

SOWK 591- Individual Studies (1-3) .................................................................................................................................Fall, Spring, Summer


## Advanced Courses (21 credits including the Advanced Field Experience and Seminar)

SOWK 600 Social Work Ethics and Professional Development (3) Summer, Module I This course provides an in-depth discussion of the ethical and legal practice standards in social work. Advanced skills required for effective engagement, assessment, intervention, and evaluation with individuals, families and groups will be taught through simulated practice. Assignments focus on developing an ethical practice model, social work practice skill development, application of documentation standards, use of evidence-informed practice methods, and integration of legal and ethical issues impacting practice.

SOWK 610 Trauma: Theory and Practice in Social Work (3) dents will acquire diagnostic skills as they relate to assessment and clinical treatment of adults, adolescents and children affected by trauma. Evidenced based trauma models will be taught and the role of psychopharmacology and psychiatric treatment reviewed.
This course provides a focus on theories that inform social work practice with individuals and families using a bio-psychosocial and spiritual framework. This course will also prepare students to engage, assess, and intervene within the scope of mental health practice. Human development across the life course is addressed with psychosocial theory's life stages to assist with the contextualization and integration of theories to meet the needs of diverse populations in practice. Through and critical examination of the Diagnostic and Statistical Manual of Mental Disorders (5th Ed.; DSM-5), students will develop skills essential for ethical and competent assessment, diagnosis, and intervention.


#### Abstract

SOWK 615 Inequality, Diversity, and Social Justice (3). Summer, Module II This course provides advanced theoretical and working knowledge about diversity, culture, and social justice. Students will learn to identify and implement culturally competent strategies at the micro and macro levels when working with diverse groups. Attention will be given to the social work values and Biblical perspective of diversity, human dignity and worth of the person. Current social justice concerns will be considered using a framework of redemption and reconciliation. Implications for policy, service, and clinical treatment will be covered.

SOWK 621 Applied Research Project (3) .Spring This course is designed to support students in conducting evidence-based practice research in an agency setting by evaluating practice and planning for change. Case material will be drawn from real world practice situations students encounter in their field placements.


## SOWK 653 Advanced Field Experience and Seminar (3) ..Fall, Spring, Summer

The Advanced Field Experience is designed to provide you with the opportunity to apply specialized social work knowledge, values, and skills in a community agency under the supervision of a professional social worker. As part of the corresponding seminar, you will be given opportunity to process your experiences with your fellow students in the seminar component. Throughout the Field Experience and Seminar, you will develop and refine your conceptualizations and ways of thinking analytically about your specific area of practice specialization. Working with your supervisor you will create a learning contract which will tailor your field experience to fit your specific needs and the requirements of the CSWE 2015 EPAS. The Advanced Field Experience provides students with an opportunity to build on foundational knowledge, skills, and competencies through practice in an area of concentration. Graduate students in the MSW Advanced Practicum are expected to meet and attain Advanced Competencies and Practice Behaviors as required by the Council on Social Work Education (CSWE). During the advanced year students work towards autonomous practice by graduation under the supervision of an experienced Master's Level Social Worker trained as a field instructor. All students must complete 6 credits of Advanced Field Experience and Seminar which includes 450 hours in their practicum setting and 90 hours of coursework.

## Practice Specialization Course Options: Clinical Specialization


#### Abstract

SOWK 670 Motivational Interviewing \& Solution-Focused Brief Therapy (3) Fall Provides an introduction to the evidenced-based practices, motivational interviewing (MI) and solution-focused therapy. Learners will be introduced to the application of MI to increase motivation for change in the areas of substance use, mental health, child welfare, juvenile delinquency, and other social work settings. Students will understand the transtheoretical model of change and its foundational role in MI.


SOWK 671 Cognitive Behavioral Therapy and Dialectical Behavior Therapy (3) ..... Spring
Focuses on the empirically validated treatment approaches, cognitive behavioral therapy \& dialectical behavioral therapy, as thera
peutic models used to treat addictions, eating disorders, depression, anxiety, and personality disorders.
$\begin{array}{ll}\text { SOWK } 672 & \begin{array}{l}\text { Neurobiology and Social Work Practice (3)......................................................................................................................... } \\ \text { This course focuses on the understanding and implementation of neurobiology and implications for assessment, treatment, and } \\ \text { prevention of clients' psychosocial conditions. Students will learn to apply neuroscience to social problems, behavioral phenomena, }\end{array}\end{array}$ and the human condition in general with significant implications for mental health and wellbeing.

SOWK 673 Marital \& Family Therapy (3) ......................................................................................................................... Summer, Module II
This course is an overview of current theories, methods, and psychological instruments used in marriage therapy interventions. Students apply course material to role-play scenarios during class time. Attention is given to issues of ethnic diversity, blended families, and faith integration. Content includes detection, assessment, and intervention strategies for spousal or partner abuse.

SOWK 674 Play Therapy (3)
This course provides students with exposure to and an opportunity to develop knowledge and skills in using play therapy with individuals, families and groups in diverse settings. Students will become familiar with various theoretical practice models and learn to apply those models with children experiencing a variety of problems across diverse populations. This course will expose the student to basic knowledge about play therapy as a component of services to children, including in mental health, child welfare, health and community based settings.


#### Abstract

SOWK 675 Clinical Practice with Adolescents (3) Spring This course focuses on behavioral health issues experienced by children and adolescents, and discussion of the effects of trauma on social and emotional development. Diagnostic issues affecting children and related treatment interventions are explored in the contexts of child welfare, school-based behavioral health, and healthcare settings. Evidence-based modalities and practices are taught, to improve functioning and well-being of children and adolescents. Laws and ethics guiding practice

SOWK 676 Grief (3) Fall This course provides theoretical and applied framework for understanding grief and loss as they relate to social work practices. Skills will be acquired to be able to recognize and respond to grief in developmentally appropriate ways across all age groups. Students will explore differentiations in grief presentations amongst diverse groups and time will be spent discussing a reformed perspective on grief and loss as well as practical strategies for spiritual discipleship during periods of grief.

SOWK 677 Advanced Behavioral and Social Interventions for Exceptional Children (3) Summer Odd This course is an advanced course for understanding and working with children and adolescents with mild or moderate behavior difficulties. The course examines research and theories on behavior assessment, interventions, and monitoring with special emphasis on providing leadership on behavior interventions in a school or district. You will be encouraged to reflect on children's normal emotional/behavioral development in order to see problems in their proper perspective. The emphasis is on the instructional process for managing behavior of students within the context of a Christian approach to teaching. [Cross-listed: Education 512]

SOWK 678 Crisis Intervention (3) $\qquad$ ..Summer Even, Module 1 This course will introduce students to a new and growing field of literature on crisis intervention. Special attention will be paid to mental health issues, emergency preparedness and other crises that require coordinated responses and intervention. Students will learn about and apply best practices in crisis intervention in an organizational setting. Students will think critically about the role of the nonprofit and public sector in the community in times of crisis. [Cross-listed: MPA 516]


SOWK 679 Biblical and Christian Counseling (3).................................................................................................................................Spring This course will provide a broad overview of the field of Biblical and Christian counseling, from theory and theology to practical applications in professional practice. The focus of the course will be threefold. First, Christian counseling definitions and distinctives in comparison to secular theories and models (e.g. role of counselor and ethical issues). Second, Reformed theology of Christian counseling (e.g. God's sovereignty, role of the Holy Spirit). Third, the application of biblical wisdom to real-world problems and issues (e.g. marriage, mental health disorders).

## Practice Specialization Course Options: Community Practice and Administration Specialization

SOWK 680 Organizational and Community Change Planning (3)
Summer Odd, Module I In this course, students will learn to lead and manage a change effort at the organizational and community levels. Theories of social and organizational change will be presented and critiqued. The course will explore visions of collective human flourishing, and how that influences views on change. Students will be able to develop a plan for implementing and assessing change efforts in both an organizational and community setting.

SOWK 681 Nonprofit Administration \& Organizational Theory (3).
Summer Even, Module I This course will focus on organizational theories and administrative matters that are often unique to the nonprofit sector. Students will explore the nonprofit sector as a reflection of civil society creation and development. Topics such as volunteer management, commitment to mission and other management areas will be addressed. [Cross-listed: MPA 551]

SOWK 682 Community Organizing and Advocacy (3)
Spring Even This course will focus on community organizing techniques and advanced advocacy skills to promote social and political change. Students will explore examples from the Bible and other religious, academic, and human rights pieces to analyze organizing and Special attention will be paid to the concepts of culture, oppression and privilege and the importance of culturally competent practice in neighborhoods, and communities.


#### Abstract

SOWK 683 Program Evaluation (3) .Spring Odd, Module II This course will build upon basic quantitative skills to develop a greater understanding of using quantitative analysis in research, both practical and academic, and in program evaluation. Developing skills in evaluating effective and efficient programs will be central to this course. An undergraduate course or working knowledge of statistics is a prerequisite for this course. [Cross-listed: MPA 531]


SOWK 684 Budgeting \& Public Finance (3) Fall Even, Module II
This course will introduce basic principles of budgeting and finance as it relates to the public and nonprofit sector. Students will gain competence in reading, creating, and developing budgets. Forecasting for future sustainability will be addressed in content and in course assignments. [Cross-listed: MPA 522]
SOWK 685 Grant Writing \& Fundraising (3)

$\qquad$
.Spring Even, Module I
This course will prepare students to pursue funding opportunities for nonprofit organizations. Event planning, social media campaigns and other activities of fundraising will be covered as well as an introduction into grant writing. Students will apply their learning with projects from their reallife work in their practicum. [Cross-listed: MPA 552]

## SOWK 686 Leadership (3).

$\qquad$ Summer Odd, Module II; Fall Even, Module I This course will examine the theory and practice of organizational leadership, with an emphasis on leadership in public and nonprofit organizations. This includes a study of the ethical dimensions of leadership as well as aspects of self-knowledge and evaluation that will help students develop effective personal leadership strategies. [Cross-listed: MPA 512]

SOWK 687 HR Management (MPA) (3) $\qquad$ .Spring Odd, Module I This course will introduce and discuss the major topics in Human Resource Management (HRM), particularly as they pertain to employment in the public and nonprofit sector. This course will address the major HRM tasks of workforce design and planning, managing employee competencies, and managing employee attitudes and behaviors while moving through the employment cycle from recruitment, selection, and compensation to evaluation, training, development, and retention. [Cross-listed: MPA 513]
$\qquad$ Fall, Spring, Summer

## Master of Special Education Course Listings and Descriptions

Dordt University offers a Master of Special Education degree with tracks in Special Education Instructional Strategist I: Mild/Moderate and Special Education Instructional Strategist I and II: All. Students seeking initial teaching licensure will complete the Strategist I and II: All track along with additional coursework and student teaching. An option to complete the Applied Behavior Analysis verified course sequence for BCBA certification (approved by the Association for Behavior Analysis International) is available for students in either track. Students already holding a master's degree may take the Applied Behavior Analysis verified course sequence for BCBA certification. This course sequence is required to sit for the BCBA certification exam.

Special Education Instructional Strategist (students must select one of the following specializations):
Instructional Strategist I: Education 501, 502, 505, 511, 512, 513, 514, 522, 523; Special Education 611, 613 (30 credits).
Mild/Moderate (Meets the master's degree requirements for a master educator license in the State of Iowa and leads to a special education endorsement 260 or 261.)

BCBA Certification Sequence: Special Education 612, 614, 615, 616, 617, 618, 619; Special Education 679 if needed ( $15-21$ credits). (Verified course sequence approved by Association for Behavior Analysis International.)

Instructional Strategist I \& II: All: Education 501, 505, 517, 518; Special Education 611, 612, 613, 616, 617, 618, 619 (30 credits).
(Meets the master's degree requirements for a master educator license in the State of Iowa and leads to a special education endorsement 259.)

BCBA Certification Sequence: Special Education 614, 615; Special Education 679 if needed (3-9 credits).
(Verified course sequence approved by Association for Behavior Analysis International.)

## Special Education Strategist PLUS initial teaching license:

Instructional Strategist I \& II: All: Education 501, 502, 505, 517, 518, 521, 577 (8 credits), 578 (8 credits); Special Education 611, 612, 613, 616, 617, 618, 619; Social Work 615 ( 55 credits).
(Meets the master's degree requirements for a master educator license in the State of Iowa and leads to a special education endorsement 259.)

BCBA Certification Sequence: Special Education 614, 615; Special Education 679 if needed (3-9 credits).
(Verified course sequence approved by Association for Behavior Analysis International.)
Behavior Analyst (BCBA) Certification Only (available only if applicant already holds a master's degree):
Special Education 611, 612, 613, 614, 615, 616, 617, 618, 619; Special Education 679 if needed ( $21-27$ credits) (Verified course sequence approved by Association for Behavior Analysis International.)

SPED 611 Foundations of ABA (3). $\qquad$ .Fall Odd
This course introduces students to the science of applied behavior analysis (ABA) and the principles supporting this scientific study of behavior. In this course, we will explore the history and development of the field of behavior analysis. We will also consider the

## GRADUATE ACADEMIC OFFERINGS: COURSE LISTINGS AND DESCRIPTIONS

fundamental principles of science that apply to ABA, as they do to all areas of science. We will identify the defining characteristics of ABA and explore the underlying philosophy specific to behavior analysis. We will then consider how this philosophy aligns with our own worldview.

SPED 612 Concepts and Principles of ABA (3) .........................................................................................................................Spring Even In this course, we will define basic concepts that form the basis for applied behavior analysis (ABA). A major focus of this course is understanding the role of the environment on behavior. We will consider principles of behavior such as reinforcement and punishment and the relationship between these principles and their related behavior change tactics. We will also explore the role of motivation and rules in shaping behavior.

SPED 613 Experimental Design and Interpretation of Data (3)............................................................................................Summer Even
This course will focus on competencies needed to measure a behavior of interest and to determine the effects of various environmental arrangements on the target behavior. Factors influencing selection of a measurement system will be explored including the need for a system that is accurate, reliable, and valid. The defining features, advantages, and uses of single-subject experimental design will be considered. There will be an emphasis on developing skills in graphing of behavioral data and in interpreting data provided in graphed form.

SPED 614 Ethics for the BCBA (1.5) ........................................................................................................................................... Fall Odd
This course explores ethical dilemmas that can arise in the professional life of a Board Certified Behavior Analyst (BCBA). Our focus will be on the general role of a code of ethics in the work of various professionals and the specific guidance provided by the Professional and Ethical Compliance Code for Behavior Analysts. We will explore various scenarios and consider how the BCBA should act in each situation based on the Ethical Code. This course continues the exploration of ethical dilemmas that can arise in the professional life of a Board Certified Behavior Analyst (BCBA). We will focus on developing a greater understanding of the guidance provided by the Professional and Ethical Compliance Code for Behavior Analysts. We will explore additional ethics related scenarios and consider how the BCBA should act in each situation based on the Ethical Code.

SPED 616 Assessment of Behavior and Learning Difficulties (3)
Fall Even
This course contributes to the development of your knowledge of the concepts and principles of Applied Behavior Analysis (ABA). We will consider the topics of assessing the strengths and challenges of the learner, determining whether an individual has a need for intervention, and prioritizing goals for learning and behavior change. An important course topic is conducting a functional analysis of problem behavior and interpretation of functional assessment data. We will also consider various methods for conducting a preference assessment.

SPED 617 Methods and Procedures for Learning and Behavior Intervention (2) .................................................................... Spring Odd This course addresses principles of learning and behavior change and explores a variety of strategies that can be used with individuals based on evidenced based practices including the principles of Applied Behavior Analysis (ABA). Topics covered in this course include reinforcement and punishment procedures, prompting, motivating operations, modeling, shaping, chaining, verbal behavior, extinction, token economies, group contingencies, and self-management strategies. We will also identify procedures that can promote generalization and maintenance.

SPED 618 Learning and Behavior Intervention Procedures (2)
.Spring Odd
This course focuses on designing and implementing learning and behavior change procedures. We will work on developing competencies in writing goals that are observable and measurable. We will also work on selecting interventions that are based on assessment results and that are appropriate to the supporting environment and the preferences of the target individual. Strategies for monitoring progress as well as for measuring fidelity of implementation will be explored. Opportunities and responsibilities for collaboration with other service providers will also be discussed.

SPED 619 Personnel Supervision and Management (2) .................................................................................. Fall Even
In this course, we will explore how the principles of applied behavior analysis (ABA) can speak to improving the way we supervise and manage personnel. This course will help you develop competencies in establishing clear performance goals and expectations, conducting staff training, and monitoring and assessing staff performance. We will discuss how to use a functional assessment approach to address variables affecting staff performance. We will also consider the reasons for using ABA based supervision strategies in terms of safety, productivity, and client outcomes.

SPED 679 Field Experience Hours (1-6) Summer, Fall, Spring The teaching internship in a special education setting is the capstone experience of the M.Ed. Special Education specialization. Interns co-teach, to the greatest extent possible, with qualified mentor teachers in classroom settings appropriate for their intended special education license.

## University Personnel

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## ADMINISTRATIVE CABINET

Aaron Baart (2010), Chief of Staff and Dean of Chapel; B.A., Dordt College; M.Div., Regent College
John Baas (2005), Vice President for Advancement; B.A., Calvin College; M.B.A., Grand Valley State University
Stephanie Baccam (2017), Vice President for Finance and Risk Management; B.A., Dordt College
Ross Douma (2009), Director of Athletics; B.A., Northwestern College; M.A., Governors State University
Erik Hoekstra (2008), President; B.A., Trinity Christian College; M.B.A., Erasmus University; Ph.D., Iowa State University
Brandon Huisman (2013), Vice President for Enrollment and Marketing; B.A., Dordt College; M.B.A., Regent University
Robert Taylor (1999), Vice President for Student Success and Dean of Students; B.A., Dordt College; M.A., Azusa Pacific
Fred Verwoerd (2023), Vice President for University Operations; B.A., Dordt College
Leah Zuidema (2007), Vice President for Academic Affairs; B.A., Calvin College; M.A., Michigan State University; Ph.D., Michigan State University

## OTHER ADMINISTRATIVE STAFF

Kyle Achterhoff (2020), Director of Student Employment; B.A., Northwestern College; M. Ed., Northwest Missouri State University
Adam Adams (2015), Director for Global Education; B.A., Truman State University; M.A., Union University; M.Div., Golden Gate Baptist Theological Seminary
Amanda Albright (2022), Teaching for Transformation Director of Learning; B.A., Whitworth University; M.A., Dordt University
Taylor Anema (2023), Grants Management and Online/Global Enrollment Specialist
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Angela Kroeze Visser (2021), Director of the Kielstra Center for Research and Grants; B.A., Dordt College; M.P.H., University of Minnesota; Ph.D., University of South Dakota
Mark Volkers (2005), Digital Media Production Instructor; B.R.E., Reformed Bible College; M.A., Wheaton Graduate School
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Storm Wagner (2021), Admissions Counselor; B.A., Dordt University
Amy Westra (2016), Director of Career Development; B.S., Kuyper College; M.S., Cornerstone University
Nathan Wolf (2015), Head Men's and Women's Cross Country Coach; B.A., Northwestern College; M.A., University of South Dakota
John Wynstra (2015), Database Administrator; B.A., University of Wisconsin-Parkside; M.L.S., University of Wisconsin-Milwaukee; M.S., University of Northern Iowa
Jeffrey Zomer (2009), Head Softball Coach; B.A., Dordt College
Todd Zuidema (2020), Director of Church Relations; B.A., Dordt College; M.Div., Calvin Theological Seminary

## Faculty

## FACULTY EMERITI

Pamela Adams, Ph.D., Professor of Education, Emerita 2010
Joanne Alberda, M.S., Assistant Professor of Art, Emerita 2001
Willis Alberda, Ph.D., Professor of Mathematics, Emeritus 2001
Syne Altena, Ph.D., Professor of Health, Physical Education, and Recreation, Emeritus 2007
Dallas Apol, Ph.D., Professor of Foreign Language, Emeritus 2000
Arthur Attema, M.A., Assistant Professor of Business Education, Emeritus 2017
Duane Bajema, Ph.D., Professor of Agriculture, Emeritus 2018
Douglas De Boer, Ph.D., Professor of Engineering, Emeritus 2021
Dennis De Jong, M.S., Assistant Professor of Computer Science, Emeritus 2014
Karen DeMol, Ph.D., Professor of Music, Emerita 2012
Mary Dengler, Ph.D., Professor of English, Emeritus 2019
Robert De Smith, Ph.D., Professor of English, Emeritus 2023

William Elgersma, Ed.D., Professor of English, Emeritus 2020
George Faber, Ph.D., Professor of Education, Emeritus 2001
Christian Goedhart, Ph.D., Professor of Agriculture, Emeritus 2015
Merlyn Gulker, M.A., Associate Professor of Business Administration, Emeritus 1998
David Helmstetter, M.S.W., Assistant Professor of Social Work, Emeritus 2003
Robert Hilbelink, Ph.D., Professor of Accounting, Emeritus 2012
Richard Hodgson, Th.M., Associate Professor of Planetary Sciences, Emeritus 2002
Calvin Jongsma, Ph.D., Professor of Mathematics, Emeritus 2013
Wayne Kobes, Ph.D., Professor of Theology, Emeritus 2017
James Mahaffy, Ph.D., Professor of Biology, Emeritus 2014
Rockne McCarthy, Ph.D., Vice President for Academic Affairs, Emeritus 2008
Leonard Rhoda, Ed.D., Professor of Health, Physical Education, and Recreation, Emeritus 2005
Joan Ringerwole, D.M.A., Professor of Music, Emerita 2005
James Schaap, Ph.D., Professor of English, Emeritus 2012
David Schelhaas, M.A., Assistant Professor of English, Emeritus 2008
Jerelyn Schelhaas, M.A., Instructor of Theatre Arts, Emerita 2008
Keith Sewell, Ph.D., Professor of History, Emeritus 2012
Jay Shim, Ph.D., Professor of Theology, Emeritus 2023
Edward Starkenburg, Ed.D., Professor of Education, Emeritus 2021
Andrea Struyk, M.A., Assistant Professor of Education, Emerita 2000
John Struyk, Ph.D., Professor of Foreign Language, Emeritus 2000
Mark Tazelaar, Ph.D., Professor of Philosophy, Emeritus 2022
Richard Vander Berg, M.S., Director of Athletics, Assistant Professor of Health, Physical Education, and Recreation, Emeritus 2009
Dennis Vander Plaats, Ed.D., Professor of Education, Emeritus 2013
Delmar Vander Zee, Ph.D., Professor of Biology and Environmental Studies, Emeritus 2009
John Van Dyk, Ph.D., Professor of Philosophy of Education, Emeritus 2006
Nolan Van Gaalen, Ph.D., Professor of Engineering, Emeritus 2021
Lorna Van Gilst, Ph.D., Professor of English, Emerita 2007
Jan van Vliet, Ph.D., Professor of Economics, Emeritus 2022
Jacob Van Wyk, M.F.A., Professor of Art, Emeritus 2014
Charles Veenstra, Ph.D., Professor of Communication; Emeritus 2016
Arnold Veldkamp, M.A., Associate Professor of Mathematics, Emeritus 1998
David Versluis, M.F.A., Professor of Art, Emeritus 2019
John Visser, Ph.D., Professor of Business Administration, Emeritus 2016
Ronald Vos, Ph.D., Professor of Agriculture, Emeritus 2015
Bernard Weidenaar, M.B.A., Assistant Professor of Business Administration, Emeritus 2008
Marvin Wielard, M.S., Assistant Professor of Computer Science, Emeritus 2007
Socorro Woodbury, Ed.D., Professor of Language Studies, Emerita 2012
John Zwart, Ph.D., Professor of Physics, Emeritus 2019
Carl Zylstra, Ph.D., College President, Emeritus 2012
FACULTY ASSEMBLY (date in parenthesis indicates appointment year)
Manuela Ayee (2018), Associate Professor of Engineering and Chemistry; B.A., Dordt College; M.S., Iowa State University; Ph.D., University of Illinois at Chicago
Aaron Baart (2010), Chief of Staff and Dean of Chapel; B.A., Dordt College; M.Div., Regent College
Nathan Bacon (2019), Head Baseball Coach; B.A., Avila University; M.Ed., University of Missouri
Justin Bailey (2017), Associate Professor of Theology; B.A., Moody Bible Institute; M.Div., Trinity Evangelical Divinity School; M.Th., Trinity Evangelical Divinity School; Ph.D., Fuller Theological Seminary
Joe Bakker (2018), Director of Online Education, Dean for Online, Graduate, and Partner Programs; B.A., Dordt College; M.Ed., Dordt College
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Tara Boer (2012), Professor of Social Work; B.S.W., Dordt College; M.S.W., University of South Florida; D.S.W., Tulane University
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## TELEPHONE DIRECTORY

## Telephone Directory

## Dordt University

700 7th St NE
Sioux Center, Iowa 51250-1606
Telephone: 712-722-6000

| For specific information contact: |  |  |
| :--- | :--- | :--- |
| Office of the Academic Affairs | $722-6333$ | Academic matters, curriculum, and instruction |
| Office of Admissions | $722-6080$ | Admissions, catalogs, application forms |
| Office of Business Affairs | $722-6010$ | Payment of accounts, general business matters |
| Office of Advancement | $722-6020$ | Alumni relations, career development services, church relations, development, <br> grants, news bureau, publications, public relations |
| Office of Financial Aid | $722-6087$ | Scholarships, grants, loans, student employment |
| Office of Graduate Studies | $722-6236$ | Masters degrees |
| Office of Human Resources | $722-6011$ | Hiring, benefits, government compliance, immigration |
| Office of Online Education | $722-6379$ | Online programs |
| Office of the President | $722-6002$ | General policies and interests of the college |
| Office of the Registrar | $722-6030$ | Student records, Transcripts |
| Office of Student Services | $722-6070$ | Housing, health and welfare of students, student organizations |
| Campus Health Services | $722-6990$ | Student health issues, immunizations, personal counseling |
| Dean of Chapel | $722-6079$ | Pastoral counseling, spiritual activities |


| Department | Chairperson |
| :--- | :--- |
| Agriculture | Gary De Vries |
| Agriculture Operations | Dale Vos |
| Art and Design | Vaughn Donahue |
| Biology | Tony Jelsma |
| Business, Accounting \& Economics | Sandy Vanden Bosch |
| Chemistry | Carl Fictorie |
| Communication | Bruce Kuiper |
| Computer Science | Kari Sandouka |
| Criminal Justice | Jon Moeller |
| Education | David Mulder |
| Engineering | Justin Vander Werff |
| Engineering Technology | Tim Floen |
| English | Joshua Matthews |
| Environmental Studies | Robert De Haan |
| Graduate Program |  |
| Master of Education | Director |
| Master of Public Administration | Steve Holtrop |
| Master of Social Work | Erin Folsonan |
| Master of Special Education | Kathleen Van Tol |
|  |  |
|  |  |


| Department | Chairperson |
| :--- | :--- |
| Health and Human Performance | Craig Stiemsma |
| History | Paul Fessler |
| Language Studies | Leendert van Beek |
| Mathematics and Statistics | Thomas Clark |
| Music | Ryan Smit |
| Nursing | Deb Bomgaars |
| Philosophy | Geoffrey Fulkerson |
| Physics | Jason Wyenberg |
| Political Science | Jeff Taylor |
| Psychology | Mark Christians |
| Social Work | Leah Mouw |
| Theatre Arts | Laurel Koerner |
| Theology | Justin Bailey |
|  |  |
|  |  |
| Academic Area | Dean |
| Arts \& Humanities | Luke Hawley |
| Foundational \& Health Sciences | Jeff Ploegstra |
| Online, Graduate \& Partner Programs | Joe Bakker |
| Social Sciences | Abby Foreman |
| Technology \& Applied Sciences | Ethan Brue |

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