## Contents

Calendar, 3
General Information, 5
Admissions, Fees, Financial Aid, and Housing, 8
Academic-Information, 16
Majors and Degrees, 25
Academic Enrichment and Special Programs, 26
Student Services, 35
College of Arts and Sciences, 38
School of Social Sciences and Public Affairs, 68
College of Business, 87
College of Education, 102
College of Health Science, 123
Graduate College, 139
School of Vocational Technical Education, 151
Faculty, 171
Index, 179


## CONTACTS

ADMISSIONS: Administration Building, Room 101; Telephone (208) 385-1156.

ADMISSIONS COUNSELING:
Visitor's Center, University Drive; Telephone (208) 385-1401 or 1-800-632-6586 (from within Idaho); or 1-800-824-7017 (in most western states).
BSU BOOKSTORE: Student Union Building; Telephone (208) 385-1276.
CAREER PLANNING AND PLACEMENT: Administration Building, Room 123; Telephone (208) 385-1747.

COUNSELING AND TESTING CENTER: Education Building, Sixth Floor; Telephone (208) 385-1601.
FINANCIAL AID: Administration Building, Room 117; Telephone (208) 385-1664.

REGISTRAR: Administration Building, Room 102-108; Telephone (208) 385-3486.

STUDENT HEALTH SERVICES: University Drive; Telephone (208) 385-1459.

STUDENT RESIDENTIAL LIFE: Administration Building, Room 110; Telephone (208) 385-3986.
STUDENT SPECIAL SERVICES: Administration Building, Room 114; Telephone (208) 385-1583.


# Boise State University Calendar—1986-87 <br> <br> Summer Session 1986 

 <br> <br> Summer Session 1986}

| May 23, Friday June 6, Friday. | Last day to submit application for summer session to be assured of prepared registration materials. Registration in Pavilion, 3:00-7:00 p.m. (see Class Schedule for designated times; students may register for all summer sessions at this time). |
| :---: | :---: |
| June 9, Monday | Classes begin for 8 -week, 10 -week, and first 5 -week sessions. |
| June 20, Friday. | Last day to file with department for admission to candidacy for Master's Degree-Departmental Office. Last day to file application for graduation for Master's, Baccalaureate, and two-year or less degrees, diplomas, and certificates-Registrar's Office. |
| July 4, Friday | Holiday. |
| July 11, Friday | First 5-week session ends. |
| July 14, Monday | Classes begin for second 5 -week session. |
| August 1, Friday | End of 8-week session. |
| August 15, Friday | End of 10-week and second 5-week sessions. |

## Fall Semester 1986

June 19-21, Thursday-Saturday
. New Student Early Registration-Student Union. To be eligible to participate, a student must submit an application and be accepted by BSU no later than June 6, 1986.
July 18, Friday
August 8 , Frida
Bills will be mailed to students pre-registered for fall semester.
August 8 , Friday............... Last day for pre-registered students to complete financial arrangements and pay fees for fall semester.
August 15, Friday Last day to submit application for fall semester to be assured of prepared registration materials at the priority registration (August 29). Students submitting applications after this date will be able to register at Open Registration.
August 25, Monday......................Faculty orientation.
August 27, Wednesday ............... Residence Halls open (noon). Student advising for continuing students (afternoon.)
August 28, Thursday.................New Student Orientation Program, 9:00 a.m.-Student Union. Student advising (all day).
Drop/add for pre-registered students, 1:00-4:00 p.m.-Pavilion (see class schedule for designated times).
August 29, Friday ................... Priority and Open Registration in Pavilion (see class schedule for registration times).
September 1, Monday................. Holiday.
September 2, Tuesday . . . . . . . . . . . . . . Classes begin.
Open Registration and drop/add 9:00 a.m.-4:00 p.m. (Monday-Friday) and 5:00-7:00 p.m. (Monday-Thursday)-Administration Building.
September 3, Wednesday............ Last day for $100 \%$ refund for dropping a class or withdrawing from the university.
September 9 , Tuesday.
Last day to register except by petition (9:00 a.m.- 4:00 p.m. and 5:00 p.m.-7:00 p.m.). A fifty dollar (\$50) late registration fee applies to all registrations after this date. Last day to add except with consent of instructor and department head. Last day to drop except with consent of instructor.
September 10 , Wednesday............. Registration by petition only; fifty dollar ( $\$ 50$ ) late registration fee applies to all late registrations.
September 17, Wednesday........... Last day for $75 \%$ refund for dropping a class or withdrawing from the university.
September 26, Friday................ Last day to file with department for admission to candidacy for Master's Degree-Departmental Office. Last day to file application for graduation for Master's, Baccalaureate and two-year or less degrees, diplomas, and certificates-Registrar's Office.
October 1, Wednesday .............. Last day for $50 \%$ refund for dropping a class or withdrawing from the university.
October 3, Friday ................. Last day to make class changes or register by petition for first 8 -week block courses.
October 17, Friday.................... Notification of incompletes from previous semester.
Last day to file application with department for final Master's written exam.
October 20, Monday ................. . Second 8 -week block begins.
October 24, Friday . . . .............. Last day to submit names for faculty initiated withdrawal notifications.
October 29, Wednesday . . . . . . . . . . . Advising and pre-registration for new and reentry students (not enrolled Fall 1986) 1:00-7:00 p.m. - Student Union. To be eligible to participate, a student must submit an application and be accepted no later than October 17, 1986.
October 29-November 4, Wed-Tues . . Advising period for continuing students (enrolled Fall 1986). Pre-registration period for students who have been advised. Pre-registration materials available in Administration Building, 8:00 a.m. to 7:00 p.m. (Monday-Thursday) and 8:00 a.m. to 5:00 p.m. (Friday).
October 31, Friday ................. Last day to file Guaranteed Student Loan application and supporting documents for any funds to be disbursed prior to the end of the fall, 1986, semester.
November 7, Friday .................. Last day to make class changes or register by petition. College of Business; last day to petition for upper division admission for spring semester, 1987. Last day to drop second 8 -week block courses.
November 8, Saturday ................ Final day for written exam for Master's Degree.
November 19, Wednesday . . . . . . . . . . Last day for final oral and project/thesis defense.
November 21, Friday............... Last day to make class changes or register by petition for second 8 -week block courses.
November 27-30, Thursday-Sunday ... Thanksgiving Holiday.
December 1, Monday ................ . Classes resume.
December 12, Friday ................ Class schedule and bills will be available for students pre-registered for spring semester Registrar's Office. Last day to submit final signed copy of Master's project/thesis-Department. Classroom instruction ends. Last day for complete withdrawal.
December 15, Monday . . . . . . . . . . . . Reading Day; final exam period begins Monday night for night classes. Remaining class schedules and bills for pre-registered students will be mailed.
December 16-20, Tuesday-Saturday ... Final Semester Examinations.
December 20, Saturday............... Residence Halls close (Noon).

December 29, Monday . . . . . . . . . . . . . Last day to submit application for spring semester to be assured of prepared registration materials at the Priority Registration (January 14). Students submitting applications after this date will be able to register at Open Registration.

## Spring Semester 1987



## Summer Session 1987

May 22, Friday . . . . . . . . . . . . . . . . . . . Last day to submit application for summer session to be assured of prepared registration materials.
June 5, Friday.
Registration in Pavilion, 3:00-7:00 p.m. (see class schedule for designated times; students may register for all summer sessions at this time).
June 8, Monday. . . . . . . . . . . . . . . . . . . . Classes begin for 8 -week, 10-week, and first 5 -week sessions.
July 3, Friday Holiday.
July 10, Friday
First 5 -week session ends.
July 13, Monday.
Classes begin for second 5 -week session.
July 31, Friday End of 8-week session.
August 14, Friday . . . . . . . . . . . . . . . . . . End of 10 -week and second 5 -week sessions.


## General Information

## The University

The university exists to educate individuals, to ensure their development and to enlarge their opportunities. Boise State creates the intellectual atmosphere to produce educated persons who are literate, knowledgeable of public affairs, motivated to become life-long learners and capable of solving problems through the discipline in which they majored. Students receive a broad education to equip them for mobility in employment, social relevance and informed, active citizenry.
Boise State is an urban university, taking its character from the dynamic center of business and government in which it is located.

The university's mission reflects its urban setting. The State Board of Education has mandated that Boise State put its primary emphasis on business and economics, the social sciences, public affairs, the performing arts and interdisciplinary studies. The university gives continuing emphasis in the areas of health professions, the related physical and biological sciences and education. And, it maintains basic strengths in the liberal arts and sciences that provide the core curriculum and will enhance its role as a regional center for technology based on emerging needs.

At Boise State, students may choose to study in any one of five colleges - Arts and Sciences, Business, Education, Health Science, Graduate - or two schools-Social Sciences and Public Affairs or Vocational Technical Education. We offer 155 major fields of interest, 61 baccalaureate degree programs, 23 vocational technical degrees, four graduate and six associate degree programs. All are accredited by the Northwest Association of Schools and Colleges. Specific colleges and programs also are accredited by national agencies (see accreditation section on the next page).

Because BSU is located in the commercial, financial, health care and governmental center of Idaho, students can reach beyond the classroom for experiences not available anywhere else in the state. Internships or work experiences at places ranging from the State Legislature to the state's largest daily newspaper enhance classroom learning.

The university also provides a variety of informal experiences on campus, such as participation in student government or on university committees, distinguished speaker programs and cultural and civic events. In all of its programs, Boise State University takes pride in providing a personal enviroriment for students.

Since its beginning, the university's mission has been to respond to the wide-ranging academic needs of the community. It has sought to provide a breadth of programs both at the graduate and undergraduate levels and to provide academic leadership to the area through research and public service. Diversity, flexibility and quality are trademarks of Boise State programs.

HISTORY: Boise State University was founded in 1932 by the Episcopal Church as a junior college. It was the first institution of higher education to be located in the state's capital city.
Boise Junior College, which had an enrollment of about 600 students by the end of the 1930s, was located at St. Margaret's Hall, near the present site of St. Luke's Hospital. The school was moved to its present location on the Boise River in ' 1940.
The Episcopal Church discontinued its sponsorship of the school in 1934, when BJC became a non-profit private corporation sponsored by the Boise Chamber of Commerce and the community. A bill creating a junior college taxing district was passed in 1939, and the college was supported by local property taxes after that.

## General Information

The junior college was granted four year status and named Boise College in 1965. The school was brought into the state system of higher education in 1969 andire-named Boise State University in 1974.
During its 50 -year history, BSU has had four presidents: its founder, Bishop Middleton Barnwell (1932-34), Eugene Chaffee (1934-67), John Barnes (1967-77) and John Keiser (1978-present).
ACCREDITATION AND AFFILIATION: The university is a fully accredited member of the Northwest Association of Schools and Colleges. Permanent membership also is held in the College Entrance Examination Board and the College Scholarship Service Assembly.

A number of academic programs have additional accreditation or approval from the following organizations: American Assembly of Collegiate Schools of Business (AACSB), the National Council for Accreditation of Teacher Education (NCATE), the National Association of State Directors of Teacher Education, the National Association of State Directors of Teacher Education and Certification, the Council on Social Work Education (CSWE), the National Association of Schools of Music (NASM), the National League for Nursing, the Idaho State Board of Nursing, the Committee on Allied Health Education and Accreditation (CAHEA) of the American Medical Association (AMA) in collaboration with the Joint Review Committees on Education in Radiologic Technology and Respiratory Therapy and the American Medical Records Association, and the National Accreditation Council for Environmental Health Curriculum.
The program in Dental Assisting is accredited by the Commission on Dental Accreditation, a specialized accrediting body recognized by the Council on Postsecondary Accreditation and the United States Department of Education.

## Students

Students at Boise State are challenged to reach their highest levels of performance. The opportunities are here to test your limits in academics, sports, cultural or social activities.
The university's urban character invites a diverse student body that includes young adults, senior citizens, and working professionals along with the more "traditional" students straight from high school.
Students come from every Idaho county, almost every state and more than 30 foreign countries. Each semester, BSU enrolls about 10,000 students in its academic and vocational technical programs.



## Faculty

Boise State's strength lies in its faculty of more than 430. The university attracts motivated faculty dedicated to excellence in teaching, creative in providing new knowledge and generous in using their expertise to solve society's problems. They recognize that quality teaching is their primary goal.
At BSU, your classes won't be taught by graduate assistants. Most classes are taught by full-time professors, most with doctorate degrees. And you'll find your teachers caring, accessible people who are here to help you learn.
Some of the most respected scientists, artists, researchers and educators in the West are on the BSU faculty. They include a political scientist researching the causes of war and nuclear proliferation, geologists studying the geothermal potential of Idaho, business professors analyzing Idaho's tax structure, biologists discovering new ways to increase productivity of Idaho rangeland, English professors editing publications that preserve and study the works of Western writers and professional educators in every field working to make our future better.
Faculty members act as student advisors and are always willing to listen to student concerns.

## Facilities

One of the most acoustically sophisticated performance halls in the nation, a top-notch arena and recreation complex, and a campus nestled along the scenic Boise River are some of the things that attract students to Boise State University.
The 110 -acre campus consists of 49 buildings bordered by Broadway Avenue on the east, University Drive on the south, Capitol Boulevard on the west and the river on the north.

The Student Union Building is the hub of campus activity, meeting the campus community's social, recreational and cultural needs. Enclosed in the SUB are an information desk that sells tickets to all university and civic events; a recreational area with amusement games, bowling alleys, billiards and outdoor equipment rentals; study areas and lounges; a fine fast-food restaurant and the university dining hall; student government offices; a travel agency; and much more.

The BSU Bookstore is also located on the first floor of the SUB. There, all textbooks and supplies required for classes can be purchased. The Bookstore also carries a large selection of sale books on a continual
basis and sells some clothing and souvenir items.
The Administration Building, the oldest on campus, is where students can find information on admission, fees, financial aid, career placement and planning and housing.
The Morrison Center for the Performing Arts houses a 2,000 -seat performing hall used by both university and community groups. It also contains the Music and Theatre Arts departments, a 180 -seat recital hall and a 200 -seat theater.

The BSU Pavilion is a multi-purpose facility that attracts big name entertainers ranging from Willie Nelson and Alabama to Lionel Richie and Van Halen. Students also can use five racquetball courts, weight rooms and a large recreational gymnasium. A child care center for students' children also is located in the Pavilion.
Downtown Boise is just a few minute's walk away from campus, where students can find shopping, fine restaurants and exciting nightlife. Just across the footbridge over the Boise River is Julia Davis Park - with the Idaho Historical Museum, the Boise Gallery of Art, the city zoo, a bandshell where spring and fall concerts take place and lots of open, green space.


## The Library

Located at the heart of the campus is the University Library. On the library's four floors of shelves are 280,000 volumes that support curricular and research needs, 2,000 current periodicals and 40 newspapers, 96,000 maps and 287,000 government publications.
Access to the library's collections is primarily through the Computer Output Microform catalog. Some of the library's older holdings still are recorded on the card catalog, so both catalogs must be consulted for a thorough search. Librarians and assistants are available in the Periodicals and Circulation areas to help students. The Reference Department also provides basic and advanced bibliographic service and assistance in use of the library.

Teachers in Southwest Idaho, as well as students and faculty, have access to print and non-print materials for elementary and secondary education, records, juvenile and young adult books and college-level non-print materials through the Curriculum Resource Center on the library's second floor.

The Maps and Special Collections Department contains the library's map collection, the University Archives and various manuscript collections. A new addition to the Library are the papers of former Senator Frank Church. A special room on the Library's third floor houses some of the memorabilia for public viewing. When the collection, one of the largest senatorial collections known, is processed, it will be available for scholarly research.

## Computer Capabilities

A Boise State University graduate must be able to make use of the computer for tasks appropriate to his/her discipline.
Because we live in an age of high technology and of "information explosion," Boise State has adopted this computer literacy requirement for all graduates.
BSU's computers are in several buildings on campus in order to give students easy access to them. The university has increased student access to computers by more than 150 percent in the last two years to ensure that every student can meet the computer literacy requirement.
In addition to a university-wide computer center, with IBM 4341 and Hewlett-Packard 3000 main frame computers, micro-computer centers have been established within each college.
Two IBM computers serve both administrative and instructional purposes with over 125 terminals in offices and computer laboratories across campus. The HP 3000 is strictly an educational system, used by faculty, staff and students on 30 terminals in Room 206 of the Business Building. Student accounts on both machines are available through instructors or through the Data Center in Room 116 of the Business Building.

There are 22 IBM personal computers, an NCR Tower, two AT\&T 3B2 super microcomputers, and a variety of Apple and Commodore com: puters in Room 418 of the Education Building, with more than 1,200 programs on subjects ranging from English to Economics. The College of Health Science has numerous personal computers for tutoring, clinical test simulation and teaching X -ray position techniques and a complete computer classroom for thirty students.
An Arts and Sciences Computer Assisted Learning Center, on the third floor of the Science-Nursing Building, has eight Apple computers available so students can use programs and practice what they've learned in classes. The Vocational Technical School has 10 IBMs in Room 106 of the Vocational Technical Building and 15 Apples in various locations around the building.
The College of Business has 40 IBM personal computers in Room 208 of the Business Building for student use.

## Part 2



## Admissions, Tuition and Fees, Financial Aid and Student Housing Information <br> Questions about admissions requirements should be directed to:

The Office of Admissions Boise State University 1910 University Drive

Boise, ID 83725
(208) 385-1156

1-800-632-6586 (within Idaho)
1-800-824-7017 (in most western states)

## Admission as Regular Undergraduate Student

Admission to the university is based upon credentials showing graduation from an accredited high school. High School Equivalency Certificates or acceptable General Education Development (CED) scores ( 35 or above on all five tests with an average of 45 or above for all tests) will be accepted in lieu of a high school transcript.

Applicants for admission whose credentials have been accepted will be given permission to register for the following semester. Students should plan to have all credentials submitted one month prior to registration to settle any questions that may arise and to receive a certificate of admission by mail before registration.
Matriculation is the process of providing all required items necessary
for regular enrollment as a full-fees student at Boise State University.
NEW FRESHMEN: No credits earned since graduation from high school.
Students wishing to enter as full-fees ( 8 or more semester hours) fully matriculated academic students must be at least 16 years of age and submit the following prior to the deadline date:

## 1. A completed application

2. A $\$ 10$ matriculation fee (the matriculation fee may be waived by the Admissions Office in documented cases of financial need and/or scholastic excellence).
3. An official High School transcript showing date of graduation or a GED Certificate showing acceptable test scores.

NOTE: An "official" transcript is one certified by the issuing institution and mailed by that institution directly to the BSU Admissions Office.
4. American College Test (ACT), Scholastic Aptitude Test (SAT), or Washington Pre-College (WPC) test scores.

Permission to enroll full time is contingent upon satisfaction of all matriculation, academic, and financial requirements set by Boise State University.

TRANSFER STUDENTS: Prior enrollment at one or more post-high school institutions.

Students entering from other colleges or universities must present proof of honorable dismissal and official transcripts mailed directly to the Dean of Admissions. Students entering from other institutions must comply with the same scholastic regulations as are applied to students currently enrolled at the university. After evaluation of transcripts, students are classified as freshmen, sophomores, juniors, or seniors.

In accordance with Idaho statutes as approved by the State Board of Education, the acceptance of credits from junior college is uniform for both certification and transfer purposes and no more than 64 credit hours or $1 / 2$ the total hour requirement of the specific curriculum was established as the uniform maximum limit effective September 1, 1950.

Transfer students wishing to enter as full-fees (8 or more semester hours) fully matriculated academic students must submit the following prior to the deadline date:

1. A. completed application
2. A $\$ 10$ matriculation fee
3. Evidence of high school graduation or a GED certificate showing acceptable test scores
4. ACT, SAT, WPC test scores or evidence of successful completion of English Composition sequence
5. Official transcripts from all previously attended colleges showing good academic standing.

NOTE: An "official" transcript is one certified by the issuing institution and mailed by that institution directly to the BSU Admissions Officer.

A transfer student, whether resident or non-resident, must have a minimum GPA of 2.00 or above on all prior collegiate work completed or have cleared the probationary provision outlined on page 27, Academic Probation and Disqualification. All decisions relating to admission of foreign students will, however, be made by the Foreign Student Admissions Office.
Academic college level credit will be accepted from institutions accredited by the regional accrediting associations as reported in Accredited Institutions of Postsecondary Education published by the Council on Postsecondary Accreditation. Credit earned from institutions not accredited by these regional accrediting organizations may be granted on a course by course basis with the approval of the appropriate Boise State University department. Students may petition for acceptance of this credit once they have completed 15 semester credits at Boise State University with a minimum cumulative G.P.A of 2.0 .
TRANSFER OF VOCATIONAL TECHNICALACADEMIC CREDITS: Block transfer of vocational technical credit from accredited or State approved vocational technical schools in the State of Idaho into specific departmental programs, or general elective credit at Boise State University may be awarded as determined by the appropriate academic department and approval of the dean.
Similarly, block transfer of academic program credit from an accredited institution of higher education into a specific vocational technical program at Boise State University may be awarded as determined by the appropriate division, department, or committee.
No grade shall be assigned, and such transfer applies only to the agreed-upon-transfer program.
Credit for specific vocational technical school courses may be awarded when equivalency has been validated by the appropriate academic department and approved by the school offering the equivalent course work. Vocational technical school credit may be awarded for specific academic course credit when the equivalency has been determined by the appropriate vocational technical division or department.
Reciprocal exchange of non-equivalent prior learning such as course work training or work experience between vocational technical and
academic institutions shall be at the discretion of the appropriate division or department.
If a student transfers from one program in vocational technical education or an academic program to another, the receiving department or division will re-evaluate the appropriateness of such vocational technical training, experience, and/or academic course work.
VETERANS: Students wishing to enter and receive G.I. Bill benefits must matriculate fully and meet all requirements for either freshmen or transfer students listed previously. Veterans attending under the C.I. Bill (Chapter 34) or under the Dependence Educational Assistance (Chapter 35-widows, orphans and children of $100 \%$ disabled veterans) can apply for their benefits through the Office of Veterans Affairs on the Boise State University campus. Chapter 31 (rehabilitation program) veterans must be counseled by a Vocational Rehabilitation counselor at the V.A.

Chapter 34 veterans and Chapter 35 eligible persons are required to pay all tuition and fees at the time of registration. Chapter 31 veterans must present an Authorization of Entrance.
FORMER BOISE STATE STUDENTS: To be readmitted to the university after an absence of one semester or more, students must submit the following prior to the deadline date:

1. A completed application
2. Official transcripts from all colleges attended since the last BSU enrollment.

NOTE: An "official" transcript is one certified by the issuing institution and.mailed by that institution directly to the BSU Admissions Office.
PART-TIME STUDENTS: Undergraduate students wishing to enter part-time ( 7 or fewer credit hours) must submit a completed application form, but are not required to meet the other matriculation requirements. However, students who intend to pursue a degree objective on a part-time basis are required to meet all admission requirements. Veterans wishing to receive G.I. benefits must submit official transcripts from all previously attended colleges prior to being certified eligible for benefits.
SUMMER SCHOOL STUDENTS: Students wishing to attend Boise State University during the summer session(s) only must complete an application, but are not required to meet other matriculation requirements.

## Special Undergraduate Students

Persons who are unable to meet requirements as regular students and desire to take special studies may be admitted on special status upon presentation of satisfactory evidence that they are qualified to do college-level work. Normally, special status will not be granted to anyone less than 18 years of age unless, following a personal interview with the Dean of Admissions, it is deemed in the best interests of the student. Students admitted on special status are encouraged to complete matriculation requirements within the first semester of attendance. Special students are not eligible to become candidates for graduation until they have satisfactorily met entrance requirements or until they have completed 32 semester hours of work at the university with GPA of 2.0 or better.
HIGH SCHOOL STUDENTS: Any currently enrolled high school students may enroll part-time if they have met the appropriate prerequisite and their application for admission has been approved by the Dean of Admissions. Registration at BSU must be determined to be in the best interests of the student and must not interfere with progress toward high school graduation.
VOCATIONAL TECHNICAL STUDENTS: The School of Vocational Technical Education admits applicants who are high school graduates or who have successfully completed the GED tests to regular full-time preparatory programs. People interested in becoming a skilled craftsman or technician will be admitted to these courses if they comply with all admission requirements and meet the qualifications for the designated program. Prerequisite courses are required for various programs, such as one year each of high school algebra and geometry for entrance to the drafting or electronics technology programs. The
university does not admit applicants under 18 years of age who are attending high school at the time of application unless their high school principal requests their admission. Students in Vocational Technical programs who plan to enter certain extra-curricular activities must meet regular entrance requirements (see eligibility requirements).

Students wishing to enter the BSU Vocational Technical School must submit prior to the deadline date:

1. A completed BSU application
2. A $\$ 10$ matriculation fee
3. Evidence of high school graduation or GED
4. An official college transcript from all colleges attended showing good academic standing

NOTE: An "official" transcript is one certified by the issuing institution and mailed by that institution directly to the BSU admissions office.
5. Asset test.
6. Personal interview
7. $\$ 75$ advance security registration deposit.

NOTE: The Health programs have additional requirements.
Caution: Due to limited space in many programs, a place cannot be guaranteed until both the interview is completed and the security deposit is received.

## Graduate Students

See Graduate College section for specific program information.

1. All students holding a bachelor's or higher degree must submit a graduate application for admission.
2. All graduate students, except the exemptions listed below, must submit official transcripts from each post-high school institution attended directly to the Graduate Admissions Office.
NOTE: An "official" transcript is one certified by the issuing institution and mailed by that institution directly to the BSU graduate admissions office.
Exemption: Students attending part time (7 or less credits) pursuing general graduate study or undergraduate courses of interest.
3. All graduate students attending full time ( 8 or more credits ) and all students pursuing a master's degree must also pay a $\$ 10$ nonrefundable matriculation fee. (Full-fees graduate students who received their undergraduate degree at B.S.U. are exempt from the $\$ 10$ fee, UNLESS they are pursuing a master's degree.) Students holding a bachelor's or higher degree can be classified as graduate, senior, sophomore or special for fee purposes, financial aid and institutional enrollment reports. Clarification on classification can be obtained from the Graduate Admissions Office.

NOTE: Students pursuing the MPA program will be mailed a data form which should be returned to the address on the form. MBA students will need to have GMAT scores on file with the Graduate Admissions Office before they can be evaluated for acceptance into the graduate program they are pursuing.

## Foreign Students

Boise State University accepts qualified students from foreign countries to the extent that space is available. Foreign applicants are expected to meet the requirements for admission from high school or from other colleges or universities as outlined previously under admission requirements.
Credentials: Official transcripts and/or certified copies of the certificate, diploma, or government examination report received on completion of secondary school work and the degree, license, or diploma received on completion of any college or university must be sent by the certifying agency directly to the Admissions Office and must be translated into ENGLISH.
English Proficiency: All foreign applicants are required to take and
receive a satisfactory score (minimum of 500) on TOEFL (Test of English as a Foreign Language) or other examinations acceptable to Boise State University. Arrangements to take the TOEFL examination may be made by writing directly to TOEFL, Services CN 6151 Princeton, New Jersey $08541-6151$. The test must be taken and scores received by the university prior to a decision on admission of the applicant.
Admitted Students: Upon arrival at the university, foreign students will be examined again with the Michigan Test of English Language Proficiency. Results achieved will determine their placement level in the English as a Second Language program.

Academic Advising: Advising in academic matters is provided to foreign students by the Foreign Student Admissions Office until such time as they meet the English language requirements for a degree program.
Financial Statement: All foreign students must present to the Foreign Student Admissions Office satisfactory statements of finances and adequate proof of financial responsibility or sponsorship by a reputable American citizen or organization for all financial obligations while attending Boise State University.
Health and Accident Insurance: Boise State University requires that all full-time students be covered by health and accident insurance. Such insurance is included as a part of general registration fees paid by all full-time students.
Admission to Graduate College: Foreign students applying for admission to the Graduate School must submit all of the previously mentioned admission materials. Those wishing to major in Business Administration must submit GMAT scores (Graduate Management Admissions Test). The score on the GMAT is considered together with the GPA to determine admissibility of the student to the MBA Program. A TOEFL score of at least 550 must be achieved.

Upon completion of all requirements and the granting of final acceptance to the applicant, the Foreign Student Admissions Officer will issue an l-20 form.

## Tuition and Fees

Questions about tuition and fees should be directed to: Business Office
Boise State University
1910 University Drive
Boise, ID 83725
(208) 385-3636

All of the fees, tuition, and other charges are due and payable for preregistered students by the deadlines established prior to the beginning of each semester. Please refer to the academic calendar for exact dates. These fees and charges for students registering during open or late registration are due and payable on the day the registration occurs. Board and room charges may be paid in advance for the year or arrangements may be made to pay in advance on a partial payment basis by consulting the Director of Student Residential Life (see section under Student Housing).
TUITION AND FEE SCHEDULE: Eight or more hours made up of any combination of credit, audit, equivalent and/or repeat hours will be considered a full schedule for purposes of calculating charges.
All fees, tuition, and other charges are subject to change at any time by the State Board of Education acting as the Board of Trustees for Boise State University.

## Tuition and Fees

| Tuition/Fees (1985-86 Costs) | Idaho Resident | Non-Resident |
| :--- | :---: | :---: |
| Tuition (per semester) | $\$ 0.00$ | $\$ 950.00$ |
| Institutional fees |  |  |
| $\quad$ (Undergraduate) | 529.00 | 529.00 |
| Institutional fees (Graduate) | 696.00 | 696.00 |
| Total (Undergraduate) | 529.00 | 1479.00 |
| Total (Graduate) | 696.00 | 1646.00 |

Payment of full-fees does not necessarily constitute full-time enrollment. Please see the section on Academic Information for credit hour requirements.

## Idaho Residency Requirements For Fee Purposes

The legal residence of a student for fee purposes is determined at the time of initial application for admission and will be reconsidered, thereafter, upon appeal by the student. Appeal affidavits can be obtained in the Admission's Office. Section 33-3717, Idaho Code, specifies that a resident student shall be:

1. Any student whose parents or court-appointed guardians are domiciled in the State of Idaho and provide more than fifty percent ( $50 \%$ ) of his support. Domicile means an individual's true, fixed and permanent hone and place of habitation. It is the place where he intends to remain and to which he expects to return when he leaves without intent to establish a new domicile elsewhere. To qualify under this section, the parents or guardian must be residing in the state on the opening day of the term for which the student matriculates.
2. Any student, who receives less than fifty percent ( $50 \%$ ) of his support from parents or legal guardians who are not residents of this state for voting purposes and who has continuously resided in the State of Idaho for twelve (12) months next preceding the opening day of the period of instruction during which he proposes to attend the college or university.
3. Any student who is a graduate of an accredited secondary school in the State of Idaho, and who matriculates at a college or university in the State of Idaho during the term immediately following such graduation regardless of the residence of his parent or guardian.
4. The spouse of a person who is classified, or who is eligible for classification, as a resident of the State of Idaho for the purposes of attending a college or university.
5. A member of the armed forces of the United States, stationed in the State of Idaho on military orders.
6. A student whose parent or guardian is a member of the armed forces and stationed in the State of Idaho on military orders and who receives fifty percent ( $50 \%$ ) or more of support from parents or legal guardians. The student, while in continuous attendance, shall not lose his residence when his parent or guardian is transferred on military orders.
7. A person separated, under honorable conditions, from the United States armed forces after at least two (2) years of service, who at the time of separation designates the State of Idaho as his intended domicile or who lists Idaho as the home of record in service and enters a college or university in the State of Idaho within one (1) year of the date of separation.
8. Any individual who has been domiciled in the state of Idaho, has qualified and would otherwise be qualified under the provisions of this statute and who is away from the state for a period of less than one (1) calendar year and has not established legal residence elsewhere provided a twelve (12) month period of continuous residence has been established immediately prior to departure.

## Other Fees



MUSIC FEES: Music Performance Fee for all private music lessons: 2 credits . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 55.00 per semester 4 credits . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 110.00 per semester
Waivers of Music Performance Fees will be granted to music majors enrolled for 8 credit hours or more for all required private performance study leading to a B.A. or B.M. degree. Students receiving this fee waiver must be concurrently enrolled for credit in a major ensemble and in
concert class. Students must receive grade of " C " or better in the ensemble and a grade of " $P$ " in concert class.
All students receiving this fee waiver must be making satisfactory progress (C grade or better) in private performance study to be eligible for a fee waiver the following semester.
Students receiving this fee waiver on an instrument leading to a proficiency examination must attempt the examination at the end of the first year of study and each semester thereafter until successful completion. No more than four semesters of fees for this purpose will be waived.
SPECIAL WORKSHOP FEES: Special workshops are conducted throughout the year that are not part of the regularly scheduled courses funded through the university general fund budget. All students, regardless of full-fees or part-time status, will be required to pay the special workshop fees that are set in relation to the expenses required to conduct the course. Registration for these workshops will not change the status of a student for fee purposes.
INSURANCE COVERAGE: All students paying full fees are required to take insurance coverage, which is paid with regularly assessed institutional fees. Students who are covered by family or other plans may obtain a refund through application to the insurance agent for Boise State University.
Boise State University carries liability insurance covering all on-campus and official functions including student activities.

## Refund Policy

When a regularly enrolled student withdraws from Boise State University, a refund of registration charges including non-resident fees will be on the following basis:
Before Regularly Scheduled Classes Begin . . . . . . . . . . . . . . . . $100 \%$
During first 2 weeks of classes . . . . . . . . . . . . . . . . . . . . . . . . . $50 \%$
During 3rd and 4th week of classes . . . . . . . . . . . . . . No Refund

This policy also pertains to part-time students, including special evening classes. No special consideration is given to late registrants in extending the refund policy. The university reserves the right to deduct from the refund any outstanding bills. An itemized statement of deductions will be forwarded with the refund check. Upon completion of the withdrawal process, a refund check will be prepared and issued in approximately two to three weeks from date of withdrawal.
Students who withdraw during the refund period and have used student aid funds to pay all or part of registration fees, tuition, or room and board costs will be refunded only the amount proportionate to the amount paid with personal funds. The rest of the refund will be returned to the appropriate student aid fund.
No private music lesson refunds will be allowed after the open registration/free drop add period.

## Financial Aid

Questions about financial aid should be directed to:
Financial Aid Office
Boise State University
1910 University Drive
Boise, ID 83725
(208) 385-1664

The primary purpose of financial aid is to provide assistance and counseling to students who would be unable to attend Boise State University without such help. Financial aid is available to fill the gap between the student's potential resources and yearly educational ex$\dot{\text { penses. }}$ The primary responsibility for meeting educational costs rests with the individual student and/or parents.
Boise State University has a comprehensive financial assistance program that includes a variety of scholarships, loans, grants, and parttime employment.
To be eligible to apply for financial aid, a student must be a U.S. citizen
or permanent resident and must enroll for credit for at least 6 semester hours and show financial need. Financial aid is determined by careful analysis of financial resources from information furnished on the Financial Aid Form (FAF) submitted to the College Scholarship Service (CSS). A uniform method approved by the U.S. Office of Education is used to determine a student's financial need. Every attempt is made to ensure fair distribution of the resources available to the university.

## Application Procedures

To be eligibie for financial aid, the student must be admitted to the university into an academic or vocational technical program for the purpose of obtaining a degree or certificate, and submit the following forms:

1. Financial Aid Form (FAF)

The FAF is one of two forms that"must be completed by students applying for need-based aid, including need-based scholarships. The FAF must be sent directly to the CSS in Berkeley, California with a check or money order. Three to four weeks are required for processing. These forms are available in January.
2. Boise State University Application for Financial Aid The BSU application is the second form that must be completed by all applicants applying for need-based aid. This form is submitted directly to the Financial Aid Office.
3. Application for Federal Student Aid

The application for Federal Student Aid should be completed by undergraduate students wishing to apply exclusively for a Pell Grant. This form must be mailed directly to towa City, Iowa.
4. BSU Application for Scholarship (Optional)

This form must be submitted to apply for most scholarships available through the university. It should be sent directly to the Financial Aid Office. The "Boise State University Scholarships" brochure lists all scholarships available through Boise State University and is available on request from the Financial Aid Office. Need-based scholarship applicants should submit the FAF by February 1.
5. Financial Aid Transfer Record

Students who have attended other post-secondary institutions must submit a financial aid transcript in addition to a grade transcript from all institutions attended. The financial aid transfer record must be submitted whether or not financial aid was received.

To increase the chance of receiving aid, all appropriate forms must be filed by March 1 . If all required documents have not been submitted by the. March 1 priority deadline, the application will be considered for various types of aid on a first-come, first-served basis if there are remaining funds. Applications or Student Aid Reports (SAR) received after July 1 may not be considered in time to receive notification until after registration for Fall Semester. Students pre-registered for Fall Semester must meet the March 1 deadline to have aid available for midsummer billing.
SUMMER SESSION: The university has financial aid available on a restricted basis during the summer. Students in need of financial aid who are planning to attend summer session should consult with a Financial Aid advisor as soon as the summer class schédule for the appropriate year is available.

## Financial Aid Programs

1. Pell Grants (formerly BEOG) are available to undergraduate students with documented financial need. This is intended to be a foundation to which other need-based aid may be added. Approximately 6 weeks after the FAF is filed, a Student Aid Report (SAR) will be mailed to the student from the Pell Grant Office. All copies must be submitted to the Financial Aid Office immediately before award processing can begin. Students who are applying for a Pell Grant only may file the single purpose "Application for Federal Student Aid" throughout for the current academic year. If Pell Grants alone are not sufficient to meet educational expenses, other types of aid are described below.
2. Supplemental Educational Opportunity Grants (SEOG) and State Stu-
dent Incentive Grants (SSIG) are awarded to undergraduate students who show exceptional financial need.
3. National Direct Student Loan (NDSL) is a long-term, low interest (5\%) loan that must be repaid to the university according to specific Federal guidelines. Repayment begins 6 months after graduation or after the student's enrollment drops below 6 credits. NDSL is awarded to both undergraduate and graduate students who show need.
4. College Work Study Program (CWSP) provides an opportunity for students to work and pay for a portion of their educational expenses. Checks are payable directly to the student who is then responsible for paying outstanding debts. CWSP is awarded to selected undergraduate and graduate students who show need:
5. Waivers of Non-Resident Tuition are available to a limited number of undergraduate and graduate students who are considered to be out-of-state residents for tuition purposes, have good academic records, and show need.
6. BSU Student Employment Program has limited funds available for undergraduate and graduate students who are unable to qualify for CWSP, but who desire to work to pay a portion of their educational expenses.
7. Scholarships may be based on academic achievements, special skills, talent, or a combination of financial need and academic achievement. General scholarship applications should be returned to the Financial Aid Office.
a. President's Scholarships and Dean's Scholarships are available to a limited number of freshman enrolling directly from high school who are Idaho residents. These scholarships are one-year awards and are given in recognition of outstanding academic achievement. For more information, contact the Office of University Admissions Counseling, 1910 University Drive, Boise, Idaho 83725.
b. State of Idaho Scholarship Awards are available to incoming freshmen who are Idaho residents. Applications can be obtained from the high school counselor or the Office of the State Board of Education, 650 West State Street, Boise, ID 83720.
8. Guaranteed Student Loan (GSL) is a long-term moderate interest (7\%, $8 \%$, or $9 \%$ ) loan available to undergraduate and graduate students, negotiated through the student's personal bank, credit union, savings and loan or other participating lender. A special application form is required on which the university must provide information for the lender. This form is available at the Financial Aid Office. Applications for Guaranteed Student Loans are accepted and processed throughout the year. Repayment begins 6 months after graduation or 6 months after the student has dropped below 6 credit hours. Non-residents should use loan forms appropriate for their states. Students with family incomes over $\$ 30,000$ /year are required to show financial need to be eligible. Photocopies of tax returns may be required to verify income level.
A $\$ 15.00$ processing fee is required to be paid at Cashier's Office (A 209) before GSL application is turned in for processing.
9. Short Term Loans are available to students with a minimum GPA of 2.00 who experience an emergency during an academic term. A special application form is required. Repayment of the loan must be made within 90 days.
FINANCIAL AID NOTIFICATION PROCESS: Notification of Financial Aid awards will be mailed beginning in May for scholarship recipients and as processed for need-based aid recipients. The "award letter" must be signed and returned to the Financial Aid Office within 30 days or as indicated. Students must reapply by the deadline each year to be considered for a financial aid award.

## EFFECT OF G.P.A. AND ACADEMIC PROGRESS ON FI-

 NANCIAL AID ELIGIBILITY: To receive financial aid at Boise State University, an eligible student must:1. Be enrolled for the purpose of obtaining a degree, diploma, or certificate.
2. Be in good academic standing.
3. Be progressing towards a degree/certificate at the minimum rate defined below.

## Enrollment Status

Full-time Undergraduates $=12$ credit hours attempted per semester. Part-time Undergraduates $=6-11$ credit hours attempted per semester

NOTE: Undergraduate students who drop below 6 credits are not eligible for financial aid and will be required to repay financial aid funds received.

Full-time Graduates $=9$ credit hours per semester Part-time Graduates $=5$ credit hours per semester
NOTE: Graduate students who drop below 5 credits are not eligible for financial aid and will be required to repay financial aid funds received.
GOOD ACADEMIC STANDING: Students on any type of academic probation are not eligible for financial aid. This includes transfer students who are admitted on "probation" and continuing students who are "readmitted" by their deans.
EXCEPTION: Financial Aid will not be withheld for students on probation who earned at least 12 credit hours with a 2.5 GPA during the most recent semester at Boise State University, and who have not exceeded the maximum time frame allowed for completion of degree/certificate.
MINIMUM PROGRESSION RATE REQUIRED: Minimum credits required for continued financial aid eligibility:

|  | Bachelor's |  | Associate |  | Master's |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SEM | Full <br> time <br> 1 | Part <br> time <br> 7 | Full <br> time <br> 11 | Part <br> time <br> 6 | Full <br> time <br> 9 | Part <br> time <br> 05 |
| 2 | 22 | 14 | 22 | 12 | 18 | 10 |
| 3 | 33 | 21 | 33 | 18 | 27 | 15 |
| 4 | 44 | 28 | 44 | 24 | 30 | 20 |
| 5 | 55 | 35 | 55 | 30 |  | 25 |
| 6 | 66 | 42 | 64 | 36 |  | 30 |
| 7 | 77 | 49 |  | 42 |  |  |
| 8 | 88 | 56 |  | 48 |  |  |
| 9 | 99 | 63 |  | 54 |  |  |
| 10 | 110 | 70 |  | 60 |  |  |
| 11 | 121 | 77 |  | 64 |  |  |
| 12 | 128 | 84 |  |  |  |  |
| 13 |  | 91 |  |  |  |  |
| 14 |  | 98 |  |  |  |  |
| 15 |  | 105 |  |  |  |  |
| 16 |  | 112 |  |  |  |  |
| 17 |  | 119 |  |  |  |  |
| 18 |  | 128 |  |  |  |  |

## MAXIMUM TIME ALLOWED FOR COMPLETION OF DEGREE/CERTIFICATE OBJECTIVES:

Type of Degree/Certificate

| Degree/Certificate |
| :--- |
| Master's |
| Bachelor's |
| Associate |
| Vo Tech \& Certificate Programs | (E.g., 11 months for an 11-month program)

To qualify for the part-time completion time frame, the student must have enrolled part-time at least $50 \%$ of the time. At a minimum, Satisfactory Progress Review will be conducted annually after Spring semester grades are available. A student who does not complete the minimum number of credit hours required has the following options:

1. Enroll for the necessary number of credit hours during the summer term WITHOUT SUMMER FINANCIAL AID. Successful completion would re-establish aid eligibility for the following fall semester as long as the student is not on probation and meets all other eligibility requirements.
2. Enroll WITHOUT FINANCIAL AID and reapply for aid consideration
once the minimum credit hour requirements have been made up. All fall and spring semesters of 6 or more credits are counted as semesters attended and minimum requirements must be met. Additional credits earned over the minimum can be used to make up delinquencies.
3. Appeal in writing for exemption from this policy. Extenuating circumstances must be clearly documented.
COMPLETE WITHDRAWALS: will not be counted as semesters attended, unless this practice occurs repeatedly.
REINSTATEMENT: Students must no longer be on academic probation or deficient in the minimum number of credits completed to reinstate their eligibility for financial aid:
APPEALS: The Financial Aid Office will consider written appeals for exemption of the Satisfactory Academic Progress Policy if the poor academic record occurred at least three years prior to application for financial aid. Other documented extenuating circumstances will also be considered and the Financial Aid Office may grant an exemption for a limited period of time.
FINANCIAL AID FOR FOREIGN STUDENTS: In order to be granted student visas, foreign students must demonstrate that they have resources for the entire period of university attendance. If financial difficulties arise, the foreign student advisor should be contacted for assistance.

## Student Housing

All inquiries requesting housing information and application/contracts should be sent directly to:

The Office of Admissions Counseling Boise State University 1910 University Drive

Boise, ID 83725
(208) 385-1401

Completed application/contracts should be returned with the $\$ 60.00$ deposit to:
Student Residential Life Boise State University 1910 University Drive Boise, ID 83725
Acceptance and processing of the housing contract by the Office of Student Residential Life does not constitute approval of academic admission to the university, and application for admission is not an application for housing.

## University Residence Halls

Boise State University maintains five residence halls with accommodations for approximately 750 students. The hall experience contributes to and encourages participation in the total university community. The Towers is a coed hall that will accommodate 300 students ( 150 men and 150 women); Chaffee West is a women's hall with space for 145 students that shares an office/recreation area with Chaffee East, a men's hall with space for 145 men; Driscoll and Morrison Halls accommodate 78 students each, with Driscoll serving as a women's facility and Morrison an upper-class coed hall.

The Towers, located at the west end of campus, has six residential floors and accommodates 300 students with the bottom three floors for men and the top three floors for women. It is carpeted and air conditioned with study lounges and laundry facilities. Four students occupy each room with individual bathroom facilities.
Driscoll and Morrison Halls, located on the Boise River, are virtually identical with 48 single and 15 double rooms arranged in 10 suites, accommodating six to eight students per suite.
Morrison Hall is coed with men and women living in opposite wings separated by lounges and laundry facilities. Priority is given in this hall to upper-class students or students over 21 years of age.


Chaffee Hall is divided into two separate three-story units with approximately 50 students to a floor, living in 24 double rooms and 2 single rooms per floor. Chaffee West is a women's hall and Chaffee East is a men's hall. Both units are connected by enclosed corridors to a central lounge, office and recreational area. Each floor has a small, informal lounge, study room, and laundry facilities.
All residents are required as part of the housing contract to take their meals in the Student Union dining room.

Applications for room reservations should be made as early as possible. The contract for residence hall accommodations is for room and board for the entire academic year. Applications must be made on the official contract form and be accompanied by an application and security deposit fee of $\$ 60.00$.

## Board and Room Charges

NOTE: All room and board charges, rental rates and other fees are subject to change at any time by action of the State Board of Education, Trustees for Boise State University.
HALL AND ROOM ASSIGNMENTS: Halls and rooms are assigned on a priority system, based on date of application and receipt of deposit. Returning residence hall students have housing priority over new applicants. If a specific person is desired as a roommate, the two persons concerned should be certain that their applications are received about the same date. If no specific request is made for a roommate, it will be assumed that the applicant will accept the person assigned. The preferences indicated by the student on the application/contract regarding the desired hall, room size, etc. are not binding but will be honored whenever possible.
UNIVERSITY AND RESIDENCE HALL REGULATIONS: AII students are held responsible for all regulations and information set forth in the Student Handbook, Boise State University Catalog, and

Residence Hall Contract. All university rules and regulations are specifically made a part of this contract by reference.
PERSONAL PROPERTY AND LIABILITY: Students in residence halls are responsible for providing insurance against loss or damage to their own personal property. The university does not assume responsibility for or carry insurance against the loss or damage of individually owned personal property.

## Meal Options and 1985-86 Prices

| Meal Options | Room | Choices |
| :--- | :---: | :---: |
|  |  | Double | Single

Included in the above room and board costs is a non-refundable $\$ 17.00$ program fee.
Above prices include telephone service and state sales tax. There is no refund or "carry-over" of meals not eaten in the dining room.
This fee is used for programs, activities, and various types of interest group projects desired by the students.
The residence halls normally are closed during semester break and spring vacation. Meal service is suspended and all food service options are closed. Students staying in the rooms at the residence halls during these holidays must obtain permission from their Resident Director and will be charged on a per day basis.

## University Apartments

There are 170 units available for full-fee paying ( 8 credit hours or more) married students or single parents, all within walking distance of the campus. A single student may rent a one bedroom apartment when there are no applications from student families. University Courts apartments have small and large one, two, and three bedroom units. Apartments are carpeted and furnished with stoves and refrigerators. Coin operated laundry facilities are located on site. All utilities except electricity are furnished. University Heights and University Manor consist of one and two bedroom apartments. These are fully carpeted, draped, and furnished with stoves and refrigerators. All utilities are furnished.

## APPLICATION PROCEDURE FOR UNIVERSITY APART-

MENTS: Applications for University Apartments may be obtained in the Office of Student Residential Life, Room 110, Administration Building.
To be eligible a student must be a married student, prospective married student, or a single parent and enrolled as a full-fee and/or fully matriculated student at Boise State University. Single students are eligible when space is available (see contract).

To be considered for assignment into University Apartments a completed application/contract must be sent to the Office of Student Residential Life with a $\$ 50.00$ application fee. Checks or money orders should be made out to Boise State University. This deposit is not to be construed as partial payment for rent. The deposit will be held (after assignment) as a damage deposit and is refundable when the student permanently moves from the apartment.
When an apartment is ready for occupancy, the student must sign a lease, pay the balance of the application fee and security deposit ( $\$ 50.00$ ), and pay one month's rent prior to receiving confirmation to move into the apartment.
The total security deposit and application fee ( $\$ 100.00$ ) may be forfeited if the required 30 -days written notice is not given before the tenant vacates.

RENTAL RATES PER MONTH (1985-86 PRICÈS):
University Courts

| Small One Bedroom | $\$ 139.00$ |
| :--- | :--- |
| Large One Bedroom | $\$ 183.00$ |
| Two Bedroom | $\$ 214.00$ |
| Three Bedroom | $\$ 245.00$ |
| versity Heights |  |
| One Bedroom | $\$ 214.00$ |
| Two Bedroom | $\$ 250.00$ |
| versity Manor |  |
| One Bedroom | $\$ 214.00$ |
| Two Bedroom | $\$ 250.00$ |

The above prices are subject to change at any time by action of the State Board of Education.
The university is an equal opportunity institution and offers its living accommodations without regard to race, color, national origin, or handicap (as provided for in Title VI and Title IX and Sections 503 and 504 of the Rehabilitation Act of 1973).

## Sororities and Fraternities

Sororities and Fraternities offer a small group living experience within the total university-recognized housing program. Fundamentally, each group is guided by the principles of friendship, scholarship, leadership, mutual respect, helpfulness, and service to the university community.

Three national sororities-Alpha Chi Omega, Alpha Omicron Pi, and Gamma Phi Beta-and four national fraternities-Alpha Tau Omega, Kappa Sigma, Sigma Phi Epsilon, and Tau Kappa Epsilon-are actively involved at Boise State University. Membership is open to all full-fee students.

Each fraternity and sorority operates its own house, located within a mile radius of campus. Members take charge of their own maintenance, financial management, meal planning, governing, and organization of special events or programs. Room rates are approximate to those of university-owned residence halls. Extra costs include initial affiliation expenses, social fees, and, in some instances, building fund charges.
For additional information please contact the Student Activities Office, BSU, 1910 University Drive, Boise, ID 83725 (208)385-1223.

## Off Campus Student Housing

Lists of available housing are on file in the Office of Student Residential Life. The university does not inspect the accommodation. Parents and students must accept full responsibility for the selection. The university recommends that students and parents make written agreements with landlords concerning the obligations and expectations of each party.
As a matter of policy, assignments to university housing facilities are made without reference to race, color, national origin, or handicap. BSU expects privately owned accommodations offered through its listing service to be operated in the same manner. Listings are accepted with this understanding.


## Port 3



Questions about academic regulations should be directed to:

> Registrar's Office
> Boise State University
> 1910 University Drive
> Boise, Idaho 83725
(208) 385-3486

## Student Records

When a student enters the university and submits the requested personal data, there is an assumed and justifiable trust placed upon the university to maintain the security of that information for the protection of the rights of the student. To protect students against potential threats to their individual rights inherent in the maintenance of records and the many disclosures regarding them, and in compliance with the Family Educational Rights and Privacy Act of 1974, the university has adopted BSU Policy 4205-D (Student Records). The policy statement in its entirety is contained in the Administrative Handbook of Boise State University. Anyone with questions about the policy may consult with the Vice-President for Student Affairs.

The following is considered to be public or directory information unless specifically stated otherwise: name, local address, local telephone number, major field of study, dates of attendance, Boise State University degree, date degree conferred.
All academic records are maintained by the Registrar's Office. Students may obtain copies of their transcripts by making a request in writing or in person.

## Classification of Students

After registration, students are classified as follows:
Special No degree intent; courses of interest only.

Freshmen 0 semester credits through 25.
Sophomore 26 semester credits through 57 or enrolled in Associate, Diploma, or Certificate program.

Junior $\quad 58$ semester credits through 89.
Senior $\quad 90$ semester credits and over, or enrolled in second baccalaureate degree program.
Graduate Has received a baccalaureate degree and enrolled in a graduate level degree program.

ENROLLMENT VERIFICATION: Students enrolled for 8 semester credit hours or more are required to pay full fees but may not be considered as full-time students.

For the purposes of student enrollment verification to Veteran's Administration, Social Security Administration, BEOG, Federal and State Grants-in-Aid, banks, insurance companies, other universities, etc. the following schedule will be used:
Undergraduate:

Full-time:
$3 / 4$-time:
$1 / 2$-time:
12 or more undergraduate semester hours
6-8 undergraduate semester hours
Less than $1 / 2$-time: 5 or fewer undergraduate semester hours

## Graduate:

Full-time: $\quad 9$ or more graduate semester hours
3/4-time: $\quad 6-8$ graduate semester hours

1/2-time: $\quad 4-5$ graduate semester hours Less than $1 / 2$-time: 3 or fewer graduate semester hours

Students receiving veteran's benefits under the G.I. Bill enrolled for less than half-time will receive payment for registration fees only. Veterans pursuing a second baccalaureate degree must have an official evaluation of their transcripts; official copies are forwarded to the V.A. Regional Office, the veteran, and the certifying official at Boise State University. Only the courses listed in the evaluation will be considered in determining V.A. educational payment. Graduate students taking a combination of undergraduate and graduate credits will be certified based on a formula to determine the credit hour load

Veterans enrolled in courses that meet less than a standard semester (i.e. 12-week Mountain Home program, summer session, short workshops, etc.) will be certified based on a formula provided by the Veteran's Administration. More information can be obtained from the Veteran's Clerk in the Registrar's office.

## Advising and Registration

To assist students to plan a program of study, to define their educational and career goals and to clarify values are the faculty's primary concerns during registration and follow-up individual conferences. Faculty also help students become acquainted with the campus environment, influence their attitudes towards academic life, improve their personal study skills, and work toward their academic excellence. To ensure a successful educational experience, students should establish early in their freshman year a close working relationship with their faculty advisor, a relationship that will facilitate students chances of successfully staying in the university and completing their degree in the normal four-year period.
During registration or pre-registration, each student registering for the first time is assigned to a faculty advisor who helps the student identify academic requirements for graduation and complete the proposed course schedule form. Students registering for 8 credits or more must confer with an advisor prior to completion of registration or any change in registration. Students may change their advisor after the first semester in attendance by obtaining permission from the advising coordinator of their college.
Dates of pre-registration are listed in the university calendar at the front of this catalog. Instructions for registration, changing class schedules and deadline dates, for which every student is fully responsible, are published in the class schedule, available in April for the fall semester and in November for the spring semester.

## Grading System

A- Distinguished Work-4 quality points per hour
B- Superior Work-3 quality points per hour
C- Average Work-2 quality points per hour
D. Pass but Unsatisfactory Work-1 quality point per hour

F- Failure-0 quality points per hour
P. Pass-Credit earned but no quality points

I- Incomplete-No credit or quality points earned until grade is assigned
W- Withdrawal-No credit earned or quality points
AUD- Audit-No credit earned or quality points
NR- No Record-No credit earned or quality points until a grade is assigned
A student academic status is determined by the grade point average. Grade point average is computed by adding the total quality points earned and dividing by the number of credit hours attempted. In GPA calculations, credit hours for grades of " $P$ " are not used.

## COMPUTATION OF THE GRADE POINT AVERAGE:

1. In computing the GPA , all courses appearing on the BSU transcript with a grade of $A, B, C, D$, or $F$ are used unless a course is repeated to improve the grade, in which case, the first attempt at the course is ignored and only the grade and credits from the second attempt are used. This includes all courses taken at BSU as well. as all those taken at other institutions and entered on the BSU transcript. The sum of the credits from these courses is known as the number of

GPA credits attempted.
2. The computation: The GPA is computed only from courses that contribute to the number of GPA credits attempted. For each such course, the number of credit hours is multiplied by a factor that depends on the grade received- 4 for an A, 3 for a B, 2 for a C, 1 for a $D$, and 0 for an $F$. The sum of these products constitutes the number of quality points. The GPA is defined to be the quotient obtained by dividing the number of quality points by the number of GPA credits attempted.
DEAN'S LIST: To receive Dean's List recognition a student must have completed 12 or more hours of gradeable credit (excluding P) in a given semester and achieved a G.P.A. of 3.50 or higher for that semester. An individual with a grade point average of 3.50 to 3.74 receives an "Honors" designation; a person with a 3.75 to 3.99 grade point average receives a "High Honors" designation; and a person who achieves a 4.0 grade point average receives a "Highest Honors". designation. .

INCOMPLETE GRADES: A grade of incomplete can be given when the student's work has been satisfactory up to the last three weeks of the semester. Returning students must contact the instructor and consider the following options:

1. Make up the work within the first half of the current semester.
2. Request an extension of time of both instructor and department chairman.
3. Re-enroll in the course.
4. Request that the incomplete be changed to a "W."

If the student fails to contact the instructor by mid-semester, the instructor can change the incomplete to a letter grade or withdrawal or extend the incomplete into the next semester.
REPEAT OF A COURSE: A student who receives a grade of "D" or "F may repeat the course under certain conditions to improve the grade. Independent studies, internships, and student teaching may be taken only once; they may not be repeated. Other courses may be repeated once to raise the grade of " $D$ " or " $F$ " provided that the course is still offered. Degree credit for courses so repeated will be granted only once, but both grades shall be permanently recorded. In computing the GPA of a student with repeat courses, only the second grade and quality points shall be used.
ATTENDANCE AND ABSENCE FROM CLASS: Students are responsible for attendance in courses for which they are enrolled. No absences, whether approved by the university or necessitated by illness or other personal emergency, are "excused" in the sense of relieving the student of responsibility to arrange with the instructor to make up work missed.

Regardless of the cause of the absence, a student who has missed a class meeting has lost some of the course content. If any student accumulates absences to the extent that further participation in the class seems to be of little value to them and detrimental to the best interests of the class, the instructor shall warn the student that they may fail the class.
AUDIT VS. CREDIT REGISTRATION: Studeñts enrolled in courses for credit are required to attend class regularly, complete all assignments, and take the necessary examinations. If space is available a student may enroll in a course without credit or grade as an audit. Audit indicates that a student was allowed a place in the class but may or may not have participated in class activities.

# Registration and Student Status Changes 

Questions about registration should be directed to:

> Registrar's Office Boise State University 1910 University Drive
> Boise, Idaho 83725
> (208) $385-3486$

## Changes in Registration

Students may make the following registration and program changes by securing a "Change in Record and Registration" form and signature from their advisor and each professor involved in the change. The completed form must be filed with the Registrar's Office. No registration or program change is effective until dated and signed in the Registrar's Office.
ADDING A COURSE: Students may add a course(s) during open registration without the written consent of the professor. A "Change in Registration" form must be secured, signed by the advisor for students enrolling in 8 credit hours or more, and a "class card" obtained from the appropriate departmental office. Detailed procedural information and instructions are printed each semester in the class schedule.

Students who wish to add courses after the open registration period ends must obtain an "Appeal for Change in Registration" form from the Registrar's Office.
DROPPING A COURSE: Students may drop a course(s) during the open registration period without the consent of the professor. A "Change in Record and Registration" form must be secured and signed by the advisor for students enrolled in 8 credit hours or more. Courses dropped within this period will not be recorded on the student's transcript.
From the end of the open registration period until the end of the tenth week of classes, students must secure the consent and signature of the professor and advisor (if enrolled for 8 credit hours or more). Courses dropped within this period will be recorded with a grade of "W."

All appeals or petitions for an emergency or medical withdrawal from course(s) will be made through the Dean of Student Special Services.
Students appealing to drop course(s) after the end of the tenth week without emergency or medical reasons must obtain an "Appeal for Change in Registration" form from the Registrar's Office. This form must be signed by each professor, advisor (if enrolled in 8 credit hours or more), and appropriate department chairman. The approved petition form must be filed with the Registrar's Office.
AUDIT/CREDIT CHANGES: Students may change their status from audit to credit or credit to audit until the end of the tenth week of classes. Students desiring to change to or from audit after this deadline must follow the petition procedures described above.
LATE REGISTRATION: Individuals who file an application for admission after the cut-off dates for pre-registration and priority registration may register for courses that are still available during the open registration period. (See academic calendar for specific date.)
Individuals who wish to register after the open registration period ends must obtain a "Petition for Permission to Make Changes After Deadline Date ${ }^{\prime \prime}$ form from the Admissions Office information window. This form must be signed by the professor of each course and by their department chairman and academic dean. The approved petition form must be filed with the Registrar's Office and with the Business Office when fees are paid. Registration is not complete until all fees are paid. No registration by petition will be accepted after the last day to make registration or program changes. All registrations by petition will be assessed a $\$ 50.00$ fee.

STUDENT ADDRESS OR NAME CHANGES: The student is held responsible for keeping address or name change information up-
to-date with the Registrar's Office. Change of Address or Name Change forms may be obtained in Room 102 of the Administration Building. Mailing of notices to the last address on record constitutes official notification.

## Withdrawal, Probation and Dismissal Policies <br> COMPLETE WITHDRAWAL FROM THE UNIVERSITY:

Students who wish to withdraw from all courses and leave the university in good standing must initiate an official request with the Dean of Student Special Services. Vocational-Technical students must clear with the vocational counselor prior to reporting to the Student Special ; Services Office.
Students who are physically unable to come in to the University should ' telephone or write to the Dean of Student Special Services and request a PETITION FOR A COMPLETE WITHDRAWAL. The petition must be completed, signed and returned by the student requesting the withdrawal before the student's academic records can be legally closed for the semester.
Student initiated petitions for a complete withdrawal are allowed from the first day to the last day of classes. The process must be started on or before the last day of classes for all grades to be recorded as a "W" (Withdrawal-no credit or quality points earned). The grade of "W" will not be used in the calculation of GPA (Grade point average).
No request for a complete withdrawal will be accepted during the final examination period of any semester. After a student initiated complete withdrawal, no student may petition for registration except for extreme situations verified by the Dean of Student Special Services.
Refunds of registration fees are only prorated over the first four weeks of a semester. Students who leave the university during a semester without officially withdrawing will receive final grades of " $F$ " in all courses. It is not necessary to withdraw from the university after a semester has been successfully completed or between semesters.

RIGHT OF APPEAL: Each student has the right of appeal to the Dean of Student Special Services for an exception to the requirements or an academic regulation because of extenuating circumstances that can be verified.
Extenuating circumstances are defined as those beyond the student's control and physically prevent the student from completing course requirements.
The Dean of Student Special Services Office will investigate and confirm the verified reason prior to approving any student record change. All other appeals for an exception to an academic policy or regulation should be addressed to the Dean of the College or School of the student's major.
FACULTY INITIATED WITHDRAWAL: Although the primary responsibility for withdrawing from individual courses rests with the student, the professor may have a student dropped from the course for one or more of the following reasons:

1. Failure to attend class.
a. The student registers for the course on either a credit or an audit basis, but attends only briefly, if at all.
b. The student is registered for another class with conflicting meeting times.
PROCEDURE: The instructor must send a list indicating names and student numbers of all students in question, the course and section numbers and the nature of each students' problem to the Vicepresident for Student Affairs at least two weeks prior to the last day to make class changes (see Academic Calendar for exact day). The Vice-President will notify each student of the impending action requesting that the student meet with the instructor. When the two week period is over, the instructor will send an amended version of the original list to the Vice-President indicating which student should be withdrawn. The list must be signed by the appropriate department chairperson.
APPEALS: The Vice-President for Student Affairs strives for accommodation between the student and instructor. Students who disagree with the decision of the instructor and department chairperson may appeal to the Academic Grievance Board.
2. Failure to meet course entrance requirements.
a. The student has not passed a prerequisite for the course.
b. The student has not passed and is not enrolled in a course corequisite.
c. The student has not attained the required class standing for the course.
PROCEDURE: The professor must send a list signed by the department chairperson to the Registrar's Office no later than two weeks before the last date to make class changes for that semester (refer to academic calendar for exact date). The list must include student name, student number and corresponding course and section number. It is the responsibility of the faculty member and department to notify the student of this action.
APPEALS: Students who disagree with the decision of the faculty member and department chairperson may appeal to the Academic Grievance Board.
ADMINISTRATIVE WITHDRAWALS: A student's registration may be cancelled after proper notification for delinquent financial accounts (bad checks, library fines, overdue loans, bookstore, or housing accounts, etc.); incomplete admissions file (failure to submit transcripts or test scores); falsification of admissions application or other University records; registration without reinstatement from academic dean if academically disqualified; failure to respond to an official summons or exhibiting behavior which constitutes a clear and present danger to one's self and others (BSU Policy 4102-D).
The Vice President for Student Affairs, Dean of Admissions, Director of Administrative Services or Registrar will notify delinquent students of the pending action by certified mail. If no effort is made to correct the situation within two weeks after notification the request for an administrative withdrawal is sent to the Dean of Student Special Services for final action.

## ACADEMIC PROBATION AND DISMISSAL POLICY: A stu-

 dent whose academic work falls below the level indicated in the table below is placed on academic probation. A student who continues on academic probation at the end of the next semester of attendance is subject to dismissal from the university.| Hours <br> Attempted | Minimum <br> GPA | Hours <br> Attempted | Minimum <br> GPA | Hours <br> Attempted | Minimum <br> GPA |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | .00 | 23 | 1.78 | 45 | 1.89 |
| 2 | .00 | 24 | 1.79 | 46 | 1.89 |
| 3 | .33 | 25 | 1.80 | 47 | 1.89. |
| 4 | .75 | 26 | 1.81 | 48 | 1.89 |
| 5 | 1.00 | 27 | 1.81 | 49 | 1.90 |
| 6 | 1.17 | 28 | 1.82 | 50 | 1.90 |
| 7 | 1.28 | 29 | 1.83 | 51 | 1.90 |
| 8 | 1.37 | 30 | 1.83 | 52 | 1.90 |
| 9 | 1.44 | 31 | 1.84 | 53 | 1.90 |
| 10 | 1.50 | 32 | 1.84 | 54 | 1.91 |
| 11 | 1.54 | 33 | 1.85 | 55 | 1.91 |
| 12 | 1.58 | 34 | 1.86 | 56 | 1.91 |
| 13 | 1.61 | 35 | 1.86 | 57 | 1.91 |
| 14 | 1.64 | 36 | 1.86 | 58 | 1.91 |
| 15 | 1.67 | 37 | 1.86 | 59 | 1.91 |
| 16 | 1.69 | 38 | 1.87 | 60 | 1.92 |
| 17 | 1.70 | 39 | 1.87 | 61 | 1.92 |
| 18 | 1.72 | 40 | 1.87 | 62 | 1.92 |
| 19 | 1.74 | 41 | 1.88 | 63 | 1.92 |
| 20 | 1.75 | 42 | 1.88 | 64 | 1.92 |
| 21 | 1.76 | 43 | 1.88 | 65 or | 2.00 |
| 22 | 1.77 | 44 | 1.89 | more |  |

1. Academic Probation
a. At the end of a semester (fall, spring or summer) an undergraduate student who does not attain the cumulative grade point average required for the number of hours attempted is placed on probation for the next semester of enrollment. Notification of probationary status is by letter (to most recent mailing address) sent within two weeks of the close of a semester.
b. A student on academic probation whose cumulative GPA improves to the acceptable level will be automatically removed from probation.
2. Dismissal

The student who continues on academic probation at the end of the next semester of attendance will be dismissed from the university unless the student's GPA for the most recent semester of enrollment was 2.00 or higher. Notification of dismissal is by letter (to most recent mailing address) sent within two weeks of the close of a semester.
3. Reinstatement
a. A student dismissed from the university, may be reinstated by receiving favorable action on a petition to the academic dean of the college from which the student was dismissed. This is the only route to reinstatement and applies even to the student who has attended another institution since being dismissed from BSU. Readmission to a college may be accompanied by academic performance requirements which are more stringent than those of the university. Failure to meet conditions specified for continuation as a major in a particular college may prohibit a student from future enrollment in that college even though the university minimum academic requirements are satisfied.
b. Normally, a student is reinstated on probationary status. If, however, the student's GPA meets the minimum requirement, the dean may elect to admit the student in good standing.

## 4. Restrictions

A student on probation is ineligible to participate in universitysponsored extracurricular activities. (See Eligibility for Extracurricular Activities section of the BSU Student Handbook.)

PETITIONS: Where strict application of any Boise State University regulations seem to work an unreasonable hardship, the student may petition for an exception. Academic petitions should be addressed to the academic dean of the appropriate school. Other petitions should be directed to the appropriate administrative offices.

## General Course Information

COURSE NUMBERING: Courses are numbered on the basis of the following:
000-099 Terminal credit and non-credit courses (including remedial, evening vocational, and adult education courses). These courses do not apply towards degree programs.
100-199
200-299 . Sophomore level courses
300-499 Upper division level courses
500-above Graduate level courses
Upper division level courses, numbered at 300 or 400 level may be given $\mathrm{a}^{\text {" }} \mathrm{g}$ " or " G " designation to carry graduate credit. The " g " courses carry graduate credit for graduate students in majors outside the area of the department or college. " $C$ " courses carry graduate credit for students both in the department or college and for other students as well.
Throughout the catalog, a hyphen appearing between course numbers indicates that the first numbered course is a prerequisite (PREREQ:) to a second numbered course; a comma between course numbers indicates that either course may be taken independently of the other.

Immediately following the course title, the weekly hours of lecture, non-lecture or other information (i.e., laboratory, studio, etc.), and the credits earned are shown in parentheses. The semesters the course is normally offered may also be shown. For example:
(3-4-5)(F) Indicates 3 hours of lecture, 4 hours laboratory, and 5 credits for a course offered each fall.
(0-4-0) Indicates a laboratory without credit offered regularly each semester
(2-0-2)(F/S) Indicates a typical two-hour lecture class for two credits offered either fall or spring semesters.
(0-2-1)(F/SU) Indicates a two-hour studio art or PE activity class for one credit offered in fall and summer semesters
Other authorized abbreviations are PREREQ: for prerequisite, COREQ: for corequisite, PERM/INST for permission of the instructor and PERM/DEPT for permission of the department chairman or his representative.
COURSE PREREQUISITE WAIVERS: As a general rule, students must complete prerequisites listed in the course description prior to enrolling in the course. However, specific course prerequisites may be waived upon written approval of the Dean of the College in whose area the course is offered. A student seeking to have prerequisites waived must justify the request on the basis of background, education, and experience.

## ADMISSION TO UPPER DIVISION COURSES: Upper-division

 courses are open to students who have completed the stated course prerequisites and 57 semester credits of college work. Lower-division students who have a GPA of 2.0 or better may take upper-division courses if the course is required during the sophomore year in a specific curriculum in which the student is majoring, or the student has the written permission of the chairman of the department in which the course is offered and the concurrence of the advisor.UNDERGRADUATE ENROLLMENT IN 500-LEVEL COURSES: Undergraduate senior students may apply up to a total of two 500-level courses toward the credit requirements for an undergraduate degree. 500 -level courses may be applied to the required 40 hours of upperdivision credit. To be eligible for this a student must complete a "Senior Permit" form, available in the Registrar's Office.

## University-Wide Course Numbers

## Undergraduate

The following college-wide standardized course numbers and titles are available to each department offering a major.
Independent Study (188 and 496) must be arranged between student and professor on an individual basis. The course description does not appear in other sections of the catalog.
188 Honors Independent Study ( 1.3 credits). An independent study experience to provide an Honor Student reading or project studies. Credits may not exceed three (3) per semester nor six (6) maximum in an academic year. PREREQ: Approval of the dean and department chairman upon recommendation of the faculty advisor.
293-493 Internship (Variable Credits). The internship number is available to academic departments to provide an opportunity for supervised field-work specifically related to the student's major field of study. To enroll in 293-493, a student must also have a cumulative GPA of 2.00 . No more than 12 credits earned in internship ( 293 and/or 493) can be used to meet department and/or university graduation requirements. Each internship must receive approval from the academic department whose course prefix is being used.
294-494 Conference or Workshop ( $0-4$ credits). Conducted by outstanding leaders or qualified faculty in a particular field under the auspices of Boise State University. Conference or workshop $(294,494)$ and special topic courses $(297,497)$ will be described in the class schedule published each semester.

NOTE: 297 or 497 Honors or Interdisciplinary Humanities courses will be allowed to apply toward core requisites; however, other departmental Specia! Topics courses may apply toward graduation.

## 297 Special Topics (1-4 credits)

496 Independent Study (1-4 credits). Individual study of either a reading or project nature. Offered on demand. Student must make application well in advance of this special study experience. May be repeated for a maximum of 9 credits; 6 credits in any one academic year. PREREQ: Consent of instructor and department chairman, upper division standing.
497 Special;Topics (2-4 credits) PREREQ: Advanced standing and consent of instructor and department chairman.
498 Seminar (1-4 credits).
499 Seminar (1-4 credits).

## Graduate

The following numbers may be used by any department to offer credits for the type of activity indicated in the title. These courses may be of-
fered for variable credit. Limits on the number of credits of any one number category to be applied towards a given degree will be set by the Graduate Council. The supervising professor or committee will determine which credits may apply to an individual's program.

580-589 Selected Topics Subjects normally offered and studied in one department can be divided into no more than 10 areas. Each area will be assigned one number of the $580-590$ group. Although the topics considered in the courses in any one area may vary from semester to semester, repeated use on any one number implies that the topics continue to be selected from the same area.

## 590 Practicum

591 Project
592 Colloquium
593 Thesis
594 Extended Conference or Workshop (Graded A through F)
596 Directed Research Masters' programs may include directed research credits at the discretion of the graduate student's supervising professor or committee. A student may earn a maximum of 9 semester hours with no more tha.ו 6 in a given semester or session.

597 Special Topics
598 Seminar
599 Short Term Conference or Workshop (Graded Credit or No Credit) Generally the 599 number is used for courses meeting 3 weeks or less and the 594 for courses meeting more than 3 weeks. The decision, however, is made by the department or school offering the course.

## Graduation Requirements

## General University Requirements (Core)

To receive a Baccalaureate degree from Boise State University; all students must meet certain core requirements. Approximately one third each of their undergraduate program will be taken in core courses, major concentration, and electives. The university core is aimed at developing specific learning and communication skills of literacy and critical thought. The university core requires 3 to 6 credits of English Composition, dependent upon the student's score on a national test, 12 credit hours in each of 3 areas-Area I, Arts and Humanities; Area II, Social Sciences; and Area III, Natural Science. Specific coursework will be required in at least three disciplines in Areas I and II. BA candidates must include a literature (Area I) and a history (Area II) course, and either 1) a year's sequence in one science and a semester in another or 2) three courses in science concepts to fulfill Area III.
In addition, BA students must have an additional 9 hours in Area I and/or II, and B.S. students must have an additional 9 hours in Areas II and/or III. Degrees other than the BA or B.S. may differ in their core content quantitatively from the core, but must contain English Composition and a minimum of 26 credits to be chosen from Areas I, II, and III, with no less than 6 credits taken from any one of those areas.
Courses offered to fulfill core requirements will be identified by area in the catalog; e.g., P 101 GENERAL PSYCHOLOGY (3-0-3)(AREA II). A grade of " $C$ " is required in any course used to fulfill a core requirement including E 101, 102. All entering full-time students whose national test scores (ACT or SAT) show a composite percentile at the 20th percentile in English or Math will be referred to a special advisor who will help the student enroll in appropriate courses to build basic skills: Such students should not enroll in more than an equivalent of 12 credit hours per semester until the deficiency is removed.
All students who have not taken and passed a competency exam as part of their writing courses at Boise State University must pass a competency exam in written English which should be taken prior to the senior year.
The ENGLISH COMPOSITION requirement may be met in one of the following ways:

## 1. Completion of E 101 and E 102, English Composition.

2. Completion of E 111 and E 112, Honors Composition. Admittance is dependent on ACT score.
3. Successful Challenge of E 101 or E 102 by taking the departmentally
specified competency test.
4. Students who score in the 80th percentile or above on the ACT, or who are permitted to take and pass the departmentally specified competency test are exempt from E 101. E 102 is required.
AREA REQUIREMENTS are general education requirements required of all students seeking a Baccalaureate degree. Courses in the following lists have been approved to satisfy the core requirements.

## Area I-Arts and Humanities

AR 101, 102 Survey of Western Art
AR 103 Introduction to Art $\sqrt{ } \sqrt{ }$
AR 105, 106 Basic Design
E 215 Far Eastern Literature in Translation
E 230 Western World Literature
E 235 Western. World Literature
E 240 Survey of British Literature to 1790
E 260 Survey of British Literature: 1790 to Present
E 271 Survey of American Literature: Beginning to Civil War
E 272 Survey of American Literature: Civil War to Present
F 201, 202 Intermediate French
G 201, 202 Intermediate German
HU 207, 208 Introduction bof Humanities IH 101 Humanities: A View of Human Nature; I
IH 102 Humanities: A View of Human Nature, II
1H 111 Humanities: A View of Human Nature, III
IH 112 Humanities: A View of Human Nature, IV
MU 133 Introduction to Music
PY 101 Introduction to Philosophy $\sqrt{d}$
PY 121 Introduction to Logic S 201, 202 Intermediate Spanish
TA 107 Introduction to Theatre
NOTE: Only 6 credits of IH courses may be taken to satisfy core requirements.

## Area II-Social Sciences

AN 101 Physical Antfُropology
AN 102 Cültural Anthropology
AN '103 Introduction to Archeology
CM 111 Fundamentals of Speech Communication
CM 112 Reasoned Discourse
EC 201 Principles of Economics-Macro
EC 202 Principles of Economics-Micro
NOTE: Students who take EC 201 or 202 may NOT receive credit for EC 210.
CG: 101 Introduction to Geography
GG 102 Cultural Geography
HY 101, 102 History of Western Civjlization
HY 151, 152. United States History
HY 201, 202 Problems in Western Civilization
HY 251, 252 Problems in U.S. History
NOTE: HY 201 and 202 are NOT open to students who have taken HY 101 or 102 for credit.
HY 151 and 152 are NOT open to students who have taken HY 251 or 252 for credit.
PO 101 American National Government
PO 231 International Relations
P. 101 General Psychology '

SO 101 Introduction to Sociology
SO 102 Social Problems.
SO 230 Introduction to Multi-Ethnic Studies
TE 201 Foundations of Education

## Area III-Natural Science-Mathematics

B 100 Concepts of Biology
BT 130 General Botany $X$
C 100 Concepts of Chemistry
C 107 Essentials of Chemistry
C 108 Laboratory for Essentials of Chemistry
NOTE: Concurrent enrollment in the appropriate lecture is required.
C 109 Essentials of Chemistry
NOTE: Students CANNOT receive credit for C 109 it they received credit for C 100.
C 110 Laboratory for Essentials of Chemistry
NOTE: Concurrent enroliment in the appropriate lecture is required.

C 131 College Chemistry
C 132 Laboratory for College Chemistry
NOTE: Concurrent enrollment in the appropriate lecture is required.
C 133 College Chemistry
NOTE: Students CANNOT receive credit for C 133 if they received credit for C 100.
C 134 Laboratory for College Chemistry
NOTE: Concurrent enroliment in the appropriate lecture is required.
EN 100 Energy for Society $\star$
GO 100 Fundamentals of Geology
NOTE: Open to All students except those with previous credits in Geology, or Earth Science majors, or non-science majors who plan an eight hour sequence in Geology.
GO 101 Physical Geology
GO 103 Historical Geology $x$
M 100 Mathematics for Liberal Arts Students
M 105, 106 Mathematics for Business Decisions
M 111 Algebra and Trigonometry
M 204, 205, 206 Calculus and Analytic Geometry
M 211, 212 Accelerated Calculus
PS Fqundations of Physical Science $X^{\text {K }}$
PH 101, 102 General Physics
PH 105 Introduction to Descriptive Astronomy
PH 220 Physics I-Mechanics
PH 221 Physics II-Wave Motion and Heat
PH 222 Physics III-Electricity and Magnetism
PH 223 Physics Lab I
PH 224 Physics Lab II
Z 130 General Zoology

## Application for Graduation

A student must make formal application for graduation by filing an application form in the Registrar's Office. To be guaranteed a graduation evaluation prepared prior to the last semester of attendance, a student should apply at least four semesters in advance of contemplated graduation or upon completion of 70 credit hours.
Requirements for graduation are checked in accordance with the requirements in one university catalog. Students are not permitted to combine programs from different catalogs, but may choose to graduate on the basis of the catalog of any year they have been registered providing the said catalog was in effect not more than six (6) academic years prior to graduation.

## Baccalaureate Degrees

Minimum Graduation Requirements (Credits)

## All Baccalaureate Degrees

General College Requirements (minimum)

1. Total credits for graduation must equal 128. These must include: English Composition E 101, 102$.3-6$

Upper Division credit hours .40
2. Grade Point Average for all courses taken must equal 2.0 or greater.

Other College Requirements:
3. Meet minimum requirements for one of the degrees offered.
4. Meet specific requirements for a'departmental major.
a. Students must have a minimum cumulative 2.00 GPA in all courses required by their major.
b. Students will not be allowed credit toward their major department requirements for any grade of " $D$ " in upper division courses in their major department.
c. Understanding and application of computers constitute an important component in the preparation of graduates from Boise State University. To accomplish this mission, Boise State University graduates must be able to make use of the computer for tasks appropriate to their discipline. Each department identifies competency standards for its majors.
5. A minimum of 15 credit hours of electives outside of the major field.
6. Minimum credit hours in residence: The last 30 credit hours prior
to graduation must be taken at the university during the regular or summer sessions.

EXTENSION, CORRESPONDENCE, AND RELIGION COURSES: A candidate for a degree may earn up to 32 semester hours in any combination of extension and/or correspondence courses toward the required credit hours for graduation. These hours must have departmental approval for acceptance towards major department requirements.
Such correspondence courses must be completed, and the transcript filed with the Registrar prior to mid-term of the semester in which the last 30 hours of residence credit are started.
Up to eight (8) credits of non-sectarian religion courses from accredited colleges and universities may be accepted as general electives.
PHYSICAL EDUCATION COURSES: A candidate for a degree may have up to 8 semester hours of Fitness Activity courses counted towards graduation.

## REQUIREMENTS FOR ADDITIONAL BACCALAUREATE DEGREE:

1. A minimum of 30 additional semester hours of resident work, beyond the hours required for their first degree, for each subsequent degree.
2. Satisfaction of upper-division requirements in the major field selected as recommended by the department and approved by the dean of the school granting the additional degree.
3. Satisfactory completion of other requirements of the University as approved by the dean of the college granting the additional degree.
REQUIREMENTS FOR DOUBLE MAJOR: Students may be granted a single baccalaureate degree with more than one major, providing that they satisfy all requirements for each major field as recommended by the department and approved by the dean of the college granting the additional degree as well as satisfying all requirements for the degree sought.

## Bachelor of Arts Degree

minimum requirements (CREDITS)

1. General University requirements -3 or 6 credits
 General University Requirements (Core) for details.
2. Area I Requirements

Arts \& Humanities
a. Three credits in Literature
b. Three credits in a second field
c. Three credits in a third field
d. Three credits in any Area I field
3. Area II Requirements Social Sciences. 12
a. Three credits in History
b. Three credits in a second field
c. Three credits in a third field
d. Three credits in any Area II field
4. Area III Requirements

Natural Science-Mathematics
a. A year's sequence chosen from:

Biological Sciences
Mathematics
Physical Sciences
NOTE: The Physical Sciences include courses in Chemistry, Geology, Physical Science, and Physics.
With additional credits from a field other than that chosen to satisfy the sequence requirement.

## OR

b. Any three of the following courses except no more than two from a single department.

1) Biology-Concepts of Biology
2) Chemistry-Concepts of Chemistry
3) Geology-Fundamentals of Geology
4) Mathematics-Mathematics for Liberal Arts Students
5) Physics, Engineering, and Physical Science
a) Energy for Society
b) Introduction to Descriptive Astronomy
c) Either Foundations of Physical Science or A Cultural Approach to Physics, but not both
5. Students seeking the BA degree must have an additional 9 credits chosen from courses in any of the following disciplines:

Anthropology
Art
Communication
Economics
Foreign Language (201 or
higher of one language)
Geography
History
Humanities

Literature
Music
Philosophy
Political Science
Psychology
Social Work
Sociology
Teacher Education
Theatre Arts
6. Departmental major

## Bachelor of Science Degree

MINIMUM REQUIREMENTS (CREDITS)

1. General University requirements

English Composition E 101,102 . . . . . . . . . . . . . . . . . . . . . . . . . . 3 or 6
NOTE: Number of required credits is determined by student score on ACT exam. See General University Requirements (Core) for details.
2. Area I requirements

Arts \& Humanities
Three fields must be represented
3. Area II requirements

Social Sciences.
Three fields must be represented
4. Area III requirements

Natural Sciences-Mathematics.
Two fields must be represented
a. A year's sequence chosen from:

1) Biological Sciences
2) Mathematics
3) Physical Sciences

NOTE: The Physical Sciences'ínclude courses in Chemistry, Geology, Physical Science and Physics.
with additional credits from a field other than that chosen to satisfy the sequence requirement.
$O R$
b. Any three of the following courses except no more than two from a single department:

1) Biology-Concepts of Biology
2) Chemistry-Concepts of Chemistry
3) Geology-Fundamentals of Geology
4) Mathematics-Mathematics for Liberal Arts Students
5) Physics, Engineering, and Physical Science a) Energy for Society
b) Introduction to Descriptive Astronomy c) Either Foundations to Physical Science or A Cultural Approach to Physics, but not both
5. Students seeking the B.S. degree must have an additional 9 credits chosen from courses in any of the following disciplines:

| Anthropology | Mathematics |
| :--- | :--- |
| Biology | Physical Science |
| Chemistry | Physics |
| Communication | Political Science |
| Economics | Psychology |
| Engineering | Social Work |
| Geography | Sociology |
| Geology | Teacher Education |
| History. |  |
| Departmental Major |  |

Mathematics
Physical Science
Physics
Psychology
Social Work
Teacher Education
6. Departmental Major
Bachelor of Business Administration Degree
MINIMUM REQUIREMENTS (CREDITS)

1. English
English Composition E 101, 102 ..... 3-6
Number of required credits is determined by student score on ACT exam. See General University Requirements (Core) for details.2. Area I requirementsArts \& Humanities6
2. Area II Requirements Social Sciences ..... 12
Economics6
Area II credits other than in Economics ..... 6
3. Area III RequirementsTotal Area III Requirements12
Two-semester sequence in math .....  8
One-semester physical or biological science. ..... 4
Suggested science courses:
Concepts of Biology, B 100Concepts of Chemistry, C 100Foundations of Physical Science, PS 100Fundamentals of Geology, GO 100Introduction to Descriptive Astronomy, PH 105
4. An additional 16 hours are required in lower or upper division courses outside the College of Business. These additional credits, which are not restricted to the university core courses, must include courses from at least two of the three areas listed'below (but shall not include more than three credits in fitness activity courses):

## Area 1

- Literature
- Art
- Foreign Language
- Humanities
- Music
- Philosophy
- Theatre Arts

Area III

- Biological Sciences
- Mathematics
- Physical Sciences

6. A major in Accounting, Administrative Services, Business Education, Economics, Finance, General Business Management, Computer Information Systems, Management, Marketing, Production Management, Quantitative Management or Real Estate meeting all specific requirements for the major.

## Bachelor of Fine Arts Degree

MINIMUM REQUIREMENTS (CREDITS)

1. General University Requirements

NOTE: Number of required credits is determined by student score on ACT exam. See General University Requirements (Core) for details.'
2. Area I Requirements

Area II

- Anthropology
- Communication
- Geography
- History
- Political Science
- Psychology
- Social Work
- Sociology
- Teacher Education

Arts \& Humanities
Literature.....
............................................ . . . . . . 6
Other courses . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
No fewer than 3 credits selected from:
Introduction to Music
Introduction to Theatre
Introduction to Humanities
Introduction to Philosophy or Ethics
Foreign Language (201 or higher of one language)
3. Area II Requirements

Social Sciences

Lower Division History . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Other courses . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
No fewer than 3 credits selected from:

- Anthropology - Psychology
- Communication - Social Work
- Economics
- Sociology
- Geography
- Teacher Education
- Political Science

Additional Courses
. .3
No fewer than 3 additional credits selected from areas listed above.
4. Area II Requirements

Natural Science-Mathematics
a. A year's sequence chosen from the following:

- Biological Science
- Mathematics
- Physical Science

NOTE: Physical Science includes courses in Chemistry, Geology, Physical Science and Physics.
b. Any two of the following:

- Concepts of Chemistry
- Concepts of Biology
- Foundation of Physical Science
- Fundamentals of Geology
- Intro to Descriptive Astronomy
- Mathematics for Liberal Arts Students

5. Individual departmental major listings in other parts of the catalog may specify how Area I, II, and III requirements are to be fulfilled.
6. A candidate for the BFA degree must have Art Department approval during his/her junior year.

## Bachelor of Music Degree

MINIMUM REQUIREMENTS (CREDITS)

1. General University Requirements

English Composition.
NOTE: Number of required credits is determined by student score of ACT exam. See General
University Requirements (Core) for details.
2. Area Requirements

Arts \& Humanities . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 9
Literature
Three credits in a second field........................ . . . . . . . . . . . . . . . . . 3
Three credits in any of the following fields ....................... 3

- Art-AR
$\therefore$ Humanities-HU
- Literature
- Music History-MU
- Philosophy-PY
- Theatre Arts-TA

3. Area II Requirements

Social Sciences . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 9
History. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Three credits in a second field . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Three credits in any of the following fields . . . . . . . . . . . . . . . . . 3

- Anthropology-AN
- Communication-CM
- Economics-EC
- Geographpy-GG
- History-HY
- Political Science-PO
- Psychology-P
- Social Work-SW
- Sociology-SO
- Teacher Education-TE

4. Area III Requirements

Foreign Language and Area III Requirements................... . . 8
a. Performance and Theory-Composition Majors:

A year's sequence of a foreign language ..................... . . 8
b. Music Education Majors:

A year's sequence of a foreign language . . . . . . . . . . . . . . . . . . . 8
$O R$
A year's sequence chosen from:

Biological Sciences
Mathematics
Physical Sciences
Any two of the following courses
Concepts of Biology
Concepts of Chemistry
Fundamentals of Geology
Mathematics for Liberal Arts Student
Foundations of Physical Science Introduction to Descriptive Astronomy
5. A major in music with emphasis in Performance, Theory and Composition, or Music Education, meeting all specific requirements of the Department of Music as explained elsewhere in this Catalog.

## Bachelor of Applied Science Degree

The School of Vocational Technical Education, with the support of the College of Arts and Sciences, offers a Bachelor of Applied Science degree with a major in the field of Vocational Technical Education.
The program, known as an "upside down" program, provides for the acquisition of the major first. Then the student acquires the core and the electives.
Permission to enter the Bachelor of Applied Science degree program must be obtained from the School of Vocational Technical Education.

Minimum Credit Requirements
Vocational Technical Education Major
Areas of Emphasis:
Business Machine Technology
Child Care Studies (Supervisor)
Drafting
Electronic Service Technology
Electronics-Semi-Conductor Technology
Electronics Technology
Horticulture Service Technician
Machine Shop
Marketing: Mid-Management
General University Requirements .
English Composition . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3-6
NOTE: Number of required credits is determined by student score on ACT exam. See Ceneral University Requirements (CORE) for details.

Math 105 and Math $106 \ldots .$. . . . . . . . . . . . . . . . . . . . . . . . . . . . 8
Area 1
Area I (must have three fields) . . . . . . . . . . . . . . . . . . . . . . . 12

- Art
- Foreign Language (201 or higher of one language)
- Humanities
- Literature
- Music
- Philosophy
- Theatre Arts

Area II
Area II (must have three fields).

- Anthropology
- History
- Communication
- Economics
- Geography

NOTE: University Core courses EC 201, EC 202, CM 111, and P 101 used in fulfilling Marketing: Mid-Management Major cannot be used to satisfy credits for Area II. See the Marketing Department listing in the College of Business for additional specifications.
Area III
Area III (must have two fields)

- Biology
- Geology
- Chemistry
- Mathematics
- Engineering
- Physical Science

Math 105 and Math 105.
.8
NOTE: Math 105 and Math 106 are required in recognition that Bachelor of Business degrees require a minimum math competency of $M 105$ and $M$ 106. These two courses are not to be used for Area III.

Additional nine (9) credits from Areas II \& III.
NOTE: Must have a C grade in each Core Curriculum course and an over-all GPA of 2.0.
2. Electives to total sixty-four (64) credits.

## Minors

Minors are only available as minor teaching emphases in secondary education option programs.

## Pre-law Curriculum

Boise State University does not prescribe a pre-law curriculum; students' plans should be based on their own interests and their own personal objectives in studying law. In general, the pre-law student should place emphasis not only on the acquiring of knowledge of the fundamental elements which define the nature and character of society but also on the development of methods of study, thought, and communication. Present-day law students have undergraduate degrees in Political Science, English, Business, Natural Science, History, Linguistics, Communications, and a host of other disciplines.
For additional information, see the current PRE-LAW HANDBOOK, published annually in October and prepared by the Law School Admission Council and the Association of American Law Schools. This book includes material on the law and lawyers, pre-law preparation, application to law schools, and the study of law, together with individualized information on most American law schools. It may be ordered from Educational Testing Service, Princeton, New Jersey.

## Associate of Applied Science Degree

Some programs in the School of Vocational Technical Education lead to an Associate of Applied Science degree. The standard requirements for this degree are as follows:

1. Technical Education Requirements- 56 credit hours or equivalent clock hours.
a. Technical Coursework: 42-46 credit hours or equivalent clock hours.

Course content is determined through a task analysis of the occupation for which training is provided. Local advisory committees may provide additional information.
b. Technical Support Coursework: 10-14 credit hours or equivalent clock hours.
A more detailed explanation of Applied Science Degree information can be found in the Vocational Technical Section of this Catalog.

## Associate of Arts Degree Program

Participation in this program is limited to students at Mountain Home Air Force Base. The curriculum is focused around normal freshman and sophomore general education courses with a broad exposure to the social sciences. A student completing this program will have completed all University general education requirements except possibly one lab science course. The program includes:

> English Composition E 101, 102.
> .3 or 6 cr
> Area I including Literature.
> 12 Cr
> Area II including History . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 12 Cr
> Area III . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 8 Cr 8 Cr
> Major Requirements . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 12 Cr

$$
\begin{aligned}
& 64 \mathrm{Cr}
\end{aligned}
$$

Entrance into this program by a student at the MHAFB will be through a signed agreement by the student, the MHAFB Education Director, and the Continuing Education Director, Boise State University. The agreement shall terminate six months from the date of the student's transfer from MHAFB unless all three parties agree to a time extension. The agreement will be made available to only those students at MHAFB who have graduated from high school or who have successfully passed the G.E.D. examinations.
Once admitted to the program, the student is responsible to see that his program moves forward to completion. Program advising will be available at the time of registration each semester, but it is the responsibility of the student to seek out advice when needed.

# Majors and Degrees Offered 

| Degree | Codes |
| :---: | :---: |
| code | description |
| AA | Associate of Arts |
| AAS | Associate of Applied |
| AS | Associate of Science |
| BA | Bachelor of Arts |
| bas | Bachelor of Applied |
| BBA | Bachelor of Busimess <br> Administration |
| bfa | Bachelor of fine Ats |
| BM | Bachelor of Music |
| BS | Bachelor of Science |
| CC | Certificate of Comple (Votech) |
| DIP | Diploma |
| end | Teacher Educat |
|  | Endorsement |
| MA | Master of Arts |
| MBA | Master of Business |
|  | Administration |
| MPA | Master of Public |
|  | Administratio |
| MS | Master of Scien |
|  |  |
|  |  |
| Major | Names and |
| Degree | Abbreviations |

$\because$ Accounting (BBA, BA. BS)

- Administrative Services (BBA, BA, BSI
*Advertising Design BA, BrA)
a Agricultural Equipment Technician (C.
- Alr Condilioning, Retrigeration and Heating (CC)
$\rightarrow$ Anthropology (BA)
«Anthropology. Social Science, Secon. dary Education (BA)
Art, Ceneral (BA; BFA)
-. Art, Education (BA. BFA)
\# Auto Body (Ce)
© Autamotive Mechanics (CC)
- Biology (BS)
$\stackrel{\square}{ }$ Biology: Secondary Education (BS)
- Business Education (BBA, BA, BS) Administrative Services Option Distributive Edlucation Option Shorthand Option
© Business Machine Techinology: AAS, BAS)
$\rightarrow$ Chemistry (BS)
". Chemistry. Secondary Education (BS)
"Child Care Studies: Day Care Assistant (CC)
- Child Care Swidies. Teacher-Supervisor (AAS, BAS)
a. Communitationtenglish:Combmation. (BA)

Joumalism
Communication

- Communication (BA) Interpersonal Communication Mass Communication. Journalism Communication
- Communication. Secondary, Education (BA
© Computer Information Systems (BBA. BA. BS
© Construction Managemertit (BS)
- Criminal Iestice Administration $\operatorname{AS}$. BA, BS)
- Culnary Atts (AAS)
- Dental Assisting (CC)
. Drating Technology (AAS, BAS)
*Earth Scence Education, SecondaryEd (BA; BS)
- Economics (BBA, BA BS)
- Economics, Social Science, Secondary Ed. BA. BS
- Electrical lineworker (CC)
- Electronicssemi-Conductor Technology AAS. BAS
- Electronics Service. Technician. AAS BAS)
* Electronics Technology. AAS. BAS
$*$ Elementary Education (BA)
Areas of Specialization
Early Chilahood Education (Certification):
Library Science (Endorsemert)
* Elementary Edugation Bilingual Multi: cultural BA
" Englishi. (BA)
Liberal Arts Option
General Option
General Option with emphasis in
American Literature
British literature
Iingulistics
World Literature Writing
- English. Secondary Education (BA)
$\checkmark$ Envirommental Health (BS)
- Finance (BBA, BA, BS)
© Ceneral, Business Management (BBA
BA, BS)
- Geology (BS)
$\because$ Geophysics (BS)
- Heallh. Scences (BS)
- Heavy Duty Mechanics - Diesel (CC)
$\stackrel{W}{\text { History }}(\mathrm{BA})$
© History. Secondary Education BA!
* History. Social Science, Secondary Education (BA)
- Horticulure Service Techmician. (AAS, BAS)
- Industrial Mechanics.(C.)
- Machine Shop (AAS, Diploma)
- Management (BBA. BA. BSI Entrepreneurial. Option Transportation Option
Hurnan Resource Managementoption
$\because$ Marketing (BBA, BA, BS)
«Marketing: Mid Management (AS, BAS)
- Master of Business Administration (MBA)
- Mathematics (BA, BS)
- Mathematics, Secondary Edacation. (BA. BS)
- Medical Record Science (AS)
$\bullet$ Medical Technology (BS)
$\because$ Multilethnic Studies (BA)
- Music (BA, BM) Music/Business Performance:
Theory-Composition
- Music Education (BM)
- Masters in Education (MA. MS) Art
Business Education
Earth Science
English
History

Mathematics
Music
Reading
Special Education
Early Chllahood
Curriculum and Instruction
a Nursing (AS, BS)

- Office Occupations (Ce)
- Philosophy (BA)
- Physical Education (BS) Secondary Education Option
NonTeaching Option
- Physics (BS)
- Physics, Secondary Education (BS)
- Political Science (BA, BS) Political Philosophy and Public law American Covernment Systems \& Processes
International Relations
Public Administration
- Political Science. Social Science. Secon dary. Education (BA, BS)
- Practical Nursing (CC)
- Pre-Archilectural Programs(-)
. Pre-Dental Hygiene (-).)
- Pre-Dietetics ( ) .)
$\stackrel{\text { Pre-Engineering (,) }}{ }$
- Preforestry \& Wildlife Management (-)
- Pre-Medical \& Pre-Dental (BS)


## Biology

Chemistry

- Pre-Occupational Therapy, - )
- Pre-Optometricl-
- PrePharmacy $(=)$
- Pre-Physical Therapy ( $=$ )
*PreTechnical Sequence:
- Pre-Veterinary Medicine Studies (BS)
'Production Management (BBA; BA. BS)
"Psychology (BS, BS)
$\checkmark$ Public Aaministration (MPA)
${ }^{\circ}$ Quantitative Management (BBA. BS BA)
*Radiologic Technology (AS, BS)
- Real Istate (BBA, BA, BS)
- Respiratory Therapy. (AS, BS)
- Small Engine Repair (CC)
- Soeral Sclence (AA, BA, BS)
$\stackrel{\text { Social Work (BA) }}{ }$
-Sociology, Social Science, Secondary Education (BA)
*Surgical/ Technology ( CC )
\% Theatre Arts. (BA)
*Theatre Arts, Secondary Education. (BA)
\% Wastewater Technology (CC)
- Welding. (CC)



# Academic Enrichment and Special Programs 

## Honors Program

Questions about the Honors Program should be directed to: Honors Program
William P. Mech, Director
Library Building, Room L 408G
Telephone (208) 385-1122
STATEMENT OF PURPOSE: Admission to the Boise State University Honors Program is an opportunity for continued growth and excellence, not a reward for past accomplishments. The fundamental purpose of the program is to encourage and support efforts on the part of students to assume greater responsibility for their own education. The program is designed for promising, motivated students who are interested not only in learning the material offered in courses, but in learning to tearn.
ELIGIBILITY: The Honors Program welcomes applications from students in all university departments. A student may be admitted to the program based upon evaluation of the individual's academic record and an interview. Automatic admission is granted to incoming freshman with a 3.5 high school G.P.A. and a score at or above the 88th percentile on the composite part of the ACT or SAT. Automatic admission is granted to transfer students from other colleges and universities who have a college G.P.A. of 3.3 and a recommendation from a faculty member at Boise State or their former school.
It should be emphasized that these criteria are for automatic admission to the program. All interested students are strongly encouraged
to apply, for evaluations are made on an individual basis. Students who are not able to meet these standards may be granted a provisional admittance, or simply asked to reapply after completing one semester at Boise State.

HONORS COURSES: Honors courses are designed to be more thorough, rigorous, and in some cases more accelerated versions of regular departmental listings. A basic difference between an Honors course and the typical university course is that a seminar format is generally used in Honors offerings to encourage critical, creative thinking in a more personalized atmosphere.
Each Honors student takes special Honors courses, some of which are expected of all students in the program. Honors courses are designated by an " H " on a student's transcript, so graduate schools and employers can easily determine the extent of each student's academic involvement in the program. In every case, the student pursues work in the major department to prepare for professional or graduate work.
Honors courses fall into three basic groups: departmental Honors courses, Honors colloquia, and Honors seminars. For a listing of current Honors courses, consult the latest BSU class schedule or Honors newsletter, which is published several times a year.

ADDITIONAL ACADEMIC OPPORTUNITIES: The Honors Program is both directly and indirectly involved in several other programs that benefit its students. They include: Independent Study, Advanced Placement, Internship, Credit by Examination (Challenge), College Level Examination Program (CLEP), and Honors Studies Abroad.

The Summer Reading Program allows Honors students to earn from one to three credits while away from the campus during the summer months. The student meets with a faculty supervisor sometime in the spring and together they work out a reading project which the student completes during the summer. The Summer Reading course is included in fall registration, because the brief written report and oral examination are completed after the fall semester has resumed. Entering freshman who have enrolled at BSU and have been accepted into the Honors Program may participate.

While the Honors Program aims at enrichment more than acceleration, through Advanced Placement, Summer Reading, and extra courses, the Honors student may graduate in less than the usual four years.
SCHOLARSHIPS: The Honors staff assists students in applying for prestigious and lucrative graduate and undergraduate scholarships like the Rhodes, Marshall, Truman, Rotary and Fulbright. The Rhodes and Marshall Scholarships pay fees and living allowance for study at an English university. The Truman Scholarship is awarded to qualified individuals interested in a career in public service. The Rotary Scholarship pays for one year of undergraduate or graduate study in any country with a Rotary Club. The Fulbright Scholarship is designed for graduate study and research abroad with the aim of increasing understanding between people in the U.S. and other countries:

## HONORS COURSES:

With approval of the University Curriculum Committee, Honors courses excluding Summer Readings may be applicable to Core. No more than two Honors courses may be from one area.

HP 198,298,398,498 Honors Seminar (1 credit). A seminar involving interdisciplinary lectures and discussion for Honors students. Topics are selected by the students. Pass/Fail will be given rather than letter grade.
HP 100, 200, 300, 400 Summer Readings (1-3 credits). An opportunity and incentive for students to continue their studies during the summer when they are away from campus and faculty. Students must select their area of interest, contact a faculty supervisor, and coordinate through the Honors Program Director concerning testing and credit for the work prior to the end of the spring semester. Students will register during fall registration and will complete written and oral testing as required no later than October 15 in order to receive a grade of pass.
HP 492 Honors Colloquium ( $\mathbf{3}$ credits). Upper-division Honor students bring the background of their own major to a multi-disciplinary forum. Letter grade given.

## Interdisciplinary Studies in the Humanities

A new view of human nature is what students take away from the Interdisciplinary Studies in the Humanities program.
Faculty from varying disciplines and colleges offer team-taught courses focusing on the humanistic element of the subject matter. More than 30 faculty members from the Colleges of Arts and Sciences, Business, Education and the School of Social Sciences and Public Affairs participate.

At the center of the program is a core humanities course, Humanities: A View of Human Nature, with instructors from Énglish, History and Philosophy. It is a two semester, 12-credit hour course in which students can fulfill six Area I requirements.
Each semester, additional courses are offered with a special topics designation, chosen because of their relationship to humanistic issues raised in the core class. The courses provide faculty the opportunity to develop innovative courses that cross traditional disciplinary boundaries and offer students the chance to explore humanistic issues from at least two perspectives.
The interdisciplinary program also offers a three-hour special topics class, The Ascent of Man, a film-lecture course focusing on the biological and cultural evolution of human kind.

INTERDISCIPLINARY COURSES: The following interdisciplinary courses are identified with more than one school or department.
IH 101 Humanities: A View of Human Nature I (3-0-3)(F). Especially designed for non-humanities majors, this team-taught class integrates information to provide views of human experience. Among the topics explored are different views of human nature, different ways of knowing, the nature of humanistic understanding, and the impact of experience on the individual. PREREQ: Completion of or concurrent enrollment in E 101.

IH 102 Humanities: A View of Human Nature II (3-0-3) (F). As a continuation of IH 101, this lecture/discussion course focuses on humanistic perceptions and assumptions concerning how people understand and 'respond to society and what motivates people to accept or reject society and what motivates people to accept or reject social norms. The final unit will focus on forms of alienation and how individuals respond to social pressure. PREREQ: IH 101.

IH 111 Humanities: A View of Human Nature, III, "Consciousness and Human Imagination (3-0-3)(S). This course will examine the human imagination as a necessary constituent of each person's consciousness of his lived experience, i.e., it will analyze the role that human imagination plays for each of us in making our everyday lives, private and social, livable, understandable, and worthwhile. This course will also examine the imagination's capacity to capture our lived experience for reflection in the formalized modes of imagination, science, philosophy, art and literature. Students will examine inherent and relative values. PREREQ: Completions of, or concurrent enrollment in E 101.

IH 112 Humanities: A View of Human Nature, IV, "Human Choices and the Future" $(3-0-3)(S)$. This course assumes that the future will be shaped through human choice and will explore the role of the humanities in understanding and defining the conditions necessary to making human choices: self-knowledge, understanding language, and understanding ways of knowing, Since the humanities are involved with a constant examination of human values, it will also consider plans and strategies for maintaining conditions for genuine human choice. This course focuses on methods of conceptualization, the way in which the human imagination frames its understanding of the world about it. Since human choice results from the way in which the chooser understands the problem, the clearer the perception, the better the choice. PREREQ: Completion of or concurrent enrollment in E 101.

Special Topics courses in IH (Interdisciplinary Studies in the Humanities may be approved by the University Curriculum Committee to meet Area I core requirements.

## Student Government Courses

SG 188, 496 Student Government Independent Study (1-3 credits). Students who are currently serving in major student government offices may avail themselves of independent study in Student Government. This study will be coordinated by the Vice President for Student Affairs and may be taken in any department of the college provided an instructor is willing to direct the study. Students who are eligible for this study are (1) the Major Elected Officers (President, VicePresident, Treasurer), (2) Major Appointed Officers (Business Manager, Publicity Director, Administrative Assistant to the President and Personnel Officer), and (3) Senators. Credits may not exceed three in any one semester or six in one academic year. A maximum of nine credits will be accepted towards graduation.

## Canadian Studies Minor

The Canadian Studies Minor, consisting of 18 credit hours, of which six are required, is designed to compliment any university major. The program is interdisciplinary in its approach and at the same time permits students to pursue their interest areas in Canadian Studies. Students in business, health, education, and the liberal arts are encouraged to pursue the program. Upon successful completion of the 18 credit hours, the student will receive a certificate of completion, which will be noted on the transcript.

## Canadian Studies Courses

CN 101 Canada: Land and People (3-0-3)(F-Alternate uneven years.) Introductory, interdisciplinary survey, presenting the themes of geography, physical resources, history, political system and Indian Eskimo culture. Faculty from participating departments will span two centuries of Canadian growth, development and attainment of national identity. Open to all students. Required of CN Minors.

CN 102 Contemporary Canada: (3-0-3)(S-Alternate Even Years) Faculty from participating departments present areas of current Canadian national/international interest. Detailed study of modern Canadian life and culture, literature, economic development, foreign affairs, conservation, and provincial/national relationships are focused. Open to all students. Required of CN Minors.

Courses that will meet the $\mathbf{1 2}$ hours of electives to be chosen from two or more disciplines:
AN 307 Indians of North America
AN 312 Archeology of North America
F 201-02 .. Intermediate French
F 303-04 . Advanced Composition and Conversation
F 328 . Lecutres avancses de la poesie et de la prose francaises
'F 359 Les grandes oeuvres contemporaines (1939 to the present)

F 376 La Civilization francaise historique
F 377 La Civilization francaise moderne
GG 297 Geography and Geology of Canada
HY 335 Diplomatic History of the United States
HY 380-480 . United States/Canadian Accords
PO 311 Comparative Foreign Policy
EC 317 International Economics
Plus the Special Topics as offered each semester on Canada.

## Independent Study

The Independent Study experience provides individual study opportunities of reading or project nature.
Any department that contains a baccalaureate or graduate degree program is authorized to offer Independent Study. The course numbers identifying Independent Study are not listed in the class schedule. This does not preclude their availability based on mutual agreement between student and professor and approval by the appropriate department chairman.
Upper division students are eligible for one to four credits of Independent Study per semester. A total of nine credits counted toward graduation can be taken, with no more than six credits taken in any given academic year.
Lower division honors program students are eligible for 1 to 3 credits of Honors Independent Study per semester. No more than three credits per semester or more than six in an academic year can be taken.
Independent Study may not be substituted for any departmental course requirements without prior approval of the department chairman and dean of the college offering the Independent Study.

## Advanced Placement and Credit

Questions about Advanced Placement and Credit by Examination and/or Competency should be directed to:

Dean of Admissions<br>Boise State University<br>Administration Building-Room 105<br>1910 University Drive<br>Boise, Idaho 83725<br>(208) 385-1177

Many colleges and universities, including Boise State University, accept satisfactory performance on national standardized examinations or locally written examinations and/or evaluation of other training and experiences às alternative by which a student may satisfy certain general education, specific course, or pre-major requirements. Students generally prepare for such examinations by independent studies, completing advanced high school courses, auditing college courses, completing non-collegiate training sessions, on-the-job training and/or other experiences.
BSU Policy 2305B, July 7,1984 , lists in detail all current non-class attendance avenues available at Boise State University for earning college credit for competency. Summarized below are the most frequently used of those avenues.
Examinations may be repeated to raise scores six months after last taken. Scores received for tests repeated earlier than this will not be evaluated for credit.

## College Level Equivalency Program (CLEP)

Two types of examinations are offered through CLEP. These are the General Examinations and the Subject Examinations. The General Examinations are measures of college-level achievement in five general areas and the material covered is comparable to that taught in general education courses at the college freshman level. Currently enrolled Boise State University students can use the CLEP General Examinations to challenge, in effect, all or part of their freshman year and can satisfy a significant portion of their CORE COURSE graduation requirements (See CORE entry in Index for course requirements for graduation.).

Minimum acceptable CLEP General Examination scores and BSU hour equivalencies are:

ENGLISH COMPOSITION NATURAL SCIENCES

MATHEMATICS HUMANITIES

SOCIAL SCIENCES \& HISTORY
(score of 498 or above) ..... 3 hrs , LD elective (score of 447 to 529 ) .... . 4 hrs, Area III CORE (score of 530 or above) . . 8 hrs, Area III CORE (score of 446 or above) . . 4 hrs , Àrea III CORE (score of 452 to 513) . . . . . 3 hrs , Area I CORE (score of 514 or above) $\ldots 6$ hrs, Area I CORE (score of 453 to 506) 3 hrs , Area II CORE (score of 507 or above) . . . 6 hrs, Area II CORE

CLEP SUBJECT EXAMS BY THE CEEB: The CLEP Subject 'Exams are designed to test achievement in specific college subjects in a variety of areas. A currently enrolled Boise State University student may earn a minimum of two hours of lower division elective credit for any CLEP Subject Exam passed with a score at or above the 50th percentile (national norms) providing that the credit earned does not duplicate college credit earned previously for the same subject material.
Some BSU academic departments will award specific departmental credit in lieu of lower division elective credits for acceptable CLEP Subject Exam scores. These are listed below. Credits awarded for CIEP Subject Exams not listed below will be Lower Division Elective credits. Lower Division Elective credit will count toward graduation requirements, but will not count toward CORE COURSE or MAJOR requirements.
CLEP Exam Title BSU Equiv. Course \& Number of Credits
English Composition (50)*. .......... E-101, English Composition (3)
Freshman English (51)*. . .E-101, English Composition (3) Analysis and Int. of Lit. (51)*........ E-102, English Composition (3) Biology (49)** ..................... B-100, Concepts of Biology (4) General Chemistry (50) .........C-107/108, Essentials of Chem (4) or C-131/132, College Chemistry (4) College Algebra (48) ............... M-108, Intermediate Algebra (4) College Algebra \& Trig. (50) . M-111, Algebra and Trig. (5)
Calculus with Elem. Functions (49) M-204, Calculus and Anal. Geom. (5) Calculus with Analytic Geom. (50) M-204, Calculus and Anal. Geom. (5) Statistics (51) . . . . . . . . . . . . . . . . M- 361, Fundamentals of Stat. (4) Elem. Computer Prog. Fortran IV (51) CS-124, Digital Comp. Prog. (2) Introduction to Accounting (50). AC-205, Intro. to Finan. Acctng + AC-206, Intro. to Manag. Acctng (6) Computers \& Data Processing (49)***IS-210, Intro. to Info Science (3) Intro. Business Management (49) . . GB-101, Introduction to Bus. (3) Introduction Marketing (50) .... MK-301, Principles of Marketing (3) American Government (50) . . . PO-101, American National Govt (3) Introductory Sociology (50) ..... SO-101, Introduction to Sociol, (3) General Psychology (50) .............. P-101, General Psychology (3) Educational Psychology (49)****. . P-325, Educational Psychology (3) Western Civilization I (49) ..... HY-101, History of Western Civ. (3) Western Civilization II (49) ....... HY-102, History of Western Civ. (3) American History I (49) ..........................HY-151, U.S. History (3) American History II (49) ..................... . HY-152, U.S. History (3) College French-Level 1 (44) ...... F-101/102, Elementary French (8) College French-Level 2 (56) . . . . F-201/202, Intermediate French (8) College German-Level 1 (43) ....G-101/102, Elementary German (8) College German-Level 2 (55) ... G-201/202, Intermediate French (8) College Spanish-Level 1 (45) .... S-101/102, Elementary Spanish (8) College Spanish-Level 2 (55) ...S-201/202, Intermediate Spanish (8)
*To receive credit for E-101 or E-102, the student must meet with the English Department Chairman and receive a letter of authorization. This letter must be taken to the Dean of Admisman and receive a letter of authorization. This let
sions and processed with the request for credit.
**Credits obtained by successful completion of this subject exam may be applied towards ${ }^{*+}$ Credits obtained by successful completion of this subject exam may be appr
***To receive credit for IS-210, the student must meet with Dr. Emerson Maxson (B-308) and receive a letter of authorization This letter must be taken to the Dean of Admissions and proreceive a letter of authorization This
cessed with the request for credit.
***To receive credit for P-325, the student must meet with Dr. Ram Singh ( $\mathrm{E}-305$ ) and receive a letter of authorization. This letter must be taken to the Dean of Admissions and processed a letter of authorization. This
with the request for credit.
ADVANCED PLACEMENT (AP) EXAMS BY THE CEEB: Advanced Placement Exams are administered nationally only once a year, in May, primarily at participating high schools. They are the culminating exercise for high school students who, while in high school; enroll in
honors or advanced courses that parallel standard college-level courses. It is not necessary, however, for a student to be formally enrolled in an AP course before taking the AP Exam. Preparation for the exam can be by independent study, home environment influences, and/or travel.
A student may earn a minimum of two hours of college credit for each AP examination passed with a score of 3,4 or 5 . Specific departmental credit will be awarded for most AP exams passed. These are listed below. Credit for AP exams not listed below will be Lower Division Elective credits.
AP Exam Title . BSU Equivalent Course(s) \& Number of Credits
American History . . . . . . . . . . . . . . . . . . . . HY-151/152, U.S. History (6) History of Art . . . . . . . . . . . . . . AR-101/102, Survey of Western Art (6) Studio Art . . . . . . . AR-111/112, Drawing (4) or AR-113/114, Painting (4) Biology . . . . . . . BT-130/Z-130, General Botany \& General Zoology (9) Computer Science . . . . . . . . . . . . . . . . CS-125, Pascal Programming (3) Chemistry . . . . . . . . . . . . . . . . . . . . . . C-131-134, College Chemistry (9) English (score of 5) . . . . . . . . . . . . E-101/102, English Composition (6) English (score of 3 or $4 \&$ favor-
able evaluation of essay) . . . . . . E-101/102, English Composition (6) English (score of 3 or 4) ............... . E-101, English Composition (3) European History . . . . . . . . . . . . . . . . HY-102, Western Civilization (3) French Level 3, Language . . . . . . . . . F-101/102, Elementary French (8) French Level 3, Literature . . . . . . . F-201/202, Intermediate French (8) German Level 3, Language . . . . . . G-101/102, Elementary German (8) German Level 3, Literature* . . G-201/202, Intermediate German (8) Mathematics, Calculus AB . M-204, Calculus \& Analytic Geometry (5) Mathematics, Calculus BCM-204/205, Calculus \& Analytic Geometry (9) Theory of Music . . . . . . . . . . . . . . . . MU-101, Music Fundamentals (2) Listen/Literature of Music . . . . . . . MU-133, Introduction to Music (3) General Physics B . . . . . . . . . . . . . . . . . . . . . PH-101, General Physics (4) Mechanics of Physics C . . . . . . . . . . PH-220, Physics I, Mechanics (3) Spanish Level 3, Language . . . . . . S-101/102, Elementary Spanish (8) Spanish Level 3, Literature . . . . . S-201/202, Intermediate Spanish (8)
*To receive credit for G-202, the student must meet with Dr. George Jocums (LA-213) for a conversation in German and receive a letter of authorization. This letter must be taken to the Dean of Admissions and processed with the request for credit.
PEP EXAMS BY ACT: PEP (Proficiency Examination Program) exams are very similar to the CLEP Subject Exams in that they are designed to test achievement in specific college subjects. They are developed and distributed by the American College Testing Company, a competitor to the College Board (CEEB).
A currently enrolled Boise State University student may earn a minimum of three hours of lower division elective credit for each PEP exam passed with a score of 50 or above, or a grade of $A, B, C$ or PASS. Some BSU departments will award specific departmental credit for acceptable PEP Exam scores. These are listed below. Credit award for PEP exams not listed below will be Lower Division Elective credits. For a complete listing of available PEP and/or CLEP Subject Exams, contact the BSU Dean of Admissions Office.
PEP Exams . BSU Equivalent Course(s) \& Number of Credits
Microbiology (50) . . . . . . . . . . . . . . . . . . . . . . . B-205, Microbiology (4) Abnormal Psychology (50) .......... P-301, Abnormal Psychology (3) Statistics (50) . . . . . . . . . . . . . . . . . . . . . . . P-305, Statistical Methods (3)

OTHER STANDARDIZED TESTS: USAFI-For many years the United States Armed Forces Institute (USAFI) operated as an educational agency providing support to the voluntary education programs of all military services. A large number of college-level courses and end-of-course examinations were developed and standardized. These courses and examinations have been periodically reviewed and evaluated by the American Council on Education and credit recommendation formulated.
BSU will award general elective lower division credit for each USAFI exam passed at the 50th percentile or higher. To receive credit for a USAFI course, it must be listed in the ACE recommendation guide. The amount of credit awarded will be the amount of credit recommended by the ACE.

DANTES-DANTES was created in May 1974, after the USAFI program terminated. The examinations offered through the DANTES Examina-
tion Program are available to personnel currently on active duty in the Army, Navy, Air Force, Marine Corps, and Coast Guard, or the cadets and midshipmen of their respective academies, and other appropriate persons.

DANTES offers four different series of examinations. They are: CLEP General Exam, CLEP Subject Exam, DANTES Subject Standardized Tests, and the CED Exams. BSU's policy on CLEP can be found just above this section. BSU will not grant credit for GED proficiency.
The DANTES Subject Standardized Tests (DSST's) are an extensive series of subject-matter examinations in college and technical subjects and are essentially course achievement tests. The American Council on Education (ACE) has reviewed and evaluated each DSST and has formulated credit recommendations. BSU will follow the ACE recommendations and will grant as lower division elective credit the number of hours credit recommended by the ACT for each DANTES course listed in the guide directory of DANTES SUBJECT STANDARDIZED TESTS (DSST's), June 1983, or subsequent issues, if the student scores at or above the minimum acceptable score on that examination.

## OTHER TRAINING PROGRAMS RECOMMENDED FOR

 CREDIT BY THE ACE: Currently enrolled BSU students who successfully complete a training program listed in THE NATIONAL GUIDE TO EDUCATION CREDIT FOR TRAINING PROGRAMS 1982-83 Edition (or subsequent editions) published by the American Council on Education, or who successfully complete a training program listed in A GUIDE TO EDUCATIONAL PROGRAMS IN NONCOLLEGIATE ORGANIZATIONS 1982 Edition (or subsequent editions) published by The University of the State of New York can request consideration for credit for that experience. BSU will follow the ACE and/or SUNY recommendations and will grant as elective credit the number of hours recommended unless the student requests specific departmental course credit. In that event, department chairmen will decide the amount of academic credit to be granted in their specific areas.A complete list of all current ACE non-collegiate approved educational program organizations is available in the Administration Building, Room 105. Information about these programs can be requested by calling (208) 385-1177. A partial listing of agencies that offer approved programs follows:

American Institute of Banking<br>American Medical Record Association<br>American National Red Cross<br>American Telephone and Telegraph Company<br>Boy Scouts of America<br>Federal Aviation Administration<br>Federal Law Enforcement Training Center<br>General Electric Company<br>Life Management Institute (LOMA)<br>Mountain Bell Training and Education Center<br>National Fire Academy<br>Police Training Institute<br>Professional Secretaries International<br>United States Postal Service-Training \& Development Institute YMCA/YWCA

## Evaluation of Military Experience

COMPLETION OF TECHNICAL SCHOOLS: Currently enrolled Boise State University students who have successfully completed certain military programs and/or technical schools are eligible to petition to receive academic credit. Students must furnish a copy of their DD214, or similar official documents to the BSU Registrar's Office (Evaluator's Office) and request receipt of credit. The Evaluator (Registrar's Office) will identify those military experiences that meet the ACE specifications (courses listed in the 1982 or earlier, or subsequent GUIDE TO THE EVALUATION OF EDUCATIONAL EXPERIENCES IN THE ARMED SERVICES published by the American Council on Education). BSU will follow the ACE recommendations and will grant as elective credit the number of hours recommended unless the student requests specific departmental course credit. In that event, the department chairman will decide the amount of academic credit to be granted in his/her specific area.

MOS: Persons who have completed a military technical school and who have also earned an Army MOS, can request the recommended credit for completion of the technical school or the credit recommended for
the MOS, but not both. Persons requesting credit for the MOS after August 1983, must show that they also have a SQT of 60 or higher for that MOS
MILITARY SCIENCE: Currently enrolled Boise State University students who have successfully completed two or more years active military service (any branch) are eligible to request evaluation by the Military Science Department. In general, prior enlisted personnel are eligible to request 6 semester hours credit in Military Sciences and former commissioned officers are eligible to request 18 semester hours credit in Military Science. All requests for evaluation should be made to the Department Chairman, Military Science Department, Boise State University.
NCO SCHOOL: Currently enrolled Boise State University students who successfully complete the USAF Certified Command NCO Leadership School, Phase III, at MHAFB or elsewhere, or a comparable NCO Leadership School for the other branches of military service, can request lower division elective credit for that experience. To receive consideration, students must provide a copy of their DD214, DD295, DA1059, or similar documentation that shows successfully completion of the program to the BSU Registrar's Office (Evaluator's Office) and request receipt of credit.
BASIC OR RECRUIT TRAINING: Currently enrolled students who have completed basic or recruit military training are eligible to receive 4 semester hours credit in Fitness Activities (FA). No more than eight semester hours total of Fitness Activity credit can be counted toward graduation requirements, however, it is the student's responsibility to furnish the BSU Registrar's Office (Evaluator's Office) a copy of the of ficial DD295 or DD214 and to request receipt of credits.

## Credit for Competency (Other)

COURSE CHALLENGE: Students may challenge a university course, subject to department determination of appropriate courses, when they feel that they have acquired sufficient knowledge to pass an examination covering the content of the course. In those cases where credit by examination is allowed, the department shall have the option of using a standardized examination or an examination prepared within the department. Students attempting to earn credit by examination must consult with the department chairman to determine whether the credit will be a regular grade or on a credit-no-credit basis, whereby they receive credit and not grade for the course if they pass the examination.
CREDIT FOR PREREQUISITES NOT TAKEN: Students who have sufficiently high GPA or ACT scores, who pass a departmental placement examination, or who have the approval of the department chairperson, may take designated courses without having completed the listed prerequisite.
Students who receive a grade of " C " or better for a course in which they have not taken the prerequisite course(s) may be given credit for the prerequisite course(s) with a grade of " $P$ ". To qualify, students must initiate the application in consultation with their advisor only after the final grade for the advanced course is officially recorded. Department chairmen and deans will determine which course(s) can qualify for this credit. An examination covering the content of the prerequisite courses may be required.

## Other Opportunities

## Continuing Education

Regular university courses, non-credit seminars, short courses or workshops on many practical topics are available through the Continuing Education Program. Continuing Education serves a wide geographic range as well-10 Southwest Idaho counties, from New Meadows on the north, Glenns Ferry on the east, the Nevada border on the south and the Oregon border on the west. Courses will be taught in any of these locations.
Courses can be designed to meet the needs of school districts, organizations, industries and businesses.
SUMMER SESSION PROGRAM: A full complement of programs, courses and services is offered during the summer through Continu-
ing Education. Graduate, undergraduate and non-credit programs and courses are presented in several time block sessions on campus. There are two five-week, an eight-week session and a 10-week session. For more information, contact the Office of Continuing Education/Summer Sessions/Evening Programs.

## MOUNTAIN HOME AIR FORCE BASE PROGRAM: The

university now offers a bachelors degree in business administration as well as undergraduate and graduate, credit and non-credit programs in most academic areas to residents of the Mountain Home area. This resident and credit program is available to military personnel, their dependents and members of the community.

## Independently Sponsored Programs

CORRESPONDENCE STUDY IN IDAHO: The program is coordinated and administered by the Correspondence Study Office located on the University of Idaho campus. Courses are developed and graded by approved faculties of the University of Idaho, Boise State University, Lewis-Clark State College, and Idaho State University. Contact the Office of Continuing Education on the BSU campus for further information.
STUDIES ABROAD PROGRAMS: The Office of Studies Abroad, located in the Offices of the Department of Teacher Education, has information about opportunities for work, study, and travel outside the United States.
Boise State University is affiliated with the Northwest Institutional Council for Studies Abroad (NICSA), a consortium of universities that since 1969 has sponsored liberal arts programs in London, England; Avignon, France; Guadalajara, Mexico; and Cologne, Germany. Students may enroll in these programs at BSU retaining BSU course numbers.
THE BSU CAMPUS IN SPAIN: Offers a full year of academic study on its overseas campus in San Sebastian, Spain. This program offers a full range of courses including the Basque Language and Culture and course work in Spanish language and literature. The year supplies a unique opportunity to live and study in a non-English area, in a culture different from our own. No language background is required. Groups leave in September each year. Vacation time for travel and study and tours to various parts of the Basque country and Spain enrich the experience. Students can inquire through the Office of Studies Abroad.

## NATIONAL STUDENT EXCHANGE PROGRAM: The National

 Student Exchange (NSE) Program is a consortium of over 70 statesupported colleges and universities that allow students to exchange for a limit of one academic year to a state supported institution in another area of the United States. The Exchange encourages participants to broaden their academic, social, and cultural awareness and provides Boise State students with options for educational travel and study at in-state tuition rates. Exchange students are assured that credits and grades received at the host institution are recorded at the home campus as part of their regular transcript.To qualify, a participant must (1) be a full-time Boise State University student; (2) have sophomore or junior standing during the exchange; (3) have a minimum cumulative GPA of 2.50 at the time of acceptance as an N.S.E. student.
Additional information and application materials may be obtained from the National Student Exchange Student Coordinator in the Student Union Building or from the Director of Student Activities/Student Union.
RESERVE OFFICERS' TRAINING CORPS—ARMY: Since 1977 military training has been offered at Boise State University by the Department of Military Science. Participation by men and women students in the program of instruction leading to a commission as a second lieutenant is voluntary and comprises four years and one summer camp or two years and two summer camps. The department strives to develop in students who have the essential qualities and attributes a capacity for leadership and to provide them with the basic working knowledge required of a young officer.
Selected, qualified students receive scholarships for two, three, or four years that pay for tuition, fees, books and laboratory costs each year and also receive $\$ 100$ a month retainer pay for 10 months each year.

During the final two years all students receive $\$ 100$ subsistence pay a month for up to twenty months. Texts and equipment are provided. Travel to and from summer camp plus food, quarters, and basic pay are paid by the government. For detailed information, see the Department of Military Science listing in the School of Social Sciences and Public Affairs section of this Catalog.
SERVICEMEMBER'S OPPORTUNITY COLLEGE: The necessary mobility of people in military service has always been an obstacle to the completion of an educational program.
Boise State University has been designated as an institutional member of Servicemember's Opportunity Colleges (SOC), a group of over 400 colleges and universities providing voluntary postsecondary education to members of the military throughout the world. As a SOC member, Boise State University recognizes the unique nature of the military lifestyle and has committed itself to easing the transfer of relevant course credits, providing flexible academic residency requirements, and crediting learning from appropriate military training and experiences. SOC has been developed jointly by educational representatives of each of the Armed Services, the Office of the Secretary of Defense and a consortium of thirteen leading national higher education associations; it is sponsored by the American Association of State Colleges and Universities (AASCU) and the American Association of Community and Junior Colleges (AACJC).
Boise State University endorses the Servicemember's Opportunity College With the following qualifications:

1. Entrance into this program by a servicemember will be through a signed agreement between the student and the university, specifying responsibilities of both the student and the university.
2. The agreement shall terminate six years from date of approval or six months after servicemember's separation from active duty, whichever comes first.
3. The agreement (and thus the SOC Program) will be made available only to those servicemembers who have successfully completed (with a CPA of 2.25 or above) fifteen (15) or more hours of college credit through B.S.U.
4. Residency requirements other than the initial 15 hours before the signing of the contract will be waived.
5. Acceptance of any servicemember into the SOC Program is contingent on the agreement of the given department under whose jurisdiction that program lies.
6. No school or department shall be compelled to offer a SOC Program such programs are voluntary.
EDUCATIONAL TALENT SEARCH: Educational Talent Search, located in Room E-428 of the Education Building, is a federally-funded program that encourages low-income youth between the ages of 14 and 27 to attend college by providing admissions and financial aid counseling.
ADULT BASIC EDUCATION: Basic literacy training for adults in community is offered through Adult Basic Education in the Vocational Technical School for those who want to qualify for occupational entry and/or pursue high school instruction. Preparation for United States Citizenship, beginning reading for adults, and English as a second language are offered through the Adult Basic Education Program.

## GENERAL EDUCATIONAL DEVELOPMENT (G.E.D.) TRAIN-

ING: As a part part of the Adult Basic Education Program, the university offers instruction and prepares adults who wish to take the General Educational Development Test to qualify for the Idaho high school equivalency certificate.

## SPECIAL INTEREST GROUP COURSES AND PROGRAMS:

Offerings of continued utility to various special interest groups, such as the engineers' workshop preparing participants for the state licensing examinations, are offered as a regular, periodic feature of the university's instructional program.
HIGH SCHOOL EQUIVALENCY PROGRAM: The High School Equivalency Program was developed for migrant and seasonal farmworker students in need of a GED and assistance in placement in post-

GED training and financial aid. The program operates in Nampa and is sponsored by the Department of Teacher Education.

UPWARD BOUND PROGRAM: Upward Bound is a federallyfunded program designed to assist potential high school dropout youth. It provides them with academic and counseling assistance to help them remain in high school and become better prepared for college. The program operates in the high schools in Nampa, Vallivue, and Wilder and is sponsored by the Department of Teacher Education.
BILINGUAL TEACHER TRAINING PROGRAM: Bilingual Teacher Training, part of the Department of Teacher Education, prepares teachers to teach in Spanish and English and to assist them in learning how to teach English to public school children who are not proficient in English. Financial assistance is available for many students who pursue a degree and certification in Bilingual Education.

## CONFERENCE, WORKSHOP, SEMINAR, INSTITUTE PLANNING ASSISTANCE: The university offers assistance to groups and

 agencies in planning educational programs or in upgrading personnel in new techniques, knowledge, and skills.
## FACULTY AND STAFF CONSULTATION SERVICES: The

 faculty and staff stand ready to assist business, industry, educational institutions, governmental agencies, professional groups, and others in the solving of their education and training problems or in their research and development efforts.USE OF FACILITIES: BSU will make available meeting rooms and classroom facilities to various community groups and agencies.
EDUCATIONAL MEDIA SERVICES: A large collection of educational media materials is housed at EMS in the BSU library. These teaching aids are available for the university faculty, the school teachers of the state, and the students in teacher education. Community organizations may use these media when available. Projectors, TV, and other audio-visual equipment are available for group use on the campus.
CENTER FOR DATA PROCESSING: The Center for Data Processing, on the first floor of the Business Building, is a university-wide unit. Its primai y mission is to provide computing and data processing service in support of the educational and administrative objectives of the university, and to encourage the use of data processing procedures throughout the university.
The Center for Data Processing is a service agency. All students, faculty, and staff are encouraged to make full use of the facilities. Appropriate charges are made to faculty and staff for funded projects. Rates are available from the Center for proposal purposes. Charges for data processing services are not made for university use.
Tours of facilities, equipment demonstrations, and inservice lectures about data processing are available on request.
THE VISITING SCIENTIST PROGRAM: The College of Arts and Sciences has a number of faculty members who are willing to make prepared presentations of about 40 minutes to high school science and mathematics classes on appropriate topics. This is available without cost to the school. Presentations may be scheduled for single classes or collective classes. Speakers can be scheduled for one day only, but when necessary the presentation may be given as many as three times during the day. Three weeks' advance notice is necessary for proper scheduling.
SPEAKER'S BUREAU: As a service to the region and state, Boise State has organized a faculty and staff Speaker's Bureau, whose members have volunteered to present lectures and/or talks before community groups and organizations. A booklet listing speakers is available at the Office of University Relations, phone 385-1577
PUBLIC AFFAIRS AND ENRICHMENT PROGRAMS: Boise State University offers great variety in its program of public affairs and cultural enrichment, with many events presented at no charge. Some of the events that provide opportunities of participation and observation include:

[^0]Traveling Art Exhibits Concerts and Recitals Faculty Lecture Series Forums of Particular Arts BSU Community Symphony Orchestra Demonstrations in various fields of study Programs of outstanding artists and lecturers
PUBLIC TELEVISION: KAID-TV is a non-commercial, public broadcasting station on the BSU campus. It provides to Treasure Valley residents instructional programs for public education, higher education and the community. BSU courses also are offered over Channel 4. An affiliate of the Public Broadcast Service, the station also produces and airs public television programs of wide cultural and public interest to the citizens of ldaho.

INSTRUCTIONAL TELEVISION FIXED SERVICE: ITFS is a special multi-channel television service that allows the university to
transmit courses and other activities on campus to specific sites, primarily to businesses, industries, corporations, hospitals and schools within a 30 -mile radius. The broadcasts are live and "interactive"instructors and participants communicate by telephone.
CABLE PUBLIC ACCESS CHANNEL: BSU operates Cable Television Channel 27 through its Communication Department as a public access station. Channel 27 is a cooperative venture between BSU and United Cable. The station serves as a training facility for students while providing alternative programming for the Treasure Valley area.
IDAHO SMALL BUSINESS DEVELOPMENT CENTER: A varety of assistance programs to businesses throughout the state is offered through BSU's new Idaho Business Development Center. The center marshalls the resources of the state's three universities to provide a network of expertise. It offers skill development programs and technical assistance and is compiling a directory of resources for businesses.


## Internships/Cooperative Education

Most departments at Boise State University provide internships or cooperative education programs that give students practical, on-thejob experience which contributes to their academic development.

Because the university is surrounded by several businesses, government agencies, and health care facilities, internships and cooperative education opportunities are available in nearly every major field.

For more specific information, students should consult the academic department that offers the program.
The following are some of the common internship and cooperative education experiences available:

1. College of Arts \& Sciences
a. Mathematics internships or cooperative education with government departments, corporations and education
b. Biology internship/cooperative education with state and federal agencies research laboratories and educational institutions
c. English internships or cooperative education in writing laboratory and developmental writing programs on campus
d. Construction Management internships or cooperative education with local contractors
2. School of Social Sciences and Public Affairs
a. Social Work internships or cooperative education with various government agencies
b. Caniadian Studies internships with corporations and governmental agencies
c. Communication internships and cooperative education with many corporations, nonprofit organizations, television and radio stations, government offices, and business enterprises
d. History internships with businesses, associations, and federal, state, and local agencies
e. Military Science internship and cooperative education with various military units (Treasure Valley) working toward excellence in Army officership
f. Political Science internships or cooperative education with the Idaho Legislature
3. College of Business
a. Accounting/Data Processing internships or cooperative education with local businesses
b. Business Education and Office Administrative internships or cooperative education with local businesses
c. Marketing/Mid-Management internships or cooperative education with local businesses.
4. College of Education
a. Elementary, secondary, and physical education student teaching.
b. Psychology internships or cooperative education.
c. Athletic training and coaching internships.
5. College of Health Sciences
a. Supervised clinical practice in local health care facilities for students in Allied Health and Nursing programs
b. Pre-medicine, pre-dental, pre-veterinary medicine, pre-physical therapy internships or cooperative education with individual health-care practitioners
c. Environmental Health internships or cooperative education with district health agencies and the Environmental Protection Agency
6. School of Vocational Technical Education
a. Internships and cooperative education between Vocational Technical Education programs and industry.


## Women in the Curriculum

The purpose of the Women in the Curriculum enrichment progłam is three-fold: to assure that students are able to recognize the contributions and significance of women's activities to our culture; to provide students with an enhanced awareness of the major changes in roles and responsibilities of individuals and institutions that have occurred in recent years; and to help students explore the implication these changes may hold for their own lives and future.

The BSU curriculum is beginning to incorporate the new perspectives achieved about women, about their significance to society, and about how views of them have limited the selection of scholarly sources and research strategies in the past. The courses in this program utilize materials and methods which will further an awareness of the importance of women's many roles, and encourage students of both sexes to expand their horizons beyond those of gender based stereotypes.
Faculty and staff in many departments at Boise State have been exploring the new scholarship and integrating women's issues into their disciplines, resulting in several popular courses. A list of women's studies and gender-balanced courses is located in a special section of each semester's class schedule. Students have joined faculty and staff in new scholarly research on women's roles and activities. Examples of this exciting work include Women in Management, Contemporary Women Artists, and Sex Roles and Authoritarianism.

Many of these faculty, staff and students share their expertise with the larger community through serving on the boards and committees of community service organizations. Information is also shared through publications, speeches, appearances and interviews with the media, and the loan of library materials.

The BSU Library is building a microfilm collection which reflects and furthers the interests of women. In addition, the Library's Special Collections include papers from Idaho women and women's groups. Faculty are assisting in the selection of materials to balance this collection in different disciplines and to ensure that students will have access to these materials for research projects and term papers as well as for per sonal enrichment.
Taken together, the people and materials of The Women in the Curriculum Project com prise a valuable community resource.



## Student Services

Questions about Student Services should be directed to:
The Vice President for Student Affairs
Boise State University
1910 University Drive
Boise, Idaho 83725
(208) 385-1418

Boise State provides a variety of services, programs and activities to help students achieve the maximum benefit from their university experience. These services are under the direction of the Vice President for Student Affairs (Room 112, Administration Building) and include new student orientation, admissions counseling, registration, financial aid, career planning, special services, residential programs and facilities, health services, and Student Union activities.

NEW STUDENT ORIENTATION: The Office of Admissions Counseting/Visitors Center, located at 2065 University Drive, coordinates campus activities for prospective students through campus visitations, correspondence, campus tours and on-campus orientation programs prior to each registration. Other programs include summer early registration and advising, and the "Discover BSU" program.
STUDENT RIGHTS AND RESPONSIBILITIES: Students enrolled in the university assume an obligation to conduct themselves in a manner compatible with its function as an educational institution. The Student Bill of Rights; Code of Conduct, and policies pertaining to organizations, use of facilities, judicial boards, activities, and reiated matters are contained in the Boise State University Student Handbook. Each student, as a member of the university community, is responsible for being familiar with these policies and regulations.
TUTORIAL ASSISTANCE: The Office of Student Special Services (Room 114, Administration Building) provides additional academic assistance through student-to-student tutoring that complements classroom instruction. Currently enrolled full or part-time students are eligible to receive tutorial assistance without charge if they are having problems
keeping up in a class. Student tutors are second year or upper division students who have completed and earned at least a "B" grade in the course they tutor. They are recommended by the professor of the course and are certified by their academic department. They work closely with individuals and/or small groups of students through liaison faculty members and professional staff from the Office of Student Special Services.

READING AND STUDY SKILLS: For students who need special help in reading or improving their study skills the University offers a Reading and Study Skills course (TE-108) each semester for two academic credits. The course is designed to assist students at their own pace in notetak ing, speed-reading, textbook study methods, vocabulary development, and test taking. The course teaches a student survival in the college classroom and in many cases is the difference between success and struggle in the university environment.
COUNSELING AND TESTING CENTER: The Counseling and Testing Center offers a wide range of services directed toward students, faculty and staff at no charge. However students must be currently enrolled for a minimum of 6 credit hours. The staff offers these services in a wide variety of forms ranging from individual counseling and crisis intervention to promoting programs aimed at enhancing the overall learning environment at Boise State University.

The primary purpose is to help students become more effective in dealing with concerns that influence their pursuit of personal and academic goals. This includes helping students solve specific educational problems as well as developing the social and personal skills necessary to
gain the most from their experience at BSU.
Typical concerns that the Center frequently assists students in resolving include. Thterpersonal conflicts, test anxiety, stress related problems, depression, marital and pre-marital difficulties, social skill deficits, value clarification, loneliness, academic and career decision making, life style planning, and personal social-emotional adjustment problems.
There are a variety of standardized tests available to complement the counseling process. The Center is also responsible for the administration of such nationwide testing programs as the CLEP, LSAT, GRE, GMAT, MAT, and others.

Appointments can be made by calling 385-1601 between 8 a.m. and 4:30 p.m., Monday through Friday, or by coming to the Center on the sixth floor of the Education Building. Interviews are generally scheduled for 30-60 minutes. Referrals from faculty, residence advisors and others are welcomed by the staff.

DISABLED STUDENT PROGRAM: The university has made special efforts to provide facilities, services, and program accessibility to physically disabled or handicapped students and staff. All the main floors in each campus building can be entered via ground level approaches or ramps, and the upper floors of most academic or vocational technical classroom buildings are accessible by elevator. The campus itself is flat and has an abundance of curb cuts and ramps.

The Office of Student Special Services (Room 114, Administration Building) authorizes handicapped parking decals for eligible students and provides information and orientation to the university, class scheduling and registration assistance, interpreter an notetaker services as well as tutorial assistance and liaison with the Boise area office of the Idaho Vocational Rehabilitation Service. The office has limited equipment available for use by disabled students such as a TTY (208) 385-1454, portable wheelchair, tape recorders, crutches, modified computer terminals, and electric'typewriters for testing. The Library has a talking calculator, Visualtek, Braille typewriter, Braille dictionary and a Talking Books tape player. There is also a close working relationship with the area office of Vocational Rehabilitation when individuals need other assisting devices.

MULTICULTURAL BOARD: The Multicultural Board offers various academic, cultural, social, and recreational activities and events to all students. The Board also promotes interaction, awareness, and cooperation between students, faculty, and people from the local community of all ethnic and cultural backgrounds. The Multicultural Board is located in the student organizational area of the Pavilion. Please check with the Office of Student Special Services (385-1583) for more information.
CHILD CARE SERVICE: The University Child Care Service, (located in the northeast corner of the Pavilion) provides child care for two and one-half through kindergarten age (5-6) children of full-time students first, then part-time students. Care of children faculty and staff or halfday or drop-in service is provided on a space available bașis. The child care service provides an educational development program for the total child and also serves as a laboratory experience and as internships for Child Care Studies majors, Health Sciences and Social Work programs. The Center is financed as a self-supporting project through parent-paid fees, donations, ASBSU funds and USDA Child Care Food Program Assistance.
VETERANS SERVICES: The Office of Veterans Affairs (Room 114, Administration Building) provides liaison and advocacy services for eligible veterans, veterans' dependents, and their widows with the Veterans Administration Regional Office and various state agencies. Peer counselors in the office work with fellow veterans to assist with any problems associated with benefits or federal forms, standards for satisfactory progress, and attendance. Tutorial assistance for_veterans, work-study positions, and admissions counseling are also available.
STUDENT HEALTH SERVICE: The Student Health Service is located at 2103 University Drive, directly across from Campus Elementary School. Clinic hours range from 9:00 a.m. to 4:00 p.m., Monday through Friday each day classes are in session. Outpatient medical care is rendered to full-time registered students within the capability of the facility at no additional cost after the general registration fee is paid. Minimal fees are charged for tests and procedures not within the capability of the Student Health Service. Patient referrals are made as necessary.


The Student Health Service is equipped to care for more than 90 percent of student health care needs.
MEDICAL EXPENSE INSURANCE: All full-time students are automatically included in the health insurance program when they pay the full-time registration fee. Benefits become effective when fees are paid for the fall semester and continue until the first day of the spring semester. Spring semester benefits continue through August of that year, and protection is effective during all vacation periods. Each full-time student is covered 24 hours a day during the policy period at home, school, or while traveling. There is a $\$ 50$ deductible per calendar year for accident or sickness.

Students who are covered by a family or other plan may obtain a refund through application to the insurance agent for Boise State University. The university carries liability insurance covering all on-campus official functions, including student activities.

INTERNATIONAL STUDENTS: The Associate Dean of Admissions (Visitor's Center) is the international student advisor and is responsible for immigration requirements concerning the visa status, and initial ' academic advising, orientation, and registration of all non-U.S. citizens on the campus. All new international students must report to the Associate Dean of Admissions as soon after arrival as possible. This office provides assistance and a central contact and information source to registered foreign students. The International Student Organization provides opportunities for American and foreign students to meet, exchange views, and become better acquainted.

CAREER PLANNING AND PLACEMENT: The Career Planning and Placement Office (Room 123, Administration Building) offers career information, advising, planning, and placement opportunities to all students and alumni. Some of the equal opportunity services provided include:

1. Assistance in identifying and making a career choice;
2. A resource library of information, recruiting literature, and other career references;
3. A placement credential file where students may assemble a permanent file of vocationally significant data at a time when professors and administrators easily remember them. Copies are then sent to prospective employers upon student request. Credential files should be established early in the year of graduation;
4. On-campus interviews with representatives from business and industry, government agencies, school districts, and graduate schools for graduating students and alumni. Many other employment notices are listed through this office, and numerous directories of possible employers are available.
STUDENT GOVERNMENT: The Associated Students of Boise State University (ASBSU) strives to represent the interests of all full-time BSU students and to encourage active student participation in university
life. The ASBSU sponsors and promotes a well-rounded program of educational, cultural, social, and recreational activities. The ASBSU executive branch includes the president, who acts as the voice and representative of the students at university functions; the vice-president, who is the chief officer of the senate; and the treasurer, who administers the budget. The Senate, as the legislative branch, consists of senators elected in campus-wide balloting. This body develops and coordinates activities, passes legislation for the general welfare of all students, and grants recognition and funding to student groups.
The Judiciary determines the constitutionality of questions brought before it by individuals and organizations.
Advisory and governing boards serve as vehicles for student input on vital policy and administrative decisions that affect the ASBSU and the university.
STUDENT ORGANIZATIONS AND ACTIVITIES: There are more than 90 ASBSU-recognized student organizations on campus representing a variety of interests and concerns: These organizations include special interest groups that vary from chess and ethnic interests to Judo and women's studies, professional honoraries representing every major field from social work to business, service and campus honoraries, religious organizations, fraternities and sororities, as well as ASBSU-sponsored services such as The University News, the student newspaper; KBSUFM, a non-profit, student-operated radio station; the Student Programs Board, which presents films, fine arts performances, lectures, and concerts; and the National Student Exchange.
CULTURAL OPPORTUNITIES: The Art, Music, and Theatre Arts Departments stage a number of shows throughout the year, most often with students as participants. The Art Department sponsors shows of both regionally and nationally known artists, and in conjunction offers workshops with the artists. Each spring, the department holds a student show, displaying outstanding work done during the year.
In the Music Department, the Symphonic Band and University Singers are open to all students without audition. Meistersingers, the BSU Orchestra Music Theatre, the Jazz Band and other ensembles are open to students by audition; with credit available for most. Faculty members perform in the Faculty Artist Series each month.
The Theatre Arts Department schedules four to eight productions each year, all open to students. The department also hosts a secondary school festival each February and a children's theatre tour each spring.
Most of the performances on campus are held in either the Morrison Center or the Special Events Center.
RECREATION: The university has three main indoor recreational facilities-the Pavilion Auxiliary Gym, the Main Gym, and the PE An-
nex. Housed in these buildings are two gymnasiums, a swimming pool, two weight rooms, five racquetball courts, an indoor jogging track, mat room and equipment room. Outdoor recreation facilities include playing fields and tennis courts. All recreation facilities on campus are available for use by students when classes, intramurals and varsity sports are not using them. Hours are posted at the individual facilities.
The Intramural Program offers league and tournament play in a variety of lifetime sports and recreational activities, including softball, tennis, powderpuff football, touch football, volleyball and inner tube water polo.
The Intramural/Campus Recreation Office also checks out many types of recreational equipment to students free of charge. For more information about any type of recreation program, contact the office at 385-1131.
ATHLETICS: The intercollegiate athletic program at Boise State University provides the opportunity for qualified students to engage in an outstanding program of competition with other universities and colleges of the National Collegiate Athletic Association (NCAA), Division 1AA, Big Sky Athletic Conference for men and the Mountain West Athletic Conference (MWAC) for women.
It is the philosophy of the Athletic Department to offer student athletes the best possible coaching, equipment, facilities, and competition available to allow them to reach their full potential. The university fields men's teams in football, basketball, track, wrestling, tennis, crosscountry, and golf while the women's intercollegiate sports include basketball, gymnastics, track, tennis, cross-country, and volleyball.

ALUMNI ASSOCIATION: The Boise State University Alumni Association was incorporated as a voluntary organization in 1967. Its membership includes all individuals who have completed two semesters or more at the university. Members in good standing have paid annual dues of $\$ 15$ per year and are entitled to receive the following benefits: alumni news publications; placement services; use of the student union, library, and swimming pool; discounted alumni tours; group insurance program; invitations to all social functions and activities; and other services.
The Association seeks to promote interests in and support of the university, maintain contact with graduates and former students, and provide benefits to students and alumni. Some of these services include: scholarships for outstanding and deserving students, theatre programs, grants of money for special student-faculty projects, and participation in several campus gatherings during the year such as Homecoming, academic awards banquet, golf tournament; regional meetings, and the annual reception before the first football game of the year for all alumni and friends of the university.


## Pourt 6



## College of Arts and Sciences

Acting Dean: Monte D. Wilson, Ph. D. Associate Dean: Margaret Peek, Ph. D.

College of Arts \& Sciences Emeriti:
Allison, Best, Bratt, Chatterton, deNeufville, Emerson, Hahn, Jones, Marshall, Meyer, Mitchell, Obee, Power, Smartt, Spulnik, Wallace, Warner, Winans

## Philosophy

The philosophy of the college is to provide students with quality academic programs in the Arts, Humanities, and Sciences in addition to establishing innovative curricula and needed programs to meet the constantly changing demands of a highly technological and urban society.

## Objectives

1. To offer programs of study leading to a baccalaureate degree in the

- Arts-Advertising Design, Art, Music, and Theatre Arts;
- Humanities-English and Philosophy; and
- Sciences-Biology, Chemistry, Construction Management (with the College of Business), Earth Science, Geology, Geophysics, Mathematics, and Physics.
Degrees available in the above areas, including the Secondary Education Options offered by all departments, include the Bachelor of Arts, Bachelor of Science, Bachelor of Fine Arts (in Art, Art Education, and Advertising Design), Bachelor of Music (in Music Performance, Music Education, and Music Theory and Composition), and Master of Arts in Secondary Education with majors in various departments (see College of Education programs elsewhere in this Catalog).

2. To offer undergraduate preparation in pre-Engineering, pre-Forestry and Wildlife Management, and pre-Architecture.
3. To offer elective and service courses for students majoring in other schools.

## Activities

Departments within the College of Arts and Sciences sponsor a variety of activities that are additions to the traditional curriculum. The English Department is the home of several publishing ventures including the cold-drill, BSU's national award-winning student literary magazine; Ahsahta Press, which publishes poetry by western poets; the Western Writers Series, booklets about the lives and works of western authors; and Poetry in Public Places, posters distributed to several schools and other locations throughout the Northwest.
The Biology Department is affiliated with the World Center for Birds of Prey, a research and breeding center for raptors located near Boise, and the Communication Department includes a new public access cable television station and the student radio station, KBSU.

Students can participate in many activities sponsored by the departments in the College, including art exhibits (Art), production of plays both during the academic year and in the summer (Theatre Arts), student recitals and ensemble concerts (Music), and a variety of student tours to such events as the Shakespeare Festival in Ashland, Oregon.

## Department of Art

Liberal Arts Building, Room 252

Telephone (208) 385-1230
Chairman and Professor: Louis A. Peck; Professors: Huff, Killmaster, Kober, Roberts, Russell, Skov, Takehara; Associate Professors: Benson, Blankenship, Douglass, Heap, Hoopes, Miller, Oravez, Watia; Assistant Professors: Shurtleff, Smith, Taye, Taylor; Visiting Professor: Machacek.

## Degrees Offered

- BA and BFA in Art Advertising Design
- BA and BFA in Art Education
- BA and BFA in General Art
- Pre-Architecture


## Degree Requirements

ART MAJORBachelor of Arts Program
General Art-Bachelor of Arts Program
General University \& Basic Core Requirements Credits. ..... 51
Art Major Requirements
Painting and-or Watercolor AR 113, 114, 217, 218 ..... 6
Drawing AR 111, 112 ..... 6
Art History .....  9
Design AR 105, 106 .....  .6
Ceramics AR 225 ..... 2
Sculpture AR 231 ..... 2
Printmaking AR 209 ..... 2
Art Metals AR 221 ..... 2
Senior Seminar AR 498 ..... 3
Major Emphasis
A total of 14 credits hours from any Fine Arts area will constitutethe major emphasis, which include: Painting, Watercolor, Drawing,Ceramics, Sculpture, Prințmaking, Art Metals, Photography, ArtHistory.
Electives
Credits ..... 39
Total ..... 128
Art Education-Bachelor of Arts Program
General University \& Basic Core Requirements Credits ..... 51
Art Major Requirements
Painting ..... 6
Watercolor ..... 4
Drawing ..... 6
Design. ..... 6
Art History ..... 6
Ceramics. ..... 2
Sculpture ..... 2
Printmaking ..... 2
Crafts. ..... 2
Lettering .....  2
Senior Seminar ..... 3
Education Requirements for Qualification Toward State Certification.Refer to the Department of Teacher Education listing in the Collegeof Education for complete information.
Educating Exceptional Secondary Student TE 333 ..... 1
Foundations of Education TE 201. ..... 3
Reading in Content Subject TE 307 ..... 3
Secondary School Methods TE 381 .....  3
Educational Psychology P 325 ..... 3
Art Methods in Secondary Schools AR 351 ..... 3
Elementary School Art Methods AR 321 ..... 3
Secondary Student Teaching .....  8-16
Electives ..... 27-35
Credits ..... 1-9
TOTAL ..... $128^{*}$
Art-Advertising Design-Bachelor of Arts Program
General University \& Basic Core Requirements Credits. ..... 51
Art Major Requirements
Advertising Design ..... 10
Watercolor and-or Painting .....  8
Drawing ..... 6
Advertising Illustration ..... 6
Design ..... 6
Lettering-Lettering \& Layout ..... 4
Art History ..... 6
Printmaking ..... 2
Creative Photography ..... 2
Senior Seminar ..... 3
Electives
Credits. ..... 24
TOTAL ..... 128*

* A minimum of 40 credit hours of a total 128 must be Upper Division.
ART MAJOR
Bachelor of Fine Arts Program
General Art-Bachelor of Fine Arts Degree
General University \& Core RequirementsCredits.32
Art Major Requirements
Painting ..... 8
Drawing ..... 8
Art History ..... 12
Watercolor ..... 4
Design . ..... 6
Printmaking ..... 2
Sculpture ..... 2
Ceramics ..... 2
Art Metals. ..... 2
Senior Seminar ..... 3
Art Electives. ..... 16Major Emphasis
A total of $20^{* *}$ credit hours in any Art Field constitute the major requirements and a total of 14 credit hours in a second Art area will constitute the minor emphasis.
*A minimum of 40 credit hours of a total 128 must be Upper Division
** A total of 6 credits, 2 of each in Drawing, Painting, and Design may be applied to the 20 hour major requirement in the Area of Watercolor, Ceramics, Sculpture, Printmaking, Art Metals, Photography, and Art History.


## Electives

Credits . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 31
TOTAL 128*

## Art Education-Bachelor of Fine Arts

General University \& Core Requirements
Total Credits . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3232
Art Major Requirements
Painting ..... 8
Drawing ..... 8
Art History ..... 9
Watercolor ..... 4
Design . ..... 6
Printmaking ..... 2
Sculpture ..... 2
Ceramics ..... 2
Crafts ..... 2
Lettering ..... 2
Senior Seminar .....  348
Major Emphasis
A total of 14 credit hours from any Art Field will constitute the MajorEmphasis.Education Requirements for Qualifications Toward StateCertification
Educating Exceptional Secondary Student TE 333 ..... 1
Foundations of Education ..... 3
Reading in Content Subject TE 307 ..... 3
Secondary School Methods ..... 3
Educational Psychology ..... 3
Art Methods in Secondary Schools ..... 3
Elementary School Art Methods ..... 3
Secondary School Teaching ..... 8-16Electives
Credits ..... 13-21
TOTAL ..... 128*
Art-Advertising Design-Bachelor of Fine Arts Degree Advertising Design Emphasis
General University \& Core Requirements Credits ..... 32
Art Major Requirements
Advertising Design. ..... 10
Painting ..... 8
Drawing ..... 8
Watercolor ..... 4
Design. ..... 6
Sculpture, Ceramics, Art Metals ..... 4
Lettering-Lettering \& Layout ..... 4
Art History ..... 12
Creative Photography .....  2
Printmaking ..... 2
Advertising Illustratration ..... 6
Senior Seminar .....  3
Electives
Professional Electives ..... 27
TOTAL ..... 128*
Recommended Program
ART MAJOR
Freshman Year-All Degrees

| Freshman Y | $\begin{array}{r} \text { 1st } \\ \text { SEM } \end{array}$ | $\begin{aligned} & \text { 2nd } \\ & \text { SEM } \end{aligned}$ |
| :---: | :---: | :---: |
| Basic Design AR 105-106 | 3 | 3 |
| Elementary Drawing AR 111-112 | 2 | 2 |
| . Elementary Painting AR 113-114. | 2 | 2 |
| Art History AR 101-102 | 3 | 3 |
| Lettering AR 107* | 2 | - |
| Lettering and Layout AR 108* |  | 2 |
| English Composition E 101-102 | 3 | 3 |
| History (Area II). | 3 | 3 |
| Electives. | - | 3 |
|  | 18. | 21 |

## * Not required in general Art degree

## Pre-Architectural ' Program

Boise State University offers courses that can be used for a 2 to $21 / 2$ year pre-Architectural program. This program is preparatory and should be transferable to most architectural schools. Some universities offer a degree in Architectural Engineering. If interested in this type of degree the student should follow the Civil Option under the Engineering curriculum.

## ART COURSES

Introduction to Art AR 103 OR
Survey of Western Art AR 101 or AR 102 ..... 3
Basic Design AR 105-106 ..... 6
Drawing AR 111-112. ..... 4
History of Amer Architecture I,II, AR 270,271 ..... 6
Architectural Graphic Communication AR 255 ..... 3
Basic Architectural Design AR 256 ..... 3
Materials \& Methods of Architecture AR 290 ..... 3
Art Elective ..... 2
Interior Decorating AR 131 .....  2
ENGINEERING COURSES
Surveying EN 215 ..... 2
Digital Computer Programming EN 104 .....  2
ENGLISH COURSES
English Composition E 101-102 ..... 6
MATHEMATICS COURSES
Algebra \& Trigonometry M 111 ..... 5
Calculus \& Analytical Geometry M 204 ..... 5
PHYSICS COURSESGeneral Physics PH 101-1028

## Course Offerings

## AR ART

The Art Department reserves the right to withhold selected student work for the Permanent Collections. Certain Art courses are subject to a lab fee. Several courses may be "repeated" for credit. This should be interpreted, "taken again" for credit, not to raise a D or F grade.

## Lower Division

AR 100 BASIC DRAWING AND PAINTING FOR NON-ART MAJORS (0-4-2)(F/S). One semester course with emphasis on media, techniques, and philosophy designed to acquaint the general college student with the basic fundamentals of drawing and painting.
AR 101 SURVEY OF WESTERN ART (3-0-3)(F) (Area I), A historical survey of Painting, Sculpture, and Architecture from Prehistoric Art through the Middle Ages.
AR 102 SURVEY OF WESTERN ART II (3-0-3)(S) (Area I). A historical survey of Painting, Sculpture, and Architecture from the Renaissance to the present.
AR 103 INTRODUCTION TO ART (3-0-3)(F/S) (Area I). A one-semester course designed to acquaint the general college student with the aesthetics of Painting, Sculpture, Architecture, and related Art forms.
AR 105 BASIC DESIGN (2-2-3)(Area I). A two dimensional theoretical and applied study of the basic design elements underlying all Art areas.
AR 106 BASIC DESIG (2-2-3)(Area I). A continued exploration of either two or three dimensional design elements. Emphasis on the theoretical and applied study of the structural organization underlying two or three dimensional art forms. PREREQ: AR 105 or PERM/INST.
AR 107 LETTERING (0-4-2)(F/S). A study of lettering techniques and various alphabetical forms; emphasis upon modern styles, spacing and layout.
AR 108 LETTERING AND LAYOUT (0-4-2)(F/S). A study of layout typography and lettering techniques used in advertising design, for advertising design majors. Advisable to take AR 107 prior to AR 108.
AR 111 DRAWING (0-4-2)(F/S). A study of line, chiaroscuro, space, volume, and perspective, utilizing a variety of media; still life, landscape, plant, animals and other subject matter may be used. Limited enrollment spring semester.
AR 112 DRAWING ( $0-4-2$ )(F/S). Continuation of AR 111 with an emphasis on more advanced drawing problems. Compositional imaginative, or semi-abstract work may be done, utilizing a variety of subject matter including some figure drawing. PREREQ: AR 111.
AR 113 PAINTING (0-4-2). Study of basic techniques of painting in oil, acrylic or other media as determined by instructor. Students will learn to represent form and space through study of value relationships and through use of monochromatic color. Still life and other subject matter will be used. Advisable to take AR 111 Drawing concurrently with AR 113. Limited enrollment spring semester.
AR 114 PAINTING (0-4-2)(F/S). A continuation of AR 113 problems with increased emphasis on color, composition, and contemporary concepts in painting. A variety of subject matter will be painted in oil, acrylic or other media. Advisable to take AR 113 prior to AR 114. Limited enrollment fall semester.
AR 115 LANDSCAPE PAINTING (0-6-3)(SU). Various styles and techniques in landscape painting in oil, watercolor and related media. Field trips. First summer session.


AR 116 LANDSCAPE PAINTING (0-6-3)(SU). (Description same as AR 115 on previous page.) Second summer session.
AR 123 CRAFTS (0-4-2)(F/S). Lectures will be in the nature of crafts, the design principles, craftsmanship and creativity. Several areas of crafts applicable to the public school classroom will be introduced. Simple crafts, leather work, mosaic, ceramic tile construction, batik, tie and dye, creative stitchery, enameling, macrame, simple ceramic work, sheet plastic and others may be assigned. The proper use of hand tools and their safety will be stressed. This course is open to non-Art majors.
AR 131 INTERIOR DECORATION (2-1-2)(F/S). Aid in understanding and appreciating interior design. The most basic components of home decorating will be studied. These include color, wallpaper, fabrics, carpet, and furniture.

AR 203 ADVERTISING DESIGN (0-4-2)(F). Special assignments in various techniques employed in advertising and commercial art, problems in layout, typography, and reproduction processes will be emphasized. Advisable to take AR 105, 106, 107 and 108 prior to AR 203.
AR 204 ADVERTISING DESIGN (0-4-2)(S). Advanced work in various techniques employed in advertising and commercial art. PREREQ: AR 108 AR 203 or PERM/INST.
AR 209 INTRODUCTION TO PRINTMAKING (0-4-2)(F/S). A course designed to acquaint the student with creative work in woodcut, lithography, and intaglio. Advisable to have some experience in drawing and design.
 class between the introduction to printmaking AR 209 and the advanced class AR 309. Emphasis will be placed on the use of the techniques to accommodate ones own personal statement while utilizing sound design practices.
AR 211 ANATOMY ( $0-4-2$ )(F/S). A structural and aesthetic approach to drawing the nude, emphasizing bone, muscle, and surface anatomy of the figure. Model fee. PREREQ: AR 111-112.
AR 212 LIFE DRAWING (0-4-2)(F/S). Further study from the model with increased emphasis on anatomy, expressive drawing, and composition. Model fee. PREREQ: AR 211.
AR 215 PAINTING (0-4-2)(F/S). More advanced painting problems in realism and abstraction, with some independent work. Oil, acrylic or other media may be used. May be repeated once for credit. PREREQ: AR 113 and AR 114.

AR 217 PAINTING-WATERCOLOR (0-4-2)(f). Major emphasis will be in the use of transparent watercolor. Work can be outdoors from nature as well as studio work.
AR 218 PAINTING AND WATERCOLOR (0-4-2)(S). Introduction to experimental AR 218 PAINTING AND WATERCOLOR (0-4-2)S techniques in the use of opaque waterbase media. Work will be outdoors from nature as well as studio work. Advisable to take AR 217 prior to AR 218.
AR 219 PORIRAIT AND FIGURE PAINTING (0-4-2)(F/S). Painting from models with an emphasis on a representational approach; study of form, color an composi-
tion as they relate to the human figure. Model fee. Advisable to take AR 114 and 112 prior to AR 219. May be repeated once for credit.
AR 221 ART METALS (0-4-2)(F). A creative exploration in design and construction problems. Various materials will be utilized with primary emphasis on jewelry design and metals. Craftsmanship and the care and usage of tools will be stressed.
AR 222 ART METALS (0-4-2)(S). Continued exploration in design and construction work in metal and other media. Fabrication, forming and casting techniques will be emphasized.
AR 225 CERAMICS (0-4-2)(F). An introduction to ceramics technique and materials. Wheelthrowing, hand building, decoration, glazing and firing will be given. Enrollment is limited. Advisable to take AR 105, and 106 prior to AR 225.
AR 226 CERAMICS (0-4-2)(S). Continued use of the potter's wheel, molding, and hand building. Advisable to take AR 105 and 106 prior to AR 226.
AR 231 SCULPTURE (0-4-2)(F). Work in a variety of three dimensional material with emphasis on the techniques of carving, modeling.
AR 232 SCULPTURE (0-4-2)(S). Continued work in a variety of three dimensional materials with emphasis on the techniques of carving, modeling and mold building.
AR 251 INTRODUCTION TO CREATIVE PHOTOGRAPHY (2-2-2)(F/S). An aesthetic approach to the basic photographic skills of camera operation, film development and enlargement of negatives. All work in black and white. Adjustable camera required.
AR 252 HISTORY OF PHOTOGRAPHY (3-0-3)(\$). This course is designed to provide a basic understanding of both the technical and visual history of photography. Through slide presentations, important photographers of the 19th and 20th centuries will be discussed in terms of their role in the development of photography as an art form.
AR 255 ARCHITECTURAL GRAPHIC COMMUNICATION (1-4-3)(F). Study of architectural presentation techniques, including rendering, light and shadows, model building, use of color. Also study of basic orthographic projection, including plans, elevations and sections. Advisable to take AR 105 and AR 106 and AR 255 before enrolling in AR 256 Basic Architectural Design.
AR 256 BASIC ARCHITECTURAL DESIGN (1-4-3)(S). Introduction to the process of architectural design. Combines basic architectural projects with presentation techniques learned in AR 255 Architectural Graphic Communication. Advisable to take AR 105, AR 106 and AR 255 before enrolling in AR 256 Basic Architectural Design.
AR 270 HISTORY OF AMERICAN ARCHITECTURE I (3-0-3)(F). History of early American architecture from developments after. Plymouth Rock landing in early 17th century through mid 19th century.
AR 271 HISTORY OF MODERN AMERICAN ARCHITECTURE II (3-0-3)(S). History of modern American architecture from the late 19th Century through mid 20th Century. Includes introductory review of American architecture from early 17th Century through late 19th century.
AR 290 MATERIALS AND METHODS OF ARCHITECTURE (3-0-3)(S). This course is developed to enable students to identify construction materials, elements, and systems; to locate theoretical and proprietary information about them and to sketch sections of various construction systems and combinations thereof. At completion, they should be able to select materials based on physical and psychological criteria and design with sensitivity to the appropriate use of various materials.

## Upper Division

AR 301 NINETEENTH CENTURY ART HISTORY (3-0-3)(F). A study of important artists and movements from Neoclassicism through Post-Impressionism. Critical writing will be assigned.
AR 302 HISTORY OF TWENTIETH CENTURY MOVEMENT IN ART (3-0-3)(S).An analysis of important European artistic movements up to World War II, including Fauvism, German Expressionism, Cubism, Futurism, Constructivism, Dada and Surrealism. Critical writings will be assigned.
AR 303 STUDIO IN ADVERTISING DESIGN (0-6-3)(F/S). Advanced study of the design and preparation of art for reproduction, techniques and studio practices. PREREQ: AR 204 or PERM/INST. May be repeated once for credit.
AR 305 STUDIO IN VISUAL DESIGN (0-6-8)(F/S). Advanced exploration of twodimensional of three-dimensional design, continuing with problems in line, form, color, texture, and space. Advisable to take AR 105 and 106 prior to AR 305.

AR 307 STUDIO IN METALSMITHING (0-6-3)(F/S). Advanced study in materials of jewelry making and metalsmithing with special emphasis on forging, stonesetting, cutting, and mechanical techniques as further personal development of craftsmanship. May be repeated once for credit. PREREQ: AR 221, 222.

AR 309 STUDIO IN PRINTMAKING (0-6-3)(F/S). Introduction to color printing and advanced printmaking in any of the following specialized areas, each of. which
may be repeated once for credit: intaglio, lithography, serigraphy, and relief printing. PREREQ: AR 209.

AR 311 ADVANCED DRAWING (0-6-3)(F/S). Structural, interpretive, or compositional study from the model or other subject matter, based on individual interests. Model fee. May be repeated once for credit. PREREQ: AR 212.
AR 315 STUDIO IN PAINTING ( $0-6-3$ )(F/S). Creative work in representational areas in any media. May be repeated once for credit. PREREQ: AR 215.

AR 317 PAINTING-WATERCOLOR (0-6-3)(F). Advanced work in opaque and transparent media with emphasis on experimental techniques. Advisable to take AR 217 and 218 prior to AR 317.
AR 318 PAINTING-WATERCOLOR (0-6-3)(S). Advanced work in opaque and transparent media with emphasis on experimental techniques. Advisable to take AR 317 prior to AR 318.

AR 319 PORTRAIT AND FIGURE PAINTING (0-6-3) (F/S). Painting from models in realistic or semi-abstract styles based on individual interests. Model fee. May be repeated for credit, PREREQ: AR 219 and Upper Division status.
AR 321 ELEMENTARY SCHOOL ART METHODS (2-2-3)(F/S). For students expecting to teach in the elementary schools. This course is especially designed to help prospective teachers construct outlines of courses for creative art activities in the elementary grades. Progressive methods and materials conducive to free and spontaneous expression are stressed.

AR 325 STUDIO IN CERAMICS (0-6-3)(F/S). Advanced study in the materials of ceramics with emphasis on the exploration of clays, glazes, and firing as it applies to the creative artist or teacher. Advisable to take AR 225 and 226 prior to AR 325. Individual instruction will be given. May be repeated once for credit.

AR 331 STUDIO IN SCULPTURE (0-6-3)(F/S). Advanced study in the materials and methods of the sculptor with emphasis upon welded steel and metal casting. Advisable to take AR 231 and 232 prior to AR 331. May be repeated once for credit.
AR 341 STUDIO IN CREATIVE PHOTOGRAPHY (2-4-3)(F/S). Advanced study of photographic techniques: emphasis on the creative approach to picture taking and printing. Adjustable camera required. Advisable to take AR 251 prior to AR 341.

AR 344 STUDIO IN CREATIVE PHOTOGRAPHY, COLOR PRINTING (2-4-3)(F/S). Advanced study of photographic techniques; emphasis on the creative approach to picture taking and printing in color. Adjustable camera required. May be repeated for credit. PREREQ: AR 251 or PERM/INST.

AR 345 STUDIO IN CREATIVE PHOTOGRAPHY (2-4-3)(F/S). Advanced study emphasizing techniques of color slides. Color theory and composition will be covered in the course as well as the processing of slides and various methods of projections. Various approaches to lighting and laboratory work will be taught. Adjustable camera required. May be repeated for credit. PREREQ: AR 251 or PERM/INST.

AR 346 PHOTOGRAPHY: ZONE SYSTEM (2-4-3)(F). This course deals with the important relationship that exists between the negative and the print in photography. This course will provide systematic accounting of the numerous variables of personal equipment, procedures, films, developers, enlarging papers, and style. Technique as the clarifier of idea will be stressed. PREREQ: AR 251 or PERM/INST.

AR 351 SECONDARY SCHOOL ART METHODS (2-2-3)(F). Art education on the junior high school and senior high school levels. Includes current literature in art education, budgeting, curriculum, planning.
AR 361 STUDIO IN ADVERTISING ILLUSTRATION (0-6-3)(F/S). Advanced study emphasizing techniques and methodology of illustrating finished art for ads. Fundamental approaches to story, product, fashion and decorative illustration with emphasis on building a portfolio. Advisable to take AR 203 and 204 prior to AR 361. May be repeated for credit.

AR 371 HISTORY OF TWENTIETH CENTURY AMERICAN ART (3-0-3)(F). Beginning with a short survey of American Art from the Ashcan School through the Thirties with concentration on Abstract Expressionism, Pop, Op, and Minimal. Critical writings will be assigned. Advisable to take AR 302 prior to AR 371.

AR 409 STUDIO IN PRINTMAKING ( $0-6-3$ )(F/S). Individual problems in any of the following areas; woodcut, lithography, intaglio, and serigraphy. May be repeated for credit. PREREQ: AR 309.

AR 411 DRAWING STUDIO (0-6-3)(F/S). Individual problems in drawing. Model fee. May be repeated for credit. PREREQ: AR 311.

AR 415 STUDIO IN PAINTING (0-6-3)(F/S). Individual problems in painting in any media. Students will participate in one-person senior show projects. May be repeated for credit. PREREQ: AR 315.
AR 417 STUDIO IN PAINTING-WATERCOLOR (0-6-3)(F/S). Advanced study in selected watercolor media. Advisable to take AR 317 and 318 prior to AR 417. May be repeated for credit.

AR 419 STUDIO IN METALS ( $0-6-3$ )(F/S). Continued study in materials and methods (advanced) of jewelry making and metalsmithing as they apply to the creative artist and teacher. May be repeated for credit. PREREQ: AR 221, 222,307.
AR 425 STUDIO IN CERAMICS ( $0-6-3$ )(F/S). Continued study in the materials of ceramics with emphasis on the exploration of clays, glazes, and firing as it applies to the creative artist or teacher. Advisable to take AR 325 and 326 prior to AR 425. Individual instruction will be given. May be repeated for credit.
AR 431 STUDIO IN SCULPTURE ( $0-6-3$ )(F/S). Continued study in the material and methods of the sculptor with emphasis on welded steel and casting, carving, mixed media, and experimental. Advisable to take two semesters of AR 331 prior to AR 431. May be repeated for credit.
AR 441 STUDIO IN CREATIVE PHOTOGRAPHY (2-4-3)(F/S). Individual problems in black and white photography. Advisable to take AR 251 and AR 341. May be repeated for credit.

AR 498 SENIOR SEMINARS (3-0-3)(F/S). Required reading and written and oral reports relative to the senior art major's area of interest within the visual arts. PREREQ: Senior status.

## Department of Biology

Science/Nursing Building, Room 223 Telephone (208) 385-3262
Chairman and Professor: Robert C. Rychert; Professors: Baker, Centanni, Fritchman, Fuller, McCloskey, Papenfuss, Wicklow-Howard Associate Professors: Bechard, Douglas, Kelley, Long, Wyllie.

## Degrees Offered

- BS in Biology
- BS in Biology, Secondary Education
- Pre-Forestry and Wildlife Management


## Degree Requirements

BIOLOGY MAJORBachelor of Science Option

1. General University and Baccalaureate Degree requirements Credits ..... 30
2. Major Requirements Biology ..... 45
Biology Core ..... 20
General Botany BT 130 ..... 4
General Zoology Z 130 . .....  5
Cell Biology B 301 .....  3
Genetics B 343 .....  3
Ecology B 423 ..... 4
Biology Seminar B 498, 499 ..... 1
Physiology-one course. ..... 4Human Physiology Z 401
General \& Comparative Physiology Z 409
Morphology-one course ..... 4
Plant Anatomy BT 302
Plant Morphology BT 311
Comparative Vertebrate Anatomy Z 301
Vertebrate Embryology Z 351
Vertebrate Histology Z 400
Biology Electives to total 45 credits* ..... 17
Chemistry ..... 14
College Chemistry C 131-134 ..... 9
Organic Chemistry C 317,319 . ..... 5
Mathematics .....  9
Algebra and Trigonometry M 111 .....  5
Four or more credits chosen from the following:
Applied Statistics with the Computer M 120 .....  4
A First Course in Programming CS 122 .....  2
Introduction to Computer Science CS 127 ..... 4
Calculus and Analytic Geometry M 204 ..... 5
Digital Computer Programming EN 104 (or CS 124) ..... 2
Recommended Electives ..... 30
Area 1 \& II Electives
Biochemistry C 431
Introduction to Biophysics PH 207 Earth Science Electives

## Secondary Education Option-Major Endorsement

1. General University and Baccalaureate Degree Requirements Credits ..... 30
2. Major Requirements
Credits ..... 54-69
Biology + ..... 30-45
Biology Core ..... 13
Microbiology B 205 ..... 4 ..... 4
Genetics B 343, 344
Genetics B 343, 344
Physiology BT 401, Z 409 ..... 4
Systematic Botany BT 305 .....  4
Biology Electives* ..... 1-16
The following electives are highly recommended: Ecology B 423, 424 ..... 3-4
Entomology Z 305 .....  . 4
Invertebrate Zoology Z 307 ..... 4
Vertebrate Natural History Z 355 ..... 4
Chemistry ..... 14
College Chemistry C 131-134 ..... 9
Organic Chemistry C 317, 319 ..... 5
Mathematics ..... 10
3. Education Requirements to include Science Methods Credits ..... 24-32
4. ElectivesCredits0-19
*A maximum ofBiology Electives.+ A Biology Major without a minor requires 45 Biology credits. A Biology Major with a minor+ A Biology Major without a minor requires 45 Biology credits. A Biology Major with a minor
requires 30 Biology credits. In both instances a minimum of 6 credits must be in Botany and6 credits in Zoology.
Secondary Education Option-Minor Endorsement
5. General University and Baccalaureate Degree Requirements Credits. ..... 30
6. Major Requirements Credits ..... 30
7. Minor Endorsement in Biology Credits ..... 21
General Botany BT 130 and General Zoology Z 130
Systematic Botany BT 305
Concepts of Anatomy \& Physiology Z 107
Genetics, Lab B 343, B344
or Vertebrate Natural History Z 355
8. Education Requirements
Credits ..... 24-32
9. Electives
Credits ..... 17-23
Recommended Program
BIOLOGY MAJOR
Bachelor of Science Degree
FRESHMAN YEAR1st 2nd
3English Composition E 101-102
General Botany BT 130
4
4
General Zoology Z 130 ..... 5
Coliege Chemistry C 131-134. ..... 4
5
Mathematics ..... 16
SOPHOMORE YEAR
Organic Chemistry C 317, 319 ..... 5
Cell Biology B 301 ..... 3
Electives (Area I) ..... 3
Electives (Area II) ..... 6
Other Electives ..... 15
JUNIOR YEAR
Electives (Area I, II) ..... 3
Biology Electives ..... 8
Other Electives ..... 3
SENIOR YEAR ..... 14
Biology Seminar B 498
Biology Electives ..... 8
Other Electives . ..... 9
10. ..... 17

BIOLOGY MAJOR

## SECONDARY EDUCATION OPTION Bachelor of Science

FRESHMAN YEAR $\quad$. $\quad$\begin{tabular}{r}
1st <br>
SEM

 

2nd <br>
SEM
\end{tabular}

## SOPHOMORE YEAR

Organic Chemistry C 317, 319. ..... 5.
Microbiology B 205 ..... 4
Cell Biology B 301 ..... 3
Foundations of Education TE 201 ..... 3
General Psychology P 101 ..... 3
Electives (Area I) ..... 3
Electives (Area II) ..... 3
Other Electives . ..... 3
15
JUNIOR YEAR
Educational Psychology P 325 ..... 3
Secondary School Methods TE 381 ..... 3
Secondary School Science Methods TE 384 ..... 3
Electives (Area I, II)3
Genetics B 343, 344
8
Biology Electives ..... 17
SENIOR YEAR
Biology Seminar ..... 1
Biology Electives ..... 4-8.
Education Courses. ..... 8-16
Other Electives ..... 3
12-16 14-22

## PRE-FORESTRY AND WILDLIFE MANAGEMENT.

This program is designed to satisfy the lower division coursework typically completed during sophomore year in a School of Forestry. Students wishing to earn a.bachelor's degree in this area of study usually transfer to the University of Idaho. School of Forestry for their junior and senior years.

| FRESHMAN YEAR | $\begin{array}{r} \text { 1st } \\ \text { SEM } \end{array}$ | $\begin{aligned} & \text { 2nd } \\ & \text { SEM } \end{aligned}$ |
| :---: | :---: | :---: |
| English Composition E 101-102 | 3 | 3 |
| General Botany BT 130 | 4 |  |
| General Zoology Z 130. | - | 5 |
| Essentials of Chemistry C 107-110 | 4 | 5 |
| Mathematics.......... | 5 | 5 18 |
| SOPHOMORE YEAR |  |  |
| General Physics PH 101, 102 | 4 | 4 |
| General Forestry FS 101 | - | 2 |
| Systematic Botany BT 305 |  | 4 |
| Fundamentals of Speech CM 111 | 3 | - |
| Basic Surveying EN 215. | 2 |  |
| Digital Computer Programming EN 104 | 2 | - |
| Principles of Economics EC 201-202. | 3 | 3 |
| Physical Education . . . . . . . . . . . . | 1 15 | 1 14 |

## Course Offerings

## B Biology

Lower Division

B 100 CONCEPTS OF BIOLOGY (3-2-4)(F/S) (Area III). Basic course for nonmajors. General biological principles and how they relate to man. Brief survey of plant and animal diversity. Emphasis areas include populations, pollution, ecology, genetics, and evolution.
B 200 MAN AND THE ENVIRONMENT (3-0-3)(F/S). The impact of biological, economic, and social factors on man's environment are discussed. Participants become aware of important issues and factors involved in environmental decision making.

B 205 MICROBIOLOGY (3-2-4)(F/S). A survey of microbial diversity, structure, function, and metabolism; principles of microbial control; host-parasite relationships; immunology; and medically important microrganisms. PREREQ: C 107 and Z 111-112 (or equivalent) or PERM/INST.

## Upper Division

B 301 CELL. BIOLOGY (3-0-3)(F/S). Structure and function prokaryotic and eukaryotic cells, cellular energetics and metabolism, mitochondria and chloroplasts, cell and organelle genetics, chromosomal aberrations, and medical applications of Cell Biology. One year of college Biology and prior or concurrent enrollment in Organic Chemistry are required.
B 303 GENERAL BACTERIOLOGY (3-6-5)(F). A general survey of the field of Bacteriology; techniques, cytology, taxonomy, growth, physiology, ecology, genetics, evolution, control, medical aspects and immunology. PREREQ: C 317, B 301, PERM/INST.

B 310 PATHOGENIC BACTERIOLOGY (2-6-4)(S). Medically important bacteria, rickettsia, and chlamydia are surveyed with emphasis on their pathogenicity, host-parasite relationships, and the clinical and diagnostic aspects of the diseases they produce in humans and animals. PREREQ: B 303, PERM/INST.
B 343 GENETICS-LECTURE (3-0-3)(F). A study of the principles of genetics as they relate to living organisms. PREREQ: B 301 or PERM/INST.

B 344 GENETICS LABORATORY (0-3-1)(F). A practical course in the techniques of growing and analyzing genetic materials. Drosophila and other organisms will be cultured and analyzed; reports will be submitted. PREREQ: prior or concurrent enrollment in B 343 required.

B 401 ORGANIC EVOLUTION (3-0-3)(S). Philosophical basis and historical development of evolutionary theory. Detailed examination of genetic variation, mechanisms of evolutionary change, adaptation, specialization, phylogeny. Genetics recommended. Offered alternate years. PREREQ: B 301 or PERM/INST.

B 412 GENERAL PARASITOLOGY (2-3-3)(S). Animal parasites with emphasis on those of man and his domestic animals. Lectures cover general biology, life history, structure, function, distribution, and significance of parasites. Laboratory provides experience in identification and detection. PREREQ: B 301, PERM/INST.

B 415 APPLIED AND ENVIRONMENTAL MICROBIOLOGY (3-3-4)(S). Microbial populations and processes in soil and water. Water and food-borne pathogens. Microbiological and biochemical methods of environmental assessment. PREREQ: B 303, PERM/INST.
. 420 IMMUNOLOGY (3-0-3)(S). A survey of the principles of immunology, host defense systems, the immune response, immune disorders, serology and other related topics. Representative laboratory procedures will be demonstrated. PREREQ: B 303, PERM/INST.
B 423 ECOLOGY (3-3-4)(F/S). A survey of the physical factors of the environment and their effect of the mode on life and distribution of plants and animals. Environmental and biological interrelationships of organisms will be discussed. Field and laboratory investigations into topics of physical habitat, populations, communities, pollution, etc. Weekend field trips may be taken. PREREQ: BT 130, Z 130, PERM/INST.
B 498,499 BIOLOGY SEMINAR (1-0-1)(F/S). A review of pertinent literature on selected topics. Restricted to senior Biology majors.

## BT BOTANY

## Lower Division

BT 115 MUSHROOMS OF IDAHO (2-0-2)(F). A survey of the fleshly fungi with emphasis on collecting and identifying species of Idaho mushrooms. Edible and poisonous species will be discussed. Weekend field trips arranged.
BT 130 GENERAL BOTANY (3-3-4)(F/S) (Area III). An introduction to a plant biology which includes the study of cells, genetics whole plant physiology and functions, ecology, classification, and economic importance.

## Upper Division

BT 302 PLANT ANATOMY (3-3-4)(S). A study of the structure and development of vascular plant tissues, regions, and organs. Emphasis will be placed on the Angiosperms. PREREQ: BT 130, B 30T, PERM/INST.

BT 305 SYSTEMATIC BOTANY (2-4-4)(S). Fundamental problems of taxonomy. Discussion of historical development of classification systems and comparison of recent systems. Instruction on use of keys and manuals. PREREQ: BT 130, PERM/INST.
BT 311 PLANT MORPHOLOGY (3-4-4)(F). A comparative study of the structure, function, reproduction, and development of major plant groups. Phylogeny, paleobotany, and economic importance of various plant groups will be considered. PREREQ: BT 130, or PERM/INST.
BT 330 MYCOLOGY (3-3-4)(F). A study of the biology of fungi with emphasis on their classification, morphology and development, identification, ecology, and economic significance. Laboratory work will include projects and field trips. PREREQ: BT 130, PERM/INST.
BT 401 PLANT PHYSIOLOGY (3-3-4)(F). Emphasis placed on physical and chemical processes of plant body functions. Includes coverage of cell, tissue, and organ functions; mineral requirements, metabolism, water uptake, photosynthesis; soil chemistry, and the alkaloids and glucosides synthesized by plants. B 302 and PH 101, 102 recommended. PREREQ: B 301, C 317, PERM/INST.

## FS FORESTRY

## Lower Division

FS 101 GENERAL FORESTRY (2-0-2)(S). A survey of forestry, timber management and economics, and the propagation of important trees of the United States.

## Z ZOOLOGY

## Lower Division

Z 107 CONCEPTS OF HUMAN ANATOMY AND PHYSIOLOGY (3-2-4)(F/S). A survey of human structure and function with emphasis on regulatory mechanisms of the body. This is a terminal course and does not satisfy allied health program requirements.
Z 111, 112 HUMAN ANATOMY AND PHYSIOLOGY (3-3-4). A two-semester sequence for students whose career objectives require a thorough study of human anatomy and physiology. Z 107 cannot be substituted for either semester of this sequence. One semester of this sequence cannot be substituted for $Z$ 107. Prior or concurrent enrollment in C 107 is recommended.
Z 130 GENERAL ZOOLOGY (3-6-5)(F/S) (Area III). Introductory study of animals. Fundamentals of structure, function, development, life cycles, diversity, heredity, evolution, and ecology.

## Upper Division

Z 301 COMPARATIVE VERTEBRATE ANATOMY (2-6-4)(F). The evolutionary development of vertebrate anatomy, fishes through mammals. Dissection of the shark, salamander and cat plus demonstrations of other vertebrate types. PREREQ: Z 130, PERM/INST.

Z 305 ENTOMOLOGY (2-6-4)(f). Biology of insects with emphasis on identification and life cycles for students who have completed one year of college level biology. Laboratory includes field trips to collect and identify local species. Insect collection required. Students should meet with instructor the spring or summer before enrolling. PREREQ: PERM/INST.

Z 307 INVERTEBRATE ZOOLOGY (2-6-4)(S). Morphology, taxonomy, and natural history of the marine invertebrate animals and terrestrial arthropods exclusive of the insects. Offered in alternate years. PREREQ: Z 130 PERM/INST.
Z 341 ORNITHOLOGY (2-3-3)(S). Birds as examples of biological principles: classification, identification, ecology, behavior, life histories, distribution, and adaptations of birds. Two weekend field trips. Offered alternate years. PREREQ: Z 130, PERM/INST.
Z 351 VERTEBRATE EMBRYOLOGY (2-6-4)(S). Germ cell development, comparative patterns of cleavage and gastrulation, neurulation and induction, and development of human organ systems. Laboratory studies of frog, chick, and pig development. PREREQ: Z 130 or PERM/INST.
Z 355 VERTEBRATE NATURAL HISTORY (2-6-4)(f). Classification, identification, evolution, ecological relationships, behavior, and life histories of fish, amphibians, reptiles, birds and mammals. Two weekend field trips. PREREQ: Z 130, PERM/INST.

Z 361 MICROTECHNIQUE (1-6-3)(S). Theory and practical application of procedures involving fixation, staining, preparation of paraffin sections and whole mounts, and histochemical techniques. Offered alternate years. PREREQ; Z 130 PERM/INST.

Z 400 VERTEBRATE HISTOLOGY (3-3-4)(F). Microscopic anatomy of cells, tissues, and organ systems of vertebrates. Major emphasis will be on mammalian systems. Z 301 or $\mathbf{Z} 351$ are recommended prior to enrollment. PREREQ: Z 130 or PERM/INST.

Z 401 HUMAN PHYSIOLOGY (3-3-4)(S). Functional aspects of human tissue and organ systems with emphasis on regulatory and homeostatic mechanisms. PREREQ: B 301, C 317, PERM/INST.
Z 409 GENERAL AND COMPARATIVE PHYSIOLOGY (3-3-4)(S). Physiological principles common to all forms of animal life are discussed. Physiological adaptations required to live in a variety of environments are presented. PREREQ: Z 130, C 317, PERM/INST.
Z 421 MAMMALOGY (2-3-3)(S). Mammals as examples of biological principles: classification, identification, distribution, ecology, life histories, and adaptations of mammals. Two weekend field trips. Offered alternate years. PREREQ: Z:355, PERM/INST.

## Department of Chemistry

Science-Nursing Building, Room 315 Telephone (208) 385-3963
Chairman and Professor: Jack Dalton; Professors: Banks, Carter, Ellis, Hibbs, Matjeka, Mercer, Peterson, Stark.

## Degrees Offered

- BS in Chemistry
- BS in Chemistry, Secondary Education


## Department Statement

The Department of Chemistry offers Baccalaureate Degree programs in Chemistry to prepare students to:

- Teach Chemistry in secondary schools;
- Enter a career in the Chemistry laboratory;
- Attend a graduate school in Chemistry or Biochemistry; or
$\therefore$ Attend a professional school in medicine.
The Chemistry curriculum of Boise State University offers an education based upon employment requirements of industry, educational institutions, and government agencies, while emphasizing the individual needs and capabilities of each student. The staff of the Chemistry. Department recognizes that students are most successful if their training has prepared them for a specific career field, but also recognizes that a broad background affords the best opportunity for a future career selection.


## Degree Requirements

## CHEMISTRY MAJOR <br> Bachelor of Science

This degree prepares the student for employment as a chemist or for admission to medical school.

1. General University and Baccalaureate Degree Requirements (128 credits total).
General Requirements ..... 53-61
English Composition E 101, 102 ..... 6
Area I Core .....  12
Area II Core. .....
Electives, Lower and Upper Division ..... 23-31
Chemistry ..... 47
College Chemistry C 131, 132, 133, 134 ..... : 9
Organic Chemistry C $317,318,319,320$
8
8
Physical Chemistry C 321, 322, 323, 324 ..... 5
Quantitative Analysis C 211, $212 \ldots .$. ..... 3
Organic Qualitative Analysis C 440 ..... 3
Instrumental Analysis C 411 .....  4
Chemistry Seminar C 498, 499. .....  2
Independent Study C 496 ..... -
Mathematics ..... 10-18
(Completion of Mathematics through Calculus $M$ 206)Physics Requirements11
(PH 220, 221, 222, 223, 224)
2. Recommended Electives:Foreign Language
Upper Division MathematicsUpper Division Physics

## Life Science Courses

CHEMISTRY MAJOR, SECONDARY EDUCATION OPTION Bachelor of Science Degree
This degree program prepares the student to teach Chemistry in secon-dary schools.

1. General University and Baccalaureate Degree Requirements (128credits total).
General Requirements ..... 27-36
English Composition E 101, 102 ..... 6
Area I Core ..... 12
Area II Core ..... 9
Electives, Lower and Upper Division. ..... 0-9
Major Endorsement Requirements Chemistry. ..... 37-38
College Chemistry C 131, 132, 133, 134 ..... 9
Quantitative Analysis C 211, 212 .....  5
Organic Chemistry C $317,318,319,320$ ..... 10
Physical Chemistry C 321, 322, 323, 324 .....  8
Chemistry Seminar C 498, 499. ..... 2
Additional Upper Division Courses .....  3-4
Mathematics Requirements ..... 10-18
(Completion of Mathematics through M 206)Physics Requirements11
(PH 220, 221, 222, 223, 224)Biology Requirements9
(BT. 130 and Z 130)
2. Idaho Certification RequirementsTotal Credits24
Foundations of Education TE 201 .....  3
Reading in Content Subjects TE 307 ..... 3
Education of Exceptional Secondary Students TE 333 .....  1
Educational Psychology P 325. ..... 3
Secondary School Methods TE 381, 384 ..... $\cdot 6$
Senior High School Student Teaching TE 483 ..... 8

## Recommended Programs

## CHEMISTRY MAJOR <br> Bachelor of Science

NOTE: For students with a strong high school background.

## FRESHMAN YEAR

English Composition E 101, $102 \ldots . . . . . . . . . . . . . .$. . . . . . . 3
College Chemistry C $131,132,133,134 \ldots \ldots \ldots .$.
Mathematics M 204,205.................................. .. . 5. 4
Physics I PH 220 ........................................... . . . . 3
Degree Requirements or Electives $\ldots \ldots \ldots \ldots$
Totals

## SOPHOMORE YEAR

Organic Chemistry $C 317,319,318,320 \ldots \ldots \ldots \ldots$. 5
Quantitative Analysis C $211,212 \ldots \ldots \ldots \ldots \ldots .$.
Mathematics M 206 ....................................... . . . . 4

Degree Requirements or Electives . . . . . . . . . . . . . . . . . . . . . . 6
Totals 18
JUNIOR YEAR
Physical Chemistry C 321, 322, 323, $324 \ldots \ldots . . .$. . . . . . 4
Organic Qualitative Analysis C $440 \ldots \ldots \ldots \ldots \ldots \ldots$. . . . . . . 3
Degree Requirements or Electives . . . . . . . . . . . . . . . . . 12 9
Totals 16

## SENIOR YEAR

Advanced Inorganic Chemistry C $401 \ldots . .$. .......... 3 Totals 17

Instrumental Analysis C $411 \ldots . . . . . . . . . . . . . . . . .$.
Independent Study C $496 \ldots . .$. ....................... . . . . 1
Chemistry Seminar C 498, 499 . . . . . . . . . . . . . . . . . . . . . 1
Degree Requirements or Electives . . . . . . . . . . . . . . . . . . . . . . 12 . 12

| CHEMISTRY MAJOR Bachelor of Science |  |  |
| :---: | :---: | :---: |
| NOTE: For students with a general high school background. |  |  |
|  | $\begin{array}{r} 1 \mathrm{st} \\ \text { SEM } \end{array}$ | $\begin{aligned} & \text { 2nd } \\ & \text { SEM } \end{aligned}$ |
| FRESHMAN YEAR |  |  |
| English Composition E 101, 102 | 3 | 3 |
| College Chemistry C 131, 132, 133, 134 | 4 | 5 |
| Mathematics M 111, 204 | 5 | 5 |
| Degree Requirements or Electives | 3 | 3 |
| Totals | 15 | 16 |
| SOPHOMORE YEAR |  |  |
| Organic Chemistry C 317, 319, 318, 320 | 5 | 5 |
| Mathematics M 205, 206 . | 4 | 4 |
| Physics \| PH 220. | 3 | - |
| Physics II PH 221, 223 | - | 4 |
| Degree Requirements or Electives | 3 | 3 |
| Totals | 15 | 16 |
| JUNIOR YEAR |  |  |
| Physical Chemistry C 321, 322, 323, 324. | 4 | 4 |
| Quantitative Analysis C 211, 212. | - | 5 |
| Physics PH 222, 224 | 4 | - |
| Degree Requirements or Electives | 3 | 12 |
| Totals | 16 | 16 |
| SENIOR YEAR |  |  |
| Advanced Inorganic Chemistry C 401. | 3 | - |
| Instrumental Analysis C 411 | - | 4 |
| Organic Qualitative Analysis C 440 | - | 3 |
| Independent Study C 496. | 1 | 1 |
| Chemistry Seminar C 498, 499 | 1 | 1 |
| Degree Requirements and Electives | 12 | 8 |
| Totals | 17 | 17 |
| CHEMISTRY MAJOR, SECONDARY EDUCATION OPTION Bachelor of Science Degree |  |  |
| - | 1st | 2nd |
|  | SEM | SEM |
| FRESHMAN YEAR |  |  |
| English Composition E 101, 102 | 3 | 3 |
| College Chemistry C 131, 132, 133, 134 | 4 | 5 |
| Mathematics M 111, 204. | 5 | 5 |
| General Zoology Z 130 | 5 | . |
| General Botany BT 130 | - | 4 |
| Totals | 17 | 17 |
| SOPHOMORE YEAR |  |  |
| Organic Chemistry C 317, 319, 318, 320 | 5 | 5 |
| Mathematics M 205, 206 | 4 | 4 |
| Physics I PH 220 | 3 | . |
| Physics II PH 221, 223. | - | 4 |
| General Psychology P 101 | 3 | - |
| Foundations of Education TE 201 | - | 3 |
| Totals | 15 | 16 |
| IUNIOR YEAR |  |  |
| Physical Chemistry C 321, 322, 323, 324. | 4 | 4 |
| Physics III PH 222, 224 | 4 | - |
| Quantitative Analysis C 211, 212. | - | 5 |
| Educational Psychology P 325. | 3 | - |
| Reading in Content Subjects TE 307 | - | 3 |
| Degree Requirements or Electives | 6 | 6 |
| Totals | 17 | 18 |
| SENIOR YEAR |  |  |
| Upper Division Chemistry Course | 3 | - |
| Chemistry Seminar C 498, 499 | 1 | 1 |
| Secondary School Methods TE 381, 384 | 3 | 3 |
| Senior High School Teaching TE 483, 487 | - | 9 |
| Educating Exceptional Secondary Students TE 333. | 1 | . |
| Degree Requirements or Electives | 9 | - |
| Totals | 17 | 13 |

Students who do not have a Chemistry degree may be certified to teach Chemistry in secondary schools. Refer to the Department of Teacher Education section where minor certification endorsements for teaching areas are listed.

## Course Offerings

## C CHEMISTRY

## Lower Division

C 100 CONCEPTS OF CHEMISTRY (3-3-4)(S)(Area III). A descriptive non mathematical course designed to acquaint students with the science of Chemistry and the relationship of Chemistry to other fields of study and to modern life. This course cannot serve as a prerequisite to any other Chemistry course, nor will it serve as part of a Chemistry sequence. Students who have received credit for C 109 or C 133 may not receive credit for C 100.
C 107 ESSENTIALS OF CHEMISTRY (3-0-3)(Area III). The first semester of a sequence course for non-science majors who require only one year of Chemistry: Basic concepts of inorganic and organic Chemistry. Satisfactory score on Mathematics Placement Exam " BA " and/or satisfactory completion of Math 020 is required. Concurrent enroliment in C 108 is required.
C 108 LABORATORY FOR ESSENTIALS OF CHEMISTRY (0-3-1)(Area III). The laboratory to accompany C 107. Concurrent enrollment in C 107 is required.
C 109 ESSENTIALS OF CHEMISTRY (3-0-3)(S/SU)(Area III). A continuation of C 107 to include basic concepts of Biochemistry. PREREQ: C 107 and 108. Concurrent enrollment in C 110 is required.

C 110 LABORATORY FOR ESSENTIALS OF CHEMISTRY (1-3-2)(S/SU)(Area III). The laboratory to accompany C 109. One three-hour laboratory and one one-hour recitation. The recitation will include discussion of both lecture and laboratory material. COREQ: C 109.

C 131 COLLEGE CHEMISTRY (3-0-3)(F/SU)(Area III). The first semester of a oneyear sequence course. A thorough study of the fundamentals of Chemistry including atomic and molecular structure, stolchiometry, physical states, and solu tions. PREREQ: M 111 or 108. Concurrent enrollment in C 132 is required.

C 132 LABORATORY FOR COLLEGE CHEMISTRY (0-3-1)(F/SU) (Area III). Laboratory work to accompany C 131. Concurrent enrollment in C 131 is required.
C 133 COLLEGE CHEMISTRY (3-0-3)(S/SU) (Area III). A continuation of C 131 to include equilibrium, redox, and complex ions. PREREQ: C 131,132.
C 134 LABORATORY FOR COLLEGE CHEMISTRY ( $0-6-2$ )(S/SU) (Area III). Laboratory work to accompany C 133. To include qualitative analysis. PREREQ: C 131, 132.
C 211 QUANTITATIVE ANALYSIS (3-0-3)(F). Study of the equilibrium relationships and methods used in gravimetric, volumetric, and some instrumental analysis. PREREQ: C 131, 132, 133, 134.

C 212 QUANTITATIVE LABORATORY TECHNIQUE (0-6-2)(F). Practical application of quantitative analytical techniques through the analysis of unknown samples using gravimetric, volumetric, and some instrumental methods. PREREQ: C 211 or concurrent enrollment.

## Upper Division

C 317 ORGANIC CHEMISTRY LECTURE (3-0-3)(F). An overview of Organic Chemistry covering the fundamental principles of nomenclature, reactions, synthesis, mechanisms, sterochemistry, proteins and carbohydrates. Will fulfill the requirements for an elementary organic course and partially fulfill the requirement for a more rigorous course. PREREQ: C 131,132, 133, 134. Concurrent credit enrollment in C 319 is required.
C 318 ORGANIC CHEMISTRY LECTURE (3-0-3)(S). An in-depth study of organic reaction mechanisms, reaction theory, and advanced organic synthesis. PREREQ: С 317, 319.

C 319 ORGANIC CHEMISTRY LABORATORY (1-3-2)(F). Basic organic laboratory techniques and simple organic syntheses. One three-hour laboratory and one hour of recitation per week. Concurrent enrollment in C 317 is required.
C 320 ORGANIC CHEMISTRY LABORATORY (1-3-2)(S). More advanced organic laboratóry techniques, syntheses, classical organic qualitative analysis and an introduction to spectroscopic methods. Three hours of laboratory and one hour of recitation per week. PREREQ: C 319. Concurrent enrollment in C 318 is required
C 321, 322, PHYSICAL CHEMISTRY LECTURE (3-0-3)(F/S). The fall semester will cover gases, point symmetry, molecular structure and quantum theory (briefly) and the first, second and third laws of thermodynamics. The spring semester continues with thermodynamics, reaction kinetics, phase equilibria, electrochemistry and absorption. PREREQ: C 131, 132, 133, 134, PH 102 or 221, M 206 or equivalent.
C 323, 324 PHYSICAL CHEMISTRY LABORATORY (0-3-1)(F/S). Laboratory experiments paralleling the material covered by the lectures. PREREQ: C 321, 322 or concurrent enrollment. A year's sequence (fall and spring).
C 341, 342 CLASSBLOWING (0-3-1). C 341 acquaints students with the basics of scientific glassblowing. C 342 gives students practice in techniques and in construction of more complex apparatus. PREREQ: Junior Standing. Offered on demand.

C 401G ADVANCED INORGANIC CHEMISTRY (3-0-3)(F). Quantum mechanical overview of atomic and molecular structure, bonding in ionic, covalent, and complex ions, nonaqueous solutions, and selected properties of elements of periodic table and inorganic comp. PREREQ: C 322, PERM/INST.
C 411G INSTRUMENTAL ANALYSIS (2-6-4)(S). Theory and practice of the more common instrumental methods of analysis, laboratory experience with commercial instruments. PREREQ: C 211, 320. C 320 may be taken currently with C 411.
C 431G INTRODUCTION TO BIOCHEMISTRY (3-0-3)(F). A study of the chemistry of biologically important compounds and an introduction to metabolism. PREREQ: C 317.
C 432G BIOCHEMISTRY LABORATORY (0-3-1)(S). Identification, isolation, and reaction to biologically important compounds. PREREQ: C 431 or concurrent enrollment.

C 433 C BIOCHEMISTRY (3-0-3)(S). The function of biological compounds, including intermediary metabolism and synthesis of proteins. Cellular control mechanisms of these processes are integrated into the material. PREREQ: C 431.
C 440 ORGANIC QUALITATIVE ANALYSIS (1-6-3)(S). Organic qualitative analysis with emphasis upon using spectroscopic methods and spectral interpretation. Two three-hour laboratories and one hour of lecture per week. PREREQ: C 318 and C 320.

C 498-C 499 SEMINAR (1-0-1)(F/S). Croup discussions of individual reports on selected topics in the various fields of Chemistry. PREREQ: Chemistry major and senior standing.

## Graduate

The department offers certain graduate courses. See the Graduate School portion of this Catalog for course descriptions.

## Department of English

Liberal Arts Building, Room 228
Telephone (208) 385-1246
Chairman and Professor: Charles G. Davis; Professors: Boyer, Leahy, Martin, Sahni, Willis; Associate Professors: Cocotis, Fox, Maguire, Papinchak, Peek, Sanderson, Trusky, Widmayer, Zirinsky; Assistant Professors: Ackley, Burmaster, Case, Dayley, Evett, Guilford, Hadden, King, Lojek, McGuire, Nickerson, Rinnert, Selander, Thomas, Warner.

## Degrees Offered

- BA, English, Liberal Arts emphasis
- BA, English, Secondary Education
- BA, English, General Literature emphasis
- BA, English, American Literature emphasis
- BA, English, British Literature emphasis
- BA, English, Linguistics emphasis
- BA, English, World Literature emphasis
- BA, English, Writing emphasis
- BA, English, Liberal Arts
- MÁ in education, English emphasis (see Graduate College listing in this Catalog for details)


## Department Statement

The major in English was traditionally served to develop skills of imagining, reasoning, and communicating. English majors have come to approach matters from a variety of points of view, to recognize patterns of information or ideas from incomplete reports and to understand other people as well as abstract principles. For these reasons the major in English has provided one of the most successful preparations for professional degrees in law, medicine, and commerce.

Because the major serves students seeking personal development as well as professional training, the department has designed a series of major options to fit student needs. The Secondary Option fulfills Idaho certification requirements and prepares students to teach in school districts around the country. The General Option affords student most flexibility through limiting departmental requirements. The Liberal Arts emphasis, by requiring preparation in a number of areas, offers the broadest, most complete background in the disciplines.

## Degree Requirements

All majors must fulfill general university requirements for the Bachelor of Arts degree.

1. BA, English, Liberal Arts emphasis

- Specific Courses

Survey of British Literature E240 and E260 . . . . . . . . . . . . . . . . . 6
Shakespeare E345, 346 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Introduction to Language Studies LI305 ......... . . . . . . . . . . . . . . . 3
History of the English Language LI309 . . . . . . . . . . . . . . . . . . . . . . . 3
History of Literary Criticsm E393 . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Senior Seminar E498 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2

- Area Requirements

Pre-1800 British Lit E340, 341, 348, 349, 350, 351, 356, 358,
359 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 6 .3

Post-1800 British-American Lit E360, 365, 366, 369, 377, 378,
384, 385, 389, 390, 487. . .6

- Upper Division Electives 15
- Competence in a Foreign Language equivalent to two years of University instruction.

2. BA, English, Secondary Education

- Specific Courses

Survey of British Literature E240, E260 . . . . . . . . . . . . . . . . . . . . . . . 6
Shakespeare E345, 346 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Introduction to Language Studies LI305 . . . . . . . . . . . . . . . . . . . . . 3
History of Literary Criticism E393 . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Senior Seminar E498 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2

- Area Requirements

American Literature E271, 272, 378, 384 . . . . . . . . . . . . . . . . . . . 3
Pre-1800 British Lit E340, 341, 348, 349, 350, 351, 346, 358,
359
Post-1800 British-American Lit E360, 365, 366, 369, 377, 378,
384, 385, 389, 390, 487

- Special Option Requirements
a. Option 7-9 (Junior High)

Writing E201, 401 (instead of E393) . ... . . . . . . . . . . . . . . . . . . . . . . . 3
Language LI309 and 307 or 405 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 6
Methods E301 and 381 or TE358........................................ . . . . 6
Speech . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Literature for use in Junior and Senior High School E481 .... 3
Upper Division English Electives .......................... . . . . . . . . . 6
Western World Literature E230, 235 . . . . . . . . . . . . . . . . . . . . . . . . 6
Idaho Certification Requirements: Successful completion of
Secondary Option Writing Proficiency exam.
b. Option 10-12 (Senior High)

Language LI 307 and 309 or 405 . . . . . . . . . . . . . . . . . . . . . . . . . . . . 6
Methods E 301 and 381 or TE 358 . .................................. . . . 6
Speech . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Advanced Writing E 201,305, 306, 401. . . . . . . . . . . . . . . . . . . . . . . 3
Upper Division English Electives . . . . . . . . . . . . . . . . . . . . . . . . . . . . 9
Western World Literature E230. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Idaho Certification Requirements: Successful completion of
Secondary Option Writing Proficiency exam.
c. Option 7-12 (composite)

Language LI 309 and 307 or 405
Methods E 301 and 381 or TE 358
Speech
Literature for use in Junior and Senior High School, E 481 . . 3
Advanced Writing E 201, 305, 306, 401 . . . . . . . . . . . . . . . . . . . . . . 3
Upper Division English Electives . . . . . . . . . . . . . . . . . . . . . . . . . . . 6
Western World Literature E230...................................... . . . 3
Idaho Certification Requirements: Successful completion of
Secondary Option Writing Proficiency exam.
3. BA, English, General Literature emphasis

- Completion of 53 credits in English or Linguistics excluding E 101, E 102, E 111-H, and E 112-H.
a. Of these credits, 38 must be upper division, including E 498, Senior Seminar.
b. Of these credits, 15 must be in British Literature, excluding E 385, E 389, and E 487.
- No more than 9 credits may be in special topics courses in English or Linguistics.

4. BA, English, American Literature emphasis

- Specific courses:
Survey of American Lit, E 271,272 ..... 6
Shakespeare, E 345 or E 346 ..... 3
American Renaissance, E 377 .....  3
American Realism, E 378 .....  3
Lit of American West'E 384 ..... 3
Folklore, E 390 ..... 3
Senior Seminar, E 498 ..... 2
- Area requirements
Modern British \& American Lit E 385, 389, 487 .....  3
Lower Division Lit courses E 211, 213, 217, 219, 240 or 260 ..... 9
Upper Division electives in Literature or Linguistics ..... 18
American Political Theory PO 331 ..... 3
Cultural Anthropology AN 102 (Area II)3
3
U.S. History HY 151, 354, 355, 356, 358, or 359

5. BA, English, British Literature emphasis

- Specific courses:
Survey of British Literature E 240, 260 ..... 6
Shakespeare E 345 or 346. ..... 3
Senior Seminar E 498 ..... 2
- Area Requirements
Pre-1800 British Lit courses numbered E 340-359 ..... 12
Post-1800 British Lit courses numbered E 360-369 ..... 6
Electives in British or American Lit (15. Upper Division) ..... 24
British History HY 311, 312,338 or 432 .....  3

6. BA, English, Linguistics emphasis

- Specific courses:
Intro to Linguistics Ll 305 .....  3
Applied English Linguistics LI 307 .....  3
History of English Language LI 309 ..... 3
Modern English Structure LI 405 ..... 3
Applied Linguistics in Teaching ESL LI 407 .....  3
ESL Internship E 493 .....  3
Senior Seminar E 498 .....  2
- Area Requirements:
Old or Middle English Lang or Lit (i.e., E 340) or foreign Litread in original language3
Electives in literature lower or upper division ..... 15
Upper division electives in Lit. (12 British Lit) ..... 15
One year of a Foreign Language ..... 6-8
A 2nd year of foreign language or one year of a 2nd foreign language ..... 6-8
Cultural Anthropology, AN 102 (Area II core) .....  3

7. BA, English, World Literature emphasis

- Specific courses:
Far Eastern Literature E 215 ..... 3
Western World Lit E 230, 235 ..... 6
19th \& 20th Cent Continental Lit E 336, 338 ..... 6
Medieval Epics \& Romance, E 341 .....  3
Shakespeare E 345 or 346 ..... 3
Folklore E 390 ..... 3
History of Literary Criticism E 393 ..... 3
Senior Seminar E 498 .....  2
- Area Requirements:
Lower Division Lit-E 211, 213, 217, 240, 260, 271 or 272 ..... 6
English Lit courses from E 340-369 ..... 9
Upper Division electives in Lit or Linguistics ..... 9
World Drama TA 341, 342, or 445 ..... 3.
History, other than US or British ..... 68. BA, English, Writing emphasis
- Specific courses:
Advanced Expository Comp. E 201 ..... 3
Technical Writing E 202 .....  3
Advanced Writing E 401 ..... 3
Writing Internship E 493 ..... 3
Senior Seminar E 498 .....  2
- Area Requirements:
Creative Writing E 205, 206, 305, or 306 ..... 6
Linguistics LI 305, 307, 309 or 405 ..... 6
Lower Division Lit electives, not to exceed 15 credits
total for completed option ..... 3-9
British Lit courses numbered from E 340-369 ..... 15
Upper Division electives in Lit or Linguistics ..... 3-9
Electives CM 471, 473, 474, HY 210, P 341 or PY 247 ..... 9
Minor Endorsement in English
Advanced Composition ..... 3
Linguistics .....  3
E 301, 381 .....  3
Survey of American Literature E 271, 272 ..... 3
Lower Division Literature (To be selected from E 215, 230, 235,240, 260) .6
Upper Division Literature ..... 6
Successful completion of Secondary Option Writing Proficiency exam.
Theatre Arts Minor For English
Technical Theatre (basic set drawing and construction) TA 117. ..... 4
Technical Theatre (basic set design, painting, lighting) TA 118 ..... 4
Acting TA 215 .....  3
Major Production Participation TA 331 .....  3
One of the following: ..... 3
World Drama, 500 B B. to 1660 TA 341Contemporary Theatre TA 445
Directing TA. 401 ..... 3
One of the following:
Shakespeare: Tragedies and Histories E 345 ..... 3
Shakespeare: Comedies and Romanaces E346 ..... 3
Total hours in Theatre Arts Minor for English Major . ..... 23
Combined Major, Communication and English

The combined major is designed for students interested in jobs in business and industry or mass communication. It offers an opportunity to combine courses in complementary subject areas. Students may select an emphasis in Journalism or in Communication under the combined major.

Refer to the Department of Communication listing in this Catalog for the specific requirements.

## Course Offerings

## E ENGLISH

Students who transfer from other schools with qualifying scores on objective tests equivalent to those administered to Boise State University freshman will be required to take only the essay section of the placement tests. See requirements below for remedial and advanced placement in English Composition.

Nine credits of Creative Writing may be counted toward fulfillment of the major requirements.

## Lower Division

E 010 DEVELOPMENTAL WRITING (1-2-0). Training in writing and editing processes with emphasis on correctness and sentence structure. Attention to fluency, organization, development, revision. Required if writing sample demonstrates need or if ACT, SAT, or TWSE score is below 20th centile. Also for basic review. Successful completion of competency test required.
E 101 ENGLISH COMPOSITION (3-0-3)(Core). Basic skills in writing, including use of supportive materials, source references, basic patterns of organization, and standard usage. Successful completion of competency test required. PREREQ: $A C T$ score 20 or $S$ in Developmental Writing.
E 102 ENGLISH COMPOSITION (3-0-3)(Core). Advanced practice in expository writing, which may include literary material as a means of teaching critical reading and writing and communication of complex ideas. Successful completion of competency test required. PREREQ: E 101 or PERM/INST:

E 111, 112 HONORS COMPOSITION (3-0-3)(Core). Provides superior student challenge emphasizing individual study and original writing. Introduction to critical writing and study of ideas through literature. Honors 11.1 concentrates on lyric, poetry, essays, and short fiction: Normial prerequisite: ACT of 80th centile or above for E 111. Successful completion of competency test required. PREREQ: E 111 or PERM/CHMN for E 112.

E 120 ENGLISH AS A SECOND LANGUAGE (5-0-3)(F/S). Basic skills in American English pronunciation, sequence structufe, composition and reading for foreign students with TOEFL scores (or equivalent) of 500 or below. Practice in speaking and listening to current American English, reading and vocabulary development; elementary principles of English Composition. PREREQ: Admission to college, recommendation of Foreign Student Advisor and PERM/INST. Credit not applicable toward requirements for graduation:
E 121 ENGLISH AS A SECOND LANGUAGE (5-0-3)(F/S). Continuation of E 120 with special emphasis on vocabulary development, reading and development of skills in written English. For foreign students with TOEFL scores (or equivalent) of 500-550. PREREQ: Admission to College, recommendation of Foreign Student Advisor and PERMIINST. The sequence E 122-123 satisfies the E 101 requirement for foreign students.
E 123 ADVANCED ENGLISH COMPOSITION FOR FOREIGN STUDENTS (5-0-3) (F/S). Study of and practice in the principles of formal and informal written English; principles of the essay and research paper; continuation of vocabulary development and mastery of the more complex types of English structure. PREREQ: Admission to college, recommendation of Foreign Student Advisor and PERM/INST. The sequence $\mathbf{E} 122-123$ satisfies the $\mathbf{E} 101$ requirement for foreign students.
E 131 INTRODUCTION TO LITERATURE (3-0-3)(F/S). A study of popular and classic novels, short stories, plays, and poems by notable American, British, and other authors. Students will see film or television versions and hear recorded renditions of some of the works read. PREREQ: Completion of or concurrent enrollment in E 101 or PERM/CHMN.
E 201 ADVANCED EXPOSITORY COMPOSITION (3-0-3)(F/S). An advanced writing course for students who wish to develop skills beyond those acquired in English Composition. Students examine specimens of professional writing as well as criticizing the work of other students. Extensive writing practice stressing organization, clarity and effectiveness. PREREQ: E 102 or PERM/CHMN.
E 202 TECHNICAL WRITING (3-0-3)(F/S). Practice in writing the main kinds of reports used in the science, social sciences, health sciences and other fields. Students will improve the logic, organization and persuasiveness of their writing. Will not fulfill Area I requirements. PREREQ: E 102 or PERM/CHMN.
E 205 CREATIVE WRITING-Poetry (3-0-3)(F). PREREQ: PERM/INST. based on evaluation of student's original work. May be repeated for nine credit hours.
E 206 CREATIVE WRITING-FICTION (3-0-3)(S). Introduction to fiction writing with a concentration on descriptive technique. Readings in the short story.
E 211 THE BIBLE AS LITERATURE (3-0-3)(S). Examines selected historical, biographical, poetic, dramatic teaching and letter-writing portions of HebrewChristian testaments. Emphasis in literacy aspects with discussions of notable concepts in major writings. PREREQ: E 102.
E 213 AFRO-AMERICAN LITERATURE (3-0-3)(S). The Black experience as reflected in the development of Black American literature. This course relates AfroAmerican writing to its salient social and cultural conditions. It explores recurrent and characteristic themes, techniques, and genres from Slavery to present. Emphasis is on Blackwriting from the 1930's to the present day. PREREQ: E 102.
E 215 FAR EASTERN LITERATURE, IN TRANSLATION (3-0-3)(S) (Area I). Survey of literature of Far Eastern Countries with major emphasis on China, India, and Japan. An introduction cultural and religious environment of each country covered. PREREQ: E 102.
E 217 MYTHOLOGY (3-0-3)(F). Mythologies and mythological concepts having most influence on Western civilization. Emphasis on Greek, Norse and JudeoChristian mythologies and their relation to religion, literature, art and modern psychology. PREREQ: E 102.
E 219 NORTH AMERICAN INDIAN FOLKLORE AND LITERATURE (3-0-3)(F). A comparative study of traditional Native American beliefs and practices as reflected in authentic oral narratives and creative written literature. The content, form and style or oral narratives and the functions which these narratives serve in preliterate societies receive particular emphasis. PREREQ: E 102.
E 230 WESTERN WORLD LITERATURE (3-0-3)(F) (Area I). Introduction to writings of the great minds in the Western tradition which have shaped our cultural and literacy past and present. Reading includes selections from ancient Greece, Imperial Rome, medieval Euröpe and Renaissance Europe. PREREQ: E 102..
E 235 WESTERN WORLD LITERATURE (3-0-3)(S) (Area I). An introduction to the Western literary tradition as it has developed during the last four centuries. Attention will be paid to the way in which the older values and attitudes are challenged by the new spirit of scepticism and rebellion. PREREQ: E 102.

E 240 SURVEY OF BRITISH LITERATURE TO 1790 (3-0-3)(F)(Area I). Examines the E 240 inant cultural movements and literary forms in England from the middle ages through the 18th century. PREREQ: E 102.
E 260 SURVEY OF BRITISH LITERATURE: 1790 TO PRESENT (3-0-3)(S)(Area 1): The reflection of social and cuitural changes in the poetry and prose of Romantic; Victorian and modern England. PREREQ: E 102.

E 271 SURVEY OF AMERICAN LITERATURE: Beginnings to Civil War (3-0-3)(F/S)(Area I). This course traces the artistic, philosophic; social, scientific, and intellectual influences on American writers and the emergence of an independent American outlook, as seen in the literary works of such authors as Thoreau, Hawthorne, Melville, Emerson, and Whitman. PREREQ: E 102.

E 272 SURVEY OF AMERICAN LITERATURE: Civil War to Present (3-0-3)(f/S)(Area I). This course traces the continued development of American Literary thought as revealed in the works of such authors as Twain, James, Hemingway, Eliot, and Faulkner. PREREQ: E 102

## Upper Division

E 301 TEACHING ENGLISH COMPOSITION (3-0-3)(f/S). Methods and techniques for teaching English composition in secondary schools, with emphasis on individualization of instruction, student-centered activity, creativity, and integration of composition into all the other aspects of the total English program.Limited to teachers, students with a secondary option and a major or minor in English, or consent of the department. PREREQ: Upper Division standing, and LI 305, Introduction to Language Studies, or inservice teaching.
E 305 CREATIVE WRITING-ADVANCED POETRY (3-0-3)(S). PREREQ: E 205 or PERM/INST based on evaluation of student's work. May be repeated for nine credit hours.
E 306 ADVANCED FICTION (3-0-3)(F). Exploration of narrative technique dialogue form, and the short story. Recommended: E 206.
E 336 NINETEENTH-CENTURY CONTINENTAL LITERATURE (3-0-3)(5). Major European writers in the 19th century in translation. Reading maintains a chronological approach stressing the relationship of the literature to the socio-economic and political conditions of the times. Works of Goethe, Stendahl, Flaubert, Nietzsche, Schopenhauer, Dostoevsky and Tolstoy are included. PREREQ: E 102 or PERM/CHMN. Alternate years. Offered 1986/1987.
E 338 TWENTIETH-CENTURY CONTINENTAL LITERATURE (3-0-3)(S). Twentieth century philosophical trends and cultural themes are emphasized in the reading. Includes works by Mann, Mauriac, Kafka, Hesse, Grass and Solzhenitzyn, which examine mythological, existential, religious, and political themes in relation to contemporary human values. PREREQ: E 102 or PERM/CHMN. Alternate years. Offered 1986/1987.
E 340 CHAUCER (3-0-3)(F). Emphasis on The Canterbury Tales and Troilus and Criseyde. Also representative minor works. PREREQ: Three credits, lower division literature or PERM/CHMN. Alternate years. Offered 1986/1987.
E 341 MEDIEVAL EPICS AND ROMANCES (3-0-3)(F/S). Representative English and continental epics and romances, including Beowulf, Sir Gawain, and the Green Knight, Chretien de Troyes, Arthurian Romances, The Song of Roland, the Nibelungenlied, The Cid. PREREQ: Three credits of literature or PERM/CHMN. Alternate years. Offered 1985/86.
E 345 SHAKESPEARE: TRAGEDIES AND HISTORIES (3-0-3)(F/S). A selection of the tragic plays including Romeo \& Juliet, Hamlet and King Lear, and the best plays concerning English history. PREREQ: Three credits literature or PERM/CHMN.
E 346 SHAKESPEARE: COMEDIES AND ROMANCES (3-0-3)(F/S). Representative plays such as The Taming of the Shrew, A Midsummer's Night Dream, As You Like it Twelfth Night, and the Tempest. PREREQ: Three credits of literature or PERM/CHMN.
E 348 BRITISH RENAISSANCE POETRY AND PROSE (3-0-3)(F/S). A study of the poetry and prose of the English Renaissance, including works by More Marlowe, Spenser, Shakespeare, and Bacon, PREREQ: Three credits of literature or PERM/CHMN.Alternate years. Offered 1985//986.
E 349 ELIZABETHAN AND JACOBEAN DRAMA (3-0-3)(F/S). Tragic and comic plays by Shakespeare's contempories such as Kyd, Marlowe, Jonson, Tourneur, Chapman, Middletown, Marston, Webster and Ford. PREREQ: Three credits literature or PERM/CHMN. Alternate years. Offered 1986/1987.
E 350 SEVENTEENTH CENTURY PÓETRY AND PROSE (3-0-3)(S). The works of English authors such as Francis Bacon, Ben Johnson, John Donne, George Herbert, Andrew Marvell, Robert Burton, and Thomas Browne, who flourished in the first 60 years of the 17th century. The social, philosophical, and scientific background of this period. PREREQ: Three credits literature or PERM/CHMN. Alternate years. Offered 1986/1987.

E 351 MILTON (3-0-3)(S). A study of John Milton's major poetry and prose, with special emphasis on Paradise Lost, Paradise Regained and Samson Agonistes. PREREQ: Three credits of literature or PERM/CHMN. Alternate years. Offered 1986/1987.

E 356 BRITISH DRAMA: THE RESTORATION TO THE DECADENT MOVEMENT (3-0-3)(F/S). A study of Restoration tragedy, the comedy of manners, sentimental comedy, and comic opera. Playwrights read include Wycherley, Dryden, Etherege, Congreve, Gay, Sheridan, Goldsmith, Gilbert and Sullivan, and Wilde. PREREQ: Three credits lower-division literature or consent of Department Chair. Alternate years. Offered 1986/1987.

E 358 RESTORATION AND EIGHTEENTH CENTURY POETRY AND PROSE (3-0-3) (F/S). A study of literary currents in the British Enlightenment-from satiric to sen|timental, reasonable to fanciful. Emphasis: Dryden, Pope, Swift, and Johnson, plus works by Addison and Steele, Thomson, Boswell, Gray, Gibbon, Burke, and others. PREREQ: Three credits lower-division literature or consent of Department Chair. Alternate years. 1985/86.

E 359 BRITISH NOVEL: BEGINNINGS THROUGH AUSTEN (3-0-3)(F). An investigation of the novel tracing its roots and exploring the work of Defoe, Richardson, Fielding, Smollett, Sterne, Austen and others. The emergence of the most popular genre of literature helps us to understand how fiction reflects our assumption about the world around us. PREREQ: Three credits of literature or PERM/CHMN.
E 360 BRITISH ROMANTIC POETRY AND PROSE (3-0-3)(F). Readings in Blake, Wordsworth, Coleridge, Byron, Shelley, Keats, and others. These Romantics provide freshly imagined patterns of emotional and intellectual response to nature and our place in it. PREREQ: Three credits literature or PERM/CHMN.
E 365 VICTORIAN POETRY (3-0-3)(S). Readings in Tennyson, Browning, Arnold, and others. Their poems are the sometimes sane, sometimes shocking results of trying to find and keep artistic and moral hope amidst vital but unhealthy times. PREREQ: Three credits literature or PERM/ CHMN.
E 366 VICTORIAN PROSE (3-0-3)(S). Great prose stylists, including Carlyle, Arnold, Newman, Ruskin, and Pater, bring insights to controversy over issues still with us. Their subjects range from industrialism to mysticism, their purposes from amusement to reformation. PREREQ: Three credits literature or PERM/ CHMN. Alternate years. Offered 1982/83.
E 369 BRITISH NOVEL: SCOTT THROUGH HARDY (3-0-3)(S). An investigation of the development of the English novel during the nineteenth century with particular attention to the impact of Victorian thought on the genre and to the emergence of the modern novel. Includes Scott, Dickens, Thackeray, the Brontes, Eliot, Meredith, and Hardy. PREREQ: Three credits of literature or PERM/CHMN.
E 377 AMERICAN RENAISSANCE (3-0-3)(F/S). A study in the second generation of the American literary experience when such leading writers as Hawthorne, Melville, Emerson, Thoreau, Poe and Whitman, acting under the varied impulses of Puritansim, Romanticism and idealism, created the first universal vision of human experience to appear in American literature. PREREQ: Three credits of literature or PERM/CHMN.

E 378 AMERICAN REALISM (3-0-3)(F/S). American literature from the Civil War to World War I. Mark Twain, Stephen Crane, Henry James, W.D. Howells, Kate Chopin, and fellow Realists wrote about the average person in the light of common day. Their novels show how American writers were increasingly influenced by science, business, and art. PREREQ: Three credits of literature or PERM/CHMN.

E 381 METHODS OF TEACHING SECONDARY SCHOOL ENGLISH (3-0-3)(f). Study of traditional and modern theories and methods of teaching composition, language and literature at the secondary level. PREREQ: Introduction to Language Studies LI 305.

E 384 LITERATURE OF THE AMERICAN WEST ( $3-0-3$ )(F/S). The literary merits of works by representative Western writers such as Wallace Stegner, Owen Wister, H.L. Davis, John Steinbeck, and Willa Cather. Also discussed are regional values and Western types such as the mountain man, the cowboy and the pioneer. PREREQ: Three credits of literature or PERM/CHMN.
E 385 MODERN BRITISH AND AMERICAN FICTION (3-0-3)(F/S). Designed to acquaint both nonmajors and majors with typical themes, subject matter, and stylistic innovations in British and American fiction since 1900. Reading includes selected novels and short stories by such authors as Cary, Ellison, Faulkner, Gardner, Golding, Hemingway, Joyce, Lawrence, O'Connor, Steinbeck, Welty, and others. PREREQ: Three credits in literature or PERM/CHMN.
E 389 MODERN BRITISH AND AMERICAN DRAMA (3-0-3)(F/S). An analysis of the various dynamic confrontation between 20th century audiences and actors arranged by dramatists as far apart in their times, themes, and techniques as Shaw and Stoppard, O'Neill, and Osborne, PREREQ: Three credits literature or PERM/CHMN.

E 390 FOLKLORE (3-0.3)(F/S). Study of what folklore is, its written and oral traditions, its different genres. PREREQ: E 102.

E 393 HISTORY OF LITERARY CRITICISM (3-0-3)(F). A survey of critical approaches to literature from Plato to the twentieth century. PREREQ: A literature survey or PERM/CHMN.

E 401 ADVANCED WRITING (3-0-3)(F/S). Writing for the student who wants advanced training in expressing ideas. The emphasis is on developing effective prose styles, taking into account varieties of technique and their appropriatness for a specific audience. Will not fulfill Area I requirement for graduation. PREREQ: E 102 or PERM/INST.

E 481 LITERATURE FOR USE IN JUNIOR AND SENIOR HIGH SCHOOLS (3-0-3)(F). A literary content course designed for prospective or experienced teachers of secondary school English. Primary emphasis is placed on critical reading of literature ordinarily used with adolescents in secondary schools. Secondary em-
phasis is placed on methods of critical analysis appropriate to secondary students. All genres will be discussed. Both classical and popular authors will be included. PREREQ: E 102, completion of two literature courses.
E 487G MODERN BRITISH AND AMERICAN POETRY (3-0-3)(F/S). A study of the radical changes Eliot, Pound, Yeats, and others made in poetry's traditional aesthetic and thematic concerns early in this century. The course traces poetry's continuing metamorphosis into the present day. PREREQ: Three credits literature or PERM/CHMN.

E 488G METHODS AND THEORIES OF LITERARY CRITICISM (3-0-3)(S). A detailed study and application of major critical methods and theories. PREREQ:E 393 or PERM/CHMN.
E 498 SENIOR SEMINAR (2-0-2)(S). Required of all senior English majors. PREREQ: Senior standing or PERM/CHMN.

## HU HUMANITIES

HU 207, 208 INTRODUCTION TO HUMANITIES (3-0-3)(FIS)(Area I). Man's intellectual and creative heritage as reflected in art, literature, philosophy, and architecture. PREREQ: E 102 or PERM/CHMN.

## LI LINGUISTICS

LI 305 INTRODUCTION TO LANGUAGE STUDIES (3-0-3)(F). A general survey of contemporary language study as it is carried on in the fields of linguistics, anthropology, semantics, psychology, and communication theory, with emphasis on sound, word, sentence formation in English. PREREQ: E 102 or PERM/CHMN.
LI 307 APPLIED ENGLISH LINGUISTICS (3-0-3)(S). Application of linguistic theory and concepts to the teaching of English grammar and composition. Analysis of specific problems of structure encountered in instruction. Examination of texts and materials, reports on pertinent articles in professional journals and demonstrations. For teachers or prospective teachers of secondary schools. PREREQ: LI 305 or PERM/CHMN.
LI 309 HISTORY OF THE ENGLISH LANGUAGE (3-0-3)(S). A study of the periods on the development of English; Indo-European and Germanic backgrounds; development of writing; internal and social forces of change; dialects of English. Concentrated work with written documents in English language history. PREREQ: LI 305 or PERM/CHMN.
LI 405 MODERN ENGLISH STRUCTURE (3-0-3)(F/S). An approach to modern English grammar based on linguistic principles; will cover word formation and sentence structure including transformational, structural, and newly developing theories of grammar. PREREQ: LI 305 or PERM/CHMN. Alternate years. Offered 1985/86.

LI 407 APPLIED LINGUISTICS IN TEACHING ENGLISH AS A SECOND LANGUAGE (3-0-3)(S). Designed to help teachers in the bilingual classroom or teachers of students of limited proficiency in speaking English to understand to deal with the process of learning English. It will focus on identifying, defining, and remedying the specific problems that confront learners of a second language. PREREQ: LI 305 Alternate years. Offered 1985/86.

## Department of Geology/ Geophysics

Mathematics-Geology Building, Room 104 Telephone (208) 385-1631
Chairman, Professor: Claude Spinosa; Professors: Hollenbaugh, Donaldson, Waag, Wilson; Associate Professors: Bentley, Pelton, White, Wood; Assistant Professor: Snyder.

## Degrees Offered

- BS, Geology
- BS, Geophysics
- BS, Earth Science Education, Secondary Education
- MS, Education, Earth Science emphasis: see Graduate section of this Catalog for program details.
- MS, Geology: cooperative program with Idaho State University; see Graduate section of this Catalog for program details.


## Special Information for Students

The Department of Geology and Geophysics provides five degree programs: 1) Bachelor of Science in Geology, 2) Bachelor of Science in Geophysics, 3) Bachelor of Science in Earth Science Education, 4) Master of Science in Education, Earth Science emphasis, and 5) Master of Science in Geology, offered in cooperation with the Geology Depart-
ment at Idaho State University. Nondegree course offerings in Geography meet the 15 credit requirement under the $30-15-15$ Social Sciences Secondary Education Degree Program offered in the Departments of Economics, History, Political Science, and Sociology, Anthropology and Criminal Justice Administration.

The curriculum leading to the BS degree in Geology is designed for those students who plan a career in Geology or who plan to attend graduate school. The curriculum leading to the BS degree in Earth Science Education is designed to prepare the student to teach Earth Science in secondary schools and to meet the teacher certification requirements of the State of Idaho. The curriculum has full national accreditation.
The program leading to the BS degree in Geophysics is designed for students who would like a career in Ceophysics or who plan to attend graduate school. The curriculum offers a broad background of courses in Geology, Mathematics, Chemistry and Physics to support the Geophysics courses.
The curriculum leading to the MS in Secondary Education, Earth Science emphasis, is designed to provide advanced academic training in the topics of Earth Science to those students pursuing a teaching career. The curriculum has full national accreditation.

For details regarding the Master of Science in Geology offered in cooperation with the Geology Department at Idaho State University, refer to the Graduate Programs section of this Catalog.
In addition to the courses formally offered in all degree programs, a student may acquire credit for independent study, internship, undergraduate or graduate thesis, or for participation in departmental research projects.
It is strongly recommended that high' school students who plan to enter the Geology, Geophysics, or Earth Science program include Chemistry, Physics, and as much Mathematics as possible in their high school program.

## Degree Requirements

GEOLOGY MAJORBachelor of Science Degree Requirements

1. General University and BS Degree Requirements. Note that Area III is fulfilled by the major requirements below. Recommended Core Courses:
Area I, Foreign Language (201 or higher) Area II, Economics, Geography
2. Major Requirements:
Geology and Geophysics . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 53
Physical Geology GO 101................ . . . . . . . . . . . . . . . . . . . . . . . 4
Historical Geology GO 103 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
Mineralogy GO 221 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Field Geology GO 280 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Igneous \& Metamorphic Petrology GO 323 . . . . . . . . . . . . . . . . 3
Igneous \& Metamorphic Petrography GO 324..................... 1
Sedimentation \& Stratigraphy GO 310 . . . . . . . . . . . . . . . . . . . . . . 4
Geomorphology GO 313 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Structural Geology GO 314 . ............................................ 4
Invertebrate Paleontology GO 351 . . . . . . . . . . . . . . . . . . . . . . . . 3
Geophysics GP 300 or GP 301 .................................... . . . . 3
Summer Field Camp GO 482 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
Summer Field Camp Report GO 483 . . . . . . . . . . . . . . . . . . . . . . . . 2
Senior Seminar GO 498 or 499 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1
Geology Electives . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 11
College Chemistry C 131, 132, 133, $134 \ldots \ldots . .$.
Physics
Option I: (Recommended for students planning graduate studies)
Physics I, II, and Lab PH 220, 221, 223
.7
Option II: General Physics PH 101-102 . . . . . . . . . . . . . . . . . . . . . . 8
Mathematics M 204-205* or M 211-212 . . . . . . . . . . . . . . . . . . . . 9-10
(Mathematics through M 206 is recommended for students plann-
ing graduate studies.)* CS 124 and M 225 or an acceptable STATISTICS course may be substituted for M 205.

## EARTH SCIENCE EDUCATION MAJOR

## Bachelor of Science Degree Requirements

15-18
## 1. General University and Baccalaureate Degree Requirements.

2. Major Requirements: Geology ..... 30
Physical Geology ..... 4
Historical Geology .....
Introduction to Ocean Ceology .....  .3
Meteorology ..... 3
Senior Seminar ..... 1
Geomorphology .....  3
Geology electives to total 30 credits ..... 18
College Chemistry .....  9
General Physics or General Biology .....  8
Mathematics through M-204 ..... 10
Astronomy ..... 4
Electives. ..... 6-8
Recommended electives: Geography, Communication, ForeignLanguage, Mathematics, Life Science, Field Geology, Mineralogy
3. Education Requirements The following are required for SecondaryTeaching Certification in Idaho:
Foundations of Education ..... 3
Educational Psychology. .....  .3
Secondary School Methods .....  3
Secondary Student Teaching ..... 8-16
Educating the Exceptional Secondary1
Student TE 333 Student TE $333 \ldots . . . . . . . . . . . . . . . . . . . . . . . . . ~$ ..... 3
Secondary School Science Methods TE 384 ..... 24-32

## GEOPHYSICS MAJOR

## Bachelor of Science Degree Requirements

1. General University and BS Degree Requirements NOTE: Area III is fulfilled by the major requirements below.
2. Major Requirements:

Geophysics21
Grav-Mag Methods (GP 310) ..... 3
Electrical Methods (GP 320) .....  3
Seismic Methods (GP 330). ..... 3
Geophysics Field Camp (GP 340) ..... 6
Exploration Well Logging (GP 410) ..... 3
Geophysical App. of Dig. Sig. Proc. (GP 420) ..... 3
Geology ..... 26
Physical Geology (GO 101) ..... 4 ..... 4
Historical Geology (GO 103).
Mineralogy (GO 221) ..... 3
Field Geology (GO 280) ..... 3
Igneous and Metamorphic Petrology (GO 323) .....  3
Igneous and Metamorphic Petrography (CO 324). ..... 1
Sedimentation and Stratigraphy (GO 310) ..... $\therefore 4$
Structural Ceology (GO 314) ..... 4
Chemistry ..... 7
College Chemistry I (C 131) ..... 3
College Chemistry Lab (C 132) ..... 1
College Chemistry II (C 133) ..... 3
(C 134 not required)
14
14
Physics .....  3
Physics I-Mechanics (PH 220) .....
Physics II-Waves \& Heat (PH 221) .....  3
Physics II-Lab (PH 223) ..... 1
Physics III-Elec and Mag (PH 222) ..... 3
Physics III-Lab (PH 224) ..... 1
Electricity and Magnetism (PH 381) ..... 3
Mathematics ..... 24
Digital Computer Programming (CS 124 or EN 104) ..... 2
Calculus \& Analytic Geometry I(M 204). .....  .5
Calculus \& Analytic Ceometry II (M 205) ..... 4
Calculus \& Analytic Ceometry III (M.206)
2
Vector Calculus (M 320)
Differential Equations (M 331) .....  3
Lin Sys and Sig Proc (CS 426) ..... 4
Electives* ..... 9* Recommended electives usually include 3 courses tailored to an individual student'sneeds. See an advisor for assistance.
Recommended Programs
GEOLOGY MAJOR
FRESHMAN YEAR ..... 1st 2nd
College Chemistry C 131, 132, 133, 134 ..... SEM
English Composition E 101, and 102 ..... 3
Historical Geology GO 103 ..... 4
Algebra and Trigonometry M 111 ..... 5
SOPHOMORE YEAR
Cartography GG 220 or alternate ..... 3
Ig. \& Met. Petrology GO 323 ..... 3
Ig. \& Met. Petrography GO 324 ..... 1
Physics PH 220 and PH 221, PH 223 ..... 3
Calculus \& Analytic Geometry M 205 or alternate
Area I \& II Electives. ..... 4 ..... 6
JUNIOR YEAR
Structural Geology GO 314 ..... 4
Sedimentation \& Stratigraphy GO 310 ..... - 4
Geomorphology GO 313. ..... or 3
Electives Area I \& II
Upper Division Geology \& Geophysics Electives ..... 3-6 ..... 15-18 $\quad 17-20$
SUMMER OF JUNIOR YEARSummer Field Camp GO 482-4836
SENIOR YEAR
Senior Seminar GO 498 or 499 ..... 1
Upper Division Geology \& Geophysics Electives ..... 4
Area I and II Electives ..... 3
Free Electives at least 3 cr of upper division ..... 6
Invertebrate Paleontology GO 351 ..... 14
EARTH SCIENCE EDUCATION MAJOR
FRESHMAN YEAR
English Composition ..... SEM2nd
Physical Geology3
Historical Geology ..... 4
Mathematics ..... 5
College Chemistry ..... 5
SOPHOMORE YEAR
Foundations of Education. ..... $\because 3$
Geography ..... 3
General Physics or General Biology ..... or 4
Intro to Ocean Geology ..... 3
Meteorology ..... 4
General Psychology ..... 3
Degree Requirements ..... 6
Astronomy ..... 4
JUNIOR YEAR
Upper Division Geology. ..... 4.
Degree Requirements. ..... 3
Upper Division Electives. ..... 6
Geomorphology ..... 3Educational Psychology1716
SENIOR YEAR3
Upper Division Geology ..... 6
Seminar. ..... 1
Secondary School Methods
8-16
Student Teaching
Education Requirements ..... 3
Education Requirements ..... 6
Education Requirements ..... 2
13-21
GEOPHYSICS MAJOR ..... 2nd
FRESHMAN YEAR
FRESHMAN YEAR SEM
English Composition E 101-E 1023
Physical Geology GO 101
4
Historical Geology GO 103 ..... 4
College Chemistry I C 131 ..... 3
College Chemistry Lab C 132
1
1
College Chemistry II C 133 ..... 3
Calculus: \& Anal.' Geometry M 2043
5
Digital Computer Programming EN 104 or CS 124 ..... 2
Area I: ..... 3
Elective ..... 3
17
SOPHOMORE YEAR
Mineralogy CO 221
Field Geology GO 280 ..... 3 ..... 3
Calculus \& Anal. Geometry II M 205.
Physics I-Mechanics PH 220 ..... 3
Igneous \& Met. Petrology GO 323 .....  3
Igneous \& Met. Petrography GO 324 ..... 1
Calculus \& Anal. Geometry III M 206 ..... 4
Physics II-Waves \& Heat PH 221 ..... 3.
Physics II Lab PH 223 ..... 1
Area I \& II ..... 3
JUNIOR YEAR
Differential Equations M 331. ..... 315
Physics III—Elec \& Mag PH 222
Physics III Lab PH 224.3
Grav-Mag Methods GP 310 ..... 3
Sed \& Strat CO 310 ..... 4
Striuctural Geology GO 314 ..... 4
Vector Calculus M 320
2
2
Electrical Methods GP 320
3
3
Seismic Methods GP330 ..... 3
Area II ..... 3
Elective ..... 3
16SUMMER OF JUNIOR YEAR:
Geophysics Field Camp GP 340 ..... 6
SENIOR YEAR
Linear Systems \& Signal Proc CS 426 ..... 4
Elec \& Mag (advanced) PH 381 ..... 3
Exploration Well Logging GP 410 ..... 3
$\times$
Geophys App of Dig Sig Proces GP 420. ..... 3
Area I \& II ..... 6
Elective

## Course Offerings <br> GO GEOLOGY

## Lower Division

GO 100 FUNDAMENTALS OF GEOLOGY (3-2-4)(Area III) (Field trip required). An introduction to the principles of Physical and Historical Geology. Topics include weathering, erosion, glaciation, volcanism, earthquakes, rocks, minerals, maps, the origin of the earth and its physical and biological development. Open to all students except those with previous credit in Geology, or

Earth Science majors, and those nonscience majors who plan an eight hour sequence in Geology.
GO 101 PHYSICAL GEOLOGY (3-2-4)(Area III) (Field trip required). A study of the origin and development of the earth, its materials and processes. Topics include weathering, erosion, volcanism, earthquakes, landscapes and plate tectonics. Rocks, minerals and topographic and geologic maps are studied in the laboratory.
GO 103 HISTORICAL GEOLOGY (3-3-4)(Area III) (Field trip required). A study of the origin and progressive development of the earth and evolution of plants and animals. The geologic history of the earth is treated in considerable detail. Prehistoric life and fossil study as well as field trips to fossil beds are included in the laboratory work. PREREQ: GO 101.
GO 105 ROCKS AND MINERALS (2-3-3)(F/S). A systematic study of rocks and minerals, with emphasis on physical characteristics and methods of identification. Field trips and laboratory sessions are part of the course for those taking the class for credit. PREREQ: High school chemistry or PERM/INST.
GO 111 GEOLOGY OF IDAHO AND THE PACIFIC NORTHWEST (3-0-3)(Field trip required). A study of the geologic setting and history of Idaho and its immediate surroundings. Includes major topographic and scenic features, structural and stratigraphic features, mineral deposits, tossil and gem areas and current problems in natural resource products. PREREQ: GO 103 or PERM/INST.
CO 201 INTRODUCTION TO OCEAN GEOLOGY (3-0-3)(F/S). A general study of the physiography, the structures, and the sediments of the ocean floors and the geologic processes and environments represented thereby. Methods and instruments of ocean floor investigation are also studied. PREREQ: GO 103
GO 213 INTRODUCTION TO METEOROLOGY (3-0-3)(F). A study of the weather phenomena in terms of origin, distribution, and classification. Instruments and research methods are also investigated. PREREQ: GO 101.

GO 221 MINERALOGY (2-3-3)(F). A study of the chemical and physical properties of minerals and their relationships to geologic environments. The laboratory work includes the study of crystal models as well as hand hand specimens of about 100 important minerals. PREREQ: GO 101. COREQ: C 131.
GO 232 OPTICAL MINERALOGY (1-3-2)(F). The theory and application of the polarizing microscope to the examination of minerals in immersion media and primarily in thin sections. The study of crystal optics and the use of the petrographic microscope for the identification and quantitative examination of minerals. COREQ: GO 221.

GO 250 PRINCIPLES OF PALEONTOLOGY ( $\mathbf{( 2 - 3 - 3 ) ( F / S ) . ~ O v e r v i e w ~ o f ~ p a l e o n - ~}$ tology for nongeology majors. Evolution, taxonomy and descriptio of impor tant fossil groups stressed. Laboratories to study small collections and sim ple museum methods. Term paper or project.
GO 280 FIELD GEOLOGY (1-6-3)(F) (Field trip required). Techniques of field mapping to solve geologic problems. Field exercises will use topographic maps, steropair air photos, Brunton compass, and plane-table alidade for map ping. A detailed geologic map and written geologic report will be made, interpreting one area of moderate complexity and regional significance. Two weekend field trips required. Required field work on Friday afternoons PREREQ: GO 101, 103, E 102. COREQ: M 111.

## Upper Division

GO 310 SEDIMENTATION AND STRATIGRAPHY (3-1-4)(S). The study of sedimentary rocks, their classification, processes involved in their genesis, and chronology of deposition. Subjects covered include: Weathering and erosion, transportation, diagenesis, depositional facies and environments, and correlation techniques. PREREQ: GO 103, CO 323.
GO 313 GEOMORPHOLOGY (2-3-3)(F) (Field trips required). A study of the ex́ternal physiographic features of the earth's surface such as mountains, valleys, beaches, and rivers and the process by which they are formed and changed. Laboratory work consists of map studies and field investigations. PREREQ: GO 103, E 102.

GO 314 STRUCTURAL GEOLOGY (3-3-4)(S) (Field trips required). Fundamentals of descriptive, kinematic and dynamic analysis of structures within the Earth's crust, and a theoretical treatment of stress and strain. Laboratory problems in orthographic and stereographic methods, and solution of structural problems using geologic maps and cross-sections. PREREQ: M 111, GO 101, 221, 280
GO 323 IGNEOUS AND METAMORPHIC PETROLOGY (2-3-3)(S). A study of igneous and metamorphic rocks with emphasis on the physical and chemical constraints on their origin, occurrences and associations. The classification chemes of these rocks and their tectonic affiliations. PREREQ: CO 221, GO 232, COREQ: GO 324.
GO 324 IGNEOUS AND METAMORPHIC PETROGRAPHY (0-3-1)(S). The study of igneous and metamorphic rocks in thin section by means of the polarizing microscope. A systematic survey of the classes of igneous an metamorphic
rocks and study of their origin and histories through examination of their mineraology, textures, fabrics, and alteration. PREREQ: GO 232 CoreQ: CO 323.

GO 351 INVERTEBRATE PALEONTOLOGY (2-3-3)(F) (Field trips required). The study of the invertebrate phyla represented in the fossil record. Special emphasis is placed on hardpart morphology, ontogeny, phylogeny and taxonomy of the geologically more important groups. Laboratory work based on standard collections. Special project, field trips. PREREQ: GO 103.

GO 403G ENGINEERING GEOLOGY (2-3-3)(S) (Field trip required). Introduction to soil and rock mechanics. Slope stability analysis. Surface and subsurface exploration of sites. Geological and geophysical considerations for construction projects. Current applications of geology to engineering projects. Alternate years. PRERQ: GO 280, PH 102 or PH 220, GO 323 or PERM/INST.

GO 412G HYDROGEOLOGY (3-0-3)(S)(Field trip required). The stưdy of subsurface water, encompassing the interrelationships of geologic material's and processes. Emphasis upon the role of groundwater in the hydrologic cycle, flow through methods of determination of aquifer characteristics and performance, and groundwater modeling. PREREQ: GO 310, 314.

GO 421 . ORE DEPOSITS (2-3-3)(F) (Field trips required). Genesis, structure, associations and classification of mineral deposits. Discussion of. modern theories of ore deposition, origin, and migration of ore-bearing fluids, and the processes of alteration, and secondary enrichment, controls of ore occurrence and the economics of exploration, development, and use of ores. Laboratory work consists of detailed studies of ore and alteration suites. Transmitted and reflected-light microscopy will be used to supplement handspecimen study.

GO 422 EXPLORATION AND MINING GEOLOGY (3-0-3)(S). The course emphasizes geologic, engineering, and economic factors as they relate to exploring for and developing mineral deposits. The philosophy and methodology of systematically gathering, evaluating, and presenting data pertinent to exploration and development discussions are also studied. Field trips required.
GO 431 PETROLEUM GEOLOGY (2-3-3)(S) (Field trips)(Odd years). A study of the nature and origin of petroleum, the geologic conditions that determine its migration, accumulation and distribution, and methods and techniques for prospecting and developing petroleum fields. PREREQ: GO 311, 314.
GO 460g VOLCANOLOGY (2-0-2)(F)(Field trip)(odd years). A study of volcanic processes and the deposits of volcanic eruptions. An in-depth review of the generation, rise and eruption of magmas and of the types of volcanic vents and vent structures produced. Field and petrographic characteristics of various types of volcanic deposits as well as their volcano-tectonic relationships will be emphasized. An independent project pertaining to volcanoes or volcanic rocks will be required of all students taking the course for graduate credit. PREREQ: GO 323.

GO 471G REGIONAL FIELD STUDY ( 1,2, or $\mathbf{3} \mathbf{c r})(F / \mathrm{S} / \mathrm{SU})$. Field trips and field exercises to study geology of classic localities in North America. Review of pertinent literature and maps, recording of geologic observations and the preparation of a comprehensive report on the geology of the areas visited. PREREQ: GO 103 or PERM/INST.

GO 482 GEOLOGY SUMMER FIELD CAMP (0-0-4)(SU). The study of geology in its natural environment, the field. Emphasis is upon geologic mapping, the collection, plotting and analysis of data to solve geologic field problems, mapping on aerial photograph and topographic base. Student should expect to be in the field $8-10$ hours per day, 6 days per. week for 4 weeks. Students working toward a professional degree in geology (Bachelor of Science) at BSU must take. COREQ: GO 483.
GO 483 GEOLOGY SUMMER FIELD CAMP REPORT (0-0-2)(SU). A comprehensive geologic report, map and cross-section based upon mapping experiences at summer field camp. Map, report and cross-section must be of professional quality. COREQ: GO 482

GO 493 SENIOR THESIS ( $4-6$ credits). Field study involving an original investigation in geology or geophysics, carried out independently, but supervised by one or more faculty members. Problem must be well-stated and method of study designed to give a conclusive result. Project may be substituted for GO 480 upon approval by a committee of three department faculty members of a written proposal. PREREQ: Senior Standing.
GO 498, 499, GEOLOGY SEMINAR (1-0-1). Research project based on field and/or literature studies. Fundamentals of geologic report preparation and oral presentations. PREREQ: Geology major or Earth Science Education major.

## GG GEOGRAPHY

## Lower Division

GG 101 INTRODUCTION TO GEOGRAPHY (3-0-3)(F/S)(Area II). A comprehensive survey of various environments of man in a study of regional and world patterns. Basic concepts and techniques used in geography and the utilization of natural resources are introduced.

GG 102 CULTURAL GEOGRAPHY (3-0-3)(F/S) (Area II). A study of the distribution and character of man's cultural activities throughout the world with analysis on man-land relationships.
GG 201 THE ÚSE AND INTERPRETATION OF MAPS (3-0-3)(F/S). An intensive use and interpretation of a wide spectrum of map types, their advantages and limitations for students of various fields, such as Archaeology, History, Geology and Teaching.
GG 220 CARTOGRAPHY (1-6-3)(F/S). A study of the methods, concepts, techniques and instrumentation of map construction. Involves compilation and graphic presentation of data through the use of coordinate systems, map projections and scale. Lettering tools, graphic design, dimensional problems, computer mapping, and aerial photographs are discussed.
GG 221 GEOGRAPHY OF IDAHO AND THE PACIFIC NORTHWEST (3-0-3)(F/S). Physical and cultural geography of the Pacific Northwest with emphasis on Idaho. Study includes the continuing physical; biological, social, political, and economic changes and the role of the region in relationship to the United States. Current problems and problem solving in accordance with the known resource base.
GG 231 GEOGRAPHY OF CANÁDA AND LATIN AMERICA (3-0-3)(F/S). A study of the natural and cultural geographies of Canada and Latin America with emphasis on the resources, environments, peoples and potential of each region. PREREQ: GG 101, PERM/INST.

GG 241 GEOGRAPHY OF AFRICA AND THE FAR EAST (3-0-3)(F/S). The physical and cultural geography of Africa and the. Far East with emphasis on the relationships and changes within the regions. Topics include the various landscapes, flora and fauna, peoples and problems. PREREQ: GG 101, PERM/INST.

## Upper Division

GG 301 HISTORICAL GEOGRAPHY OF THE UNITED STATES (3-0-3)(F/S). The course explores the changing physical and cultural landscapes of the United States through time and space and analysis of the various regions. Included is the study of the distribution and relationships between peoples, land and resources. PREREQ: GG 102 PERM/INST.
GG 311 WORLD ECONOMIC GEOGRAPHY (3-0-3)(F/S). A real distribution and variation of resources and human activity related to producing, exchanging and consuming commodities. Economic activities are studied in the context of where they occur, their regional characteristics and their relationship to national or international phenomena. PREREQ: GG 101, or PERM/INST.
GG 321 CONSERVATION OF NATURAL RESOURCES (3-0-3)(F/S). Informative study of resources, their use and relative values. Discussions will include perception, attitudes, character of resources, demand factors, social implications, and population characteristics. Local and regional exámples are emphasized. Local experts on conservation issues will serve as guest speakers. PREREQ: GG 101 or PERM/INST.

GG 331 CLIMATOLOGY (3-0-3)(F/S). Atmospheric processes, global heat and moisture balance, radiation budget and world climate zones. Applied climatological concepts, evaporation, soil water conditions, regional and global climatic trends, climate change, and climate modification. PREREQ: GO 101 or GG 101.

## GP GEOPHYSICS

## Upper Division

GP 300 PHYSICS OF THE EARTH (3-0-3)(F). The course will include a discuission of the earth's gravity, magnetism, electricity, seismicity, heat and radioactivity and the significance of these properties in understanding the complexities of the earth. Alternate years. PREREQ: PH 102.

GP 301 INTRODUCTION TO APPLIED GEOPHYSICS (3-0-3)(F). A survey of surface based geophysics methods, including elementary theory, basic field practice, computation fundamentals, interpretation techniques and economic considerations of seismic, gravimetric, magnetic, and electrical techniques. Applicability of various techniques to exploration geology (economic and petroleum), engineering geology and groundwater geology will be stressed. Alternate years. PREREQ: PH 102, GO 101.
GP $\mathbf{3 1 0 g}$ GRAVIMETRIC AND MAGNETIC METHODS (3-0-3)(F). Basic potential field theory, instrumentation, reduction of observed data, methods of data interpretation. Applications to petroleum and mineral exploration; geotechnical and engineering investigations. PREREQ: GO 101; must be concurrently taking or have taken PH 222, PH 224.
GP 320 g ELECTRICAL METHODS (3-0-3)(S). Electrical properties of earth materials. Fundamentals of instrumentation, data collection, reduction, and interpretation. Application to resource exploration and other geophysical problems. PREREQ: GO 101, PH 222, PH 224.

GP 330 g SEISMIC METHODS $(3-0-3)(S)$. Fundamentals of seismic wave propagation in an elastic medium. Reflection and refraction at plane boundaries; energy and attenuation considerations. Instrumentation, data collection, reduction, and interpretation. Application to exploration and other in-situ investigations. PREREQ: GO 101, PH 222, PH 224.

GP 340g GEOPHYSICS FIELD CAMP (4 wks-6 cr)(SU). Fundamentals of geologic mapping. Hands-on operation of seismic, magnetic, gravimetric and electrical field instrumentation. Survey design. Reduction and interpretation of acquired data. Preparation of appropriate reports. PREREQ: GP 310, 320,330.

GP 410G EXPLORATION WELL LOGGING (2-3-3)(F). Fundamentals of geophysical and geological well logging applied to petroleum, groundwater, and engineeringsite exploration. Exercises in conventional interpretation of logs in sedimentary sections, and special considerations of logs in igneous and metamorphic rocks and fresh-water bearing sections. Integration of well logging, seismic reflection data, and surface geology.. PREREQ or CoreQ: GO 310.
GP 420G GEOPHYSICAL APPLICATIONS OF DIGITAL SIGNAL PRÓCESSING (3-0-3)(S). Digital processing of geophysical data including stacking, filtering, deconvolution, migration, synthetic seismograms, two-dimensional operations. PREREQ: CS 426.

GP 430G MATHEMATICAL MODELING IN GEOPHYSICS (3-0-3)(S). Introduction to useful mathematical techniques in geophysics. Examples include: Talwani modeling, statistical evaluation of aeromagnetic anomalies, and finite-element and finite-difference techniques applied to seismic wave propogation. PREREQ: M 331, M 301, M 406, CS 426.

## GS GENERAL SCIENCE

GS 305 TEACHING SCIENCE IN THE SECONDARY SCHOOL (3-0-3)(S)(alternate years). A course designed to introduce the prospective secondary school science teacher to an understanding of the nature of science-both as subject matter and as processes of scientific inquiry:-Special emphasis is placed on problems of communicating scientific ideas, effective modes of instruction and evaluation, and curricular materials for secondary school science teaching.

## Department of Mathematics

Science Building, Room 202
Telephone (208) 385-1172
Chairman and Professor: Charles R. Kerr; Associate Chairman and Associate Professor: Masao M. Sugiyama; Professors: Anderson, Ball, Eastman, Hughes, Juola, Lamet, Maloof, Mech, Sulanke, Takeda, Ward, Young; Associate Professors: Ferguson, Griffin, Hausrath, Kenny; Assistant Professors: Ayers, Grantham, Porter.

## Degrees Offered

- BA and BS in Mathematics
- BA and BS in Mathematics, Secondary Education
- MA and MS in Education, Mathematics emphasis: see the Graduate section of this Catalog for program description.


## Department Statement

The Department of Mathematics provides two Bachelor's Degree programs and a Master's Degree program. The curriculum leading to the Bachelor's Degree in Mathematics is designed for those students interested in

Pure or Applied Mathematics;
Statistics;
Computer Science; or
Operations Research.
The curriculum in secondary education is designed to prepare the student to teach mathematics in secondary schools and to meet idaho teacher certification requirements. The Master's Degree Program is to provide advanced education for junior and senior high school mathematics teachers.

## Degree Requirements

## MATHEMATICS MAIOR

 Bachelor of Arts or Bachelor of Science Degree1. University Requirements for BA or BS Degree.
2. Mathematics Requirements: Lower Division
a. M 204, M 205, and M 206 or M 211 and M 212 Calculus
b. CS 127
3. Upper Division Mathematics- 27 credits including:
a. M 301 Linear Algebra
b. One or more selections in at least 4 of the 5 following groups: 1) M 302 Introduction to Abstract Algebra
2) M 314 Foundations of Analysis
3) M 361 Fundamentals of Statistics or both M 431 and M 432 Probability and Statistics
4) M 306 Number Theory, M 356 Discrete Mathematical Structures, M 441 Abstract Algebra, or M 456 Linear Programming
5) M 406. Theory of Functions of a Complex Variable, M 340 Numerical Analysis, M 331 Differential Equations, M 401 Advanced Calculus, or M 411 Introduction to Topology
c. One of the following sequences:
6) CS 354 Programming Languages, CS 358 Data Structures, CS 451 Systems Programming
7) M 401-402 Advanced Calculus
8) M 421 Fourier Series and Boundary Value Problems and M 456 Linear Programming
9) M 431-432 Probability and Statistics
10) M 441-442 Abstract Algebra
d. And a 400 -level course (numbered below M/CS 490) in addition to those in the sequence selected.
All upper division mathematics courses numbered below M/CS 490 count toward the requirement of 27 upper division mathematics credits. No more than 4 credits of the combined total of credits earned for courses numbered M/CS 490 through M/CS 499 can be used toward the 27 credits of upper division mathematics requirements.

## MATHEMATICS, SECONDARY EDUCATION MAJOR Bachelor of Science or Bachelor of Arts Degree

1. University Requirements for BS or BA Degree
2. Mathematics Requirements:
a. Computers: CS 122 or 124
b. Calculus through M 206 or M 212
c. Linear Algebra: M 301
d. At least one of - Intro. to Abstract Algebra M 302

- Number Theory M 306
e. Foundations of Geometry M 311
f. Foundations of Analysis M 314
g. Statistics M 361 or both M 431-432
h. Mathematical Modeling M 464
i. Mathematics in Secondary Schools M 490
j. Either 45 semester hours of Mathematics or an approved area of emphasis outside of Mathematics.
NOTE:For those students planning to teach junior high school mathematics, M 103 is strongly recommended.

3. Education Requirements- $\mathbf{2 4 - 3 2}$ credits. See "Certification Requirements and Endorsements for Secondary Education", in the section for the Department of Teacher Education.

## Suggested Programs

## MATHEMATICS MAJOR

## FRESHMAN YEAR

Calculus M 204-205 or M 211-212
English Composition E 101-102 or E 111-112
Pascal Programming CS 125
Introduction to Computer Science CS 127
Area I and Area II core requirements
Area III Core Requirements
College Chemistry C 131-134
Physics I-Mechanics PH 220

## SOPHOMORE YEAR

Calculus M 206
Linear Algebra M 301
Differential Equations M 331
Intro to Abstract Algebra M 302
Area I and Area II core requirements
Suggested electives:
Economics EC 201-202
Physics II-Wave Motion and Heat PH 221-223
Physics III-Electricity and Magnetism PH 222-224

## JUNIOR YEAR

Foundations of Analysis M 314
Discrete Math Structures M 356 or Number Theory M 306
Linear Programming M 456
Statistics M 431-432
Area I and Area II core requirements

## SENIOR Year

Advanced Calculus M 401-402
Abstract Algebra M 441-442
Senior Seminar M498
Area I and Area II core requirements

> MATHEMATICS MAJOR
> Emphasizing Computer Science

## FRESHMAN YEAR

English Composition E 101-102 or E 111-112
Calculus M 204-205 or M 211-212
Pascal Programming CS 125
Intro. to Computer Science CS 127
Area I and Area II core requirement.
Suggested electives:
Speech CM 111
Logic PY 121
College Chemistry C 131-134
Physics I-Mechanics PH 220

## SOPHOMORE YEAR

Calculus M 206
Assembler Programming CS 226
Linear Algebra M 301
Area I and Area II core requirement.
Suggested electives:
Applied Programming PH 225
COBOL I IS 360
Differential Equations M 331
Economics EC 201-202
Physics II-Wave Motion and Heat PH 221-223

## JUNIOR YEAR

Data Structures CS 358
Programming Languages CS 354
Discrete Structures M 356
Numerical Analysis M 340
Area I and Area II core requirement.
Suggested electives:
Introduction to Abstract Algebra M 302
Foundations of Analysis M 314
Physics III-Electricity and Magnetism PH 222-224
Technical Writing E 202
SENIOR YEAR
Systems Programming CS 451
Mathematical Statistics M 431-432
Mathematical Modeling M 464
Linear Programming M 456
Area I and Area II core requirement.
Suggested electives:
Internship
Finance FI 303
DataBase Applications IS 405
Systems Analysis and Design IS 420
Software Design IS 430

## MATHEMATICS, SECONDARY EDUCATION

In order for students to complete the requirements for the Secondary Education Degree, careful course scheduling and ordering are necessary. The following suggested program reflects these considerations.

|  | 1st | 2nd |
| :---: | :---: | :---: |
| FRESHMAN YEAR | SEM | SEM |
| English Composition E 101-102 or E 111-112 | 3 | 3 |
| Calculus M 204, 205 or 211, 212 | 5 | 4.5 |
| Programming CS 122 or 124 | 2 |  |
| Electives | 6 | $9-8$ |

SOPHOMORE YEAR
Calculus M 206 ..... 0-4
General Psychology P 101
3
3
Foundations of Education TE 201
Electives ..... 9-13- 3
JUNIOR YEAR
Foundations of Analysis M 314 ..... 3
Algebra M 302 or Number Theory M 306 ..... 3
Statistics M 361 or 431, 432.4-3
Educational Psychology P 325 ..... 3
Electives7-8 5-8
Secondary School Methods TE 381
Teaching Reading in Content Subjects TE 307 ..... 3
SENIOR YEAR
Foundations of Geometry M 311 ..... 3
Mathematics in Secondary School M 490 ..... 3
Secondary Student Teaching-
Electives. ..... 11
Mathematical Modeling M 4643

## Course Offerings

## cs COMPUTER SCIENCE

## Lower Division

CS 109 INTRODUCTION TO COMPUTERS (3-1-4). The potential and limitations of computers, and their impact on society. The course includes an introduction to computer hardware and programming. Designed for non-science majors. PREREQ: Satisfactory score on placement exam.
CS 122 A FIRST COURSE IN PROGRAMMING (2-0-2). Programming using a conversational language such as BASIC with a small computer. PREREQ: Satisfactory score on algebra placement exam.
CS 124 DIGITAL COMPUTER PROGRAMMING (2-0-2). Beginning FORTRAN. See EN 104. Credit cannot be obtained for both CS 124 and EN 104.
CS 125 PASCAL PROGRAMMING (3-0-3). An introduction to the Pascal programming language: structured programming, logical control, procedures and functions, data types, //O and files. PREREQ: M 111 or M 106 or PERM/INST.

CS 127 INTRODUCTION TO COMPUTER SCIENCE (4-0-4). Concepts of assembly language programming; number systems and data representation; algorithms; procedures and subroutines; files; recursion; elementary data' structures; séarching and sorting; floating point errors; good programming practice; structured design, testing and verification. PREREQ: CS 125 or PERM/INST.
CS 226 ASSEMBLER LANGUAGE (4-0-4). Assembler language programming for the IBM 370. Data representation, the machine instructions, looping, address modification, handsome output, program sectioning and linking, mačros. PREREQ: CS 126 or PERM/INST.

## Upper Division

CS 354 PROGRAMMING LANGUAGES (4-0-4). A survey of current languages (such as FORTRAN, COBOL, PU1, SNOBOL, LISP, APL), their programming and design. Syntax and semantics. Information binding, strings, arithmetic, input/output. Recursion, multiprocessing, extensibility. PREREQ: CS 226 or PERM/INST.
CS 358 DATA STRUCTURES (4-0-4). The representation of data, lists, stacks, queues, storage mapping, tree structures, hierarchic data structures, recursion, searching and sorting, codes, data structures in programming languages. PREREQ: CS 226 or PERMINST.
CS 426 LINEAR SYSTEMS AND SIGNAL PROCESSING (4-0-4)(F). Introduction to linear systems and Fourier analysis of continuous and discrete signals. Examples of applications will be drawn from the physical, biological, and social sciences. PREREQ: M 331 and a knowledge of Fortran, BASIC, or Pascal or PERM/INST.
CS 451 SYSTEMS PROGRAMMING (4-0-4). Machine language programming, compiled languages, program optimization, computer logic and design. PREREQ: CS 226.

## M MATHEMATICS

## Lower Division

M 012 ARITHMETIC REVIEW, (2-0-0)(F/S). A review course for those who have forgotten how to add, subtract, multiply, and divide using whole numbers, fractions, decimals, percents and signed numbers. Applications include measures of weight, area, and volume.

M 020 ALGEBRA REVIEW (3-0-0). A refresher course for students in education, engineering; science, or business. Algebra is covered from fundamental operations through the level required for M 103, 105, 106, 108 or CS 122. PREREQ; Satisfactory score on arithmetic placement exam.
M 100 MATHEMATICS FOR LIBERAL ARTS STUDENTS (4-0-4)(Area III). Designed for liberal arts students. Emphasis is on the nature of mathematical knowledge, for liberal arts students. Emphasis is on the nature of mathematical knowledge,
its meaning, methodology, and use. Generally topics will be selected from the elementary materials in set theory, logic, number theory, algebra, geometry, probability, statistics, graph theory. PREREQ: A year of high school mathematics or satisfactory score on placement exam.

M 103-104 ELEMENTARY MATHEMATICS FOR TEACHERS (3-2-4). Fundemental concepts of mathematics including the study of the development of the number systems from the whole numbers through the reals, place value, arithmetic operations, real number postulates, algorithms, algebraic and geometric principles, measurement, graphing and introductory probability. PREREQ: High school algebra and geometry and satisfactory score on the algebra placement exam.
M 105 MATHEMATICS FOR BUSINESS DECISIONS (4-0-4)(Area III). Matrices, systems of linear equations, graphing, linear programming, discrete probability. PREREQ: Satisfactory score on algebra placement exam.
M 106 MATHEMATICS FOR BUSINESS DECISIONS (4-0-4)(Area III). Limits, derivatives, curve sketching, partial derivatives, optimization problems, and integrals. PREREQ: M 105, 108 or 111.
M 108 INTERMEDIATE ALGEBRA (4-0-4). Intermediate algebra with plane trigonometry. PREREQ: Satisfactory score on placement exam.
M 111 ALGEBRA AND TRIGONOMETRY (5-0-5)(Area III). Selected topics in college algebra and trigonometry. The course will prepare the student for calculus. PREREQ: Satisfactory score on placement exam.

M 120 APPLIED STATISTICS WITH THE COMPUTER (4-0-4)(S). Pre-calculus treatment of probability and statistics. Emphasis on concepts and applications rather than on proofs. Use of available computer statistics packages to handie computations. PREREQ: M108 or M 111.
M 204 CALCULUS AND ANALYTIC GEOMETRY (5-0-5)(Area III). Plane analytic geometry, functions, limits and continuity. The derivative and applications. The integral and applications. Conic sections and translation of axes. PREREQ: Satisfactory score on placement exam.
M 205 CALCULUS AND ANALYTIC GEOMETRY (4-0-4)(Area III). Calculus of exponential, logarithmic and trigonometric functions. Techniques of integration. Conic sections and rotation of axes. Indeterminate forms, Taylor's Formula and infinite series. PREREQ: M 204.
M 206 CALCULUS AND ANALYTIC GEOMETRY (4-0-4)(Area III). Three-dimensional analytic geometry and introduction to vector algebra and calculus of vector valued functions. Partial differentiation and multiple integration. PREREQ: M 205.

M 211 ACCELERATED CALCULUS (5-0-5)(F) (Area III). Analytic geometry, functions, limits. Differentiation and integration with applications, transcendental functions, methods of integration. M 211-212 is an accelerated version of the three semester sequence M 204-205-206. The student must have a strong high school background or have completed either M 106 or 111 with a grade of A.
M 212 ACCELERATED CALCULUS (5-0-5)(S) (Area III). Solid analytic geometry, vectors and vector functions, partial derivatives, multiple integration, series, introduction to differential equations. PREREQ: M 211.
M 225 INTERMEDIATE APPLIED PROGRAMMING (2-0-2). Intermediate FORTRAN. See PH 225. Credit cannot be obtained for both PH 225 and M 225.

## Upper Division

M 301 LINEAR ALGEBRA (4-0-4). Matrix algebra, determinants, vector spaces and linear transformations. PREREQ: M 206 or 212.
M 302 INTRODUCTION TO ABSTRACT ALGEBRA (3-0-3). Sets, groups, integral domains, rings, and fields. PREREQ: M 206 or 212.
M 306 NUMBER THEORY (3-0-3). Primes, congruences, Diophantine equations, residues, quadratic reciprocity, and continued fractions. PREREQ: M 205 or 212.
M 311 FOUNDATIONS OF GEOMETRY (3-0-3). Euclidean, non-euclidean, and projective geometries from an axiomatic point of view. PREREQ: M 205 or 212.
M 312 COMBINATORIAL GEOMETRY (3-0-3). Study of curves and surfaces in Euclidean spaces, maps, networks, topological equivalence of figures, topological spaces, and metric spaces. PREREQ: M 205 or 212. Odd-numbered years.
M 314 FOUNDATIONS OF ANALYSIS (3-0-3). Logic, axiomatics, sequences, foundations of calculus, structure of the real numbers. PREREQ: M 206 or 212.
M 320 VECTOR CALCULUS (2-0-2). Vector valued functions of one or several variables, line and surface integrals, Green's Theorem, Stokes's Theorem, and the Divergence Theorem. PREREQ: M 206 or 212.

M 331 DIFFERENTIAL EQUATIONS (3-0-3). Theory of ordinary differential equad tions with applications to physical sciences and engineering. PREREQ: M 206 or 212.

M 340 NUMERICAL ANALYSIS (4-0-4). The application of numerical methods to interpretation and analysis of data, general iterative methods, approximation of functions, error analysis; solution of equations with implementation of computer programming. PREREQ: M 206 and CS 122 or EN 104.
M 356 DISCRETE MATHEMATICAL STRUCTURES (3-0-3). The study of fundamental logical and combinatorial concepts from mathematics useful in abstracting ideas in other disciplines. Special emphasis will be placed on applications to computer science. Topics are: combinatorics with emphasis on enumeration, logical deduction, sets, relations, graphs and directed graphs, trees, and networks. PREREQ: M 206 or M 212 or PERM/INST.
M 361 FUNDAMENTALS OF STATISTICS (4-0-4). Discrete probabilty, random variables, distributions, central limit theorem, descriptive statistics, regression and correlation, tests of hypotheses, design of experiments and sampling surveys. PREREQ: One of $M 106,205,212$.

M 401-402 ADVANCED CALCULUS (3-0.3). The real number system, continuity, functions of several variables, partial differentiation, multiple integrals, line and surface integrals, theory of integration, and infinite series. PREREQ: M 314.

M 406G THEORY OF FUNCTIONS OF A COMPLEX-VARIABLE (3-0-3). Complex numbers, functions of a complex variable, analytic functions, infinite series, integration, and conformal mapping. PREREQ: M 206 or 212.
M 411 INTRODUCTION TO TOPOLOGY (3-0-3). Sets, metric spaces topological spaces, continuous mappings, connectedness, compactness. PREREQ: M 314.
M 421 FOURIER SERIES AND BOUNDARY VALUE PROBLEMS (3-0-3). The wave equation, the heat equation, and Laplace's equation. Orthogonal sets of functions and Fourier series solutions. Boundary value problems. PREREQ: M 331.

M 431G-432G PROBABILITY AND STATISTICS(3-0-3)(F/S). Basic concepts of probability theory, sample spaces, random variables, mathematical expectation, central limit theorem, estimation and testing of hypotheses. PREREQ: M 206 or 212.
M 441-442 ABSTRACT ALGEBRA (3-0-3). Group theory, homomorphism theorems. Sylow theorems, ring theory, ideal theory, field theory, field extensions, and Galois groups. PREREQ: M 301, 302.
M 456G LINEAR PROGRAMMING (4-0-4). Simplex algorithm, two-phase method, simplex algorithm for problems with bounded variables, duality theory, postoptimality analysis, and transportation and assignment problems. PREREQ: M 301.
M 464 MATHEMATICAL MODELING (3-0-3). Introduction to mathematical modeling through case studies. Deterministic and probabilistic models. Optimization. Examples will be drawn from the physical, biological, and social sciences. PREREQ: M 361 and CS 122 or PERM/INST.

M 490 MATHEMATICS IN SECONDARY SCHOOLS (3-0-3). Objectives, content, and methods of secondary school mathematics programs. PREREQ: Six hours of Mathematics completed at, or above the 300 level.

## Department of Music

Morrison Center, Room C-100
Telephone (208) 385-1771
Chairman and Professor: Wilber D. Elliott; Associate Chairman and Associate Professor: Donald Oakes; Professors: Baldwin, Hsu, Shelton; Associate Professors: Bratt, Hopper, Parkinson, Speake; Assistant Professors: Baldassarre, Belfy, Samball, Schroeder, Thomason.

## Degrees Offered

- BA and BM in Music
- BM in Music Education


## Department Statement

Gifts and Memorials to the Music Department: The Music Department has been the recipient of many fine gifts of instruments, music; scholarship donations; and record collections from friends and supporters of the Department. In the music auditorium is housed the J.W. Cunningham Memorial Pipe Organ, a three manual Austin Organ of 45 ranks and 54 registers, given to the University by Laura Moore Cunningham. It is used for concerts, teaching and practice purposes. The console for the Harry $W$. Morrison Memorial Carillon built by Maas-Rowe, is also in the auditorium. Given as a memorial to her husband by Mrs. Velma Morrison, the Grand Symphony Carillon System chimes the hours and half-hours and twice daily plays a short program of carillon music.

Other gifts to the Music Department include several grand pianos, electronic equipment, instruments, record collections, scholarship endowments and music. The Music Department is grateful to these donors who have given so generously:

Dr. \& Mrs. Robert deNeufville
Dr. \& Mrs. Arthur C. Jones
Bryant S. Martineau
Mr. \& Mrs. Edward Utley
William K. Dunkley Family

## Alice Gould

Senator Len Jordan
Marjorie Palmquist *
Mrs. Eli Weston

Scholarship endowments have been given in the names of Margaret Drake, Elizabeth Bowen, Martha S. Reese, Lucille Lippincott, and the Boise Choristers.

Music Major Programs: The Music Department offers two Baccalaureate Degree programs which students may choose between, and one Graduate Degree program.

1. The Bachelor of Music Degree is essentially a professional music degree with emphasis in Performance, Theory-Composition, or Music Education.
a. Major emphasis in Performance or Theory-Composition: designed to train performers, performing artist, teachers, and composers, this program is basic to prepare students for graduate work in the performing, creative, and college or university teaching fields.
b. Major emphasis in Music Education: designed to prepare students for music teaching careers in the secondary and elementary educational systems and also prepares students for graduate work in Music.
2. The Bachelor of Arts Degree with Music major is a general Liberal Arts Degree designed for the student who wants a general Music major within a broader based program.

## Degree Requirements

## BACHELOR OF MUSIC PROGRAM

1. General Requirements
a. All full-time students will be required to attend Concert Class during each semester of residency at Boise State University (see course description for MA 010 for complete details). All students will perform on their major instrument before a faculty jury at the end of each semester. Students presenting MA 444, 445 or. 446 recitals are exempt from faculty jury during the semester in which the recital is given.
b. All Bachelor of Music majors whose major instrument is other than keyboard are required to pass, no later than the end of the junior year, one of the levels in the Piano Proficiency Examina-

tion before a faculty committee. The particular level is determined by the student's major. A grade of C or better in MU 213 will meet Levels I and II requirements for Music Education majors. A grade of C or better in MU 314 will meet level III requirements for Performance and Theory Composition majors. Details are available from the Music Department.
c. All Bachelor of Music majors are required to register for one of the three major ensembles (Band, Choir or Orchestra) each semester, totaling a minimum of eight credits over a normal fouryear course of study, except that Performance majors in Piano, Voice or Guitar will take only six credits of major Ensembles. Piano Performance majors will take two credits of Accompanying (ME 180, 380) toward the required six credits. Guitar majors may take two credits of Guitar Ensemble (ME 167, 367) toward the required six credits. Music Education majors will take seven credits of Ensemble. Other Ensembles may be taken as electives in addition to the required major Ensembles.
d. The following core of Music courses will be included in all Bachelor of Music curricula:
Concert Class MA 010 (attendance required each semester of fulltime residency; Music Education majors exempt during semesterweeks of student teaching ( 0 credits).
Materials of Music MU 119 thru 220 and Ear Training MU 121 thru 222
Basic conducting MU 261 .......................................... 1
Survey of Music History and Literature I, II, III, IV-MU
341, 342, 343, 344
. 10
Ensemble (see 1c above)......................................... 6-8
Total
35-37
2. Performance Emphasis Minimum Requirements:
a. General University and Basic Core Requirements for Bachelor of Music Degree.
.......
b. Music Requirements
(1) Music Core...........
(2) Performance Studies 35-37

All Performance majors will take 2 credits of Performance Studies the first semester, freshman year, and perform a 4 credit jury prior to enrolling in 4 credit Performance Studies second semester. MC 400 Level Studies: 8 credits minimum.
c. Additional Upper Division Courses

Total credits
16-22
Keyboard Harmony \& Basic Improv MU 313-314. . . . . . . . . . . . . 4
Counterpoint MU 423,424 ...................................... . 6
Advanced Form \& Analysis MU $410 \ldots . . . . . . . . . . . . . . . . . . . .$.
Choral or Instrumental Conducting MU $365,366 \ldots \ldots \ldots \ldots$ 1* $^{*}$
Major Instrument Literature MU 457 . ....................... $2^{* *}$
Major Instrument Pedagogy I, II MU 463-464................. . . *** $^{*}$
Senior Recital MA 446............................................... . . 2

* Not required of Piano, Voice or Guitar majors.
** Required only of Piano, Voice or Cuitar majors.
d. Electives

Total credits . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 7-18
Total
128
3. Theory-Composition Emphasis Minimum Requirements
a. General University and Basic Core Requirements for Bachelor of

Music Degree.
. $29-32$ total credits)
b. Music Requirements:
(1) Music Core . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 35-37
(2) Lower Division Performance Studies . . . . . . . . . . . . . . . . . . 16

Performance Major Studies ............................... 8
Performance Minor Studies (Piano, unless major
instrument is Keyboard)
. 8
(3) Additional Upper Division Courses ......................... . . 31

MC 300 Level Performance Major Studies ................... 4
Keyboard Harmony \& Basic Improv MU 313-314 . . . . . . . . . 4

Counterpoint MU 423,424................................... 6
Advanced Form \& Analysis MU $410 \ldots \ldots \ldots \ldots \ldots . .$.
Choral \& Instrum Conducting MU $365,366 \ldots . . . . . . . . . . .$.
Music Composition MA $410 \ldots \ldots$............................. 8
Senior Composition Recital MA 447 or Music Seminar MU 498.2
c. Electives
Credits. ..... 12-17
4. Music Education Emphasis Minimum Requirements
a. General University and Basic Core Requirements foBachelor of Music Degree32
b. Music Requirements:
(1) Music Core ..... 35-37
(2) Major Instrument Performance Studies ..... 14
MC 300 Level or above: 4 cr minimum
(3) Additional Lower Division Courses. ..... 7
Orientation to Music Educ MU 271 . ..... 1
Instrumental Tech \& Meth MU 257,266. ..... 4
Vocal Tech \& Meth MU 256 ..... 2
(4) Additional Upper Division Courses . ..... 13
Band Arranging MU 455 ..... 2
Band \& Orchestra Meth \& Mater MU 387 ..... 2
Choral Methods \& Mater MU 385 ..... 2
Choral \& Instr Conducting MU 365,366 ..... 2
Instrumental Tech \& Meth MU 368,369 ..... 4
One-half Senior Recital MA 444 ..... 1
(5) Education College Requirements .....  24
General Psychol P 101(Area II). ..... 3
Education Psychology P 325. ..... 3
Foundations of Education TE 201(Area II). ..... 3
Secondary School Methods TE 381. .....  3
Educating Exceptional Second Stu TE 333 . ..... 1
Secondary Student Teaching TE 482 or 483 ..... 8-16
Reading in Content Subjects TE 307 ..... 3
c. Electives
Credits. ..... 9-14
Recommended Music Electives:Functional Piano MU 2132
Teaching Music in the Elementary Classroom MU 372 .. 2(to qualify students for Idaho State Certification for Elemen-tary School Music Specialist)
The above requirements lead to state certification eligibility to teach music in the public schools. Certification is available to teach K-12, 7-12, or K-8 in music. Specific details are available from the Music Department.

## BACHELOR OF ARTS PROGRAM General Music Major Option

1. General University and Basic Core Requirements for the Bachelor of Arts Degree.
2. Minimum Music Requirements: -

Performance Studies
Materials of Music I-IV MU 119,120,219,220 ..... 14
Ear Training I-IV MU 121,122,221,222. ..... 4
Survey of Music History and Literature Courses ( 2 to be chosenfrom MU 341, MU 342, 343,344)4-6
Ensemble .....  4
Concert Class MA 010 each semester ..... 0
Performance, Theory, Music Education, Music History
Electives (to support Senior Recital* or Senior Project**) ..... 10
Senior Recital* or Senior Project** ..... $\ldots 1$
$45-47$
*See MA 444 course description for details of the Senior Recital.
**An independent study terminal project under faculty supervision and with approval of the Dept. Chairman in the areas of Music Theory, Music History/Literature, or Music Education.

## Music/Business Option

General University and Basic Core Requirements for the Bachelor of Arts Degree to include the following:

1. Area II:

CM 111 Fundamentals of Speech Communication . . . . . . . . . . . 3
2. Area III: At least one course in Mathematics selected from the following:
M 100 Cultural Approach to Math, or . . . . . . . . . . . . . . . . . . . . . . . 4
M 105,106 Math for Business Decisions . . . . . . . . . . . . . . . . . . . . . . . . . 4-8
3. Minimum Music Requirements

Total credits .45

MC-Performance Studies .8
ME-Ensemble ..... 4
MU 119-120 Materials of Music I-II ..... 8
MU 121-122 Ear Training ..... 2
MU 341,342,343,344 History \& Lit of Music ..... 10
*Senior Project ..... 3
Music Electives (upper division) ..... 10
4. Business courses (a maximum of 33 credits in Business coursesallowed in this option)(24-33)
5. Required Courses:
GB 101 Introduction to Business ..... 3
MM 101 Salesmanship** ..... 3
MM 105 Elements of Management** ..... 3
MM 203 Principles of Advertising .....  3
AC 205 Introduction to Financial Accounting. ..... 3
AC 206 Introduction to Managerial Accounting ..... 3
GB 202 Legal Environment of Business. .....  .3
IS 210 Introduction to Information Sciences ..... 3
6. Additional courses-electives (up to 9 credits may be chosen from thefollowing):
EC 201 Principles of Economics-Macro ..... 3
EC 202 Principles of Economics-Micro .....  3
AS 309 Records Preparation** ..... 3
AS 317 Office Management** ..... 3
MK 301 Principles of Marketing** ..... 3
MK 307 Consumer Behavior** ..... 3
*An Independent Study terminal project under faculty supervision with the approval ofthe Music Department Chairman.
*To enroll in these courses special arrangements are neceDepartment of Marketing and Administrative Services.
Music Minor: The Music Department will recognize as a minor in Music (in conjunction with a major in a non-Music area) a minimum of 20 hours of Music credits completed. Emphasis is possible in Performance, Music Theory, History/Literature, or Music Education. Details of the individual student's curriculum are to be determined by the student in consultation with an assigned Music minor advisor and subject to the approval of the Music Department Chairman.
Graduate Work: Master of Arts in Secondary Education, Music Emphasis. Details may be found in the Graduate College Section of this Catalog.

## Recommended Programs PERFORMANCE EMPHASIS MAJORS

| FRESHMAN YEAR | $\begin{array}{rr} \text { 1st } & \text { 2nd } \\ \text { SEM } & \text { SEM } \end{array}$ |
| :---: | :---: |
| English Composition E 101-102 | 3) 3 |
| Area II Courses | $3 \cdot 3$ |
| Concert Class MA 010 | 0 - 0 |
| Materials of Music I, II MU 119-120 | $4 \cdots 4$ |
| Ear Training !, II MU 121-122. | 1 |
| Performance Major MC 1-2, 1-4 | 2.4 |
| Major Ensemble ME 1- |  |
| SOPHOMORE YEAR |  |
| Area I Literature | 3 |
| Area II course |  |
| Concert Class MA 010 | $0 \therefore 0$ |
| Materials of Music III,IV MU 219-220 | 3 |
| Ear Training III, IV MU 221-222. | \% 1 |
| Major Ensemble ME 1- | 1 |
| Basic Conducting MU 261 | 1 |
| Performance Major MC 2-4 | $\cdots$ |
| Electives | 4 |
|  | 1716 |
| JUNIOR YEAR |  |
| Foreign Language . | 4 |
| Concert Class MA 010 | 0 |
| Music History I, II MU 341, 342 | 2 |
| Keyboard Harmony* MU 313-314 \&/or Elective** | 2 |
| Counterpoint MU 423 or 424 | 3 |
| Performance Major MC 3-4 | 4.4 |
|  | $15 \cdot 15$ |

English Composition E 101-1023
Concert Class MA 010 ..... 0; 1
Performance Major MC 1-2, 1-4 ..... 4SOPHOMORE YEAR3
Concert Class MA 0100
Ear Training III, IV MU 221-222. .....  1
Basic Conducting MU1
Performance Major MC 2-4 ..... 4UNIOR YEARForeign Language4
Concert Class MA 010.2
Keyboard Harmony* MU 313-314 \&/or Elective** ..... 5$\begin{array}{r}4 \\ \hline\end{array}$
**Piano, Voice or Guitar majors must include major instrument literature MU 457 and Pedagogy MU 463-464.
SENIOR YEAR
Music History III, IV MU 343, 344 ..... 3
Concert Class MA 010 ..... 0
Counterpoint MU 423 or 424 ..... 3
Major Ensemble\# ME 3- ..... or 1
Inst or Choral Conducting + MU 365 or 366 ..... 4
Senior Recital MA 446 ..... or 2
$3-5$
18-20 17-19*Piano majors must include 2 credits of Accompanying ME 180, 380. Guitar majors mustinclude 2 credits of Guitar Ensemble ME. 167,367

+ Not required of Piano, Voice or Guitar majors


## THEORY COMPOSITION MAJORS

| $\because \therefore$ ! $\because$ | 1st | 2nd |
| :---: | :---: | :---: |
| FRESHMAN YEAR . . $\because$ | SEM | SEM |
| English Composition E 101-102 | 3 | 3 |
| Area II Courses..... . | 3 | 3 |
| $\therefore$ Concert Class, MA 010 | 0 | 0 |
| Materials of Music I, II MU 119-120 | 4 | 4 |
| Ear Training I, II MU 121-122. | 1 | - 1 |
| Major Ensemble ME 1- | 1 |  |
| Major \& Minor Performance Studies MC: 2-2 | 4 | 4 |
|  | 16 | 16 |
| SOPHOMORE YEAR |  |  |
| Area I Literature | 3 |  |
| Area 11 Course and elective | 3 | 3 |
| Electives | - | 3 |
| Concert Class MA 010 | 0 | 0 |
| Materials of Music III, IV, MU 219-220 | 3 | 3 |
| Ear Training III, IV MU 221-222 | 1 | 1 |
| Music History 1, II MU 341, 342 | 2 | 2 |
| Major Ensemble ME 1. | 1 | 1 |
| Major and Minor Performance Studies MC 2-2 | 4 | 4 |
| - , . : . | 17 | 17 |
| JUNIOR YEAR |  |  |
| Concert Class MA 010 | 0 | 0 |
| Music Composition MA 410 | 2 | 2 |
| - Major Performance Studies MC | 2 | 2 |
| Major Ensemble ME 3 | 1 | ; 1 |
| Band Arranging MU 455 | 2 |  |
| Counterpoint MU 423 or 424 | 3 |  |
| Basic Conducting MU 261 | 1 |  |
| Advanced Form and Analysis MU 410 |  | 1 |
| Music History III, IV MU 343,344 | 3 | 3 |
| Keyboard Harmony* MU 313-314-Electives** | 4 | 5 |
|  | 18 | 14 |
| SENIOR YEAR |  |  |
| Foreign Language | 4 |  |
| Concert Class MA 010 | 0 |  |
| Music Composition MA 410 | 2 | $\cdots 2$ |
| Counterpoint MU 423 or 424 | 3 |  |
| Major Ensemble ME 3--. | 1 |  |
| Choral Conducting MU 365 | 1 |  |
| 'Instrumental Conducting MU 366 |  |  |
| Keyboard Harmony* MU 313-314-Electivès** | 4 |  |
| Composition Recital MA $447 \ldots .$. |  |  |1

Performance Studies MC 1-1. ..... 2$17 \quad 17$
SOPHOMORE YEAR
Area I Literature ..... 3
Foundations of Education TE 201(Area II) ..... 3
Concert Class MA 010 ..... 0
Materials of Music III, IV MU 219-220 ..... 3
Ear Training III, IV MU 221-222.1
Inst. Tech \& Meth. MU 257, 266Inst. Tech. \& Meth. MU 257, 266 ..2
Orientation to Music Educ. MU 271 ..... -
Vocal Techniques MU 256 ..... 2
Music History I, II MU 347-342 ..... 2
Major Ensemble ME 1- ..... 1
Performance Studies MC 2-2. ..... 216
JUNIOR YEAR
Foreign Language or Area !ll. ..... 4
Concert Class MA 0100
Inst. Tech \& Meth. MU 368, 369 ..... 2
Band and Orch. Meth. MU 387 ..... 2
Choral Methods MU $385 \ldots$
Choral Conducting MU 365
Instrumental Conducting MU 366 ..... 1
Music History III, IV MU 343,344 ..... 3
Major Ensemble ME 3- ..... 1
Performance Studies MC 3-22
Educational Psychology P 325116
SENIOR YEAR
Secondary School Methods TE 381 ..... 3
Concert Class MA 010 ..... 0
Performance Studies MC 3-2
Senior Recital MA 444
Major Ensemble ME 3-2Band Arranging MU 4551
2Elementary Music Meth MU 372
Educating Exceptional Students TE 333 ..... 2
1
Reading in the Content Subjects TE 307 ..... 3
Student Teaching TE 482, 4838-16
Electives3

## Course Offerings

## MA MUSIC APPLIED-PERFORMANCE CLASSES, RECITALS

## Lower Division

MA 010 CONCERT CLASS ( $0-1-0$ )(F/S). Student, guest and/or faculty performances. Minimum attendances per semester: 10 for music majors, 6 for minors; plus attendance at a minimum of 5 Music Department sponsored concerts/recitals. Participation in the concert/recital does not equal attendance for meeting this requirement.

MA 107 RECORDER CLASS (1-0-1)(S). The class is designed to improve the technical ability of the classroom teacher or anyone interested in playing the recorder, and to discover the classroom value of the instrument. Baroque ensembles will be emphasized. The class will meet once a week. Students must supply their own instrument. May be repeated once for credit.
MA 127 BEGINNING GUITAR CLASS ( $0-2-1$ )(F/S). Technical fundamentals in playing the acoustical guitar for beginners. Use of popular and folk songs. Course is based on written notation and aural instruction, stressing chord playing, correct posture and holding positions. Students must provide their own instrument. May be repeated once for credit.

MA 128 INTERMEDIATE GUITAR CLASS (0-2-1)(F/S). Continuation of MA 127. Emphasis on understanding fret-board theory, reading music notation for guitar, solo playing. Concept of form levels as it relates to upper position work. Students must provide their own instrument. May be repeated once for credit. PREREQ: MA 127 or PERM/INST.

MA 150 PIANO CLASS ( $0-1-1$ )(F/S). Each semester. Maximum 2 credits allowed.
MA 180 VOICE CLASS (0-1-1)(F/S). Each semester. Maximum 2 credits allowed.

## Upper Division

MA 307 RECORDER CLASS ( $1-0-1$ )(F/S). The class is designed to enhance the technical ability of the classroom teacher or anyone interested in playing the
recorder, and to discover the classroom value of the instrument. Baroque ensembles will be emphasized. The classes will meet once a week. Students must supply their own instrument. May be repeated once for credit. PREREQ: MA 107 or PERM/INST.

MA 327 ADVANCED GUITAR CLASS (0-3-2)(F/S). Study of music and technical problems in solo guitar playing; chord construction and progression, analysis of intervals, functional harmonic relationships, principals of guitar transcriptions, introduction of improvisation. Students must provide their own instrument. May be repeated once for credit. PREREQ: MA 128 or PERM/INST.
MA 328 JAZZ GUITAR CLASS ( $0-2-1$ )(F/S). A course in jazz improvisation for the guitarist with at least 1 year of playing experience. The use of the guitar in jazz is approached within a historical perspective beginning with the 1930's. Students must provide their own instrument. May be repeated once for credit. PREREQ: MA 128 or PERM/INST.
MA 410 MUSIC COMPOSITION ( $\mathbf{2 - 0 - 2 ) ( F / S ) \text { . Instruction and supervised experience }}$ in composing for various instruments and voices, individually and in combination, utilizing small and large musical forms. May be repeated for a total of 8 credits. PREREQ: PERM/INST.

MA 444 MUSIC EDUCATION-BACHELOR OF ARIS SENIOR RECITAL ( $0-\mathrm{V}$ - - ). This course is a one-half recital to be presented as the culminating performance project for music education majors and for bachelor of arts music majors emphasizing performance. PREREQ: 300 -level performance ability and PERM/INST. Graded pass/fail.

MA 445 RECITAL (0-V-2). Music Performance majors may elect to perform a solo recital'for two credits prior to the required senior solo recital at any time subsequent to the freshman year. PERM/INST/CHMN.

MA 446 SENIOR PERFORMANCE RECITAL ( $0-\mathrm{V}-2$ ). This course is a full recital to be presented as the culminating project for performance emphasis majors within the Bachelor of Music program. PREREQ: 400 -level performance ability and PERM/INST. Graded pass/fail.
MA 447 SENIOR COMPOSITION RECITAL (0-V-2). A recital for the performance of original compositions by the Theory-Composition major. Students must make their own arrangements with personnel required for the recital. Required of Theory-Composition majors PREREQ: Major in Theory-Composition and PERM/INST. Graded pass/fail.

## MC MUSIC-PRIVATE LESSON PERFORMANCE STUDIES

(These courses carry an extra fee. For details see schedule of fees elsewhere in this Catalog.)
Students enrolling in private lesson (MC) studies must secure the consent of the instructor prior to registration.

Generally, all entering freshmen will enroll in 100 -level studies; non-music majors will enroll initially in $\mathbf{1 0 0}$-level studies. Before permission is granted to any student to enroll: in the next higher level, the student must perform before a faculty jury toward the determination of appropriate level placement. Juries are held at the end of each semester. Music majors are required to perform on their major instrument before a faculty jury each semester. Details in performance level requirements for each instrument and voice are available from the Music Department office. All MC undergraduate courses may be repeated for credit (no limit). Students transferring into the Music Department as Music majors from another institution or from another department within BSU must complete a performance examination for placement in the appropriate performance level.
Private Lesson Performance Studies Course Numbering System: The three-digit course number carries the following information: first digit ( $1-, 2-$, etc.) $=$ performance level; second digit $=$ instrumental family $(-0-$ woodwinds, -1 -brass, -2 -percussion, -3 - voice, -4 keyboard, -5 - fretted string instruments, -6 - bowed string instruments); third digit $(-1,-2,-4)=$ credit value. Four-credit studies are reserved for bachelor of music program performance emphasis majors. Suffix letters identify the particular instrument in each instrumental family: woodwinds: A flute, B oboe, C clarinet, D bassoon, E saxophone, F recorder; Brasses: A horn, B trumpet, C trombone, D tuba; Keyboard: A piano, B organ; Fretted stringed instruments; A guitar; Bowed string instruments: A violin, B viola, C cello, D string bass. The class schedule printed prior to each semester lists particular studio courses available for the semester.
Major area minimum practice requirements For $\mathbf{4}$ hrs. credit- $\mathbf{1 8}$ hrs. practice per week. For 2 hrs. credit- 12 hrs. practice per week.
Minor area practice requirements: for 2 hrs . credit-6 hrs. practice per week. MC 102, 104, 202, 204, 302, 304, 402, 404 WOODWIND INSTRUMENTS Private lessons. 112, 114, 212, 214, 312, 314, 412, 414 BRASS INSTRUMENTS private lessons.
MC 122, 124, 222, 224, 322, 324, 422, 424 PERCUSSION INSTRUMENTS private lessons.
MC 132, 134, 232, 234, 332, 334, 432, 434 VOICE private lessons.
MC 142, 144, 242, 244, 342, 344, 442, 444 KEYBOARD INSTRUMENTS private lessons.

MC 152, 154, 252, 254, 352, 354, 452, 454 FRETTED STRING INSTRUMENTS private lessons.
MC 162, 164, 262, 264, 362, 364, 462, 464 BOWED STRING INSTRUMENTS private lessons.

Course numbers ending in 2: (2-5-2)(F/S).
Course numbers ending in 4 : $(0-1-4)(F / S)$.

## ME MUSIC, ENSEMBLE

All ME Courses may be repeated for credit up to the maximum allowable as stated in the course descriptions.

## Lower Division and Upper Division

ME 101, 301 UNIVERSITY SINGERS (0-2-1)(F/S). A general chorus open to all university students. No audition is necessary. Major choral works from all periods will be suing. Public performance(s) will be expected each semester. Maximum credits: ME 101 and/or 301, 8 CR.
ME 105, $\mathbf{3 0 5}$ MEISTERSINGERS ( $\mathbf{0}-5-1$ )(F/S). Essentially a course in unaccompanied singing, open to all university students. The Meistersingers is the concert-touring choir of the University. Maximum credits: ME 105 and/or 3058 CR. PREREQ: Enrollment is by audition and Music Department approval
 in and repertoire knowledge of small vocal ensembles. Literature includes music of all periods. Public performances given each semester. Maximum credits: ME 110 and/or ME 310, 8 CR. PREREQ: PERM/INST.

ME 115, 315 OPERA THEATRE (0-5-1). A course in the study and production of operas. Maximum credit: ME 115/315, 8 CR. PREREQ: PERM/INST.
ME 120-320 BAND (0-5-1)(F/S). An elective open to all students who can play a band instrument. Maximum credits: ME 120, and/or ME 320, 8 CR.
ME 125, 325 BRASS ENSEMBLE ( $0-2-1$ )( $\mathbf{F} / \mathbf{S}$ ). A course designed to promote playing in and increasing repertoire knowledge for small brass ensembles. A.public performance is required each semester. Maximum credits: ME 125, and/or ME 325, 8 CR. PREREQ: PERM/INST.

ME 126, 326 JAZZ ENSEMBLE (0-3-1)(F/S). A course designed to promote playing repertoire of large jazz ensembles. Includes performance of dixieland, be-bop, swing, rock and contemporary jazz. Class rehearsals include study of rhythm problems, notation, improvisation, ear training and chord construction in jazz. Public performance each semester. Maximum credits, ME 126 and/or 326, 8 CR. PREREQ: PERM/INST.

ME 130, 330 WOODWIND ENSEMBLE ( $0-2-1$ )(F/S). A course designed to promote playing in and increasing repertoire knowledge of small woodwind ensembles. A public performance is required each semester. Maximum credits: ME 130 and/or ME 330, 8 CR

ME 140-340 PERCUSSION ENSEMBLE ( $0-2-1$ )(F/S). A course designed to promote playing in and repertoire knowledge of percussion ensembles. A public performance is required each semester. Maximum credits: ME 140 and/or ME 340, 8 CR. PREREQ: PERM/INST.

ME 141, 341 KEYBOARD PERCUSSION ENSEMBLE (0-2-1)(F/S). In conjuriction with the preparation of music for public performance, students will acquire a firsthand knowledge of phrasing, mallet selection and application, general ensemble techniques, musical style and interpretation, and repertoire. Students will also be encouraged to compose original music and/or arrange or adapt existing music for the ensemble. Maximum credits: ME 141 and/or 341, 8 credits.

ME 150, 350 ORCHESTRA ( $0-5-1$ )(F/S). The Boise State University Symphony is composed of students and experienced musicians and prepares several concerts each season from the standard repertoire. An elective for non-music majors. Aúdition is required of new students. Maximum credits: ME 150 and/or ME 350, 8 CR.

ME 160, 360 STRING ENSEMBLE (0-2-1)(F/S). A course designed to promote playing in and increasing repertoire knowledge for small string ensembles. A public performance is required each semester. Maximum credits: ME 160 and/or 360 , 8 CR. PREREQ: PERM/INST.
ME 167, 367 GUITAR ENSEMBLE (0-2-1)(F/S). A course designed to promote playing in and repertoire knowledge of ensembles of or including guitar(s). Maximum credits: ME 167 and/or ME 367, 8 CR. PREREQ: PERM/INST.

ME 180, $\mathbf{3 8 0}$ ACCOMPANYING ( $0-2-1$ )(F/S). Practical experience in accompanying vocal and instrumental students. Open to keyboard students with sufficient technique. Maximum credits: ME 180 and/or 380,8 CR.
ME 185,385 DUO-PIANO ENSEMBLE (0-2-1)(F/S). A basic survey of duo-piano literature from the Baroque to the present. Students will learn how to cope with ensemble problems in rehearsal and performance. Class sessions will consist of performance, listening and discussion. A public performance will be presented. Maximum credits: ME 185 and/or 385, 8 CR. PREREQ: PERM/INST.

## MU MUSIC, GENERAL

## Lower Division

MU 101 MUSIC FUNDAMENTALS (2-0-2). Primarily for Elementary Education students, but open to all non-music majors. Learning to read music through study of music notation symbols. Study of all scales and keys, major and minor, and elementary chord structures. Basic conducting patterns are learned and practiced.
MU 103. ELEMENTS OF MUSIC ( $\mathbf{2 - 0 - 2} \mathbf{2} \mathbf{( S )}$ ). Intended primarily for music majors, this course is open to anyone interested in acquiring knowledge in or upgrading their understanding of fundamental structures of music notation, scales, intervals, rhythmic patterns, etc. The course is designed for students aspiring to be music majors but lacking the necessary fundamentals background.
MU 119 MATERIALS OF MUSIC (4-0-4)(F). Music fundamentals review; notation, intervals, scales and modes, triads, key signatures, etc. Melody, cadences. Emphasis is on aural and visual recognition, analysis and compositional skills involving the above. PREREQ: piano proficiency to play simple melodies and harmonies, or concurrent enrollment in piano study, or PERM/INST.
MU 120 MATERIALS OF MUSIC II (4-0-4)(S). 4 voice textures (linear \& vertical); homophony; diatonic chords and harmonic relationships; cadences; inversions; dominant sevenths; secondary dominants; cursory survey of binary; ternary and through-composed forms; aural and visual analysis; compositional skills; PREREQ: MU 119 or equivalent and piano as per MU 119.

MU 121-122 EAR TRAINING I-II (0-2-1)(F-S). Designed to correlate with Materials I and II. Emphasizes aural training in scales, intervals and rhythms. Includes drill in solfeggio and sight singing leading to aural recognition of 3 and 4 part harmonic structures. PREREQ: Previous or concurrent enrollment in MU 119 and 120.

MU 133 INTRODUCTION TO MUSIC (3-0-3)(AREA I). An elective course open to all students and fashioned to familiarize the listener with a variety of musical expression. Emphasis is upon the enjoyment of music through the understanding of recorded and live performances. Attendance at six live concerts/recitals required.

MU 147 SURVEY OF OPERA AND MUSIC THEATRE (0-2-1)(F). An historical survey of the development and growth of opera and music theatre through chronological study of scores, recordings, sound filmstrips, and library resource materials from the beginning of the Baroque period to contemporary Modern Opera and Music Theatre compositions. Required of voice majors.

MU 213 FUNCTIONAL PIANO (2-0-2)(F/S). Building of basic keyboard skills needed for music education majors in areas of sight reading, transposition, harmonization, improvisation, and repertoire materials; piano music and 2-4 line scores will be used. May be repeated once for credit. PREREQ: MU 120 and one year of piano study.
MU 219 MATERIALS OF MUSIC III (3-0-3)(F). Continuation of 4-part textures. Diatonic sevenths; introduction to altered chords, augmented sixth and neapolitan chords; cantus firmus techniques; remote modulations; compositional skills involving the above. PREREQ: MU 120 or equivalent and piano per MU 119.
MU 220 MATERIALS OF MUSIC IV (3-0-3)(S). Includes introduction to invention and fugue techniques and sonata form; eleventh and thirteenth chords; twentieth century melody and harmony; atonality and serial techniques. Compositional skills involving the above. PREREQ: MU 219 or equivalent and piano per MU 119.

MU 221-222 EAR TRAINING III-IV (0-2-1)(F/S). Continuation of ear training I-II: solfeggio, dictation of more advanced rhythms, 2,3 and 4-parts. Student expected to play at keyboard simpler forms of basic chords in 4 part harmony. PREREQ: MU 121-122; MU 120; at least one year of piano study or concurrent enrollment in piano study.

MU 256 VOCAL TECHNIQUES AND METHODS (1-2-2)(S). Designed for the music education major, this course deals with teaching skills to help develop the vocal potentials of young students, describing basic physical components of the voice and their coordination, understanding the young and "changing" voice, and learning phonetic components of Latin, Italian, and German.

MU 257 STRING INSTRUMENT TECHNIQUES AND METHODS (1-2-2)(F). Primarily for music education majors, this course deals with methods and materials of string-class teaching in the public schools, while providing the student with a basic performing technique on two or more of the orchestral string instruments: violin, viola, cello and string bass.
MU 261 BASIC CONDUCTING ( $0-2-1$ )(F/S). Fundamental techniques of conducting: baton fundamentals, group rehearsal techniques, and simple score reading.

MU 266 WOODWIND TECHNIQUES AND METHODS (1-2-2)(F). Primarily for music education majors, this course deals with methods and materials of teaching the various woodwind instruments in the public schools, while providing the student with a basic pedagogical technique on two or more of the woodwind instruments.

MU 271 ORIENTATION TO MUSIC EDUCATION (1-1-1)(F/S). A look at school music programs to include all levels: primary through secondary programs. Lab period devoted to visitation in public schools.

## Upper Division

MU 313-314 KEYBOARD HARMONY AND BASIC IMPROVISATION (2-0-2)(F/S). Keyboard application of basic harmonic principles: playing and harmonizing figured and unfigured basses and melodies, modulation, transposition, accompanying familiar tunes, beginning improvisation. Offered alternate years, beginning fall semester, even numbered years. PREREQ: MU 120-122 and 1-2 years piano study.
MU 331 AMERICAN MUSICAL THEATRE (3-0-3)(f). An historical overview will be presented along with a look at behind-the-scenes work necessary in the presentation of musical theatre productions. Includes an in-depth look at all the responsibilities of the entire production crew, from promotion and box office to stage crews, and from make-up crews to cast.
MU 332 MUSICAL THEATRE PRODUCTIONS (0-10-4)(S). Specific apprenticeships in the operations of actual musical theatre productions will be given to gain experience in the practical application of knowledge learned in MU 331. Graded pass/fail. May be repeated two times for credit. PREREQ: MU 331, PERM/INST.
MU 341 HISTORY AND LITERATURE OF MUSIC I (2-0-2)(F/S). The analysis of the development of Western music from its beginnings in early Christian times through the early 1600 's. Consideration of music from these periods as artistic entities, their relationships to their contemporary societies, and as foundations for subsequent expression. PREREQ: MU 119 and 120 or PERM/INST.
MU 342 HISTORY AND LITERATURE OF MUSIC II (2-0-2)(F/S). Encompasses the period from the Florentine Camerata through the high Baroque, the Rococo, and pre-classic composers. Attention to the evolution of musical forms through score reading, analysis, and discussion. PREREQ: MU 119 and 120, or PERM/INST.
MU 343 HISTORY AND LITERATURE OF MUSIC III (3-0-3)(F/S). Works of Haydn, Mozart, and their contemporaries through the Romantic period to Liszt, Wagner, and Puccini will be considered and analyzed as vehicles of individual expression and as steps to greater varieties of musical expression. Their relationship to works in parallel movements in literature and other arts will be considered. PREREQ: MU 119 and 120 or PERM/INST.
MU 344 HISTORY AND LITERATURE OF MUSIC IV (3-0.3). Analysis of styles and characteristics of Western music from the last decades of the previous century to today's avant garde and electronic music. PREREQ: MU 119 and 120 or PERM/INST.
MU 365 CHORAL CONDUCTING (0-2-1)(F). A course designed to deal with the problems and techniques of choral conducting. Students will work with ensemble groups as laboratories for conducting experience. PREREQ: MU 261 or PERM/INST.

MU 366 INSTRUMENTAL CONDUCTING (0-2-1)(S).A course designed to deal with the problems of instrumental conducting. Includes baton technique and score reading. Students will work with ensembles as laboratories for conducting experience. PREREQ: MU 261.
MU 368 PERCUSSION TECHNIQUES AND METHODS (1-2-2)(S). Primarily for music education majors, this course deals with methods and materials of teaching the various percussion instruments in the public schools, while providing the student with basic performing techniques.
MU 369 BRASS TECHNIQUES AND METHODS (1-2-2)(F/S). Primarily for music education majors, this course deals with methods and materials of teaching the various brass instruments in the public schools, while providing the student with a basic performing technique on two or more of the brass instruments.
MU 370 GUITAR FOR CLASSROOM TEACHERS (2-0-2)(F/S). Designed for teachers or prospective teachers who wish to use the guitar in classroom situations. Emphasis is on accompaniment skills, elementary chord theory, melody playing, proper hand position and notereading. Musical material is drawn from popular and folk styles useful in elementary classes. May be repeated once for credit.
MU 371 MUSIC METHODS FOR THE ELEMENTARY SCHOOL TEACHER (2-0-2). Materials, methods and problems relating toclassroom music in grades $K$ through six. PREREQ: Music Fundamentals MU 101 or equivalent.
MU 372 TEACHING MUSIC IN THE ELEMENTARY CLASSROOM (2-1-2)(F). For music majors. Includes special methods, materials and teaching techniques for the elementary classroom music program. PREREQ: MU 271.
MU 385 CHORAL METHODS AND MATERIALS (1-2-2)(S). Designed for music education majors who will be teaching vocal groups in junior and/or senior high schools. A practical workshop in selection and conducting of choral materials, rehearsal techniques, use of small ensembles, planning and organization of vocal groups.
MU 387 BAND AND ORCHESTRA METHODS AND MATERIALS (1-2-2)(F). The study of the organization and administration of bands and orchestras at the secondary school level; including equipment purchasing, budgets, public relations,
planning, rehearsal techniques, scheduling, programming, and emergency repairs of instruments.

MU 410 ADVANCED FORM AND ANALYSIS (3-0-3)(5). Analysis of harmonic and formal structures of the larger binary and ternary forms; the sonata, the symphony, the concerto, Baroque forms. PREREQ: MU 220 or PERM/INST.
MU 423g SIXTEENTH CENTURY COUNTERPOINT (3-0-3)(F). Study of 16th century compositional techniques. Compositions will be written in 2 to 4 voices, 5 species, C clefs and Latin texts. Analysis/listening of music of the period. Additional compositions and/or research for graduate credit. PREREQ: MU 220 or equivalent. Odd numbered years.
MU 424 g COUNTERPOINT SINCE 1600 (3-0-3)(F). Study and writing in contrapuntal styles from Baroque Period to present day. Invertible counterpoint, canon, fugue, invention, analysis of procedures in representative works. Additional compositions and/or research for graduate credit. PREREQ: MU 220 or equivalent. Even numbered years.
MU 455 BAND ARRANGING (2-0-2)(F).Required of majors in music education and in theory and composition. A study of scoring and notation for brasswind, woodwind and percussion instruments and their textures in various combinations. PREREQ: MU 220.
MU 457 MAJOR INSTRUMENT LITERATURE (PIANO, VOICĖ, GUITAR)(2-0-2)(F/S).A survey course to acquaint the student with the important literature from all periods for piano, voice or guitar. Section 1 piano literature, Section 2 guitar literature, Section 3 vocal literature. PREREQ: Upper Division standing in performance.
MU 463 MAJOR INSTRUMENT PEDAGOGY (PIANO, VOICE, GUITAR) I (2-0-2)(F).A survey and comparative study of pedagogical materials, principals and procedures. The course will consist of reading, lecture, listening and observation in teaching studios. PREREQ: Upper Division standing in performance. Alternate years with MU 457.
MU 464 MAJOR INSTRUMENT PEDAGOGY (PIANO; VOICE, GUITAR) II (2-0-2)(S).Practical application of pedagogical methods and procedures through supervised studio teaching. Further reading, lecture, listening and discussion involving pedagogical techiniques. PREREQ: MU 463 Pedagogy I. Alternate years with MU 457.
MU 498 MUSIC SEMINAR (2-0-2)(F/S).A seminar project under faculty direction. PREREQ: Senior standing.

## Department of Physics, Engineering and <br> Construction Management

Science-Nursing Building, Room 318

Telephone (208) 385-3775
Chairman and Professor of Physics: Robert A. Luke; Professors: Allen, Dahm, Luke, Newby, Parks, Reimann, Smith; Associate Professors: Affleck, Gabert, Haefer; Assistant Professors: Dykstra, Mason.

## Degrees Offered

- BS in Construction Management
- BS in Physics
- BS in Physics, Secondary Education


## Special Information for Students

## Engineering Cürriculum

The engineering curriculum of the Department is as nearly as possible identical to that at the University of Idaho. The minimum time required to earn a BS Degree in Engineering is four years; the Boise State program is designed to do this along with two years at the University of Idaho. This is, however, a very rigorous demanding program and depends upon the student being able to handle a heavy work load plus having the necessary background to start with the prescribed initial courses. Many students find it desirable or even necessary to take four and one-half, five or more years to earn the degree. Therefore, a convenient option based on three years at Boise State followed by one and one-half years at the University of Idaho is available and students may consult an Engineering advisor about this program. The five-year option is also advised for students needing to work while attending school. Engineering curricula are very similar all over the country and
students can readily transfer to other Engineering colleges. Students should consult their advisor about possible program modifications if they plan to go to some school other than the University of Idaho to complete their degree.

## Degree Requirements

## PHYSICS MAIOR

Bachelor of Science Degree
The scope of the program is applied. However, flexibility is maintained in order to direct the student toward his desired objectives. If the student is interested in going on into graduate Physics, more Math and some independent study in Quantum Physics would be recommended. Depending on the particular field of interest in Physics, the student could select electives in Biology, Chemistry, Math or Geophysics.

## Physics Major

## Liberal Arts Option

1. General University and BA Degree Requirements
2. Major Requirements
A. *Physics.

Physics I, II, III, PH 220, 221, 222 . . . . . . . . . . . . . . . . . . . . . . . . . . . 9
Physics Lab I,II, PH 223, 224. . . . . . . . . . . . . . . . . . . . . . . 2
Intermediate Applied Programming PH $225 \ldots . . .$.
Electronics Lab PH 301..... . . . . . . . . . . . . . . . . . . . . . . . . . 4
Transducers, PH 304 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2
Lab Microprocessor Applications PH 307 . . . . . . . . . . . . 3
Modern Physics PH 311, 312 . . . . . . . . . . . . . . . . . . . . . . . 6
Optics PH 331 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
Mechanics PH 341. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
Electricity \& Magnetism, PH:381, 382 . . . . . . . . . . . . . . . . 6
Advanced Topics PH 422. . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Senior Lab PH 481. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Seminar PH 499 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1
*With consent of advisor and chairman, substitutions can be made for not more than 6 hours of the above from the area of Biology, Chemistry, Math, Engineering or Geophysics.
B. Engineering . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 12 or 13

Computer Programming EN 104 or 107 . . . . . . 2 or 3
Systems \& Circuits I, II EN 221,223 . . . . . . . . . . . . . . . 7
Thermodynamics EN 320 . . . . . . . . . . . . . . . . . . . . . . . . . . 3
C. Math . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 13

Numerical Analysis M 340 . . . . . . . . . . . . . . . . . . . . . . . . 4
D. Chemistry
E. Recommended Electives . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 7

SECONDARY OPTION

1. General University Requirements . . . . . . . . . . . . . . . . . . . . . . . . . 30
2. Major Requirements . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 78
A. Physics . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 31

Physics I-III PH 220,221,222 . . . . . . . . . . . . . . . . . . . . . . . . . 9
Physics Lab I,II PH 223,224 . . . . . . . . . . . . . . . . . . . . . . . . . . 2
Intro to Descriptive Astronomy PH 105 . . . . . . . . . . . . . 4
Modern Physics PH 311-312 . . . . . . . . . . . . . . . . . . . . . . . . 6.
Optics PH 331 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
Lab Micro processor App. PH $307 \ldots . . . . .$.
Senior Lab PH 481. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
B. Engineering . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2

Computer Prog. Course, such as EN 104 or CS 122 . 2
C. Math . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 16
Calculus Sequence M 204, 205, $206 \ldots .$. . . . . . . . . . . . . 13
Differential Equations M 331 . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3

E. General Zoology Z 130 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5
F. General Botany BT 130. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
G. Recommended Electives . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 9
H. Possible Earth Science Elective . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
3. Education Requirements . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 24-32

Foundations of Education
Secondary School Methods
Secondary School Teaching
Educational Psychology

Educ. Except Secondary Student
Read in Content Subjects
Secondary School Science Methods

## Recommended Programs <br> ENGINEERING MAJOR

| COMMON FRESHMAN YEAR | $\begin{aligned} & .1 \text { st } \\ & \text { SEM } \end{aligned}$ | $\begin{aligned} & \text { 2nd } \\ & \text { SEM } \end{aligned}$ |
| :---: | :---: | :---: |
| (All Engineering Majors) SAR SEM |  |  |
| English Composition E 101-102 . . . . . . . . . . . . . . . . . . | 3 | 3 |
| College Chemistry C 131-132-133 | 4 | 3 |
| Calculus \& Analytic Geometry M 204-205 | 5 | 4 |
| Engineering Fundamentals \& Computer Programming EN 107 | 3 | - |
| Engineering Graphics EN 108 |  | 2 |
| Physics PH 220 | - | 3 |
| Physical Education | 1 | 1 |
|  | 16 | 16 |
| COMMON SOPHOMORE YEAR |  |  |
| Physics II, III PH 221-222 | 3 | 3 |
| Wave Motion \& Heat Lab PH 223 | - | 1 |
| Electricity \& Magnetism Lab PH 224 | 1 | - |
| *Humanistic-Social Elective. | (3) | 3 |
| Introduction to Mechanics EN 205 | ${ }_{3}$ | - |
| **Systems \& Circuits I, II EN 221, 223 | 3 | 4 |
| Calculus \& Analytic Geometry M 206. | 4 | - |
| Differential Equations M 331. | - | 3 |
| Branch Variation see below. . | -2 | -3 |
|  | 17 | 16-17 |

* During first semester, Chemical Engineers substitute C 317, Civil Engineers substitute EN 215.
** Civil Engineers not required to take EN 223.


## BRANCH VARIATION

Agricultural Engineering
Dynamics of Rigid Bodies EN 206 ................................... . . 2
Civil Engineering
Dynamics of Rigid Bodies EN 206 . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2
Engineering Measurements EN 216 . . . . . . . . . . . . . . . . . . . . . . . . . . . 2
Elective (see Advisor) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3

Mechanical Engineering
Dynamics of Rigid Bodies EN 206 .................................. . . . 2
Chemical Engineering
Organic Chemistry C 318
Principles of Economics EC 201 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Electrical Engineering
Engineering Science Elective.
.3

## JUNIOR YEAR

Three junior level Engineering Science courses (EN $\mathbf{3 0 1}$, Fluid Mechanics; EN 306, Mechanics of Materials; and EN 320 Thermodynamics and Heat Transfer) are offered. These courses, along with usual Engineering requirements in Mathematics, Science, Humanities, and Social Sciences, make it feasible for many students to complete a third year before transferring. Consult an Engineering staff advisor for details.

## CONSTRUCTION MANAGEMENT PROGRAM <br> Bachelor of Science Degree

The objective of the Construction Management program is to provide education in mathematics, science, communication, engineering, business and construction so that the construction manager can intelligently relate to and coordinate the efforts of owners, architects, engineers, craftsmen and other professionals to provide society with construction services of skill, responsibility and integrity.

| FRESHMAN | SEM | 2nd |
| :---: | :---: | :---: |
| English Composition E 101-102 | 3 | 3 |
| Algebra and Trig M 111 | 5 |  |


Applied Programming PH 225 ..... 2
Area I or II Requirements ..... 3
Area I or II Requirement ..... 17
JUNIOR YEAR
Modern Physics PH 311, 312 ..... 3
Electronics Lab PH 301 ..... -
Transducers PH 3043
Lab Microprocessor Applications PH 307.
3
3
Thermodynamics EN 320 ..... 4
Optics PH 331
4
Numerical Analysis M 340
3
Area I or II Requirements
Area I or II Requirements ..... 15
SENIOR YEAR
Electricity \& Magnetism PH 381,382 ..... 3
Mechanics PH 341 ..... 4
Senior Lab PH 481 ..... 3
Advanced Topics PH 422 ..... 3
Electives ..... 4
Area I or II Requirement3
Physics Seminar PH 499

## Course Offerings

CO CONSTRUCTION MANAGEMENT

## Lower Division

CO 235 CONSTRUCTION BLUE PRINT COMMUNICATIONS (2-0-2)(f). The transmission and interpretation of blueprint communications covering different types of drawings, including their organization and format. Emphasizing threedimensional visualization to make practical applications and determine quantities of work. Learn how to interpret quickly and visualize what is being presented by the drawings. Monday field trips required. PREREQ: EN 108.
CO 240 INTRODUĊION TO THE MANAGEMENT OF CONSTRUCTION (3-0-3)(S). Introduction to construction terminology, industry and management. Includes the planning, staffing, directing and controlling functions with emphasis on organizations and the schools of management. A survey of the basic trades, methods, quantity take-off calculations, estimating, and scheduling. Monday field trips required. PREREQ: M 111 and EN 108.

CO 246 CONTRACTS AND SPECIFICATIONS (3-0-3)(S).' Contracts, contract documents and specifications for construction including legal as well as technical implications, claims, change orders and contract administration, emphasizing Owner-Engineer/Architect-Contractor functions and related problems. Monday field trips required. PREREQ: GB 202.

## Upper Division

CO 320 CONSTRUCTION EQUIPMENT \& METHODS (3-0-3)(F). Characteristics, capabilities, limitations and employment of general building and heavy construction equipment. Monday field trips required: PREREQ: EN 205.
CO 330 SOIL MECHANICS AND FOUNDATION CONSTRUCTION (3-0-3)(S). Fundamentals of soil mechanics as it relates to foundation and earthwork construction problems: interaction of water and soil, compaction, bearing capacity, lateral pressures, drainage and waterproofing, spread footings, retaining walls, pile foundations, and special foundation construction problems. PREREQ: M 204 or PERM/INST.
CO 351 MECHANICAL INSTALLATIONS (3-0-3)(F). The fundamentals of mechanical installations and associated construction problems including heat loss and gain, heating, ventilating and air-conditioning, fluid flow in pipes and ditches as well as water supply, sewage, and fire protection installations. Monday field trips required. PREREQ: PH 102 and EN 205.
CO 352 ELECTRICAL AND ACOUSTICAL INSTALLATIONS (3-0-3)(S). The fun: damentals of electrical and acoustical installations and associated construction problems including electrical circuits, conduits, conductors, switch gear; other service equipment and electrical transmission. Also included will be lighting and acoustical installations and associated construction problems. Monday field trips required. PREREQ: PH 102 and EN 205.

CO 370 COST ESTIMATING AND BIDDING (3-0-3)(S). Extracting quantities from drawings, compiling and pricing estimates, preparation of bids. Monday field trips required. PREREQ: CO 235.
CO 374 CONSTRUCTION OPERATIONS AND IMPROVEMENTS (3-0-3)(F). Contractor organization, project supervision and motivation. Labor, materials, equipment, safety, time and motion studies, time-lapse photography, methods improvements, crew balance, and flow and process charts. Monday field trips required. PREREQ: DS 207 and CO 370.

CO 410 CONCRETE AND FORMWORK CONSTRUCTION (3-0-3)(f). Design and methods of formwork construction. Study of the properties of concrete, methods of mixing, placing, curing and finishing. Monday field trips required. PREREQ: EN 306.
CO 417 PROJECT SCHEDULING AND CONTROL (3-0-3)(S). Critical path method (CPM) as a construction planning, scheduling and management technique. Monday field trips required. PREREQ: EN 107 and CO 374.

## EN ENGINEERING

## Lower Division

EN 100 ENERGY FOR SOCIETY (3-2-4)(F)(Area III). A general interest course having no prerequisite. A basic understanding of energy and how it has been put to use is developed to promote a better understanding of our present technological society with its energy, environmental, social, and political problems. Alternative as well as conventional energy solutions will be studied.
EN 101 TECHNICAL DRAWING (2-2-2). A basic course in technical diawing covering lettering, the use of drawing instruments, geometry, orthographic projections, sectioning, dimensioning, pictorial drawing and other drafting problems.

EN 104 (CS 124) DIGITAL COMPUTER PROGRAMMING (2-0-2). Course for science or math majors to introduce FORTRAN and BASIC programming principles and logic including input-output, flow charting, handling arrays and subprograms, all applied to problem solving. Should have Mathematics background equal to or exceeding one of prerequisites. PREREQ: M 106 or 111 or 108.
EN 107 ENGINEERING FUNDAMENTALS AND COMPUTER PROGRAMMING (3-0-3)(f/S). An introduction to engineering including subdivisions and organization of the professions, methods of analysis, computations, and vectors all of which include the use of computer programming. PREREQ: $M 111$,or equivalent.

EN 108 ENGINEERING GRAPHICS (2-2-2)(F/S). Engineering graphical analysis and graphic transmission of information.
EN 205 INTRODUCTION TO MECHANICS (3-0-3). Covers basic statics inclüding equilibrium, static friction, centroids, moment of inertia plus dynamics by particle motion analysis. Kinetics of particles including concepts of force, mass, aćceleration, work, and energy, impulse and momentum. PREREQ: M 204 or PERM/INST and PH 220.
EN 206 DYNAMICS OF RIGID BODIES (2-0-2)(S). Analysis of forces and the resulting motion as pertains to rigid bodies undergoing rotary and general plane motion. PREREQ: EN 205.
EN 215 BASIC SURVEYING (1-3-2)(F). A basic course in surveying serving as both a preliminary course for engineering majors and a complete course for forestry, construction management, and other non-engineering majors. Course covers use of transit, level, plane table, and computations related to elevation, traverse and stadia surveys. PREREQ: M 111 or equivalent.

EN 216 ENGINEERING MEASUREMENTS (1-3-2)(S). Advanced topics in surveying plus theory and practice relating to types of errors, distribution of errors and precision in measurements. PREREQ: EN 215.
EN 221 SYSTEMS AND CIRCUITS (3-0-3)(F). The fundamental course in electrical engineering which provides an introduction to electrical circuits and basic network analysis. Topics covered are simple resistive, capacitive and inductive circuits, network theorems and circuit analysis methods. PREREQ: M 204.
EN 223 SYSTEMS AND CIRCUITS II (3-3-4)(S). A continuation of EN 221 extending into second order circuits, the use of phasors, AC steady-state analysis and frequency-domain analysis. Transform methods of circuit analysis are introduced. PREREQ: EN 221.

## Upper Division

EN 301 FLUID MECHANICS (3-0-3)(S). Physical properties of fluids: fluid mechanics and measurements; viscous and turbulent flow, momentum, lift, drag, and boundary layer.effects; flow in pipes and open channels. PREREQ: EN 206 and EN 205.
EN 306 MECHANICS OF MATERIALS (3-0-3)(S). Elasticity, strength, and modes of failure of engineering materials, theory of stress and strains for columns, beams and shafts. Three class periods per week. PREREQ: M 205 or PERM/INST and EN 205.

EN 320 THERMODYNAMICS AND HEAT TRANSFER (3-0-3)(F). First and second laws of thermodynamics, thermodynamic processes; thermodynamic properties of fluids; flow processes; heat to work conversion; refrigeration, conduction and radiation. PREREQ: M 206 and PH 221.
EN 382 ENGINEERING ECONOMY (2-0-2). Economic analysis and comparison of engineering alternatives by annual-cost, present-worth, capitalized cost, and rate-of-return methods; income tax considerations. PREREQ: Junior standing.

## PS PHYSICAL SCIENCE

## Lower Division

PS 100 FOUNDATIONS OF PHYSICAL SCIENCE (3-2-4)(Area III). Selected concepts
of matter and energy that are widely applicable toward understanding our physical and biological environment. A one-semester course for non-Science majors.

## Graduate

PS 501 BASIC PHYSICAL SCIENCE FOR SCIENCE TEACHERS (3-0-3). An introduction to the basic ideas of Physical Science including matter, energy, motion, electricity, magnetism, wave motion, sound, light, heat, atomic and nuclear physics, and astronomy. Concepts will be discussed and demonstrated with emphasis on methods that can be used in the classroom. Offered when there is sufficient demand.

## PH PHYSICS

## Lower Division

PH 100 A CULTURAL APPROACH TO PHYSICS (3-3-4). Designed for liberal arts students. Students should gain an appreciation for the basic ideas in physics and how these ideas have contributed to the development of western culture by their influence on philosophy, religion and technology.
PH́ 101-102 GENERAL PHYSICS (3-3-4). (F/S) (Area III). Mechanics, sound, heat, light, magnetism, an electricity. This course satisfies the science requirement for the bachelor of arts and bachelor of science curricula, and may be taken by forestry, pre-dental and pre-medical students. PREREQ: Algebra and Trigonometry.

PH 105 INTRODUCTION TO DESCRIPTIVE ASTRONOMY (3-2-4)(F/S)(Area III). A study of galaxies, stars and planets and their physical relationships, beginning with our own solar system and moving outward. Several scheduled evening viewing sessions and planetarium visits are required. A one-semester course for nonScience majors.

PH 106 RADIOLOGICAL PHYSICS (2-2-3)(F). Fundamental concepts of radiation physics involving structure of the atom, radioactivity, electricity, magnetism, and electromagnetic radiation. Includes the physical principles of magnetic resonance and diagnostic ultrasound.
PH 109 (CS 109) INTRODUCTION TO COMPUTERS (3-2-4). The potential and limitations of computers, and their impact on society. The course includes an introduction to computer hardware and programming. Designed for non-Science majors.
PH 207 INTRODUCTION TO BIOPHYSICS (3-3-4) (\$). A course relating physical principles to biological applications. Lectures stress concepts of atomic physics, basic electricity, energetics, heat and optics. The variety of instruments normally found in biological laboratories are used in lab to study biological systems. PREREQ: M 111 or M 108.
PH 220 PHYSICS I-MECHANICS (3-1-3)(F/S)(Area III). Kinematics, dynamics of particles, statics, momentum, work, energy, rotational motion and vibratory motion. PREREQ: M 204. Must be concurrently taking or have taken M 205.
PH 221 PHYSICS II-WAVE MOTION AND HEAT (3-1-3)(F/S)(Area III). Wave motion, acoustical phenomena, geometrical optics, optical instruments, interference, diffraction, polarization, heat and the First and Second Laws of Thermodynamics. PREREQ: PH 220. CoreQ: PH 223.

PH 222 PHYSICS III-ELECTRICITY.AND MAGNETISM (3-1-3)(F/S)(Area III). Coulomb's Law, electric fields, electric potential, magnetic fields, magnetic induction and simple circuits. PREREQ: PH 220. CoreQ: PH 224.
PH 223 WAVE MOTION AND HEAT LAB (0-3-1)(F/S)(Area III). A lab designed to be taken concurrently with PH 221. Basic experiments in mechanics, wave motion, sound, optics and heat. PREREQ: PH F220. CoreQ: PH 221.
PHं 224 (EN 224) ELECTRICITY AND MAGNETISM LAB (0-3-1)(F/S)(Area III). A lab designed to be taken concurrently with PH 222. Basic experiments in electricity, simple circuit analysis and instrumentation. PREREQ: PH 220. CoreQ: PH 222.
PH 225 INTERMEDIATE APPLIED PROGRAMMING (2-0-2)(S). An intermediate course stressing the algorithmic techniques of problem solving using the computer. Stress will be on language and programming topics useful in the solution of science and engineering problems. Concentration will be on FORTRAN, but other programming languages will also be used. PREREQ: EN 104 or EN 107. CoreQ: M 205 or M 106. Credit cannot be obtained from both PH 225 and M 225.

## Upper Division

PH 301 ANALOG ELECTRONICS LAB (2-6-4)(F). An introduction to some of the more common discrete semiconductor devices and analog integrated circuits. and their uses in electronic circuits. Included are devices such as diodes, silicon control rectifiers, bipolar transistors, field effect transistors, operational amplifiers and their use in rectifier, amplifier and waveform circuits. PREREQ: PH 224, EN 223.

PH 304 TRANSDUCERS (1-3-2)(S). An introduction to some common devices used to convert energy forms into electrical signals. Included are photomultiplier tubes, photoconductive cells, photodiodes, phototransistors, linear variabie differential transformers, thermocouples, thermistors, piezoelectric and
piezoresistive elements. Signal conditioning for these devices will be covered. PREREQ: PH 301.

PH 307 LABORATORY MICROPROCESSOR APPLICATIONS (2-3-4)(F/S). A lecture/laboratory course designed to provide the student with the necessary skills to utilize a preassembled microprocessor system for data acquisition and control. PREREQ: PH 222 or EN 223 or PERM/INST.
PH 311-312 MODERN PHYSICS (3-0-3)(F-S). A brief introduction to the special relativity, basic ideas and methods of elementary quantum mechanics with applications to atomic, molecular, nuclear, solid state physics and statistical mechanics. PREREQ: PH 221,222, M 331.
PH 331 OPTICS (3-3-4)(F). An upper division course stressing the applied facets of optics such as the use of various optical components for analysis and measurements in the visible region of the electromagnetic spectrum. PREREQ: M 331 and PH 221.

PH 341 MECHANICS (4-0-4)(f). An upper division course which approaches classical mechanics with the aid of vector calculus and differential equations. Numerical techniques and computer applications will be used. PREREQ: M 321 and PH 220.

PH 381-382 ELECTRICITY AND MAGNETISM (3-0-3)(F-S). Electrostatic fields, poten: tials, Gauss' law, solutions of Laplace's equation, electrostatics of conductors and dielectric materials, vector potentials, Maxwell's equations, and electromagnetic radiation. PREREQ: PH 221,222, M 331.

PH 422 ADVANCED TOPICS (3-0-3). Selected topics from the major fields of physics such as astrophysics, nuclear, solid state, solar applications, biophysics or medical physics. PREREQ: Upper Division standing and PERM/INST and possible specific courses depending on topic. Offered on demand.
PH 481 SENIOR LAB (1-6-3)(f). A senior laboratory course designed to acquaint the student with concepts of modern physics, laboratory techniques and measurements. PREREQ: PH 312.

PH 482 SENIOR PROJECT (0-6-2)(S). 1 or 2 credits depending on the project. Elective. A sophisticated laboratory project in some area of physics. PREREQ: PH 481.
PH 499 PHYSICS SEMINAR (1-0-1)(S) Individual reports on selected topics. PREREQ: Senior status.

## Department of Theatre Arts

Morrison Center, Room C-100
Telephone (208) 385-3957
Chairman and Professor: Stephen R. Buss; Professor: Lauterbach, Shankweiler; Associate Professor: Ericson; Assistant Professor: Buss.

## Degrees Offered

- BA in Theatre Arts
- BA in Theatre Arts, Secondary Education


## Program Requirements

## THEATRE ARTS <br> Bachelor of Arts Degree

General University Requirements except

1. Theatre Symposium TA 010, required each semester of every Theatre Arts Major.
2. Physical Education Courses (as recommended by Advisor, fencing, dance, gymnastics, etc.)
. 2

## 3. Area I

Credits . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 12 Intro to Theatre and Art or Music . . . . . . . . . . . . . . . . . . . . . . . . . . 6
Dramatic Literature . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Elective Literature Course . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
4. Area II

Credits. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 12
History of Western Civilization . . . . . . . . . . . . . . . . . . . . . . . . . . . 6
5. The Department recommends that Theatre Arts Majors take one year of Foreign Language and Library Science 101 or 102.

## Major Subject Requirements THEATRE

Introduction to Theatre TA $107 . .$. . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Technical Theatre TA 117-118 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 8
Acting (Lower Division) TA 215 ........................................ . . . . 3
Stage Voice TA $233 .$. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
World Drama TA 341,342 ..... 6
Directing TA 401 ..... 3
Theatre History TA 421,422. ..... 6
Contemporary. Theatre TA 445 ..... 3
Major Production Participation (2 hr LD, 2, UD)TA 231,331 ..... 4
(Upper Division Courses-21)
SECONDARY EDUCATION
Department requirements for the Secondary Education Option
are the same as regular Theatre major plus:
Directing TA 402
Shakespeare E 3
Theatre TA 445)
Reading in Content Subjects TE 307
Educating the Exceptional Secondary Student TE 333
The student must also satisfy the requirements for teacher
certification.
Recommended Program
THEATRE ARTS MAJOR
Bachelor of Arts
THEATRE EMPHASIS
FRESHMAN YEAR ..... 1st 2nd
English Composition E 101-102 ..... 3
Laboratory Science ..... 3
*Introduction to Theatre ..... 4
*Technical Theatre ..... 4
Intro to Use of Books \& Libraries ..... 2
SOPHOMORE YEAR
Literature Elective ..... 3
*Stage Voice ..... 3
*Western Civilization ..... 3
Social Science Elective ..... 3
Laboratory Science ..... 4
Electives ..... 16
JUNIOR YEAR
*Dramatic Literature ..... 4
*World Drama. ..... 3
Electives, Upper Division ..... 8
15
SENIOR YEAR
*Directing ..... 0
Electives, Upper Division ..... 3
*Contemporary Theatre ..... 12 ..... 3
18* Departmental Requirements.
SECONDARY EDUCATION EMPHASIS
FRESHMAN YEAR1st
English Composition E 101-102 ..... 3
*Physical Education ..... 1
Laboratory Science. ..... 4
*Introduction to Theatre ..... 3
*Technical Theatre. ..... 4
Electives4OPHOMORE YEAR
Literature Elective ..... 3
*Stage Voice3
*Western Civilization ..... 3
Laboratory Science.2nd
8
Social Science Elective
-
*Acting ..... 6
Electives
Electives ..... 16
JUNIOR YEAR
Foreign Language. ..... 4
*Dramatic Literature ..... 3
*Shakespeare$\overline{3}$
Speech for Teachers ..... 3
Educational Psychology ..... 3
Foundations of Education3
Education Elective TE 307 \& 333 ..... 4
*World Drama. ..... 31716
SENIOR YEAR
*Directing. ..... 3
Theatre History ..... 3
Secondary School Methods ..... "
Electives ..... 7$17 \quad 16$

- Departmental Requirements.
ENGLISH MINOR FOR THEATRE ARTS
Secondary Education Option: See recommended minor listed in thisCatalog under the English Department heading.
Liberal Arts Option:
Lower Division Literature ..... 9*
One of the following. ..... 3
Expository Composition E 201
Creative Writing, Poetry E 205Creative Writing, Fiction E 206Upper Division Electives other than EnglishDepartment Drama Courses$\therefore 6$18
*This requirement cannot be fulfilled by E 297, Special Topics Courses.
Courses Applying to Both Disciplines
Shakespeare: Tragedies \& Histories È 345 ..... 3
Shakespeare: Comedies and Romances E 346 ..... 3
Total in English Minor for Theatre Arts Major ..... 24


## Course Offerings

## TA THEATRE ARTS

## Lower Division

TA 010 THEATRE SYMPOSIUM (no credit)(F/S). A forum for the presentation and discussion of appropriate theatre-related topics and activities. Class meets weekly. Required of all full time Theatre Arts majors each semester, but open to any person. Theatre Arts majors may miss no more than four sessions in one semester.
TA 107 INTRODUCTION TO THEATRE (3-0-3)(AREA I). A survey course designed to stimulate an appreciation of drama and allied art forms, through the study of the history of theatre, dramatic literature and production techniques.
TA 117-118 TECHNICAL THEATRE (3-4-4)(F/S). Provides the student with a practical knowledge and skill in the principles of the technical aspects of theatre; the mechanical characteristics of the stage and the elements used in productions, development of drafting skills, problem solving in staging, and the rudiments of lighting and design. Three hours of lecture plus four hours of lab per week required.
TA 162 STAGE MAKE-UP (3-0-3)(F). Investigation and production analysis of stage makeup; the relationship of actor to play and audience, an integration of makemakeup; the relther technical aspects that influence this particular art. Practical application emphasized.
TA 212, 412 MOVEMENT AND DANCE FOR THE PERFORMING ARTIST (3-0-3). For the theatre student and the experienced dancer. The first half of the semester covers improvization, simple choreography and ballet barre work. The second covers improvization, covers jazz warm-ups and choreography, culminating in a formal perforhalf covers jazz warm-ups and choreography, culminating. The class may be mance. The second half requires much out-of-class work. The class may be repeated once for credit. Maximum credits: 6.

TA 215-216 ACTING (1-2-3). Entails study of and practice in the basic principles, terminology, and disciplines of the acting art. Fundamentals of speech and movement for the actor, appraisal and analysis of stage techniques, acting theories and practices, and recent internationally representative roles are investigated.

TA 220 CINEMA: HISTORY AND AESTHETICS (3-0-3). An examination of the beginnings and development of motion pictures with attention given to the qualities peculiar to cinema which give it validity as a unique art form.
TA. 231, 331 MAJOR PRODUCTION PARTICIPATION (2-0-1). Significant participation in a major college production in some phases of technical theatre or acting or management. One hour of credit allowed per semester, maximum 4 credit hours.
TA 233 STAGE VOICE ( $3-0-3$ )(F/S). Techniques and practice in the use of the voice in the theatre with emphasis on diction, projection, and vocal flexibility, as applied in work with actual scenes.
TA 287 CHILDREN'S THEATRE (3-0-3)(F). An examination of the literature, theory and history of theatre for children. Includes practical participation in an oncampus production of a play for children.
TA 288 TOURING CHILDREN'S THEATRE (3-0-3)(S). A concentrated study of the history and techniques of producing theatre for children. Specific emphasis on a single script selected for production and off-campus touring to local elementary schools.

## Upper Division

TA 311 ADVANCED ACTING (3-0-3)(F/S). Intensive study in the problems of the actor in Classical Drama, Shakespearean Drama, Restoration Comedy and the modern realistic play. Skills and techniques are applied to the production of actual scenes of the categorized type. PREREQ: TA 215-216 or PERM/INST. Alternate years.
TA 341 WORLD DRAMA 500 BC- 1642 (3-0-3)(F). Study of outstanding selections of dramatic literature. The plays are studied from a theatrical point of view, i.e., they are approached as scripts intended for production as well as examples of literary form.
TA 342 WORLD DRAMA 1642-1960 (3-0-3)(S). Study of outstanding selections of dramatic literature. The plays are studied from a theatrical point of view, i.e., they are approached as scripts intended for production as well as examples of literary form.
TA 351 ELEMENTS OF SCENIC DESIGN (3-0-3)(F). Major skills of beginning design: Included will be art techniques for the theatre, research in major periods of scenic design, examination of major designers' works, and practical experience in designing for all major types of stages. PREREQ: TA 117-118.
TA 352 COSTUME DESIGN (3-0-3)(S). Major skills of beginning costume design, included will be art techniques for theatre, research in major periods of costume design, examination of major costume designers, works and practical experience in designing for all manner of productions. PREREQ: TA 117-118. Alternate years.
TA 362 STAGE LIGHTING DESIGN (3-0-3). A study of the theories, principles and practices of stage lighting including both aesthetic conception and practical application. Script analysis and lighting theory applied to actual designs for various stages and productions. PREREQ: TA 117-118. Alternate years.
TA 401-402 DIRECTING (3-0-3). Basic theory and techniques of stage directing. Includes the direction of scenes and one-act plays. Special problems of directing are presented. PREREQ: Upper Division standing.
TA $421 \mathrm{~g}-422 \mathrm{~g}$ THEATRE HISTORY ( $3-0-3$ )(F/S). Investigation of the periods of major importance in the development of theatre. The first semester will include the period from 800 BC through approximately 1550 AD; the second semester from the Elizabethan period through the end of the 19th century.
TA 445 CONTEMPORARY THEATRE (3-0-3)(S). A study of world theatre and drama since 1960 with an emphasis on current research materials and techniques. Alternate years.
TA 491 SENIOR PROJECTS (3-0-3)(S). A culminating work for the theatre major. The student will completely research, plan, and execute a theatrical endeavor relative to his emphasis in theatre. This endeavor will be accompanied by a formal written, fully documented thesis describing his production and the concept involved. PREREQ: PERM/CHMN.


[^0]:    University Band
    Theatre Productions
    Opera Workshop
    Choirs

