## CREIGHTON UNIVERSITY BULLETIN

## 2002-2003 ISSUE <br> UNDERGRADUATE ISSUE

## College of Arts and Sciences College of Business Administration School of Nursing University College


#### Abstract

This publication contains the most current information available on the subjects covered as of the date of publication. However, this publication is not an offer to enter into a contract. Final selection of applicants to be admitted shall be made by the University, which reserves the right to deny admission to any applicant for any lawful reason. The University also reserves the right to modify or eliminate University rules and policies, including without limitation: admission requirements and criteria; course offerings, or location or frequency thereof; course content; grading requirements and procedures; degree requirements; tuition, fee, and board and room rates; financial assistance programs; substantive or procedural student disciplinary rules; and support services, and to apply any such modifications to any student without regard to date of admission, application or enrollment.


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## TABLE OF CONTENTS

CALENDAR ..... 4
ADMINISTRATION
Board of Directors ..... 9
Officers of Administration ..... 10
GENERAL INFORMATION
Location ..... 12
History ..... 13
Jesuit Order ..... 15
Goals and Objectives ..... 15
Credo of Creighton ..... 16
Nondiscrimination Policy ..... 17
Services for Students With Disabilities ..... 17
Graduation Rates ..... 17
Accreditation ..... 17
Campus Facilities ..... 18
Living Accommodations ..... 22
University and Student Publications ..... 24
Extracurricular Activities ..... 25
Fraternities and Sororities ..... 30
Recognition of Scholarship/Leadership ..... 34
Alumni Association ..... 36
INTERNATIONAL PROGRAMS AND SERVICES
The Office of International Programs ..... 37
The Curriculum ..... 37
Study Abroad ..... 38
Intensive English Language Institute ..... 39
ADMISSION
Freshman Applicants ..... 41
Admission Requirements ..... 41
Registration ..... 48
Adjustments and Withdrawals ..... 49
TUITION AND FEES
Tuition and Fees ..... 50
Financial Arrangements ..... 52
Withdrawals and Refunds ..... 53
STUDENT FINANCIAL AID
Eligibility ..... 54
Application Procedures ..... 54
Scholarships, Loans, Grants ..... 55
Student Employment ..... 78
STUDENT SERVICES
Career Advising Center ..... 79
Counseling and Guidance ..... 79
Student Orientation ..... 80
Student Support Services ..... 80
Student Health Service ..... 81
Student Health Insurance Plan ..... 82

## ADMINISTRATION AND SUPERVISION

Academic Administration ..... 84
Commencement ..... 90
Discipline ..... 91
Confidentiality of Records ..... 91
Transcripts ..... 92
Special Programs
Freshman Seminar Program ..... 93
Skills Development Program ..... 93
Military Science
Army ROTC ..... 94
Air Force ROTC ..... 96
Advisers for Special Scholarship Competitions ..... 97
PROGRAMS OF STUDY - I:
ARTS AND SCIENCES
Goals of Liberal Education ..... 98
General Degree Requirements ..... 98
Core Requirements ..... 100
Field of Concentration ..... 108
Interdisciplinary Programs ..... 110
African Studies ..... 110
American Studies ..... 110
Black Studies ..... 110
Graphic Design ..... 110
Health Administration and Policy ..... 110
Justice and Peace Studies Program ..... 111
Native American Studies ..... 111
Women's and Gender Studies ..... 111
Other Academic Programs ..... 111
Arts-Engineering Program ..... 111
Certificate in Business for Arts and Sciences Students ..... 112
Creighton House ..... 112
Honors Program ..... 113
Semestre Dominicano ..... 113
Pre-Professional Study ..... 114
Pre-Engineering ..... 111
Pre-Law Study ..... 114
Pre-Health Sciences Program ..... 114
PROGRAMS OF STUDY - II:BUSINESS ADMINISTRATION
Objectives ..... 120
Requirements for Graduation ..... 120
Programs of Study ..... 120
Combined Business
Administration-Law Program ..... 129
Certificate in Business
Administration ..... 129
Graduate Study ..... 132
PROGRAMS OF STUDY - III:
NURSING
Objectives ..... 134
Programs of Study ..... 134
Academic Requirements ..... 135
Curricular Requirements ..... 136
Accelerated Nursing Curriculum ..... 138
Linking Education and Practice Program (LEAP) ..... 139
PROGRAMS OF STUDY - IV:UNIVERSITY COLLEGE
The Mission ..... 141
Associate Degrees ..... 144
Certificate Programs ..... 147
Independent Study ..... 158
PREPARING FOR GRADUATE STUDY ..... 163
Undergraduate Preparation for M.B.A. Programs ..... 164
COURSES OF INSTRUCTION
Course Numbering System ..... 165
Keys to Symbols ..... 166
Accounting ..... 167
Aerospace Studies ..... 279
African Studies ..... 169
American Studies ..... 170
Anthropology ..... 334
Art ..... 237
Arts Management ..... 250
Atmospheric Sciences ..... 175
Biology ..... 179
Biomedical Sciences ..... 184
Black Studies ..... 185
Business ..... 186
Chemistry ..... 187
Classical and Near Eastern Studies ..... 191
Classical and Near Eastern Civilizations ..... 192
Communication Studies ..... 198
Computer Science ..... 202
Counselor Education ..... 216
Creighton House Seminar ..... 205
Creighton Institute for Technology and Management ..... 173
Dance ..... 243
Economics ..... 205
Education ..... 207
Emergency Medical Services ..... 217
English ..... 219
Environmental Science ..... 225
Exercise Science ..... 231
Finance ..... 235
Fine and Performing Arts ..... 236
Freshman Seminar ..... 251
French ..... 280
German ..... 282
Graphic Design ..... 251
Greek ..... 195
Health Administration and Policy ..... 252
Health Policy and Ethics ..... 253
Hebrew ..... 196
History ..... 254
Honors Program ..... 263
Interdisciplinary Courses ..... 264
Japanese ..... 284
Journalism and Mass Communication ..... 265
Justice and Peace Studies ..... 268
Justice and Society ..... 269
Latin ..... 196
Linguistics ..... 284
Management ..... 270
Management Information Systems ..... 271
Marketing ..... 272
Mathematics ..... 273
Medical Microbiology and Immunology ..... 276
Military Science ..... 277
Modern Languages and Literatures ..... 280
Music ..... 245
Native American Studies Program ..... 287
Natural Science ..... 289
Nursing ..... 291
Pharmacology ..... 297
Philosophy ..... 297
Physics ..... 305
Political Science and International Studies ..... 308
Psychology ..... 318
Russian ..... 284
Senior Perspective ..... 322
Social Work ..... 325
Sociology ..... 329
Spanish ..... 284
Statistics ..... 337
Theatre ..... 248
Theology ..... 338
Women's and Gender Studies ..... 349
UNIVERSITY COMMITTEES ..... 350
FACULTY ..... 352

## FIRST SEMESTER, 2001-2002

2001

| August | 18, Saturday |
| :--- | :--- |
|  |  |
|  | $20-21$, Mon.-Tues. |

20-21, Mon.-Tues.
22, Wednesday
22-28, Wed.-Tues.

28, Tuesday

September 3, Monday
12, Wednesday

|  | 13, Thursday |
| :---: | :---: |
| October $\quad$ 11, Thursday |  |

13, Saturday

15, Monday

22, Monday
26, Friday
November 20, Tuesday
22, Thursday

26, Monday
December 10-15, Mon.-Sat.
15, Saturday
15, Saturday

Welcome Week begins. Activities for all new students, freshmen and transfers, are announced in a special brochure. 7:30 P.M. Welcome Week Mass. St. John's Church.

8:00-11:30 A.M., 1:00-4:00 P.M. Late Registration in the Registrar's Office.
Classes begin.
8:30-11:45 A.M. and 1:00-4:00 P.M. Class Schedule Changes and Late Registration. Registrar's Office.
Last day for late registration and class schedule changes.
Labor Day. Holiday - no classes.
11:00 A.M. Mass of the Holy Spirit. St. John's Church.

Last day to change from credit to audit. Last day to apply for Pass/No Pass status.
Last day for filing applications for degrees to be conferred at the end of the First Semester.

Fall Recess begins after last class, clinic, or laboratory.
9:00 A.M. Mid-semester grade reports from instructors due in Registrar's Office.

7:30 A.M. Classes resume.
Last day to withdraw from courses with a "W."
Thanksgiving recess begins after last class, clinic or laboratory.
9:00 A.M. Thanksgiving Day Mass. St. John's Church.

7:30 A.M. Classes resume.
Final semester examinations begin.
Last day of required attendance of First Semester. Christmas-Mid-year Recess begins.
Mid-year Commencement.

## SECOND SEMESTER, 2001-2002

2002

| January | 14-15, Mon.-Tues. | 8:00-11:30 A.M., 1:00-4:00 P.M. Late Registration in the Registrar's Office. |
| :---: | :---: | :---: |
|  | 16, Wednesday | Classes begin. |
|  | 16-22, Wed.-Tues. | 8:30-11:45 A.M. and 1:00-4:00 P.M. Late Registration in the Registrar's Office. |
|  | 22, Tuesday | Last day for late registration and class schedule changes. |
| February | 10, Sunday | Mass for Founders's Week: Past, Present and Future St. John's Church 4:30 P.M. |
|  | 14, Thursday | Last day to change from credit to audit. Last day to apply for Pass/No Pass status. |
|  | 18, Monday | Last day for filing applications for degrees to be conferred at end of Second Semester. |
| March | 9, Saturday | Spring recess begins after last class, clinic or laboratory. |
|  | 11, Monday | 9:00 A.M. Mid-semester grade reports from instructors due in the Registrar's Office. |
|  | 18, Monday | 7:30 A.M. Classes resume. |
|  | 25, Monday | Last day to withdraw from courses with a "W." |
|  | 28, Thursday | Holy Thursday-classes suspended from 5:00 P.M. March 28 to 5:00 P.M. Monday, April 1. |
|  | 31, Sunday | Easter Sunday. |
| April | 1, Monday | Easter Monday. Classes resume at 5:00 P.M |
| May | 6, Monday | Final semester examinations begin. |
|  | 11, Saturday | Final semester examinations end. Last day of required attendance of Second Semester except for candidates for degrees. |
|  | 17, Friday | 3:00 P.M. Baccalaureate Mass. |
|  | 18, Saturday | University Commencement. |

## SUMMER SESSION, 2002

| May | 20, Monday | On-campus registration for Pre-session: 8:00-9:00 <br> A.M. Registrar's Office. Pre-Session classes begin |
| :---: | :---: | :--- |
|  | 9:00 A.M. |  |

## FIRST SEMESTER, 2002-2003

| 2002 <br> August | 17, Saturday | Welcome Week begins. Activities for all new <br> students, freshmen and transfers, are announced in a <br> special brochure. 7:30 P.M. Welcome Week Mass. <br> St. John's Church. |
| :--- | :--- | :--- |
|  | 19-20, Mon.-Tues. | 8:00-11:30 A.M., 1:00-4:00 P.M. Late Registration <br> in the Registrar's Office. |
|  | 21, Wednesday | Classes begin. |

## SECOND SEMESTER, 2002-2003

2003
January 13-14, Mon.-Tues.
8:00-11:30 A.M., 1:00-4:00 P.M. Late Registration in the Registrar's Office.

15, Wednesday
Classes begin.
15-21, Wed.-Tues.
8:30-11:45 A.M. and 1:00-4:00 P.M. Late Registration in the Registrar's Office.

|  | 21, Tuesday | Last day for late registration and class schedule changes. |
| :---: | :---: | :---: |
| February |  | Mass for Founders's Week: Past, Present and Future. St. John's Church. Date and time to be announced. |
|  | 13, Thursday | Last day to change from credit to audit. Last day to apply for Pass/No Pass status. |
|  | 17, Monday | Last day for filing applications for degrees to be conferred at end of Second Semester. |
| March | 8, Saturday | Spring recess begins after last class, clinic or laboratory. |
|  | 10, Monday | 9:00 A.M. Mid-semester grade reports from instructors due in the Registrar's Office. |
|  | 17, Monday | 7:30 A.M. Classes resume. |
|  | 24, Monday | Last day to withdraw from courses with a "W." |
| April | 17, Thursday | Holy Thursday-classes suspended from 5:00 P.M. April 17 to 5:00 P.M. Monday, April 21. |
|  | 20, Sunday | Easter Sunday. |
|  | 21, Monday | Easter Monday. Classes resume at 5:00 P.M |
| May | 5, Monday | Final semester examinations begin. |
|  | 10, Saturday | Final semester examinations end. Last day of required attendance of Second Semester except for candidates for degrees. |
|  | 16, Friday | 3:00 P.M. Baccalaureate Mass. |
|  | 17, Saturday | University Commencement. |

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Director of Mail Services
Director of Financial Aid
Director of Science Complex Project
Director of US WEST Academic Development Center
Commandant of ROTC
Chairman, Archives Department, Reinert Alumni
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## CREIGHTON COLLEGE OF ARTS AND SCIENCES

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## GENERAL INFORMATION

Creighton University is by far the most diverse educational institution of its size in the nation. The combination of relatively small size and unusual diversity is the key to appreciation of Creighton University's excellence.

With an enrollment of 6,226 persons taught by a faculty of 1,361 , Creighton has set as its goal the conduct of higher education in the context of Christian values.

Founded in 1878, Creighton is coeducational, independent, and has always been operated by the Jesuits in the traditions of that Catholic religious order. Creighton has a faculty and student body made up of individuals of many races and faiths from every geographical region of the United States and from numerous foreign nations.

Creighton is a university in the true sense. In addition to the College of Arts and Sciences, Creighton has a College of Business Administration, University College, Schools of Dentistry, Medicine, Law, Nursing, and Pharmacy and Allied Health Professions, and a Graduate School offering master and doctorate degrees. As of Fall 2001, two new web pathways will be instituted for the School of Pharmacy and Allied Health Professions, the distance post-professional Doctor of Occupational Therapy (OTD) and the entry level web-based pathway to the Doctor of Pharmacy degree. Creighton has been active in the establishment of continuing education programs and of a Summer Session of modern design for the contemporary educational consumer. The University College offers undergraduate degree and certificate programs for parttime students and specializes in noncredit offerings for adults.

Thirty-seven percent of the University's students are enrolled in the College of Arts and Sciences, 31 percent in the health sciences professions, 11 percent in Business Administration, 6 percent in University College, 7 percent in law, and 8 percent in the Graduate School.

## LOCATION

Omaha, Nebraska's largest population center, is located on the western bank of the Missouri River, which serves as the Nebraska-Iowa boundary. Originally settled by the Omaha Indian Tribe, Omaha was soon a favorite stop for early settlers traveling up the Missouri River. Omaha's frontier traditions and values have remained largely intact as the city has progressed toward the 21st century. Creighton's campus is located on the northwest edge of downtown Omaha, Nebraska. The University's planned campus of nearly 93.5 acres is near the city's revitalized urban center.

Omaha is a city of 390,007 that serves as a regional center. The city is the major urban area between Chicago and Denver and between Kansas City and Minneapolis. The center of a metropolitan area of 716,998 persons, Omaha has rolling hills and treelined streets.

Creighton University is perfectly situated to enjoy both the charm and beauty of the city and its cultural and recreational attractions. The campus is minutes from downtown theatre, shopping, government and financial districts; Central Park Mall and the Heartland of America Park, the jewels of downtown Omaha's scenic riverfront development; Henry Doorly Zoo, which features the world's largest indoor tropical rainforest, a 450,000 gallon walk-through aquarium and IMAX Theatre; and Rosenblatt Stadium, home of the NCAA College World Series and the Omaha Golden Spikes.

Omaha is the home of the internationally acclaimed Opera Omaha, Ballet Omaha, and Omaha Symphony. Joslyn Art Museum not only displays impressive permanent collections from 19th and 20th century European and American artists, but also schedules five major exhibits and a dozen small presentations each year. One of the nation's finest old-world style theatres, the Orpheum, is home to hundreds of outstanding en-
tertainment events each year. In addition, the Omaha Community Playhouse and Omaha Theatre Company For Young People (formerly Emmy Gifford Children's Theatre) are among the top community theatres in the nation.

An enthusiastic sports city, Omaha has hosted the NCAA College World Series, held in early June each year, for nearly fifty years. The Creighton Bluejay basketball, soccer, and baseball teams have earned trips to their respective NCAA tournaments in recent years. Like the rest of the state, Omaha also loves the nationally ranked Nebraska Cornhusker football, basketball, volleyball, and gymnastic teams who compete against the nation's best college athletes in Memorial Stadium and the Devaney Sports complex, less than forty-five minutes from Omaha.

Omaha is the site of a vital downtown area. Omaha's Missouri Riverfront has undergone a massive redevelopment supported by private and public funds. ConAgra, Inc., a multi-billion dollar food processor, has built its headquarters operation, complete with a research facility, on the riverfront. The City of Omaha is extending its downtown Central Park Mall to the river front. New development also includes a consolidated operations center for Union Pacific Railroad and a major computer center for Qwest Communications.

Omaha is served by over 180 regularly scheduled daily flights by twelve major airlines plus two regional airlines and by four class-one railroads. Two interstate highway systems serve the metropolitan area-I-80 going east and west and I-29 north and south.

Many students find inexpensive and charming apartments in renovated historic buildings close to both Creighton and the European allure of " The Old Market," downtown Omaha's shopping and dining quarter. The cost of living in Omaha is less than that of almost any other major city - a comfortable lifestyle is within easy reach.

## HISTORY

John and Edward Creighton, builders of the transcontinental telegraph that linked pioneer America, have given their name to the University.

Edward's widow, Mary Lucretia Creighton, carrying out her husband's wishes, left money and directions for establishing a college in his memory. Following her death on January 23, 1876, the present University site was purchased and the first Bishop of Omaha, the Right Reverend James O'Connor, D.D., invited the Jesuits to conduct the Creighton College.

One priest, three scholastics, a layman, and a woman formed the faculty when classes began September 2, 1878. On August 14, 1879, Bishop O'Connor surrendered his trust to a new corporation, "The Creighton University."

Jesuits were exclusive managers of the corporation until, in October 1968, the Board of Directors was expanded to include laypersons. Today twenty-three laypersons and eight Jesuits conduct the corporate affairs of Creighton University.
The early growth of Creighton University and the enlargement of its endowment were due mainly to the benefactions of John A. Creighton and his wife, Sara Emily Creighton.

## Colleges of Arts and Sciences

The College of Arts and Sciences is the University's oldest and largest division. Creighton College was founded in 1878 as a liberal arts college for men. For forty years the College was conducted without charging tuition. Women began attending teachers' courses in 1923 and University College, a parallel liberal arts division for the education of women, was formally established in 1931. These two liberal arts divisions merged as the College of Arts and Sciences in 1951. A Department of Journalism
was part of the College of Commerce for 12 years until 1933 when a separate College of Journalism was established. In 1936 this status was changed to the School of Journalism and in 1948 to the Department of Journalism in the Creighton and University Colleges.

## College of Business Administration

On September 20, 1920, Creighton opened the College of Commerce, Accounts and Finance in response to employment requirements of business, industry and government. Four years later the division was renamed the College of Commerce, Finance and Journalism to reflect the addition of that professional department. By 1933 a separate College of Journalism was established; the original division was renamed simply the College of Commerce. In June 1956 the present name, College of Business Administration, was adopted, and in 1960 the University completed the Eugene C. Eppley College of Business Administration building. During the summer of 1996, the building underwent a complete interior and exterior renovation. The classrooms were updated to accommodate the latest in instructional and computer technology.

## School of Nursing

Nursing programs began at Creighton in 1928 but it was 1971 before separate divisional status was granted. The program was moved from its status as a department in the College of Arts and Sciences to facilitate closer relationship between nursing and the other Creighton health professions schools. In 1978 the College of Nursing became the School of Nursing.

## University College and Summer Sessions

University College opened in the 1983 Fall Semester. Designed for adult students, the College offers programs of study leading to baccalaureate degrees with the following majors: accounting, applied communication, applied computer science, atmospheric sciences, computer science, corporate communication, emergency medical services, journalism/public relations, management, mathematics, ministry, organizational communication, and psychology. Associate degrees can be earned in computer science, design production, emergency medical services, journalism/public relations, mathematics, ministry, organizational communication, spirituality, and theology. Also offered are certificate programs in applied communication, applied computer science, atmospheric sciences, broadcast meteorology, business administration, computer science, corporate communication, creative writing, design production, applied e-commerce, environmental science, Irish literature and culture, liturgy, mathematics, ministry, prehealth sciences, organizational communication, public relations/advertising, psychology, spirituality, and theology. Courses are offered in the evenings and early mornings throughout the year, during the traditional fall and spring semesters and during the summer; and most are taught by Creighton's regular faculty.

Creighton undergraduate students are eligible to register for correspondence courses in the University College Independent Study Program with permission of the Dean of their college. The Independent Study Program offers students the opportunity for access to undergraduate CORE courses developed by Creighton University faculty members. Correspondence with course instructors is the key to receiving the personalized instruction that is ordinarily given in the traditional college classroom. The minimum course completion time is 12 weeks, and the maximum is one year from the date of enrollment. Normally, Creighton students register for Independent Study Program courses at the beginning of the summer; however, it is possible to register for Independent Study Program courses at any time. The Independent Study Program maintains the same high degree of instructional quality that is maintained in on-campus courses offered at Creighton.

University College also offers noncredit courses, workshops, conferences, and seminars for adults in the Midwest and beyond, continuing the tradition of quality programming of Creighton resources and affiliate instructors in the noncredit area. The focus is on continuing education opportunities including information and skills that are useful in career and professional development; personal growth opportunities; and programs for the contemporary church. Noncredit programs have many formats. Some meet all day; others for two or three hours per week. With few exceptions, courses run a total of eight to 16 hours. Courses are held on campus and at off-campus locations to provide easy accessibility for adults.

Summer Sessions joined University College in Spring 1990. Graduate and undergraduate courses are offered during the 13 weeks of summer. Both day and evening classes are available in various formats. In addition to credit courses, a number of noncredit programs are offered. Scattered throughout the summer months are short institutes and workshops, both credit and noncredit.

## Other Divisions

Creighton's first Master's degree was conferred in 1893, but the Graduate School was made a separate division in 1926. Professional schools and their dates of establishment are the School of Medicine, 1892; School of Law, 1904; School of Dentistry and School of Pharmacy, 1905. In 1982, the Division of Allied Health Professions (formerly attached to the School of Medicine as the Division of Allied Health Sciences) was attached to the School of Pharmacy.

## THE JESUIT ORDER AND CREIGHTON UNIVERSITY

Creighton University, situated in the heart of America, is Jesuit education. Jesuit American education on the secondary level network is all-embracing. Forty-six Jesuit high schools dot our map; one was established in the 18th Century, twenty-four in the 19th Century, and twenty-one in the 20th Century, affecting over 36,500 young men and women of all denominations.

Twenty-eight Jesuit universities flourish from coast to coast, in 1990 enrolling 182,628 collegiate and professional students. Jokingly likened to sparrows, Jesuits in higher education frequent our nation's largest cities. The educational opportunities they provide are diverse, but all the institutions share in the Jesuit character and tradition. Why? Because they are staffed by religious and lay colleagues who are imbued with, or attracted by, the educational ideals of St. Ignatius Loyola, founder of the Jesuit Order. Ignatius outlined his principles for broadly-educated and decent people marked by good judgment in his Ratio Studiorum, Plan of Studies," written about 1540.

There seems to be an instant bond of camaraderie and identification among graduates of diverse American Jesuit universities and high schools before they have visited together for five minutes. Creighton graduates have commented on this again and again. It is a subtle but real bond that these graduates feel. They are part of a great and satisfying network calculated to prepare them for a full and rewarding life. This Jesuit education is shared with 1,000 other institutions conducted by the total number of 25,000 Jesuits across the world.

American Jesuit Priests and Brothers are active on every front. They are the largest missionary Order in the Catholic Church. Of their 6,000 American Jesuits, every fifth man is in the harvest field of foreign or American mission.

## GOALS AND OBJECTIVES

Creighton University exists to educate her students with a view to their intellectual expansion, social adequacy, physical development, aesthetic appreciation, and spiritual enrichment. Creighton serves her publics primarily through teaching and research.

Employing the techniques of teaching and research offers numerous other opportunities to provide community services and leadership.

Creighton has behind it a pattern of more than four centuries of Jesuit teaching. The Order's focus has always been on the total person, an approach that includes development of each student's talents to assure that he or she can meet both material and spiritual needs.

Members of every denomination are enrolled in and welcome to all courses in the University. While Creighton fosters learning in a Christian-oriented setting and challenges students to reflect on transcendental truths, students are not required to participate in religious services or activities.

All educational programs of Creighton University are open to both men and women.
The University Assessment Plan has been established to help measure the success of Creighton's academic programs. Each college and school has in place its own appropriate plan to determine student achievement in its programs and to implement changes for continuous improvement in Creighton's assessment plans, and students participate with faculty and administration in striving for improvements in the teaching-learning process. In addition, the University Plan embraces Student Services, and the special areas of cultural diversity and service to others, values which are emphasized in Creighton's Mission Statement.

## CREDO OF CREIGHTON

Creighton, a Jesuit University, is convinced that the hope of humanity is the ability of men and women to seek the truths and values essential to human life. It aims to lead all its members in discovering and embracing the challenging responsibilities of their intelligence, freedom, and value as persons.

We therefore profess, and pledge ourselves to teach in the perspectives of, the following creed:

We believe in God, our loving Creator and Father.
We believe in the intrinsic value of the human being as created in God's image and called to be his child. This includes all persons and excludes any form of racism and other discrimination.

We believe that the deepest purpose of each man and woman is to create, enrich, and share life through love and reverence in the human community. This motivates our open and relentless pursuit of truth. For this reason we foster reverence for life in all its human potential.

We believe that we should support all persons in their free and responsible lifesharing through family and social systems, and through political, scientific, and cultural achievements.

We believe that we must strive for a human community of justice, mutual respect, and concern. In this context we must cultivate respect and care for our planet and its resources.

We believe that laws exist for the benefit and well-being of individual persons, that legal systems must express the common good, and that all government must be subject to the courageous, though respectful and loyal, criticism of intelligent and responsible citizens.

We believe that the law of justice and love must regulate the personal, family, economic, political, and international life of all persons if civilization is to endure.

We believe in the teachings and example of Jesus Christ.

## NONDISCRIMINATION POLICY

Creighton admits qualified students and hires qualified employees without regard to race, color, age, national or ethnic origin, disability, sex, marital status, or religion. Its education and employment policies, scholarship and loan programs, and other programs and activities, are administered without unlawful discrimination. The University is taking affirmative action to employ and advance in employment qualified disabled veterans and veterans of the Vietnam-era. The University Affirmative Action Director has been delegated the responsibility for coordination of the University's equal rights efforts.

It is also the policy of the University to make all programs and services available to individuals with disabilities. To obtain information on accessibility of buildings and programs or to report problems of accessibility, please contact the Office of the Director of Affirmative Action, Room 232, Administration Building or by telephone (402) 280-3084.

## SERVICES FOR STUDENTS WITH DISABILITIES

Services for students with disabilities are provided to qualified students to ensure equal access to educational opportunities, programs, and activities in the most integrated setting possible. Students must make timely and appropriate disclosures and requests (at least five weeks in advance of a course, workshop, program, or activity for which accommodation is requested or such other reasonable time as the particular circumstance of a request for accommodation warrants). Requests for reasonable accommodations are encouraged to be made as soon as possible after acceptance. Each student may be required to submit medical or other diagnostic documentation of disability and limitations, and may be required to participate in such additional evaluation of limitations as may appropriately be required by Creighton University or other agencies prior to receiving requested accommodations. The University reserves the right to provide services only to students who complete and provide written results of evaluations and service recommendations to appropriate University personnel. For more information, contact the Dean's Office or the Coordinator of Services for Students with Disabilities at 280-2749.

## GRADUATION RATES

In 2001 the completion or graduation rate for students who entered Creighton University in Fall 1995 was 72 percent. This includes students who entered professional school programs of Dentistry, Law, Medicine and Pharmacy and Allied Health Professions at Creighton University.

## ACCREDITATION

Creighton University is fully accredited by the North Central Association of Colleges and Schools, the accrediting agency for the region in which the University is situated.

The College of Business Administration is an accredited member of the International Association for Management Education-AACSB (graduate and undergraduate programs). The accounting program has been accredited (Type A - baccalaureate) by the Accounting Accreditation Committee of the Association.

The Emergency Medical Services Education Program is fully accredited by the committee on accreditation of Educational Programs for the Emergency Medical Services Professions.

The School of Nursing offers a baccalaureate program and a graduate program accredited by the National League for Nursing, Inc. The baccalaureate program also is approved by the State of Nebraska. In addition, the baccalaureate and graduate pro-
grams received preliminary approval by the newly formed Commission in Collegiate Nursing Education.

The Department of Social Work is an accredited council on social work education program preparing professional undergraduate social workers.

The teacher education programs of Creighton University are fully accredited by the National Council for Accreditation of Teacher Education for the preparation of elementary, secondary, and special education teachers at the undergraduate level, and for the graduate-level preparation of school principals and school counselors.

The Schools of Dentistry, Law, Medicine, and Pharmacy and Allied Health Professions are accredited by their respective professional standardizing agencies: American Dental Association, American Bar Association and Association of American Law Schools, Liaison Committee on Medical Education, American Council on Pharmaceutical Education, the American Occupational Therapy Association, and the American Physical Therapy Association.

The University is also approved by and/or a member of the following: American Association of Colleges for Teacher Education, American Association of University Professors, American Association of University Women, American Council on Education, Association of Schools of Journalism and Mass Communication, Association of American Colleges, Association of Catholic Colleges and Universities, Association of Independent Colleges and Universities of Nebraska, Association of Independent Liberal Arts Colleges for Teacher Education, Association of Jesuit Colleges and Universities, The College Board, Council for the Advancement and Support of Education, Council of Graduate Schools in the United States, Council on Postsecondary Education, Council on Social Work Education, International Association of Catholic Universities, Midwest Association of Graduate Schools, National Association of Educational Broadcasters, National Association for Foreign Student Affairs, National Association of Independent Colleges and Universities, National Council for Accreditation of Teacher Education, National Council of Educational Opportunity Associations, Nebraska Council on Teacher Education, and Nebraska State Board of Educational Examiners.

## CAMPUS FACILITIES

Creighton's 56-building campus provides excellent facilities for most of the University's academic and extracurricular activities. Following two decades of phenomenal expansion and growth, emphasis now is placed on beautification of the central campus, particularly a pedestrian mall to add green space to the heart of the undergraduate living area. Several phases of the mall project have been completed. They provide an appealing, landscaped pedestrian and relaxation area in front of the Administration Building and St. John's Church and across the East Campus to the School of Law. Recent emphasis on modernization and upgrade of facilities has resulted in complete renovation of the Epply building for the College of Business Administration, and the addition of computer laboratories in every major building.

## Main University Campus

The University campus is about a fifteen-minute walk from the business district of Omaha. The principal portion extends from Cass Street on the south to Cuming Street on the north and from Twentieth Street on the east to Thirtieth Street on the west. (See campus map inside back cover.)

## CAMPUS DEVELOPMENT

A student center was constructed on mid-campus in 1987. Artificial-turf athletic fields and extension of the campus mall to the east were done in 1988. The Lied Edu-
cation Center for the Arts was completed in the spring of 1995. The Kiewit Fitness Center and Ahmanson Law Center have been expanded. The new McGloin Residence Hall opened in August 1998.

## Health Sciences Facilities

The Doctor C. C. and Mabel L. Criss Health Sciences Center is an ultra-modern complex made possible largely through the generosity of the late Mabel L. Criss, whose gift commemorates her late husband, Dr. C.C. Criss. Dr. Criss was a Creighton alumnus; the couple founded Mutual of Omaha and United of Omaha.

The Criss Center provides teaching, medical laboratory space, and facilities for the research activities of the faculty of the School of Medicine. Two separate units (Criss II and III) provide classroom and laboratory facilities for instruction of the freshman and sophomore students in the preclinical medical sciences, as well as office and laboratory space for the members of the preclinical faculty. Twin two-level 255 -seat amphitheatres, the connecting link between the two units, form the hub of the academic activities. Multipurpose laboratories, classrooms, and seminar rooms are conveniently distributed throughout the facility. In addition, the Criss Health Sciences Center accommodates the administration, faculty, and students of the School of Nursing and the School of Pharmacy and Allied Health Professions. The administrative offices of the School of Medicine are located in the Criss Health Sciences Center, as are the offices of the Vice President for Health Sciences. Another unit (Criss I) provides medical research facilities for the faculty. As part of an ongoing process to upgrade and modernize Health Sciences facilities, a complete renovation of Unit I of the Criss Center was completed in February 1994. The Beirne Research Tower adjoins the Criss Health Sciences Center. This six story medical research facility was made possible by a gift from Doctor Gilbert A. Beirne and his brother, Doctor Clinton G. Beirne. The Beirne Research Tower provides approximately 13,000 square feet of space for laboratories and offices. The modern, functional research laboratories house the regulatory peptide research program, the infectious disease and microbiology program, a bone biology research program, the molecular biology core facility, and an allergic diseases research program.

The University currently has under construction a 100,000 square foot science facility. The building will be physically connected to both Criss and Rigge and provide expansion space for functions of the Vice President of Health Sciences, administration and faculty offices of the School of Pharmacy and Allied Health, offices for the Department of Preventive Medicine, classrooms, common use areas, Arts and Sciences administrative functions, and offices and classrooms for undergraduate science departments.

Once construction of the new space is complete in December of 2002, space in the existing Criss and Rigge buildings will be renovated to provide state of the art research and teaching laboratories. Additionally, the two teaching amphitheaters will be updated technically and environmentally.

A new medical student computer laboratory has been built in the Criss II building. Student computer workstations are available in several sites in the Criss Center, Health Sciences Library, Saint Joseph Hospital, and various clinics. The students have access to a wide variety of software, databases (including MedLine), electronic mail, and the internet.

Saint Joseph Hospital, an ultramodern regional health-care facility with state-of-the-art technology, serves as the major affiliated teaching hospital for the Creighton University School of Medicine. Opened in December of 1977, it is located on Creighton's west campus at 30th and California Streets and was one of the largest privately sponsored construction projects in the history of Nebraska. Policies for the
hospital are set by a governing board that includes strong representation from Creighton University and the School of Medicine faculty.

The School of Medicine, since its founding, has been affiliated for educational purposes with St. Joseph Hospital. This affiliation is in accordance with the provisions made by John A. Creighton, a benefactor of both institutions, and formalized in written agreements to define cooperation for the attainment of mutual and generally inseparable goals of good patient care, research, and medical education. A major regional and community facility, the hospital maintains programs in each of the major clinical services with the active staff appointed from the faculty of the School of Medicine. The close working relationship of the two institutions is continually reinforced by regular meetings of the joint management committee involving the top executive officers of both the hospital corporation and the University.

A six-story office complex attached directly to the hospital provides office suites and examining areas for the clinical faculty of the School of Medicine. The clinical faculty assigned by the chairs of the several departments provide teaching in the following clinical areas:

Allergy; arthritis; cardiology; chest disease; dermatology; diabetes; endocrinology; family medicine; hematology; hypertension; infectious disease; neurology; obstetrics and gynecology; oncology; ophthalmology; orthopedics; otolaryngology; pediatrics; peripheral vascular disease; proctology; psychiatry; psychology; radiology; rehabilitation; renal; rheumatology; surgery; and urology.

A clinical assessment center has recently been developed at St. Joseph Hospital. The ultramodern facility has six examination rooms each equipped with recording equipment for faculty teaching and supervision of student history and physicals.

The diagnostic laboratory is supervised by the Department of Pathology and the radiological service by the Department of Radiology. Annual visits to the Health Center exceed 100,000.

A new outpatient Cardiac Center opened August 1, 1992. This new three story 60,000 square-foot building houses all cardiac outpatient diagnostic facilities as well as an outpatient Cardiac Catheterization Laboratory and a 15,000 square-foot Cardiac Rehabilitation Center.

The Boys Town National Research Hospital, constructed and operated by Father Flanagan's Boys Home, is physically connected to the teaching hospital. A unique national resource, the Hospital has assembled a highly specialized staff to develop inpatient and outpatient programs for children with communication disorders resulting from physical or sensory defects. The St. Joseph Service League Center for Abused Handicapped Children, established at the Hospital, is designed to assist in the detection, assessment, treatment, and prevention of abuse and neglect of children whose handicaps impair their communicative abilities. The staff of the Hospital also comprises the faculty and staff of the Department of Otolaryngology of the School of Medicine, and the Director of the Institute occupies the Father Flanagan Chair of Otolaryngology.

Since 1973, the School of Dentistry has occupied a facility containing 150,000 square feet of space (excluding interstitial mechanical areas). It is a three level structure with grade entry to the first two. Beginning in Fall 1993, this building has been shared with the School of Pharmacy and Allied Health's Physical Therapy and Occupational Therapy programs. A five-year renovation of all classrooms, laboratories and dental clinic operatories was completed in 1998. The first floor consists of student services and lounge, classrooms, Physical Therapy/Occupational Therapy administrative offices, clinics and research laboratories. The adult dental clinic and dental departmental fac-
ulty offices occupy the second level. The third level is occupied by the children's dental clinic, basic and dental science laboratories, research space, seminar rooms and dental administrative offices.

Central to the facilities of the Health Center is the Creighton University BioInformation Center, which opened in the summer of 1977. This facility brings to the health sciences campus a focal point for modern and innovative learning and research. The services provided are available for students and faculty of the University, hospital staff, and the health sciences community of the Omaha area. They include the Health Sciences Library, the Learning Resource Center, and the Media Services Center. Media Services provides technical services such as photography, graphic design, computer imaging, television production and classroom services. Classroom Services provides audio visual support for the University as well as educational service to assist in the identification of instructional priorities and attainment of educational goals.
The Health Sciences Library/Learning Resources Center (HSL/LRC) is open $104 / 2$ hours a week. Over 200,000 items of print and non-print materials are available. Access is provided to many; bibliographic and full-text databases such as MEDLINE, Micromedex, pharmaceutical abstracts, etc. The Learning Resources Center adds a multimedia dimension to the facility. It provides such resources as video disks, CDROMs, models, videotapes, and audiocassettes. In addition, a state of the art computer lab is equipped with Pentium PCs and Macintosh computers. Over 600 study seats are available for students, faculty, and staff.

## University Libraries

The libraries of the University and the volumes and microforms they contain are shown below. The totals are exclusive of pamphlets, reports, and similar publications. The Reinert/Alumni Library is the University's main library.

Alumni Library
Law
Health Sciences

471,548 Volumes 838,597 Microforms 156,980 Volumes 716,106 Microforms 190,290 Volumes 112,911 Microforms 818,818 Volumes 1,667,614 Microforms


## LIVING ACCOMMODATIONS

Creighton University offers on-campus housing for all full-time matriculated students. All unmarried undergraduate students, from outside the immediate Omaha area (as defined by the University), are required to live in University residence halls the first two years they are at the University. Students from the Omaha area may live in the residence halls. Otherwise, during their first two years at the University, students from Omaha must live with a parent or guardian. A request to be exempt from the residency requirement must be made in writing to the Office of the Associate Vice-President for Student Services by July 15th prior to the beginning of the student's classes. Only the Associate Vice President for Student Services will be able to permit these exemptions. A resident must be a full-time, matriculated student at the University. If space allows, the University may permit housing of part-time students in University residence halls.

The University operates seven residence halls. Three halls, Deglman, Kiewit, and Gallagher, are traditional style with common bathroom facilities. Most rooms are double occupancy. Two halls, McGloin and Swanson, are suite style with four students per suite. One hall, Kenefick, is a residence for junior and senior level students and is an efficiency or one bedroom apartment style hall. Another hall, Heider Hall, is a hall of efficiency, one-bedroom, and two-bedroom apartments open to married students, students with families, or students who have already completed bachelor's degrees. Limited space is available for students with families. To reside in Heider Hall, students must sign a 12 month lease. All other halls are contracted for the full academic year beginning in August and continuing until the end of exams the following May.

The residence hall contract is for both room and board. Only students living in Kenefick or in Heider Hall are not required to be on the board plan. A student requesting to be off the board plan for medical or other reasons must furnish documentation to the Associate Vice-President for Student Services for his review. Generally, the dining services are able to meet most dietary needs. Students may elect either a 19, 15, or 12 meal plan per week. Students in Kenefick or in Heider Hall may elect any of the standard meal plans or the Flex Plan. The Flex Plan allows the student to eat 60 meals during a semester. Board plans are also available to off campus and commuting students.

Meals are served in the Becker and Brandeis dining areas located adjacent to the campus residence halls. Carefully planned menus assure a well-balanced variety of nutritious and appetizing foods. More information about dining opportunities is available from Sodexho food service located on the lower level of Brandeis Hall.


The annual room and board rates in University residence halls effective August 2001 are:


Incoming students must apply to the Department of Residence Life for a residence hall reservation. All students pay a damage deposit of $\$ 100$. Students applying for Heider Hall are required to pay a deposit equal to one month's rent for the Heider lease plan. Each semester's tuition, fees, and room and board charges are payable at the time of registration. However, arrangements may be made to pay monthly installments by using the University's Monthly Electronic Transfer (MET) plan (see page 52).

Room and board rates are subject to change without notice. Any special needs as to age or physical condition requiring special housing arrangements will be given full consideration by the Associate Vice President for Student Services. Questions regarding housing services and facilities may be directed to the Department of Residence Life, 136 Swanson Hall; telephone (402) 280-3016.

## FAMILY HOUSING

Creighton University has limited space in the apartment-style Heider residence hall for families. A twelve-month lease is required on all apartments except for those graduating at the end of the current lease. Available for families are the large one-bedroom apartments ( 655 sq. ft.) There are only four two-bedroom apartments in Heider Hall. Family housing is available on a first-come, first-served basis.

## OFF CAMPUS HOUSING

The Department of Residence Life, 136 Swanson Hall, lists information on rentals in the area of campus. The actual arrangements for housing are left to the individual students. The University is not responsible for the rental agreements between students and their landlords. It is suggested that students set aside several days before registering to search, inspect, and contract for suitable housing.

## CHILD DEVELOPMENT CENTER

Students with children may wish to take advantage of the James R. Russell Child Development Center, which is conveniently located at 2222 Burt Street. The Center has reasonable rates, and can accommodate children ranging in age from six weeks through five years. Call (402) 280-2460 for information.

## UNIVERSITY AND STUDENT PUBLICATIONS

The Bluejay, the official Creighton University yearbook, represents all of the undergraduate Colleges of the University. Edited by students, The Bluejay presents an account of the year's activities in picture and story.

Creighton Today is produced and distributed each class day to all faculty and staff members of the University. Given priority for inclusion in this employee newsletter are scheduled campus activities and events; management and human Resources communications; papers presented; and academic and research innovations or achievements. Please submit items for publication via e-mail to bluenews@creighton.edu or fax to ext. 2549.

The Creighton University Bulletin is published four to five times annually and is edited by the Registrar's Office. Its purpose is to give the usual catalog information concerning the various Colleges and Schools of the University and their academic offerings.

The General Information Bulletin is published annually by the Admissions and Registrar's Offices to acquaint prospective students with Creighton.

The Creightonian, the University's weekly student-edited newspaper, serves as an important medium for the university community while at the same time affording students an opportunity for practical journalism experience. A member of the Department of Journalism and Mass Communication faculty serves as adviser to the student staff.

The Creighton Law Review publishes quarterly. In accord with law review tradition, this student-edited publication affords additional opportunity for intensive legal research. While publishing the work of mature scholars as the lead articles of each edition, the Review is primarily devoted to the presentation of material produced solely by students of the Creighton University School of Law.

The Creighton Lawyer is a magazine with law-related stories, law school news, and alumni information published by the School of Law for alumni, students, faculty, and friends.

CU This Month is published each month by the Student Activities Office. This calendar represents activities sponsored for students, faculty and staff.

CU Student Planner, published by the Student Activities Office, is a personal calendar that includes Creighton's academic dates and traditional events. Each fall the Daily Planner may be purchased from the Student Center Information desk or the Creighton Book Store.

The Honor Roll of Donors is published annually as a report to the University's thousands of financial donors.

Parent is produced three times annually by the Public Relations Office for parents of Creighton students.

The President's Letter is published three times a year to provide campus information to a select group of people who have shown outstanding support and interest in the University.

Shadows literary magazine contains articles by students and alumni of all divisions of the University, and is edited by members of the student body.

The Student Handbook sets forth University services, rules and regulations pertaining to nonacademic areas of student life.

Student and Faculty Directory is compiled and distributed annually in the fall by the Creighton University Student Board of Governors. It contains the names, telephone numbers and addresses of the administrative personnel, the faculty, and students of the University. One copy of the Directory is available to all students with a valid I.D.

Student Organization Directory is the official directory for Creighton's registered student organizations. It is published in the fall of each year by the Student Activities Office.

Creighton University Magazine is a quarterly magazine produced by the Public Relations Office for alumni, parents and friends of Creighton University. The magazine supports the University's mission of education, while serving as a vital link between the University and its constituents.

## EXTRACURRICULAR ACTIVITIES

It is the goal of Creighton University to develop an individual who not only has mastered the content of his or her academic courses, but who also has broad interests and who has developed skills in interpersonal relations. To aid in this process, the University promotes a wide range of student organizations and activities. Students are encouraged to take an active interest in the various academic, social, dramatic, literary, debating, student government and religious activities. The Student Activities Office in the Student Center can provide additional information.

## Academic

Alpha Kappa Psi is a professional business fraternity that was founded on October 5, 1904 in the School of Commerce, Accounts and Finance at New York University. Today, it is among the 20 largest national college fraternities and has been a leader in providing maximum services and benefits to members at minimum cost. Delta Pi is a complete, well integrated, and capably administered chapter of this national business fraternity, standing for the highest ideals of conduct and achievement in university and professional life.

The Creighton Center for Service and Justice (CCSJ) is a department of University Ministry founded to promote the Jesuit and Creighton mission of integrating faith, service and justice. The Center creates partnerships with community and church agencies in Omaha and around the country to promote awareness of social issues and engagement in community service. The staff is dedicated to involving students in service and action on behalf of justice as an integral part of their educational and communal experience at Creighton University. Students are encouraged to reflect on their experiences, make choices and take risks grounded in their faith, Jesuit values, and Catholic Social Teaching. The Center for Service and Justice is located in room 201 of the Kiewit Fitness Center.

The Creighton Marketing Association (CMA) is a collegiate chapter of the American Marketing Association (AMA), an international organization founded in 1937.

AMA membership consists of marketing practitioners, educators, and students, all striving to advance the discipline of marketing and enhance their personal development in the field. The objectives of AMA include probing and promoting the use of marketing concepts by business, nonprofit, and other institutions for the betterment of society and stimulation of ethical marketing principles so that marketing knowledge and practice are used toward legitimate ends. CMA sponsors programs and lectures conducted by marketing professionals to promote career awareness and professional development. Numerous opportunities are available in CMA for personal growth through participation and leadership. CMA membership is open to all Creighton students interested in marketing and related areas, including advertising and communications.

The Creighton University Chapter of Financial Management Association was chartered in February 1985 and has become one of the top student chapters in the nation. Membership is open to any student interested in financial management. The purpose of the chapter is to provide professional growth and development opportunities for the members. Affiliation with the national organization provides numerous benefits to the student members including a subscription to Financial Management, attendance at national meetings, and a college chapter newsletter. Activities at the local level include interaction with members of the Omaha business community and field trips to regional financial institutions.

The Creighton University Student Affiliate Chapter of the American Chemical Society (ACS) (the Chemistry Club) is composed of students interested in chemistry. The club's members work with the faculty in presenting chemistry demonstrations in area schools, assist in Chemistry Field Day, and participate in the activities of the Omaha Section of the ACS. Student Affiliates are eligible for numerous benefits from the ACS, including reduced subscription prices for journals and reduced registration fees at regional and national meetings. Membership is open to any students who are interested in chemistry.

The Student Education Association of Nebraska (SEAN) is an affiliate of the Ne braska State Education Association and the National Education Association. It is a campus organization for students preparing to teach who want to belong to, and benefit from, a professional organization of teachers. Student members receive many of the benefits offered to active members, including liability insurance, and have representation at all levels of the NSEA and NEA governance structures. Students also have the opportunity to interact with, and receive encouragement and support from teachers.

The International Relations Club is an organization of students who meet to discuss current international affairs and serve as delegates to Model United Nations and foreign policy conferences throughout the country and, sometimes, internationally. IRC sponsors University lectures, hosts national and foreign diplomats, scholars, journalists, and persons practicing in the fields of international law and international business. It also supports and promulgates information about the activities of the United Nations Association of the United States (UNA, USA).

The International Student Association (ISA) offers all Creighton students a unique opportunity for meeting new friends from all areas of the world. Members share and learn about their customs, values, music, and languages. The group organizes monthly meetings, social activities, and special events, such as the annual International Night Banquet.

The Creighton University Chapter of the Society of Physics Students is one of approximately 400 collegiate chapters affiliated with the American Institute of Physics. Membership is open to all students having an interest in physics. Chapter activities encourage and assist students in developing the knowledge, enthusiasm, and social
responsibility essential to the advancement of physics. They also provide an opportunity to develop a closer relationship between students and faculty. Local, regional, and national meetings enable members to discuss their mutual problems, exchange ideas, and present papers on their research projects. Creighton's Chapter is operated entirely by elected student officers with a faculty member of the Department of Physics serving as moderator.

Public Relations Student Society of America (PRSSA): A subsidiary of the Public Relations Society of America, PRSSA is open to public relations majors and other students who have taken at least one course in public relations. Members meet with public relations professionals in the Nebraska-Western Iowa area, attend Public Relations Society of America luncheons, participate in special events and conduct a community relations program of their choice. The organization is an avenue toward a career in public relations.

## CAMPUS RECREATION

The Creighton Kiewit Physical Fitness Center is located at the heart of the campus and features a pedestrian walk-through with indoor access from four Creighton residence halls.

The main activity area comprises five separate multi-use courts designed for basketball, tennis, volleyball, badminton. This area can be reserved for most special events, space permitting. A track around the periphery permits jogging while the five main courts are in use. All can be viewed from the mezzanine level of the center.
The Fitness Center includes an approximately 25 -meter swimming pool with additional shallow area for instruction and a diving "L" with a one-meter diving board. A sundeck adjacent to the pool is available, weather permitting. Men's and women's saunas complement the locker and shower areas, and a whirlpool is located in the pool area.
The Fitness Center also has a 4,000 square foot multipurpose room with wood flooring, four racquetball courts, table tennis, and a newly renovated weight-training and fitness forum. The Fitness Center offers many aerobics classes and fitness clinics for students and members.

All students are actively encouraged to participate in the myriad of opportunities provided by the facility. Students can also work part-time as lifeguards and in other service positions.

The Creighton Sports Complex, and artificial turf are located on the east side of campus, accommodates three intramural football fields, two soccer, and numerous other intramural activities. It is also the home field for the Creighton Varsity Baseball and Softball teams.

Creighton's Intramural Sports Program provides leadership in planning and promoting activities of competitive and recreational nature for men, women, and coed groups of students, faculty, staff, and respective spouses. Included are sports activities for teams such as softball, basketball, flag football, volleyball, soccer, and individual/ dual such as tennis, racquetball and the badminton. Student input is welcomed, and the intramural staff encourages those interested, to become involved with the organization, supervision and officiating of the intramural program.

There are also several Sport Clubs that provide multiple opportunities for instruction, improvement and/or competition in non-varsity activities such as judo and jujitsu, karate, kendo, lacrosse, rowing, strength and fitness and tae kwon do.

## CULTURAL

The Creighton University Art Gallery, located on the main floor of the Lied Education Center for the Arts, has a year-long schedule of national, faculty, and student (BFA) exhibits.

The Creighton University Chamber Choir is a small, mixed vocal ensemble that performs both on and off campus. The group's repertoire includes all styles of music from all historical periods. Membership is determined through auditions held at the beginning of each semester. Contact the Fine and Performing Arts Department: the Director of the Chamber Choir.

The Creighton University Chorus enjoys singing a diverse repertoire of music. There are no auditions, and membership is permitted for both credit and noncredit enrollment. The choir presents a performance on campus each semester as well as offering music at various off-campus sites.

Music Recitals are presented each semester and feature solo and ensemble performances. An annual honors concert is presented near the close of each academic year and features some of the University's finest student performers. All recitals are open to the public.

The Pep Band provides music for home basketball games. Membership is on a noncredit basis.

The Wind Ensemble offers students the opportunity to study the finest concert music for winds and percussion and present it to the public through performance.

Orchestra and Jazz Ensemble participation are available to interested musicians. Please contact the Fine and Performing Arts Department, Coordinator of Music, for more information.

A Company of Dancers from Creighton University. The Company is selected by open audition and the repertoire consists of both classical ballet and modern dance. A Company of Dancers perform twice each school year, usually in the spring and winter, in dance concerts that features works choreographed by Creighton faculty members and dance students. Call (402) 280-3047 for more information about these performances.

The Creighton Oratorical Association (Jaytalkers) was organized in 1884. One of the oldest organizations at Creighton, its members are trained in both Lincoln-Douglas and Parliamentary debate, oratory, limited preparation speaking, and oral interpretation of literature. The Society's members travel nationally and internationally, and compete on a circuit of speech and debate tournaments which includes attendance at several National Tournaments and the World Universities Debating Championships. The Creighton Oratorical Society is associated with the Missouri Valley Forensic League, the Mid-America Forensic League, the Nebraska Intercollegiate Forensic Association, the American Forensic Association, the National Forensic Association, and the National Parliamentary Debate Association.

Creighton University Theatre provides a season of several full-length and short plays each year in support of various courses in acting, directing, and technical areas of the theatre. All Creighton students are eligible to participate as actors or production staff. In addition, there are lectures and workshops concentrating on various aspects of theatre as well as frequent guest artists. Announcements of theatre activities are carried in the campus and local newspapers.

Creighton's new Javanese Gamelan Ensemble is open to all members of the community for non-credit participation. Performances for this year include venues inside
and outside the Lied Center for the Arts, as well as performances for the Nebraska Music Educators Conference and the community associated with the University of South Dakota at Vermillion.

The Creighton Gospel Choir is an ensemble open to all members of the Omaha community interested in developing their skills in this medium filled with personal testimony and rich traditions.

Radio facilities at Creighton consist of the Pellegrin Studios, dedicated in 1990 to the memory of alumnus broadcaster Frank Pellegrin. Two fully equipped audio production studios, an interview booth, and field recording equipment are provided for students to produce news, sports and other public affairs programming. Student productions are aired with RealAudio software on the Creighton Web Radio at http://www.cuwebradio.creighton.edu.

Television opportunities have been offered to Creighton students since 1946, when commercial television was just getting under way in this region. Recognizing early the many communicative dimensions of television, Creighton has continued to be a leader in exploring new aspects of the medium. Through its membership in the Consortium of Associated Schools and Educational Resources, the University has access to the cable television in Omaha.

State of the art television facilities are used for teaching, production and research in the undergraduate division. Through internships and part-time employment, students gain valuable experience in Media Services Video Production facilities and with commercial stations and cable systems in the community.

## MULTI-CULTURAL ORGANIZATIONS

African Student Association, Asian Student Association, Black Greeks United, Black Law Student Association, CU Latino Student Association, German American Club, Hui O Hawaii, Indian Cultural Society, International Students Association, Korean Students Association, Minority Health Science Association, Muslim Student Association, Native American Student Association, Vietnamese Student Association.

## RELIGIOUS

As a Catholic University in the Jesuit tradition, Creighton's mission is to provide a value-centered education and an environment for accomplishing this. Two visible signs of this dedication are the chaplains of St. John's Church and University Ministry who minister to the students, faculty, and staff.

The University Ministry staff consists of Jesuit priests, laywomen and men, and a Lutheran minister. The chaplains are assisted by many lay faculty, other Jesuits, and the priests and scholastics of Campion House as well as Campus Ministry student advisors.

In cooperation with students and faculty, University Ministry staff initiates social action and peace and justice programs. The chaplains also help enrich the quality of education at Creighton University by working with various faculty groups to deepen and improve the effectiveness of their mutual commitment to Christian education.

In the Jesuit tradition, the University Ministry staff provides students with opportunities for reflection, worship, and community service. Specifically offered are liturgies, faith formation, retreats, marriage preparation, interfaith and Lutheran services, community service in the Omaha area, a program of service nationally and in Latin America.

The chaplains are present in each of Creighton's eight schools and a number of them live in the residence halls in order to promote the goals of the University: "to support
and encourage reflectiveness, contemplation, objectivity, and creativeness; physical, emotional, and spiritual well being."

## STUDENT GOVERNMENT

All full-time students registering in the undergraduate colleges and in the professional schools become voting members of The Creighton Student Union. The affairs of this corporation are managed by The Student Board of Governors made up of members elected from the schools and colleges of the University. This group of student leaders controls the use of the Student Activity Fund, plans the major social events of the year, and operates through standing committees to further the best interests of the University and of her students.

## FRATERNITIES AND SORORITIES

At Creighton we feel that the Greek experience enlarges the college experience. Since the Greek community is self-governing, many opportunities exist for members to gain leadership experience. Most chapters have eight to ten officers as well as a variety of committee heads. The Greek community assists students in becoming involved on campus. This involvement includes campus service projects, philanthropic events, membership in other student organizations, and leadership training experiences. The Greek system provides an experience that will assist individuals in making the transition from high school to college. To help with academic transition, most chapters play an important role in assuring academic success of their new members. Many chapters set minimum grade-point averages that must be attained before the prospective member is admitted into the organization. Fraternity and Sorority study halls encourage strong study habits. The Greek system was specifically established to foster the development of friendship and support needed for academic and personal success. Chapters offer the opportunity to associate with individuals of diverse backgrounds, goals, ideals and interests. Most of the values and benefits of involvement in the Greek community are not even realized until after graduation.

## HONOR SOCIETIES AND FRATERNITIES

Alpha Sigma $N u$ is the national honor society of Jesuit institutions of higher education in the United States. The society was founded in 1915 at Marquette University to honor a select number of students each year on the basis of scholarship, loyalty and service. Alpha Sigma Nu merged with Gamma Pi Epsilon in 1973 and now has active chapters on all 30 campuses and theologates and at Sogang University in Seoul, South Korea. The Creighton alumni chapter's living members number over 2,000 persons.

Alpha Sigma Nu is unique among honor societies in that it seeks to identify the most promising students in Jesuit schools, students who demonstrate an intelligent appreciation of and commitment to the ideals of Jesuit higher education-intellectual, social, moral and religious. Outstanding undergraduates in their junior and senior years and professional and graduate students are eligible. Membership is highly selective and is awarded on the recommendations of the deans, the faculty, the administration, the local chapter, and with the approval of the university president. At graduation members of the student chapter automatically transfer into membership in the alumni chapter. Selection to Alpha Sigma Nu is one of the highest honors that can be given on a Jesuit campus.

Alpha Kappa Delta, international sociology honor society, was founded in 1920 at the University of Southern California. The organization is dedicated to the promotion of human welfare through the scientific study of social behavior and institutions. Delta Chapter at Creighton was established in 1986. Membership is open to students who major or demonstrate a serious interest in sociology, achieve junior status, and complete at least four courses in sociology. Candidates must have a cumulative grade-point average of 3.0 in sociology and overall.

Beta Alpha Psi is a national honorary accounting fraternity that fosters the professional development of its members. The fraternity recognizes that the best professional is not just the individual who has achieved academic excellence, but one who fulfills his or her obligation to serve his or her community and develop his or her full potential. Membership in the Alpha Nu chapter is available to both men and women from the junior and senior classes whose principal area of interest is accounting and whose academic record in both accounting and nonaccounting courses is superior. Alpha Nu has been recognized by the national fraternity as a superior chapter, indicating the dedication of its members in achieving their goals of service and professional development.

Beta Gamma Sigma is a national organization founded in 1913 to encourage and reward scholarship and accomplishment among students of business and administration, to promote the advancement of education in the art and science of business, and to foster integrity in the conduct of business operations. The Creighton University Chapter was installed in March 1963. Student members are selected from among those of high scholarship and good moral character who are enrolled in subject matter areas within the purview of The International Association for Management Education accreditation. The society limits its student membership to Master's degree candidates who rank in the upper fifth of their class and to undergraduates who rank in the upper tenth of their graduating class in their senior year. To obtain continuity of its student membership, the chapter may induct juniors who are in the highest seven percent of their class in the last term or semester of their junior year. Induction to Beta Gamma Sigma is by election; it is not automatic. It is one of the highest scholastic honors awarded to students of business and administration.

Delta Sigma Rho-Tau Kappa Alpha is one of the two national forensic honor societies. Delta Sigma Rho was organized in 1900. Tau Kappa Alpha was organized in 1908. The Creighton University chapter of Delta Sigma Rho was chartered in 1934. When DSR-TKA merged in 1963, Creighton continued its membership. Membership in the society is open to students who have completed two years of inter-collegiate forensics. A senior may be accepted with only one year of inter-collegiate experience.
Eta Sigma Phi is the national honor society for students of Latin and Greek. The national society was founded in 1924, and Creighton's Epsilon Nu chapter was chartered in 1981. To be eligible for membership, students must have completed two or more semesters of Greek or Latin with a "B" average. The society recognizes students who have achieved a high level of excellence in classical languages, fosters the study of the ancient classics, enhances the appreciation of Greek and Roman culture, and promotes good will and friendship among classical students. Members are eligible to take part in national Greek and Latin contests each year and to compete for fellowships for summer study in Greece or Italy. They also receive copies of the society publication, the Nuntius.
The Financial Management Association National Honor Society is the only national organization recognizing scholastic achievement in the field of finance. Creighton University's chapter was organized in 1985 and inducts new members each semester. Outstanding academic achievement and active participation in the Creighton University Chapter of Financial Management Association are the criteria used for selection of members for the National Honor Society.

Kappa Delta Pi is an international education honor society for students who have a cumulative grade point average of at least 3.0. The purpose of this organization is to prepare leaders who will serve in educational positions and who will, in these positions, provide benefits to both local and global communities. The Creighton chapter,

Upsilon Iota, actively promotes and participates in community and national activities related to classroom involvement, promotion of reading, and global understanding.

Omicron Delta Epsilon, Honor Society in economics, was formed on January 1, 1963, by a merger of two national honor societies, Omicron Delta Gamma (Order of Artus) and Omicron Chi Epsilon. The objectives of Omicron Delta Epsilon and its Creighton Chapter (Alpha of Nebraska) are to recognize high scholastic achievement in the field of economics and to stimulate student interest in economics. Undergraduate candidates for election to Omicron Delta Epsilon must have an overall scholastic average of 3.2 or better and at least twelve hours of economics including ECO 303 or ECO 305 with an average of 3.2 or above in economics.

Omicron Delta Kappa, the National Leadership Honor Society, was founded in 1914 at Washington and Lee University in Lexington, Virginia. The Creighton Chapter was officially approved in 1988 and joins over 200 established chapters in colleges and universities across the country. ODK was founded to recognize and encourage superior leadership and scholarship. Creighton's chapter sponsors a variety of programs each year designed to meet those goals. Membership is a mark of highest distinction and honor and is open to qualifying undergraduate juniors and seniors, graduate and professional students.

Phi Alpha Theta is the International Honor Society in history. Founded at the University of Arkansas in 1921, it has chapters in every major university in the nation. The Theta Eta Chapter was founded at Creighton in May 1961. Membership is open to all students who have a minimum Q.P.A. of 3.0 and at least 3.1 average in 12 semester hours of history courses above the 100 level.

Phi Beta Delta is the only national honor society dedicated to recognizing scholarly achievement in international education. The national society was founded at California State University in 1986, and was established as a national organization in 1987. Creighton University's Alpha Chi chapter was chartered in 1990. To be eligible for membership, students must have: 1) participated in an approved study abroad program or be an international student, 2) achieved a cumulative QPA of 3.0 for juniors and seniors or a 3.5 for graduate and professional students, and 3) contributed activities which promote international understanding on campus and/or in the community for at least one year. Eligible faculty, staff, and students must be nominated by a current Alpha Chi member. Interested persons should contact the Office of International Programs.

Phi Sigma Tau is the international honor society in philosophy and is a member of the Association of National Honor Societies. The Creighton chapter, Nebraska Beta, was chartered in October of 1971. Membership is open to students, faculty, and alumni. Students must fulfill the following requirements: completion of at least two semesters of college, rank in the upper $35 \%$ of their class, and completion of at least two courses in philosophy with an average grade of $\mathrm{B}^{+}$. The purpose of the society is to reward students who have achieved academic excellence, to provide opportunities for student-directed philosophical discussions, and to promote the study of philosophy in general. Members receive subscriptions to the undergraduate philosophy journal Dialogue and the Phi Sigma Tau newsletter.

Pi Mu Epsilon, national mathematics honor society, was founded in 1914 in New York State. The purpose of the organization is the promotion of scholarly activity in mathematics among students by electing members on an honorary basis according to their proficiency in mathematics and by engaging in activities designed to promote the mathematical and scholarly development of its members. The Creighton Chapter, called Nebraska Beta, was installed in April 1973. Membership is open to undergraduate students who have completed at least two years of college mathematics, including
calculus, with a B average and who are in the top one-third of their college class. Sophomores, majoring in mathematics, who have completed three semesters of college mathematics, including at least one semester of calculus, with a straight A record and who are in the top quarter of their college class are also eligible.

Pi Sigma Alpha, the national political science honor society, was founded in 1920 at the University of Texas. The Theta Alpha Chapter at Creighton was established in 1977. Membership is offered to students who have completed at least nine semester hours of political science, including at least one advanced course. Candidates must have a " $\mathrm{B}^{+}$" average in political science courses and must rank in the upper third of their class.

Psi Chi is the national honor society in psychology. The organization was initiated in 1929 at the ninth International Congress of Psychology with the first charter going to the University of Kansas. Today there are over 700 chartered chapters with 200,000 national members. The Creighton campus charter was granted in April 1979. Membership is open to all students who have completed eight hours of psychology, have an interest in the field, and rank within the upper 35 percent of the class in general scholarship. The purpose of the society is "to advance the science of psychology and to encourage, stimulate, and maintain scholarship of the individual members in all fields."

Sigma Pi Sigma is the national honor society in physics. The national society was founded in 1921. Today there are over 300 chartered chapters throughout the United States. Creighton University's chapter was chartered in 1982. Membership is open to all students with an interest in physics who have completed at least three semesters of full-time college work, including twelve hours of upper-division physics courses applicable to the major. Undergraduate students must have a minimum Q.P.A. of 3.25 in all college work and a 3.25 in upper-division physics at the time of initiation. Graduate students must have satisfactorily completed at least 15 semester hours of graduate work in physics and be approved for membership by the Graduate Physics Faculty on the basis of the quality of their graduate work. The society serves as a means of awarding distinction to students of high scholarship and promise of achievement in physics. It promotes student interest in research and advanced study in physics, it encourages a professional spirit and friendship among its members, and it seeks to promote interest in physics on the college campus.
Sigma Theta Tau is the international honor society in nursing. The national society was founded in 1922. Creighton's Iota Tau Chapter, one of 301 chapters, was chartered in 1984. The Society exists to recognize superior achievements in nursing, encourage leadership development, foster high nursing standards, stimulate creative work, and strengthen commitment to the ideals of the profession. Membership is open to nursing students enrolled in NLN accredited baccalaureate and masters nursing programs. Students who have completed at least one-half of the nursing component of the baccalaureate curriculum or a minimum of one-fourth of the required graduate curriculum and have demonstrated marked achievement in nursing shall be eligible for membership. Undergraduate students shall have a grade-point average of not less than 3.0 on a 4.0 scale, and graduate students must achieve a grade-point average of 3.5 or higher on a 4.0 scale. The number of students from any one class shall not exceed onethird of the total number expected to graduate from that class and shall not rank lower than the highest 35 percent of their class in scholarship. A community nurse with a minimum of a baccalaureate degree who has demonstrated marked achievement in nursing education, practice, research or publication also shall be eligible for membership.

Theta Alpha Kappa, a national honor society in theology, was founded in 1975-76 and formally instituted by the College Theology Society in 1976. Its purposes are to further the study of religion and theology at the graduate and undergraduate levels; to
encourage excellence in research, learning, teaching, and publication; to foster the exchange of ideas among scholars; to sponsor activities and mechanisms for the better realization of these purposes. Creighton's local chapter, Alpha Gamma Mu, was established in 1996. Membership in the local chapter requires completion of a minimum of 15 credits in theology, a minimum GPA in theology of 3.5, a cumulative GPA of not less than 3.0, and approval of the theology faculty.

There are, in addition to the foregoing, other honorary societies which are associated with the University's Professional and Graduate Schools.

## RECOGNITION OF SCHOLARSHIP AND LEADERSHIP

## Honors and Prizes

Membership in Alpha Mu Gamma, national collegiate foreign language honor society, for scholastic achievement.

Membership in Alpha Sigma $N u$, national Jesuit honor society for men and women, awarded on the basis of scholarship, loyalty and service.

Membership in Beta Alpha Psi, national honorary accounting fraternity, for excellence in scholarship.

Membership in Beta Gamma Sigma, national honor society for men and women in business administration. Members are elected from senior undergraduates who rank in the upper ten percent of their class, junior undergraduates who rank in the upper seven percent of their class, and Master's students who rank in the upper twenty percent of their class, on the basis of scholastic average for the entire business administration program.

The Merna L. and Robert F. Allen Prize in Economics, an award of up to $\$ 1,000$ presented by the Department of Economics and Finance to an economics major judged to have written an outstanding paper in Political Economy or Applied Economics.

The Reverend Raymond J. Bishop, S.J., Award given annually to the student enrolled in a program in the Department of Education who best reflects Father Bishop's qualities of warmth, caring, dedication to teaching, and also reflects the student's desire to see his or her peers do their best.

The American Institute of Chemists (AIC) Award is presented annually by the AIC to the outstanding graduating chemistry major. Choice is made on the basis of scholastic achievement and commitment to the profession of chemistry.

The American Marketing Association, Marketing Student of the Year Award, given annually by the Greater Omaha American Marketing Association to a student showing great promise in the field of marketing.

The Analytical Chemistry Award is given annually to the outstanding student in the analytical chemistry course sequence.

The Beta Alpha Psi Regional and National Scholars Certificate, presented annually by the National Council of Beta Alpha Psi to fraternity members who presented papers at regional or national meetings and who entered the National Manuscript Contest.

The Beta Alpha Psi Meritorious Service Certificate, presented annually by the National Council of Beta Alpha Psi to graduating senior accounting majors who have demonstrated outstanding leadership and service to their college and fraternity.

The Beta Alpha Psi Scholarship Certificate, presented annually by the National Council of Beta Alpha Psi to the graduating senior accounting majors who are members of Beta Alpha Psi with the highest scholastic average in the College of Business Administration.

The CRC Freshman Chemistry Award is given annually to the outstanding student in the general chemistry program.

The Christian Leadership Award presented by Campus Ministry for outstanding Christian leadership and service to Creighton University and to the Omaha community.

Creighton College of Arts and Sciences Senior Award for excellence in scholarship and outstanding contribution to the College and its mission of education and service to life.

Membership in the Creighton Honors Program. Upon successful completion of the Program, students are awarded a plaque at the Senior Awards Ceremony; and the following special awards are also presented in recognition of exceptional performance and service: Dean's Award, Director's Award, Virginia Shaddy Senior Research Award.

The Pricewaterhouse and Coopers Scholarship awarded annually to outstanding students in the College of Business Administration who will be in their senior year.

Membership in Eta Sigma Phi, Latin and Greek Honor Society, for scholastic achievement.

The Financial Executive Institute Student of the Year Award, a gold medallion, annual award to an outstanding finance major who demonstrates the potential for success as a financial executive.

The Eugene F. Gallagher, S.J. Annual Award, to the student with the top grade-point average in Teacher Education.

The Thomas A. Grennan Award is presented annually by the Department of History to outstanding students in core-level courses in African, Asian, Latin American, and Middle Eastern history.

The Jefferson-Mullen Essay Prize. Through the generosity of the late Arthur F. Mullen, Sr ., of Omaha, an annual award is given in recognition of the best essay submitted on the life or works of Thomas Jefferson. Students from any division of the University are eligible for the competition. For details, contact the Department of History.

The Fr. Alfred Kaufmann Prize, an award presented by the Department of History to the student judged to have written an outstanding paper in European History.
The Francis M. Kraft Awards are presented annually by the Department of Fine and Performing Arts in recognition of outstanding accomplishments in the arts by graduating seniors.

The Eileen B. Lieben Award, an annual award of up to $\$ 400$ and a plaque is given by the Department of History to an outstanding female history major or co-major.
Membership in Omicron Delta Epsilon, honorary economics fraternity, for scholastic achievement in economics.

The Nebraska Society of Certified Public Accountants, annual scholarships are given to senior accounting majors who have evidenced an interest in public accounting, and who have maintained high class averages.

The KPMG Endowed Scholarship, an annual award to senior accounting majors who have evidenced an interest in public accounting and who have maintained a high class average.

The POLYED Award in Organic Chemistry, sponsored by the Polymer Education Committee of the American Chemical Society, is given annually to the outstanding chemistry major in the organic chemistry course.

The Joseph Robbie Prizes, given by the Department of History through the generosity of the late Joseph Robbie to the Department. Annual awards given to the outstanding first year student in each section of the required introductory history course and inscription of the awardees' names on the Joseph Robbie Plaque.

The Allan M. Schleich Award, given annually to a student of history, who, in addition to academic excellence, best reflects the exemplary qualities of the late Dr. Allan M. Schleich, Chairman, Department of History, 1963-81. The award includes a stipend, usually not less than $\$ 400$, a plaque, and the permanent inclusion of the recipient's name on the Schleich Plaque in the Allan M. Schleich Room.

The Father Marion Sitzmann, O.S.B. and the Boniface McGuire Award in Speech and Debate, awarded annually to speech and debate students who excel in performance at tournaments. Approximately eight awards of $\$ 500$ are given annually by the Dean of the College of Arts and Sciences at the spring banquet honoring the recipients.

The Richard Spillane, S.J., Award, for Service in Civic Life, is presented to the graduating political science student, who, through excellence in scholarship, personal modesty, and service in community affairs, best reflects the principles of reason, humility, and service that Fr. Spillane exemplified in his lifetime.

The Spirit of Creighton Award is a citation conferred on a male and a female student by the President of the University annually at Commencement for demonstrating remarkable initiative and able enterprise, wisdom in action, modesty in achievement, and great personal sacrifice for the good of others.

The Wall Street Journal Student Achievement Award, a silver medal and a year's subscription to The Wall Street Journal, annual award to a graduating senior economics or finance major with a high scholastic average.

## THE ALUMNI ASSOCIATION

The Creighton University Alumni Association was formed in 1892 to provide an organization through which alumni could continue the friendships and associations developed during their student days on campus. Its mission is "to advance the interests of the Creighton family through a commitment to academic excellence, Judeo/Christian ethics, and a lifelong relationship between Creighton alumni and their University that enriches both."

The administration of alumni activities is handled by the Alumni Relations Office under the supervision of the Director of Alumni Relations, as advised by the National Alumni Board. Among the activities sponsored by the Alumni Relations Office are the annual President's Alumni Picnic, Reunion Weekend, the Thanksgiving Day Mass and Breakfast, alumni club and chapter events, and reunions for the various Schools and Colleges. University representatives frequently attend alumni club get-togethers to which alumni, parents of current and past students, and friends of Creighton University are invited.

The Creighton Alumni Association has grown over the years to include over 50,000 alumni, parents, and friends.

## INTERNATIONAL PROGRAMS AND SERVICES

Creighton University seeks to provide its students an integrating vision of the world. Through the curriculum, experiences abroad, and on-campus interactions with students, scholars, and staff from around the world, Creighton students have the opportunity to gain the international perspectives and intercultural communication skills necessary for leadership and service in the global community.

## THE OFFICE OF INTERNATIONAL PROGRAMS (OIP)

As the focal point and information center for Creighton's international activity, the Office of International Programs provides learning opportunities and services that foster cross-cultural awareness, facilitate intercultural communications, and enhance knowledge about world cultures and societies. It carries out its mission through the administration of various programs and the dissemination of information about all international programs.

Programs and services administered by the OIP include:

- Opportunities abroad for students and faculty
- Linkages with colleges and universities abroad
- International student

Recruitment
Admission
Counseling on academic, visa, employment matters
Cultural and social activities
Intensive English Language Institute

- Cross-cultural communication programs

In addition, the OIP

- Provides support for internationalizing the curriculum
- Welcomes international visitors
- Organizes events with an international focus

The Office of International Programs is located on Lower Becker. The web site is http://www.creighton.edu/International/intprog.html

## THE CURRICULUM

Individual academic departments administer curricula that include many courses with international content as well as majors and minors that cover studies of various areas of the world, such as:

- African Studies
- Asian Studies
- Classical and Near Eastern Studies
- European Studies
- International Business
- International Relations
- International Studies
- Latin American Studies
- Russian Studies

Creighton students may also choose to study one (or more) of these modern languages:

- French
- German
- Japanese
- Russian
- Spanish


## STUDY ABROAD

Creighton University offers its students faculty-led and independent study abroad programs in nearly 40 countries. Programs vary in length, content, format, and cost. Some require an appropriate degree of fluency in the language of the host country while others use English as the language of instruction. Students with a QPA of 2.5 (or higher to meet the requirements of specific programs) may choose to participate in one of Creighton's programs abroad or in a program sponsored by other institutions and organizations in any part of the world.

## Faculty-Led Programs

## Semester Abroad in the Dominican Republic:

The Creighton College of Arts and Sciences and the College of Business Administration offer a semester of immersion and study in Latin America. Each fall and spring, a group of selected undergraduate students and a Creighton faculty member study at ILAC's modern facilities in Santiago, a city of 850,000 in north central Dominican Republic. Students enroll for 15 semester hours-two courses offered by the accompanying professor, another by an invited instructor from Santiago's Catholic University, a fourth course in the Spanish language, and a final one in community service (Arts and Sciences students) or a business internship (Business students).

## Summer Travel Courses:

Each year, Creighton faculty members offer Summer Travel Courses abroad for either 3 or 6 credit hours. Most recently, Creighton students have studied the Greek art and archeology in Greece; the Irish literature, history, and culture in Ireland; the SyroPalestinian archeology and the Bible in Israel; Eastern European politics and other courses in Lithuania; and Paris, Ville du Monde, in France. Students interested in Summer Travel Courses should visit the University Office and Summer Sessions Office in the Business Administration Building, Room B11 or call 280-2843 for more information.

## Independent Semester and Year Programs

- Through bilateral agreements, Creighton currently sponsors programs in IRELAND (University of Limerick) ENGLAND (De Montfort University) JAPAN (Sophia University) GERMANY (Mannheim University) LITHUANIA (Vilnius University)
- Through the International Student Exchange Program (ISEP), Creighton students may study in 110 universities in 35 countries. Students pay Creighton's tuition, fees, room, and board to the University and receive the equivalent at one of the University's new partner institutions in:
ARGENTINA
AUSTRALIA
AUSTRIA
CANADA
CHINA
COLOMBIA
COSTA RICA
ENGLAND
ESTONIA
FIJI
FINLAND
FRANCE
GERMANY
GHANA
HUNGARY
ICELAND
IRELAND
ITALY
JAPAN
REPUBLIC OF
KOREA
LATVIA
MALTA
MEXICO

THE NETHERLANDS NICARAGUA
THE PHILIPPINES
LA REUNION
RUSSIA
SCOTLAND
SPAIN
SWEDEN
SWITZERLAND
THAILAND
URUGUAY
WALES

Students who do not have sufficient ability in other languages can study at many universities where the language of instruction is English. These universities are located in the United Kingdom, Hong Kong, Australia, Canada, Estonia, Fiji, Finland, Ghana, Hungary, Korea, Latvia, Malta, the Netherlands, the Philippines, Sweden, and Thailand.

Credit may be earned toward a Creighton degree through an approved program of study abroad. The application process must start early so that all of Creighton's and the program sponsor's deadlines are met. The pre-approval of credits to be earned abroad does not guarantee that credit will be granted; transcripts, actual course descriptions, and other documentation must be submitted to the Office of International Programs upon completion of the off-campus program for final evaluation. While abroad, students must report any changes in the schedule to the Director of International Programs.

Interested students are encouraged to review materials in the Office of International Programs and to seek the guidance of the study abroad advisor. For an appointment, more information, and application forms, visit the Office of International Programs in Lower Becker G25, call 402/280-2310, or check our website at www.creighton.edu/ IntlPrograms/abroad.htm.

## Prestigious Scholarships for Study Abroad

Among several prestigious scholarships and fellowships available to students, five are for study abroad: Fulbright Grants, Marshall Scholarships, NSEP Scholarships, Rhodes Scholarships and Rotary Fellowships. For more information, visit the Office of International Programs in Lower Becker or contact the special advisors for each of the scholarships. Please refer to the list on Advisers for Special Scholarship Competitions on page 97 of this Bulletin, or check our website at www.creighton.edu/ IntlPrograms/sascholar.htm.

## THE INTENSIVE ENGLISH LANGUAGE INSTITUTE

The Intensive English Language Institute (IELI) offers courses designed to improve the English skills of undergraduate and graduate students who are native speakers of other languages. The IELI is a member of the American Association of Intensive English Programs (AAIEP).

## Program Description

The IELI offers 5 eight-week terms and 1 five-week term per year. Small classes of no more than 15 students allow for a great deal of individual attention. Listening, Reading, Writing and Speaking are taught on seven levels. A full-time IELI student has between 20 and 24 hours of classes per week. Advanced classes are designed to help students improve critical reading, outlining, writing, notetaking, and decision skills for university-level work. Students enrolled in a Study Skills class may also take a regular university course. Experienced, professional instructors teach the IELI classes. All full-time teachers and most part-time teachers have Master's degrees in Teaching English as a Second Language or in related fields. Most of the faculty have lived in one or more foreign countries and speak one or more foreign languages.

## Entrance Requirements

An IELI applicant must have completed high school or secondary school. If the student does not have a recent TOEFL score, he/she will take the Institutional TOEFL on the first day of the term. In addition, all new students take a writing test and have their speaking ability evaluated. These tests are used for placement and advising purposes. For more information, interested students should contact the Director of the Intensive English Language Institute at 402/280-2221, by sending an e-mail to ieli@creighton.edu, or by accessing the IELI website at www.creighton.edu/ IntlPrograms/ieli.htm.


40 CREIGHTON UNIVERSITY UNDERGRADUATE BULLETIN

## ADMISSION

It is the admission policy of Creighton University to accept qualified students within the limits of its resources and facilities. See also the University's Nondiscrimination Policy on page 17.

## FRESHMAN APPLICANTS

1. In person or by letter, request official application forms from the Director of Admissions of the University, or access the application electronically at http://www.creighton.edu.
2. Application may be made any time after completion of the junior year in high school, but not later than one month prior to the opening of a term, although the earlier the better. The University reserves the right to return applications for admission prior to the deadline if space for additional students is not available.
3. A $\$ 40.00$ fee is required for filing an application. This fee is not refundable.
4. An official high school transcript should be sent directly to the Director of Admissions. A Creighton recommendation form must also be completed by your high-school guidance counselor. Upon submission, these credentials become the property of Creighton University and will not be returned.
5. Admission into one of Creighton's undergraduate colleges is a highly individualized process that utilizes national standardized test scores in addition to a comprehensive review of high-school performance and recommendations.

Toward this purpose we will consider as one factor either the American College Testing Program (ACT) Assessment or the Scholastic Aptitude Test (SAT) in the review process. Students may apply for admission as soon as they complete their junior year in high school and may apply before the submission of either the ACT or the SAT report.

The ACT or SAT Assessment is used for admission, scholarship, placement, counseling, and for statistical purposes.
When all your credentials required through the admissions application have been received, they will be reviewed by the Committee on Admissions. As soon as action has been taken, you will be informed of the decision in writing. All information pertinent to residence hall facilities, registration procedures, and other requirements are sent following letters of acceptance.

## ADMISSION REQUIREMENTS

Admission to undergraduate standing in Creighton as a freshman or as a transfer student may be achieved as indicated below:

1. As a freshman on the basis of:
A. Certificate of graduation from an accredited high school including: (a) Record of subjects and grades indicating academic potential for college success; (b) Personal recommendation from high-school counselor.
B. Satisfactory ACT or SAT scores.
C. Completed application for admission.
D. Optional personal statement.
2. As a transfer student on the basis of a transcript of a satisfactory record from a regionally accredited college or university. See regulations under Admission of Transfer Students on page 44. (ACT or SAT scores are ordinarily not required of transfer students who have completed one year of college.)

An accredited high school is a school accredited by the North Central Association of Colleges and Schools, or the equivalent regional standardizing body, or any school approved by the recognized accrediting agency in its state.

## SUBJECT REQUIREMENTS

The high-school graduate applying for admission to college is expected:

1. To be able to write and speak correct, grammatical English.
2. To have completed in an approved high school the recommended subject requirements shown below.

Strict adherence to the pattern of subject requirements may be waived at the discretion of the Committee on Admissions if the other criteria qualify the applicant.

| High-School Subject Pattern |
| :---: |
| Minimum Required |

Highly Recommended
*A unit represents a year's study in any subject in a secondary school, covering an academic year of at least 36 weeks, five periods per week, each period being at least 45 minutes. Two hours of shop or laboratory work are equivalent to one hour of prepared classroom work.

## REQUIREMENTS FOR ADMISSION TO THE SCHOOL OF NURSING

High-school graduates who are first-time freshmen wishing to pursue the traditional program of study leading to the degree of Bachelor of Science in Nursing apply to the Admissions Office of the University. Transfer students interested in Nursing apply to the School of Nursing.

Graduates of diploma or associate degree programs in nursing or students already holding a bachelor's degree in another field refer to the admission requirements on page 135. Additional information may be obtained from the office of the Dean, School of Nursing.

## ACT/SAT ASSESSMENT PROGRAMS

Students planning to enter Creighton University as freshmen are required to take the ACT Assessment provided by the American College Testing Program (ACT) or the SAT Assessment provided by the College Board.

The ACT Assessment, designed for college-bound students, consists of a Student Profile Section, an Interest Inventory, and four academic tests covering the subject areas of English, mathematics, reading, and science reasoning. The tests assess general educational development and the ability to perform college-level work. Results of
the ACT Assessment are used at Creighton for course placement, advising and counseling, scholarship awards, and admissions and research purposes.
The ACT Assessment is administered annually on up to five national testing dates at test centers throughout the country and overseas. Students planning to enter Creighton University should arrange to take the ACT Assessment at the earliest test date possible during their Senior year in high school and direct that their ACT score report be sent to Creighton. The SAT Assessment is administered annually on up to six national test dates.

Following is the schedule of the regular Saturday test dates for the ACT:
2002-2003 - September 28 (selected states only), October 26, December 14, February 8, April 12, June 14.
Following is the schedule of test dates for the SAT:
2002-2003 - October 12, November 2, December 7, January 25, April 5, May 3, June 7.
High-school students may obtain full information from their counselor about the ACT or SAT Assessment, the location of test centers, and how to register for either test.

## ADVANCED PLACEMENT

## English Advanced Placement By Examination

Students who receive a score of 5 on the CEEB Advanced Placement English Language and Composition Examination will receive three semester hours credit in composition and fulfill the writing skills course (ENG 150) requirement in the Core Curriculum. Students who receive a score of 4 or 5 on the CEEB Advanced Placement English Literature and Composition Examination will receive six semester hours of elective English credit. This will not satisfy the literature requirement for the Core Curriculum.

## Mathematics Advanced Placement by Examination

Advanced Placement students in Mathematics with scores of 3, 4, or 5 on a CEEB Advanced Placement mathematics examination will receive the number of semester hours credit appropriate to the examination successfully completed. Those who have passed the Calculus AB Exam receive four semester hours for having completed the equivalent of MTH 245. Those who have passed the Calculus BC Exam receive eight semester hours for having completed the equivalent of MTH 245 and 246. Students who have passed either of these exams will have fulfilled the mathematics requirement (MTH 201 or 245) in the Core Curriculum.

## Modern Language Advanced Placement By Examination

Advanced Placement students in Modern or Classical Languages (French, German, Latin, and Spanish) with a score of 3 in a given language exam will receive three semester hours credit for having completed the equivalent of FRN 111, GER 111, LAT 101 or SPN 111 respectively. Those students in Modern or Classical Languages (French, German, Latin, and Spanish) with a score of 4 or 5 in a given language exam will receive six semester hours credit for having completed the equivalent of FRN $111 \&$ 112, GER $111 \& 112$, LAT $101 \& 102$, or SPN $111 \& 112$ respectively.

Advanced Placement students in Modern or Classical Languages (French, German, Latin, and Spanish) with scores of 4 or 5 in a given literature exam will receive three semester hours of elective credit (FRN 000, GER 000, or SPN 000, respectively). These students are still required to meet core competency requirements as set forth in the Program of Study section of the Student's school.

## Other CEEB Advanced Placement and Credit

Further advanced placement credit may be awarded for successful completion of the CEEB Advanced Placement Examination in Art History, Biology, Chemistry, Computer Science, Economics, Environmental Science, History, Physics, Political Science, and Psychology. However, such awards are not automatic and may involve further departmental testing or evaluation. Credit may or may not be eligible for fulfilling the Core Curriculum requirements. Students who have completed one or more CEEB Examinations and have had the scores sent to Creighton should receive an awarded credit evaluation a few weeks after Creighton receives the score report. If the outcome of these examinations determines the course(s) for which the students are currently registering, they should contact their dean's office for further information.

## College Level Examination Program (CLEP)

Students accepted into a degree program may earn college credit through successful completion of CLEP Subject Examinations. CLEP examinations are administered at testing centers (Creighton University is NOT a testing center) on a regular schedule. Details concerning the award of credit for CLEP examinations are available in the Arts and Sciences Dean's Office.

## Credit for Experience

The undergraduate colleges may award academic credit for knowledge acquired in a non-traditional manner in areas where Creighton offers instruction. Creighton degree students who believe they qualify for such credit may petition the appropriate academic department through the Dean's office detailing the experience in question and submitting appropriate supporting evidence. In evaluating the experience, departments may find it desirable to utilize standardized tests, department-prepared tests, portfolios, interviews, etc. The petition and departmental recommendation will be reviewed by the appropriate college committee and a recommendation made to the Dean, who makes the final decision as to the award of credit.

Students who petition for credit for experience that has not been supervised by a department must purchase a special examination/evaluation ticket (\$15.00). A fee of $\$ 50.00$ per credit hour is charged for each challenge examination in the clinical practicums in nursing. Examination/evaluation fee tickets must be purchased from the University Cashier in advance and presented to the department concerned. In addition to the examination fees, there is a recording fee of $\$ 10.00$ per credit hour awarded, which must be paid to the University Cashier before the credit will be recorded. (A total of $\$ 50.00$ is charged for taking and recording each credit hour of challenge examinations.)

## ADMISSION OF TRANSFER STUDENTS

Students who are in good standing at another accredited college and entitled to honorable dismissal may be admitted to Creighton University without examination if they present evidence of satisfactory scholarship. An accredited college or university means one that has been fully accredited by a Regional Accrediting Association. Transcripts from nonaccredited schools will be judged on an individual basis.

The regular application form must be filed with the Director of Admissions. The applicant is responsible for having the appropriate official of each institution previously attended send an official academic transcript and testimony of honorable standing directly to the Director of Admissions, even if attendance was only during a summer session or for part of a term. These official transcripts are required even if the transcript of the institution most recently attended lists the record of the student at the other institutions, and regardless of whether or not credit was received or advanced standing credit is desired. A secondary-school transcript must also be submitted.

To qualify for a Creighton degree, transfer students should plan to spend the last two years of college at Creighton and meet departmental requirements for completion of an academic major. Students must earn at least 48 hours in residence to qualify for a degree. More hours may be required depending upon the program of study and the way in which the transfer hours fulfill University requirements. The minimum number of hours in a student's major which must be taken at Creighton are: 15 in the College of Arts and Sciences; 15-18 in the College of Business Administration; 20 in the School of Nursing.

## Conditions for Transfer of Credit

The University will evaluate all hours submitted by the transfer applicant and reserves the right to accept or deny any of the credits offered for transfer.

Credit hours earned with grades of C or better at an accredited institution of higher education prior to admission to Creighton University may be transferred at the discretion of the respective College. Transcripts will be evaluated by the College only after a transfer student has been officially accepted for admission. In some instances, the College may require that the transfer student complete successfully at least one semester at Creighton consisting of not less than twelve semester hours before the exact amount of credit to be transferred will be permanently determined.

Students must earn at least 48 hours in residence. No more than eighty credit hours will count toward a degree. However, specific program requirements of each school and college must be fulfilled for graduation. Credit hours are transferred, but not quality points. The quality-point average of the transfer student will be determined only by work done at Creighton. Credit is normally not granted for correspondence or television courses.

## International Baccalaureate

Creighton University recognizes the International Baccalaureate (IB) program and awards credit/placement for students who qualify for the IB diploma. Such credit/ placement will be granted for courses taken at the higher level on an individual and course-by-course basis.

## TRANSIENT STUDY

Creighton students who live outside the Omaha Metropolitan Area may be permitted to enroll in courses in other accredited institutions near their homes during the summer months. Prior approval of the Dean must be obtained for each course (application forms are available in the Dean's Office). Courses not so approved by the Dean in advance may not be accepted in transfer. Normally students will not be able to transfer more than a total of twelve hours of approved transient study during the entire degree program at Creighton. Core courses and/or courses in the major will normally not be authorized for transient study.

## ADMISSION OF VETERANS

Courses in all schools and colleges of the University are approved for veterans' education and training. Veterans' Service is provided by the Registrar's Office. Veterans and others eligible for educational benefits administered by the Veterans Administration are given assistance to assure proper and advantageous use of their benefits and to simplify and expedite transactions with the government.

Students who have completed service in the Armed Forces of the United States may petition for credit for certain experiences of an educational nature. Creighton University will use the recommendations of the American Council on Education Commission on Educational Credit to evaluate such experiences. Petitions should be submitted to the Registrar, who will make recommendations to the appropriate Dean.

## ADMISSION OF INTERNATIONAL STUDENTS

Creighton University welcomes international students from all corners of the world.

## Required documents

International applicants for undergraduate programs must present the following documents:

1. International Application for Undergraduate Students.
2. Official high school transcript. Submit the original along with a certified English translation.
3. Official transcripts from each previous college or university (for transfer students.) Submit the original along with a certified English translation.
4. Applicants for whom English is not a native language must request that the Educational Testing Service send Creighton (Code 6121) their TOEFL test results. A minimum TOEFL score of 550 ( 213 CBT) is required. (Applicants who do not meet the required TOEFL score are encouraged to enroll in Creighton's Intensive English Language Institute.)
5. Counselor evaluation.
6. Teacher recommendation.
7. $\$ 40.00$ application fee (credit card or check drawn on a US bank).
8. ACT or SAT score as available
9. Proof of financial support to cover all expenses (tuition, fees, mandatory health insurance, room, board, books, and incidentals.)

## Enrollment reservation deposit

Students accepted for admission are requested to confirm their acceptance and enrollment at Creighton with a $\$ 250$ enrollment reservation deposit by May 1 for the Fall Semester and November 1 for the Spring Semester. The deposit is refundable in fullminus $\$ 100.00$ - prior to the beginning of any semester. The refund is sent after the Certificate of Eligibility has been returned to Creighton.

## Academic Scholarships

Freshman international students may be eligible to receive academic scholarships ranging from $\$ 1,000$ to $\$ 5,000$ a year, renewable for four years. Students interested in competing for those scholarships, must submit their complete application for admission on or before March 1, the priority deadline for admission.

For more information about services for international students contact the Office of International Programs (OIP) in Lower Becker G25, (402) 280-2221 or visit the website at www.creighton.edu/IntlPrograms/students.htm.

## ADMISSION OF SPECIAL STUDENTS

Students who wish to take courses but do not expect to receive a degree from Creighton University may register as special students. Prerequisites for specific courses must be met and students are expected to fulfill the same course requirements as degreeseeking students. Most special students taking undergraduate courses register in University College. Tuition and fees charged will be on a per-credit-hour basis for students taking from 1-11 semester hours; special students attending on a full-time basis (12-18 semester hours) are charged full tuition and fees. Tuition charges are published in the semester Schedule of Courses. Financial aid is available to special students who have been accepted into certificate programs and carry a minimum of six hours per semester. Persons who have registered as special students and subsequently decide to enter a degree program must apply for acceptance as degree-seeking students.

A student who has been dismissed from another educational institution within the previous calendar year will normally not be allowed to register at Creighton as either a special or a degree-seeking student.

## INTRA-UNIVERSITY TRANSFER

Students wishing to transfer from one undergraduate college to another within the University must file a special application, which is available in their current academic Dean's Office.

## LEAVE OF ABSENCE PROGRAM (LOAP)

Creighton's Leave of Absence Program is a planned interruption in a student's formal education. It is designed for full-time undergraduate students in good standing (cumulative QPA of 2.00 or above). In this program the student voluntarily steps out of college for a specified period of time for one or two semesters. A student who elects this program may do so to re-evaluate his/her educational goals, earn additional money for his/her educational expenses, travel, receive medical procedures that would debilitate him/her from completing a full academic semester, and/or gain other practical experiences not available on campus. The program is not intended for students who wish to temporarily attend another college or university.
The principal advantage of LOAP is that it offers a student the opportunity to leave college temporarily with the assurance that he/she will be able to return and resume his/her studies with a minimum of administrative difficulty. Because the leave is initially approved by the College and officially recognized as a leave of absence, the student is able to be away from the College and still maintain a close tie with it.

Students in this program are considered "on leave" by the University and will not be classified as enrolled students; however, they will be eligible for services of the Career Planning and Placement Center and limited use of library facilities.

## READMISSION OF FORMER STUDENTS

Students previously enrolled in the College of Arts and Sciences, College of Business Administration, or the School of Nursing who have been out of school for at least one full semester must make formal application for readmission to the school or college previously attended. Students must submit a new application form and send all official transcripts of any schools attended after leaving Creighton. The $\$ 30$ application fee is waived. A student involved in the Leave of Absence Program (LOAP) is exempt from this requirement unless the student failed to return as expected after the end of the specified period of leave, or unless the student enrolled elsewhere in the meantime.

Former full-time students who have continued on a part-time basis need not reapply if they wish to resume a full-time schedule.

## ENROLLMENT RESERVATION DEPOSIT

Each applicant for admission will be informed in writing by the Director of Admissions of the outcome of his or her application.

An applicant accepted for admission is asked to make a $\$ 250$ enrollment reservation deposit by May 1 for the Fall Semester and December 15 for the Spring Semester. The enrollment reservation deposit is credited to the first semester's tuition. The deposit is not refundable unless the prospective student cancels his or her reservation in writing prior to the date specified on their enrollment reservation form.
If the reservation is canceled after the date specified or the student fails to register, or withdraws after registering, the deposit is forfeited to the University.

## SUMMER PREVIEW PROGRAM

The Summer Preview Program has been organized to give new students an opportunity during the summer to consult with administrators, faculty advisers, and student leaders about curricular regulations, course details, registration procedures, or any other questions the student might have. Several dates are specified during the summer, and students are invited to visit the campus at one of those times. Preregistration may be completed after students have discussed their goals and the options open to them with the faculty advisers.

## REGISTRATION

Registration for continuing students is conducted in March-April for the Summer Sessions and the Fall Semester and in October-November for the Spring Semester. Registration is conducted through the web. Registration is conducted continuously until the end of the late registration period.

Students in Arts and Sciences, Business Administration, Nursing, Pharmacy and Allied Health Professions, University College and Graduate School receive a Schedule of Courses, Course Request Forms, and other related materials, including a specific appointment time for completing Registration. Each student completing Registration is mailed a hard copy of his/her specific course/class schedule for the next semester.

By enrolling in Creighton University, a student agrees to comply with all rules, regulations, directives, and procedures of the University, and understands that his or her failure to do so will be grounds for dismissal or other disciplinary action at the University's discretion. The University reserves the right to dismiss at any time a student who in its judgment is undesirable and whose continuation in the University is detrimental to himself, herself, fellow students, or the interests of the University, and such dismissal may be made without specific charge.

## WELCOME WEEK

All new students are required to be on the campus a few days before classes begin for "Welcome Week" in August. New students move into their housing, consult with their advisers, learn about the University and its many services and opportunities, and become acquainted with the school, the faculty members, and the other members of their class. Approximately 120 upper-class students serve as leaders during Welcome Week and work with small groups of new students offering individual attention and special help. For the exact dates of registration and other events for both freshmen and upper-class students see the University calendar, pages 4-8.

## Late Registration

All official admission records must be received and approved by the Committee on Admissions at least two weeks before registration.

## Full-Time Students

Students who take 12 or more semester hours of credit during a semester are considered full-time students.

## Part-Time Students

Students who carry less than 12 semester hours of credit are considered part-time students. Such students pay tuition according to the current semester-hour charge and all other fees to which they might be subject. Part-time students are required to follow the prescribed course of studies.

## Auditing Courses

Students will be permitted to register as auditors only for exceptional reasons and with the explicit authorization of the Dean. Not all courses are open to auditors. Auditors are not held responsible for the work expected of regular students, are not admitted
to examinations, and receive no grade or credit for the course. Regular attendance at class is expected, however, and auditors are subject the same as regular students to being dropped from the course for excessive absences (in this event auditors receive a W). Changes of registration from credit to audit or audit to credit will not be permitted after the deadline, four weeks after the first day of classes.

A student who has previously enrolled as an auditor may not take the course for credit during any succeeding semester except by special permission of the Dean.

Charges for courses audited are one-half ( $50 \%$ ) of the regular per-credit-hour tuition rate when the per-credit-hour rate is applicable, for example, when a student registers for less than 12 semester hours, including the credit for the course(s) audited. For Summer Session courses, the $50 \%$ reduction for auditors applies to the regular rate only, not to the Summer Session discounted rate. Also, special courses, workshops, and institutes offered at a special flat-rate tuition charge are excluded from the auditor discount.

Students seeking to change from credit to audit status will be eligible for a tuition adjustment (if otherwise applicable) only if the change is made with the dean's approval within the period for late registration.

## ADJUSTMENTS AND WITHDRAWALS AFTER REGISTRATION

## Changes in Registration

Changes in registration are permitted until the end of the first week of classes.

## Dropping Courses

Withdrawal from any course after the first week requires sufficient cause and may be made only with the approval of the Dean. After the first week of class (the period for late registration) any petition to drop a course or to change status from credit to audit must include the recommendation of the teacher(s) involved and the student's college or major adviser before the petition will be acted on by the Dean. Course withdrawals with a "W" may not be made later than the date posted each semester, which is approximately a week after midsemester grades are available. A student who drops a course without approval of the Dean receives WF for the course (failure because of unauthorized withdrawal).

## Withdrawal from the University

A student is considered in attendance until he or she has formally notified the University in person or in writing of his or her withdrawal.

Permission to withdraw from the University is granted by the Dean of the School or College in which the student is registered. This is required as a condition of honorable dismissal. After properly filling out the withdrawal card and securing all of the necessary clearances, the student will present the withdrawal card at the Business Office where it will be countersigned and transferred to the Registrar.

The policy of considering a student as withdrawn from the University after two consecutive weeks of unexplained absence in no way is to be interpreted as allowing withdrawal without formally notifying the Dean in person or in writing of the withdrawal.

A student withdrawing from the University during any semester or summer session before the final examinations forfeits credit for work done in that term. Students who withdraw with permission of the Dean receive W on their official record; those who withdraw without permission of the Dean receive WF for all courses (failure because of unauthorized withdrawal).

Students who have decided to withdraw from school and plan to return within the following year may wish to consider the Leave of Absence Program (LOAP). For further information about LOAP see page 47.

## TUITION AND FEES

Ordinarily tuition and fees and board and room charges are payable in advance for an entire semester or summer session. ${ }^{1}$ (see Financial Arrangements). All rates are subject to change without notice.

Full-time students (in a semester) are not subject to registration or laboratory fees, but are subject to all non-recurring, penalty, and special service fees and to extra tuition when registering for credit hours beyond the normal full-time limitation.

Part-time students (students registering for less than 12 credit hours in any semester) and all summer session students are charged tuition on a per-credit-hour basis and are subject to registration, laboratory, and any other applicable fee among the following:

[^1]Laboratory fee—biology for each lab course ..... 36.00Laboratory fee-chemistry for each lab course:
a. Courses numbered below 200 ..... 36.00
b. Courses numbered 200 and above ..... 43.00
Laboratory fee-physics for each lab course ..... 36.00
Any student, full- or part-time, may be subject to the following nonrecurring, penalty or special service fees in any semester or summersession when applicable:
Late payment fee ${ }^{1}$ (also see Financial Arrangements-page 52) ..... 89.00
Special examination/evaluation fee each examination or other learning assessment ..... 15.00
Challenge examination fee in clinical practicums in nursing per credit hour ..... 40.00
Recording fee for each credit hour awarded on basis of examination or other special learning assessment ..... 11.00
Board rate and room rate per semester ..... (see page 23 )

The tuition charges for courses audited are one-half (50\%) of the regular per-credithour rate when the per-credit-hour rate is applicable.

Loss or damage to University property and equipment and excessive use of laboratory materials are charged to the student or students responsible.

Property and equipment, including library books, military uniforms, laboratory apparatus, etc., loaned to a student for use during a period of instruction must be returned by the time specified. In case of delinquency, grade reports, transcripts, and diplomas shall not be released until proper return or restitution is made.

## Special Tuition Rates for Teachers and School Administrators

Teachers and school administrators who are employed full time in public or private elementary or secondary schools and enroll as part-time students at Creighton may receive a tuition discount of $50 \%$ for three semester hours of course work each semester (fall and/or spring) in one of the following divisions: College of Arts \& Sciences, College of Business Administration, School of Nursing, University College, or Graduate School. This discount does not apply to students in University College who receive a University College tuition remission. Students must complete an "Application for Teacher Improvement Remission" form verifying full-time employment status. These forms are available in the Business Office. Telephone: 280-2707.

The University also reserves the right to exclude certain programs from this special discount. The following programs are currently excluded: Master of Business Administration and Master of Computer Systems Management. In the future, other programs may be added or deleted without notice.

[^2]
## ESTIMATING BASIC COSTS

The basic costs for a Freshman year (two semesters) in the College of Arts and Sciences or College of Business Administration are:

$$
\begin{aligned}
& \text { Tuition (full-time program at rate effective January 2002) ............ \$16,500.00 } \\
& \text { University Fee ..................................................................................... } 636.00 \\
& \text { Board and double room ................................................................. 6,190.00 } \\
& \text { Total for academic year (two semesters) .......................................... 23,326.00 }
\end{aligned}
$$

The basic costs payable each semester would be approximately one-half of these totals.

In estimating the overall costs one should include allowances for personal expenses, including such items as clothes, laundry and dry cleaning, recreation and entertainment, transportation, etc. These costs will vary greatly among students. Books and school supplies average about $\$ 650$ per year.

## FINANCIAL ARRANGEMENTS

Tuition and fees and board and room charges are payable at the time of registration for a semester. However, arrangements may be made to pay monthly installments by using the University's Monthly Electronic Transfer (MET) plan. Participation in this plan will be limited to the unpaid balance after all financial aid credits have been applied. Folders describing the payment plans and services of MET are mailed to prospective and returning students during the summer.

Books and supplies may be purchased at the Campus Book Store. These items must be paid for when they are obtained.

Students are invited to pay tuition and other expenses by personal check or money order. This is recommended especially to avoid the risk involved in carrying large amounts of cash. All students, particularly those from out of town, are urged to establish checking accounts in Omaha or hometown banks. The University will ordinarily cash small checks for students. (There is a $\$ 200$ limit for each student per day in the Business Office.) However, the University reserves the right to revoke or to deny this privilege to any individual at any time.

## Late Payment Policy

A late payment fee will be added to charges assessed at registration that remain unpaid after the period for late registration. This fee is $\$ 89$ for the first month and an additional $\$ 45$ for each subsequent month that the account remains unpaid. Accounts with unpaid balances under $\$ 500$ will be subject to a $\$ 89$ fee the first month and $\$ 35$ each month thereafter.

Students with questions regarding their financial responsibilities are invited to contact the Business Office to set up an appointment for individual counseling.

## WITHDRAWALS AND REFUNDS

Students withdrawing before the end of a semester will be charged tuition and recurring fees on the following basis:

| Period of attendance from date of enrollment ${ }^{1}$ | Per cent of the semester rate to be charged |
| :---: | :---: |
| During the first week | . $10 \%$ |
| During the second week | 20\% |
| During the third week | 40\% |
| During the fourth week | 60\% |
| During the fifth week | 80\% |
| Over five weeks | .. 100\% |

Students withdrawing before the end of a summer session will be charged tuition and recurring fees on the following basis:

| Period of attendance from date of enrollment ${ }^{1}$ | Per cent of the semester rate to be charged |
| :---: | :---: |
| One or two class days | 10\% |
| Three through seven class days | ... $40 \%$ |
| Eight through twelve class days | .. $80 \%$ |
| Over twelve class days | 100\% |

Students withdrawing before the end of the Pre-Session will be charged tuition and recurring fees on the following basis:

Period of attendance from Per cent of the semester
date of enrollment ${ }^{1}$ rate to be charged
One or two class days ............................................................................ $10 \%$
Three through five class days ................................................................. $40 \%$
Six or seven class days .......................................................................... 80\%
Eight or more class days ....................................................................... 100\%
Refunds of room rent for withdrawals will be on the same basis as refunds of tuition.
Nonrecurring fees, the application fee, the University fee, and penalty fees will be charged in full, regardless of the period of attendance. ${ }^{2}$

Full time students who drop courses after the last day for late registration but remain full-time ( 12 or more credit hours) receive no refund. If a full-time student drops to part-time status, refund of the difference between the full-time tuition charge and the per-credit-hour charge for the courses being continued will be made in accordance with the schedule applicable in the event of total withdrawal. Students assessed tuition per credit hour, including part-time students, graduate students and students in a summer session, will be charged for courses dropped in accordance with the schedule applicable in the event of total withdrawal.
A student will be considered as having withdrawn from the University after two consecutive weeks of unexplained absence. However, this policy is not to be considered as revoking the regulation that requires a student to notify the Dean in person or in writing of his/her withdrawal. Refunds are made to the student on the basis of the date he/she has formally notified the Dean in person or in writing of his/her withdrawal.

[^3]
## STUDENT FINANCIAL AID

## ELIGIBILITY CRITERIA

To be eligible for Federal and University financial aid programs at Creighton University, you must be (1) a citizen, a national or permanent resident of the United States, (2) in good academic standing, (3) in financial need as determined by the U.S. Department of Education, and (4) a high-school graduate or equivalent pursuing a degree on at least a half-time basis (six hours). Students from a foreign country may qualify for consideration of a limited number of Creighton funded scholarships.

NOTE: With the exception of the Pell Grant, Stafford Student Loan, and Parent Loan to Undergraduate Students (PLUS), eligibility for Federal and University aid will not normally extend beyond the prescribed course length, normally four to five years (eight to ten semesters) depending on the curriculum. First award priority will be to students enrolled on a full-time basis (at least 12 hours per term).

Students who have a previous baccalaureate degree and are pursuing a second baccalaureate degree are only eligible to apply for loan or employment assistance. Normally, University and Federal grants and scholarships are not extended to students seeking a second baccalaureate degree.

## APPLICATION PROCEDURES

## Freshmen and Transfer Students:

1. Complete the "Application for Undergraduate Admission." Forward all parts of the application to the Admissions Office. Creighton cannot make a financial aid commitment until you have been granted acceptance by the University.
2. Complete a Free Application for Federal Student Aid (FAFSA). We encourage you to use the electronic form found at www.FAFSA.ED.gov. This is the fastest way to apply for need-based aid. A paper application is available at high-school guidance offices or Creighton's Financial Aid Office. Once you complete the form, submit it directly to the processing address listed on the application. Do not submit until after January 1. All processed FAFSA's should be on file at Creighton by April 1 for priority consideration. Applications received after April 1 will be considered as funding allows.
3. Submit the Creighton Financial Aid Application and signed and dated copies of the parents' and applicant's 2001 Federal tax return to the Student Financial Aid Office by May 1, 2002. If a tax return will not be filed, a statement of nonfiling must be submitted to the Student Financial Aid Office.

## Current Undergraduate Students

1. Complete Steps 2 and 3 above.

## DISBURSEMENT AND USE OF AWARDS

All financial aid advanced by Creighton University must be used to pay tuition, fees, and University room and board charges before any other direct or indirect educational costs. With the exception of Federal Work-Study, all financial aid awards will be deducted from University tuition, fees, room and board charges in the fall and spring semesters. One-half of the aid award will be deducted in the fall, and the remaining half in the spring. Federal Work-Study will not be deducted since the student must earn his/her award. Students on Federal Work-Study will receive bimonthly paychecks and may use them to meet their personal or institutional expenses.

## SCHOLARSHIPS

Normally, to receive and retain a scholarship, you must be enrolled in a program of study leading to a degree in the College of Arts and Sciences, College of Business Administration, or School of Nursing. In addition to qualifying material listed for each scholarship, you must be accepted and enrolled full-time at Creighton to retain scholarship(s) for four academic years or eight consecutive fall/spring semesters (exclusive of summer terms). Furthermore, the dollar amount of the scholarship may vary unless otherwise specified, and all offers are made dependent on the annual availability of funds. Most scholarships are renewable for additional years and continued eligibility is based on maintaining the specified cumulative quality-point average for each scholarship and showing normal progression toward a degree. Unless otherwise specified, all University controlled scholarships, individually or in combination, may not exceed the value of tuition, and may only be applied toward tuition charges.

If you have submitted all required credentials necessary for admission by January 1 st of your senior year, you will automatically be given priority consideration for all competitive academic scholarships. Individuals who complete their admissions requirements after January 1st are eligible for academic scholarships based on the availability of funds. Unless otherwise noted, undergraduate academic scholarships are awarded solely to new freshmen and are available for eight consecutive semesters. As new scholarships, not listed in the catalog, become available, selections are made in conjunction with the wishes of the donor.

The four year/eight semester limitation begins upon your matriculation at Creighton and is accumulated consecutively. If you leave Creighton any time during this period, you automatically forfeit all future scholarship eligibility previously granted, unless you receive an approved Leave Of Absence (LOA) from your school. It is your responsibility to notify the Financial Aid Office of this action prior to your temporary separation from the University. Semesters absent under an LOA do not count against the eight semester limitation.

Scholarships awarded to entering undergraduates can be continued if you are admitted to one of Creighton's post-baccalaureate programs before the end of the eight semester limit. If you enter a program of study leading to a D.D.S., D.P.T., J.D., M.D., M.A., M.B.A., M.S.I.T.M., M.S., M.Min., Pharm.D., or Ph.D. degree, your scholarship is continued until eight consecutive semesters have expired. Scholarship values based on a percentage of tuition will be calculated on the prevailing undergraduate tuition rate in effect during the time you are in a post-baccalaureate program of study.

## DOCUMENTED FINANCIAL NEED IS NOT A CONSIDERATION FOR THE FOLLOWING (NO-NEED) SCHOLARSHIPS. NEVERTHELESS, APPLICANTS ARE ENCOURAGED TO FILE A FAFSA. IF NOT SUCCESSFUL IN RECEIVING ONE OF THE SCHOLARSHIPS BELOW, YOU WILL BE CONSIDERED FOR OTHER TYPES OF FINANCIAL AID. YOU MUST HAVE FAFSA RESULTS ON FILE AT CREIGHTON BY APRIL 1.

## Presidential Scholarships

These scholarships are competitive annual three-quarter tuition awards based on ACT or SAT scores, high school class rank and leadership ability. The scholarships are renewable with a 3.3 quality-point average. They are funded from gifts from Union Pacific, The Omaha World-Herald, and Creighton University.

## Creighton Academic Scholarships

These competitive academic scholarships, based on high school academic performance and national test scores, are awarded to selected entering freshmen and are renewable by maintaining the Q.P.A. as indicated on the scholarship announcement letter.

## Creighton Scholarships for Black and Hispanic Scholars

These competitive awards are open to Omaha area students and require a separate application form, available from Creighton's Undergraduate Admissions Office. It provides for the student's direct educational costs, less Pell Grant and/or other scholarships received from any source, and is renewable by maintaining a 2.5 Q.P.A. Specific qualifications and award amount details are found on the application.

## Scholarship for Economic and Educationally Disadvantaged Students

Scholarships are available to students admitted to the University and participate in the Student Support Services Program. The number and amount of awards are determined by the student's financial need and program funding.

## Alumni Association Scholarships

These competitive renewable annual awards are offered to children of Creighton alumni and are based on academic achievement. A 2.8 Q.P.A. is required for renewal.

## The Arthur Andersen and Company Endowed Scholarship

This endowed scholarship funded by the Arthur Andersen and Company endowment is given to a senior accounting major who has evidenced a professional level of technical ability, self-confidence, strong interpersonal and communications skills, leadership abilities, and a sincere interest in the public accounting field.

## Mary Ann Beller Scholarship Fund

In memory of his wife, Donald V. Beller has established this fund to assist nursing students from the states of Iowa and Nebraska. The Dean of the School of Nursing annually selects the recipient(s) and the amount of the annual award.

## The Beta Alpha Psi Superior Chapter Scholarships

This is awarded to two active members of the Alpha Nu chapter of Beta Alpha Psi, an honorary accounting fraternity, for scholarship and chapter activity.

## Dr. Lee C. Bevilacqua Scholarship

This award recognizes a man who made innumerable contributions to Creighton's athletic teams over many years. It provides support to student-athletes and is renewable based upon their academic progress and availability of funds. The award amount and number of recipients is determined by the Athletic Department.

## The Rowley "Pat" Irwin Blakeney Scholarships

The Blakeney Scholarship is to assist academically-qualified degree students in the College of Business Administration. Awards are renewable. Freshmen with a declared interest in business who graduated in the top two-fifths of their high-school class and upperclassmen with a declared major in business and a cumulative Q.P.A of 2.5 or more are eligible. All criteria being equal, need may be considered.

## Bozell Worldwide Scholarship

Each year the Department of Journalism and Mass Communication will select a recipient of this award, with the amount to be determined by the department.

## Mary J. Burke Scholarship

This scholarship recognizes women enrolled in the College of Business Administration with preference given to those who are concurrently employed. Maintaining at least a 2.0 cumulative grade average will automatically renew the scholarship for the next year.

## Michael A. Byrne scholarship

This award goes to a senior Journalism or Marketing major based on academic achievement and extracurricular involvement who has not received scholarship support in the past. It is funded through a gift by the Creighton Federal Credit Union.

## Walter Capps Justice and Peace Scholarship

Each year a junior or senior Arts and Sciences student will be selected by a faculty committee who demonstrates an outstanding commitment to the peace and justice studies program and adheres to its values and objectives. It is possibly renewable.

## Arthur Carter Scholarship

This nationally competitive scholarship funded by Mr. Carter's estate, is awarded annually to top accounting students throughout the United States, by the College of Business Administration.

## The College of Business Administration Scholarship

This scholarship is awarded to College of Business Administration students on the basis of scholastic achievement.

## Sheila Ciciulla Nursing Scholarship

Honoring a longtime faculty member and administrator in Creighton's School of Nursing, this award recognizes an outstanding nursing student who epitomizes integrity and commitment to the nursing profession. It requires a 3.0 Q.P.A. for renewal and the recipient is determined by the School's Scholarship Committee.

## Everett and Eileen Connelly Scholarship

This scholarship provides for full tuition and fees, plus a book allowance for an entering student with exceptional academic and personal qualities into any of Creighton's undergraduate schools. It is renewable for ensuing years by maintaining an overall Q.P.A. of at least 3.3. Financial need may be used as a determining factor between qualified candidates.

## The James D. Conway Scholarships

Academically-qualified students who graduated from Hastings High School or St. Cecilia High School, both of Hastings, Nebraska, are eligible for these scholarships. Awards are renewable with a 2.5 Q.P.A. A preference is extended to qualified students who will pursue a prelaw education.

## The Deloitte and Touche Scholarship

Awarded to a senior accounting major who has evidenced an interest in public accounting, maintained a high academic record and demonstrated leadership ability.

## Robert M. Dippel Scholarship

This recognition goes to a student-athlete participating in intercollegiate athletics and the selection is made by the Director of Athletics.

## Paul W. Douglas Scholarship

This scholarship is established to assist students enrolled in the College of Arts and Sciences with a declared major in either Environmental or Atmospheric Sciences. Faculty members from the two departments shall select the recipient and renewal is based on academic progress and continued status as a student in these departments

## Frederick J. de la Vega Scholarship

Students in the three undergraduate colleges are eligible for these highly competitive awards. Academic achievement is the main criteria upon which selections are based but the financial need of applicants may be considered. Between equally eligible applicants, a preference is given to students of color. This award is renewable by maintaining a cumulative 3.0 Q.P.A.

## H. M. and Ruby V. Frost Scholarship

In awarding this scholarship, the University Academic Scholarship Committee considers high-school academics, national test scores, and extracurricular activities. Need may also be considered. The scholarship is renewable by maintaining a 3.0 Q.P.A.

## German-American Society Scholarship

An annual scholarship will be awarded to a student who has a record of high academic performance and a firm commitment to the study of German with at least twelve credit hours on the upper-division level; demonstrable financial need will also be a decisive factor in awarding the scholarship.

## Harve B. Heaston Scholarship

An annual scholarship awarded to a senior finance major in the College of Business Administration who demonstrates high academic promise and extracurricular leadership in the college and university.

## James and Helen Herbert Scholarship

This scholarship is established to assist entering or continuing students in the College of Business Administration with a preference to those pursuing an accounting career. In addition to grade average, selections will also be based on extracurricular activities and employment history. This award may be renewed by attaining a minimum 2.5 Q.P.A.

## Lied Foundation Trust/Christina Hixson Scholarship

This endowed scholarship, made possible by the Lied Foundation and its sole trustee, Christina Hixson, recognizes students entering the College of Business Administration. Preference is given to students from midwest/plains states who demonstrate financial need and the potential for success in the business world. Applicants should contact the Undergraduate Admission Office for specific instructions and scholarship application material. It is renewable by maintaining enrollment in the College and a minimum 2.5 cumulative grade average.

## Jesuit Community at Creighton University Scholarship

Each year, a select number of under-represented minority students graduating from a Jesuit High School will receive this award to encourage such students to continue their education at Creighton. Selection is competitive and renewal is based on maintaining at least a 2.25 grade average.

## Charles and Genevieve Juergens Scholarship

Each year freshmen entering any undergraduate division of the University may receive this scholarship. The awards will be based upon academic achievement, extracurricular leadership, and, if necessary, need. The scholarships are renewable upon the condition that the student is maintaining a 3.0 Q.P.A.

## Grace Keenan Scholarship

This fund provides financial support to Fine Art majors in the College of Arts and Sciences. These renewable scholarships are awarded to deserving students based on academic achievement and recipients are selected by the Chair of the Fine and Performing Arts Department. As determined by the Chair, students from other disciplines can be nominated based on the availability of funds. A cumulative 2.5 Q.P.A. is required for renewal.

## T. Leslie Kizer Scholarships

Freshmen entering the College of Business Administration are selected each year to receive this scholarship. Recipients are selected on the basis of high school academics, national test scores, and extracurricular activities. A 3.0 quality-point average is required for renewal.

## KPMG-Peat-Marwick-Main Scholarship

This recognition is given to a senior College of Business major who demonstrates exceptional interest and ability in the accounting field. The Department of Accounting makes the annual selection.

## John W. and Ann C. Langley Scholarship

Each year a scholarship will be awarded to entering freshmen on the basis of highschool academics, national test scores, extracurricular involvement, and, possibly, financial need. Recipients will be required to maintain a 3.0 Q.P.A. for renewal.

## Clare Boothe Luce Scholarship

Junior and senior women science majors may be invited by the Dean of the College of Arts and Sciences to apply for this renewable competitive award which may augment current academic scholarships. Special application forms are available from the Dean's Office upon nomination by a screening committee. This award provides for tuition, University fee, on-campus room/board charges and an allowance in books.

## Paul Luex Scholarship

Awarded by the University Scholarship Committee, this scholarship shows first preference to students who are members of St. Libory Parish, St. Libory, NE, then secondly to students from Central Catholic High School, Grand Island, NE. Students must also demonstrate a record of community service.

## Paul E. McCarville Scholarship

An award is made to an incoming freshman who is a graduate of either St. Edmond's or Fort Dodge High Schools in Fort Dodge, Iowa. The scholarship is renewable provided the recipient maintains a Q.P.A of at least 2.5. Selection is based on high-school academics, extracurricular involvement, test scores, and leadership qualities. Financial need may be considered.

## Susan Marchese Athletic Scholarship

This award is made by the Director of Athletics and recognizes an outstanding stu-dent-athlete based on their classroom and athletic achievements.

## Midwest Insulation Contractors Association/William R. Heaston Memorial Scholarship

This award is given to an accounting major in the College of Business Administration, and is renewable as determined by the Accounting Department.

## Gordon Morrison Scholarship

This scholarship fund honors the memory of the father of Fr. Morrison, S.J., Creighton University's President. The candidates shall be considered by the University Scholarship Committee who exhibit outstanding scholastic achievement and continued potential for academic success. The award is renewable by maintaining a minimum 3.0 grade average.

## John A. Murphy Scholarship

Students who have graduated from a parochial high school are eligible for consideration. The scholarship is made available to one junior and one senior student in any undergraduate division with selection based upon academic achievement, extracurricular involvement, and leadership qualities. The award is renewable with a 3.0 Q.P.A.

## Joseph F. Murphy, Jr. and Helen Clare Murphy Scholarship

This award is available to entering freshmen and is renewable for successive years by maintaining a Q.P.A of at least 2.7. Selection is based on high-school academic achievement, leadership, extracurricular involvement, and national test scores. Financial need may be considered. Preference is given to Nebraska and Iowa residents.

## Nebraska Society of CPA'S

This award is made by the College of Business's Department of Accounting to an accounting major showing excellence in the field.

## Northwestern Mutual Life Scholarship

This scholarship recognizes a worthy College of Business Administration student with preference given to students who have participated in the Company's internship program. The recipient is selected by the Dean of the College.

## Laurence R. O'Donnell Scholarship Fund

Each year one freshman entering any undergraduate division of the University will be awarded this scholarship. The award is based upon academic achievement, extracurricular activity, and, if necessary, need. The scholarships are renewable upon the condition that the student maintains a 3.0 Q.P.A. and is progressing according to the guidelines of the program in which the student is enrolled.

## Omaha Federation of Advertising Scholarship

This organization supports scholarships for senior level students who have a major which includes the study of advertising. Recipients are selected by the chairman of the Journalism and Mass Communication Department.

## Raymond Owens Scholarship

This scholarship, established by Mrs. Emmett Roberts in memory of her brother, Raymond, is awarded to a deserving freshman from Creighton Prep High School for leadership, community service and commitment to Creighton Prep. It is not based on financial need and is not renewable.

## Val J. Peter Scholarship

This scholarship was established in memory of the Founder of Interstate Printing Company by the Company and the Peter family. It is given to a junior Journalism student and may be renewed for the senior year. The Chair of the Department makes the selection annually.

## The PricewaterhouseCoopers Scholarship

Awarded to an outstanding senior accounting major who has maintained a high scholastic average, demonstrated leadership qualities, and has an interest in pursuing a career in public accounting.

## Dean Michael Proterra, S.J. Scholarship

This scholarship was established to honor this Dean of the College of Arts and Sciences in his last year as Dean. It will recognize an outstanding student in the College and is renewable with a minimum cumulative Q.P.A. of 2.75 .

## Thomas C. Quinlan Scholarship

This award will recognize a worthy student enrolled in the School of Nursing by the School's Scholarship Committee. Renewal is based on continued academic progress and enrollment in the School.

## Schroedinger's Cat Scholarship

Junior women in the College of Arts and Sciences majoring in either physics or mathematics can be considered for this award. Academic achievement while at Creighton is also a criteria and the scholarship can be renewed for the senior year. The Chair of the Department of Physics makes the annual selection.

## Scott Scholars Endowed Scholarship

Scholarship recipient(s) of this award must enroll in the College of Business Administration and represent the pinnacle of academic excellence, as based on high school grades and national college entrance exams. This award is automatically renewed by
maintaining at least a 3.4 cumulative grade average and continued enrollment in the College of Business. The value of the award is equal to each year's tuition, minus any other Creighton controlled and/or third party scholarships also received by the recipient.

## V.J. and Angela M. Skutt - Mutual of Omaha Scholarship

Each year the University will award scholarships to sons and daughters of full-time associates of the Mutual of Omaha Companies. The scholarships will have a value of at least $\$ 2,000$ and are renewable upon application. Interested parties must first complete a preapplication form obtainable from the Training and Development Department, Mutual of Omaha Companies, Mutual of Omaha Plaza, Omaha, Nebraska 68175.

## St. Joseph Hospital Nursing Alumni Association Scholarship

Awards sponsored by this alumni group are made to support undergraduate and/or graduate students in the School of Nursing. Awards may be renewed for ensuing years by maintaining a 2.5 grade point average and the endorsement of the Nursing School. Preference will be made to alumni of this organization, or their dependents.

## Dr. John F. Sheehan Scholarship

This scholarship is established to assist sophomore or junior level students enrolled in the College of Arts and Sciences with a declared major in Biology. The Biology Department will select the recipient(s) and renewal is based on continued academic progress and enrollment in the Department.

## Gilbert C. Swanson Foundation Scholarship

The Swanson Foundation provides funds for deserving students and each year the University President shall determine the number of recipients and award amounts under foundation criteria. Awards are renewed at the discretion of the President and continued funding.

## H. Margaret Thorough Scholarship

Students in the School of Nursing benefit from this scholarship and is renewable with a 3.0 Q.P.A. The School of Nursing selects the recipient(s) based on academic achievement and available funding.

## Rose and Sal Valentino Scholarship

Scholarship awarded annually to an economics or finance major in the College of Business Administration.

## Floyd E. and Berneice C. Walsh Scholarship

Students enrolled in the College of Business Administration are eligible for this scholarship established by former Dean Floyd Walsh and Mrs. Walsh to assist deserving students. At least a 2.5 Q.P.A must be maintained for renewal.

## Charles Zuegner Memorial Scholarship

Various alumni and corporate gifts enable the memory of Charles Zuegner to continue through this scholarship. Recipients are selected by the chairman of the Journalism and Mass Communications Department.

# THE FOLLOWING SCHOLARSHIPS ARE AVAILABLE TO STUDENTS WITH FINANCIAL NEED AND DEMONSTRATED ACADEMIC ACHIEVEMENT. A COMPLETED FAFSA MUST BE ON FILE BY APRIL 1 FOR PRIORITY CONSIDERATION. 

## Ahmanson Foundation Scholarships

Each year scholarships are awarded from funds provided annually by the Ahmanson Foundation. Recipients must demonstrate financial need through the Free Application for Federal Student Aid (FAFSA) and be above average scholastically. A 3.0 Q.P.A. average must be maintained for renewal.

## Alpha Sigma Nu Scholarship

Funded by the National Jesuit Honor Society, an annual scholarship is available to an undergraduate student based on financial need and scholastic achievement.

## Merna L. and Robert F. Allen Scholarship

This need-based award will help support and recognize the academic achievements of an entering undergraduate student from either Omaha Mercy or South High Schools. It is designated for a new student and is not renewable.

## AMDG RAD Scholarship

This endowed scholarship is primarily designed to recognize a financially needy student with a preference to those majoring in Chemistry. It is renewable by maintaining normal academic progress toward a degree.

## Harold and Marian Andersen Family Fund Scholarship

This scholarship benefits an undergraduate student who demonstrates financial need and has high academic credentials. It is automatically renewed by maintaining at least a 2.5 cumulative grade average.

## Fr. Andrew M. and Edward D. Augustyn Scholarship

First priority goes to freshmen who are members of St. Josaphat's Parish, Loup City, NE, secondly to students from Central Catholic High School, Grand Island, NE, and then to students from Loup City High School, Loup City, NE. Candidates must show financial need, church participation, and community service. The award is possibly renewable.

## Ben Augustyn Scholarship

This endowed scholarship is established to assist students in any division of the University. Students shall be of high academic standing and financially needy. Preference will be given to students graduates of a high school from Valley County in Nebraska. Renewability is based on normal academic progress to a degree.

## Leo Augustyn Scholarship

This endowed scholarship is offered to an undergraduate student by the Financial Aid Office who demonstrates financial need and academic achievement.

## Mr. and Mrs. Jack B. Balousek Scholarship

This award is made to a freshman who demonstrates financial need and enrolls in one of Creighton's undergraduate schools. It is renewable by meeting normal academic progression. Renewable with a 2.5 Q.P.A.

## Clair D. Barr Memorial Scholarship

This award is for student-athletes who are not receiving a full athletic scholarship who consistently give of themselves $110 \%$ in both academic and athletic endeavors. The Directors of Athletics and Financial Aid shall determine the recipient and renewability.

## Francis A. and Harriett Barrett Scholarship

This gift shall be used to support a Creighton student in their senior year of study. Preference will be made to students from Wyoming. It is not renewable and the final award will be made in the 2004-05 academic year.

## Dr. Richard G. and Marilyn J. Belatti Annual Scholarship

This award provides annual assistance to students from South Dakota enrolled in any of the undergraduate divisions of the University. The University's Undergraduate Scholarship Committee shall make the selection of the recipient and a 3.5 cumulative Q.P.A. is required for renewal.

## William E. Belfiore Memorial Scholarship Fund

In memory of his son, Joseph F. Belfiore established this fund, designed to assist students in any undergraduate school who need financial aid in order to continue their education. The Creighton University Financial Aid Office annually selects the recipient(s) and the amount of the award. It is renewable upon 2.5 Q.P.A. and continued need. A preference is extended to students who are of Italian lineage by at least one parent.

## Frank E. Bellinger Scholarship

This fund is established to assist students enrolled in the School of Nursing who demonstrate financial need and high academic achievement. It is renewable based on normal academic progress toward a BSN degree.

## Charles and Mary Patricia Blevens McFadden Endowed Scholarship Fund

This scholarship provides assistance to students enrolled in any school/college at Creighton who have a permanent mobility, visibility or hearing impairment, show high academic promise and have demonstrated financial need. First priority for funds shall be directed to students with a mobility impairment and the annual scholarship value may vary. This award is renewable by maintaining satisfactory academic progress toward a degree/certificate and is awarded by the University's Financial Aid Office.

## Elmer L. and Margaret M. Bradley Scholarship

Funds from this scholarship shall be used to assist students with high academic standing and financial need to enroll in Creighton's College of Business Administration. Preference will be given to graduates of Nebraska high schools and is renewable by meeting normal academic progression standards and a 2.0 cumulative Q.P.A.

## John P. and Charlotte M. Brand Scholarship

This scholarship is established to assist students in Creighton's College of Arts and Sciences who are of high academic standing and demonstrated financial need. Preference will first be given to students majoring in mathematics. With a 2.5 cumulative Q.P.A., the award is automatically renewed, based on the availability of funds.

## Dr. Patrick E. Brookhouser Scholarship

This scholarship recipient will be a student from western Iowa who demonstrates financial need and high academic ability. Preference is given to students from Missouri Valley, IA. If the recipient maintains normal progression toward a degree, it is renewable.

## Mildred D. Brown Scholarship

Preference for this $\$ 1,500$ award is given to black high school seniors from the Omaha area. Criteria include financial need, academic achievement and high school journalistic activity. Renewable with a minimum 2.75 Q.P.A.

George and Mary Ellen Burns Scholarship
Financially needy students from the Sioux City, IA area, with preference to students from Heelan High School, will benefit from this endowment. Renewability is based on normal progression toward degree completion.

## Fr. Neil Cahill, S.J. Scholarship

Each year an award will be made to a financially needy student in the College of Business Administration, in honor of Fr. Cahill, a longtime faculty member. Candidates must be of high academic standing, and students from South Dakota will receive preference.

## John and Ann Callahan Scholarship

This endowment supports a varied number of scholarships each year to deserving and financially needy students enrolled in any of Creighton's undergraduate schools. The award is made by the Director of Financial Aid and may be renewed.

## Chicago Minority Student Scholarship

Preference for this recognition is given to students from the Chicago-land area who have participated in the LINK program and are graduates of Oak Park, Fenpeck or Trinity high schools. By maintaining at least a 2.5 Q.P.A., this scholarship is renewable.

## W. Dale and Katherine Clark Scholarship

Students who have graduated from a high school in Omaha are eligible for benefits from this fund. The scholarship is based upon academic achievement, extracurricular activity, and need. These scholarships are renewable upon the condition that the student is progressing according to the guidelines of the program in which the recipient is enrolled.

## Dr, James R. and Bridget Condon Memorial Scholarship

Preference for this scholarship shall first go to financially needy students who previously attended either Gonzaga H.S. or Gonzaga University in Spokane, WA. The award is renewable based on the recipient's academic progress and fund availability.

## James and Barbara Corboy Scholarship

This fund provides scholarships for undergraduate students who are in need of funds to continue their education and who show the potential for success. It is renewable by normal progression under University standards toward graduation.

## James M. Cox Scholarship

This scholarship is established to assist freshmen who reside in eastern Nebraska, with preference given to students from York and Hamilton counties. Financial need must be evident and a 2.0 Q.P.A. is required for renewal.

## Matthew E. Creighton, M.D. Scholarship

This scholarship was established by a former Creighton University President in honor of his father. It will be awarded to financially needy undergraduate students and can be renewed.

## Creighton University Scholarship for Women

This award will assist women, preferably from south Omaha, who have a declared major in mathematics, computer science or the natural sciences and who have financial need. It may be renewed based on normal progression toward a degree and availability of funds.

## Dr. James and Karen Cunningham Scholarship

Any undergraduate student from the Black Hills region of South Dakota can receive consideration for this award. Preference will be given to graduates of St. Thomas More H.S., Rapid City, SD. It is renewable.

## Norma L. Curley Scholarship

Nursing students who demonstrate financial need will benefit from this fund. It is renewable by maintaining a 3.0 cumulative Q.P.A.

## Charles H. and Mary Lou Diers Scholarship

This endowment supports a scholarship for an incoming freshman from the Fremont, NE area who demonstrates financial need and potential for success at the postsecondary level.

## Elizabeth Fund for Nurses

Nursing students who demonstrate financial need will benefit from this fund. Candidates must demonstrate financial need and meet the three principles of the Fleet Reserve Association; loyalty, protection and service to country. It is renewable

## David and Wanetta Ellison Memorial Scholarship

This scholarship, honoring David and Wanetta Ellison, helps to support a new student in the College of Business Administration and is renewable for future years by maintaining a minimum 2.5 Q.P.A. and continued demonstration of financial need. Selection priority goes first to students from specific counties in central Illinois, then from the Ralston, Nebraska school district, then from Boys Town and finally any student from Illinois or Nebraska.

## Farmers Insurance Group Inc., Scholarship

A scholarship is awarded annually to a College of Business Administration student on the basis of academic performance and financial need.

## Grace and Robert Fay Scholarships

These awards recognize outstanding academic students in the College of Arts and Sciences who have the demonstrated need for funds to continue their education. Renewal is automatic with at least a 2.0 cumulative Q.P.A.

First Federal Lincoln Bank Scholarship
Sponsored by First Federal Lincoln Savings and Loan, this scholarship is awarded annually to a senior student in the College of Business Administration who is a Ne braska resident and has demonstrated financial need.

## Dr. Herbert J. Funk Scholarship

This scholarship assists students majoring in Economics with preference to students from Shelby County, Iowa.

## Tom and Judy Garner Scholarship

This scholarship recognizes students enrolled in the College of Business Administration who are of high academic ability and demonstrate financial need.

## Kitty Gaughan Scholarship

This award is made by the Financial Aid Office to undergraduate students graduating from Creighton Prep High School, Omaha, NE who display financial need.

## Emalea and Zeta Gaul Scholarship

This award recognizes a Nursing student of high academic ability with financial need and may be renewed.

## Dr. James and Lois Gerrits Family Scholarship

This award is made to a student enrolled in one of the undergraduate colleges of Arts and Sciences, Business Administration, or the School of Nursing who has high academic standing and demonstrates financial need. This award is renewable for future years by maintaining a minimum Q.P.A. of 2.0.

## William M. Gordon Scholarship

This scholarship is named in honor of the first Black student to graduate from Creighton's School of Medicine in 1901 and is intended to promote the racial diversity of the student body at Creighton University. Financial need is considered when selecting recipients and a 2.5 minimum Q.P.A. is required for renewal.

## Adolph Hallas Scholarship

This endowed fund supports four scholarships each year to students in the College of Business who are selected by the Financial Aid Office based on scholastic achievement and financial need.

## Josie Harper Nursing Scholarship

This award recognizes a Nursing student of high academic ability with financial need and may be renewed.

## D. Paul and Marjorie S. Hartnett Scholarship

This scholarships helps support undergraduate students of high academic ability and who demonstrate financial need. Preference is given to Native American students first, then graduates of the Bellevue high schools in Nebraska, then Gross HS graduates residing in Sarpy County, Nebraska and finally high schools graduates from Dakota County, Nebraska.

## William Randolph Hearst Foundation Scholarship

Each year a scholarship is funded by the Hearst Foundation to provide financial support to a student in one of Creighton's undergraduate colleges who demonstrates financial need. Preference is given to multicultural students and is renewable with a cumulative Q.P.A of 2.0.

## Charles F. and Mary C. Heider Scholarship

This scholarship is open to any needy undergraduate student who demonstrates high academic credentials. It is renewable.

## The Richard J. and Marguerite Heider Endowed Scholarship

This scholarship is designated for a student from Carroll County, Iowa enrolling in the College of Business Administration who has a demonstrated need of financial support.

## Dr. Edward A. Hier Scholarship

This scholarship is awarded to a freshman from western Nebraska who demonstrates financial need and enrolls in either the College of Arts and Sciences or Business Administration. It may be renewable.

## Roger Holzman Scholarship

This scholarship assists financially needy, academically worthy students enrolled in the College of Business Administration. It is renewable.

## Gunnar Horn Scholarship

This nonrenewable award is restricted to students with an interest in or intent to major in journalism. College test scores, financial need, and high school journalistic activities are factors in the selection process.

Dr. Ross C. Horning Endowed Scholarship
This scholarship, honoring Dr. Ross C. Horning, Professor of History, is awarded by the Financial Aid Office in conjunction with the Department of History, to a junior who has been admitted as a History major. The student must also demonstrate a background of work experience and the need for financial aid. By maintaining a 2.5 grade average during the junior year, the scholarship may be renewed for the senior year.

## Joseph H. Jackson Scholarship

This award recognizes a student in the Education Department who has achieved academic distinction within the Department, shows a sincere commitment to the teaching profession and has financial need. Juniors or seniors are eligible for consideration and the scholarship can be renewed with at least a 2.5 Q.P.A. The Chair of the Education Department and the Financial Aid Director jointly review candidates and name the recipient.

## Marion G. Jeffrey Memorial Scholarship

This scholarship is awarded to a junior or senior Creighton student with a declared major in the Department of Fine and Performing Arts. Financial need is a requirement, and recommendations of candidates will be made by the Department Chair to the Director of Financial Aid. The award may be renewed by continued eligibility and the recommendation of the Department Chair.

## Martin C. and Helen M. Jessup Scholarship

Any undergraduate student admitted to one of Creighton's undergraduate schools who demonstrates financial need is eligible for consideration of this scholarship. Preference is extended to new entering students and is renewable by maintaining normal academic progression and at least a 2.0 cumulative Q.P.A.

## Lavern and Thelma Johnson Scholarship

This scholarship is open to any needy undergraduate student who demonstrates high academic credentials. It is renewable.

## Edith and Carl Jonas Scholarship

This award is made by the Financial Aid Office to students in need of assistance to further their education. Awards are made in a number and amount determined by the funds available and may be renewed.

## Glenn T. Jordan Scholarship

Undergraduates from the state of South Dakota are eligible for this scholarship, which is based on a combination of need and academic excellence. The recipient will be required to maintain a 3.0 Q.P.A. for renewal. This scholarship is awarded by the Director of Financial Aid.

## John J. and Eloise H. Kane Scholarship

This endowment assists students in the College of Arts and Sciences who demonstrate financial need and may be renewed for further years with normal academic progression. Recipients are selected by the Financial Aid Office.

## Leo Kelley Memorial Scholarship

This competitive award is established to assist freshman applicants demonstrating financial need. It is renewable by maintaining at least a 2.5 Q.P.A.

## Rev. William F. Kelley, S.J. Scholarship

This award honors Fr. Kelly's popularity and guidance of numerous students during his longevity of service to Creighton. This award provides funds to a financially needy undergraduate student of high academic potential. Preference will be made to new students and is renewable with a 2.5 cumulative grade average.

## Helen W. Kenefick Scholarship

This scholarship fund is made possible by Mr. John Kenefick in honor of his wife and provides scholarship support to financially needy, high ability undergraduate students. By attaining at least a 2.5 cumulative Q.P.A., it is automatically renewed.

## Gertrude Beckers King Scholarship

This endowment honors the lifetime teaching accomplishments of Mrs. King and is used to support the financial needs of a student accepted into the elementary education program. The Financial Aid Office selects recipients who are academically qualified and demonstrate financial need.

## Kittle Memorial Scholarship

The Adrienne Lee Kittle Scholarship is established to assist undergraduates who are of high academic standing and demonstrate financial need. A preference shall be extended to students who are residents of Colorado. The scholarship is renewable.

## Joan Kuehl Memorial Scholarship

This scholarship assists a financially needy student from Creighton Prep High School who demonstrates high academic credentials. It is renewable.

## Metta Laughlin Scholarship

The Financial Aid Office awards this scholarship to an academically qualified and financially needy student enrolled in any undergraduate college of the University.

## Les and Phyllis Lawless Scholarship

This gift provides scholarship support to any undergraduate student demonstrating financial need and academic achievement. It is renewable based on continued financial need, progress toward a degree, maintaining a 2.5 cumulative grade average and the availability of funds.

## Lynch-Heaston Scholarship

Initiated by the Honorable Patrick Wm. Lynch to honor his father William P. Lynch and his sister Eleanor Lynch Heaston, this endowed scholarship fund provides assistance to students in the College of Arts and Sciences planning a career in social work. Preference will be given to students with a declared major in Social Work and may be renewed by maintaining a minimum 2.5 grade average and making normal progression toward a BSW degree.

## John L. and Carol V. Maginn Scholarship

This scholarship is designed to assist students enrolled in Creighton's College of Business Administration who are academically qualified and have financial need. Preference is given to women and students of color. The award is renewable with a 2.5 minimum grade average.

## Walter J. and Ruth C. Maginn Scholarship

This scholarship is designed to assist students enrolled in Creighton's College of Business Administration who are academically qualified and have financial need. Preference is given to students of color. The award is renewable with a 2.5 minimum grade average.

## Ralph and Margaret Mailliard Memorial Scholarship

Founded by Mr. and Mrs. R. Dennis Mailliard, this scholarship is awarded to a minor sport student-athlete who demonstrates financial need and consistently gives 110 percent to both his/her academic and athletic endeavors. It is renewable at the discretion of the Athletic Director.

Yano and Cindy Mangiameli Scholarship
This account helps student-athletes whose baseball eligibility has expired and are within 12 credit hours of graduation. A 2.25 cumulative Q.P.A. is required for consideration and candidates must complete their degree requirements no later than the end of the Fall term following the expiration of their athletic eligibility. The Athletic and Financial Aid Directors shall select the recipient(s) and determine the award amount.

## Diane McCabe Scholarship

This scholarship pays tribute to Diane McCabe who served the School of Nursing and its students with tireless dedication for 17 years. The recipient will be a junior level nursing student who has financial need and academic promise. It can be renewed for an additional year if first received as a junior and normal progression to degree completion is evident.

## Thomas P. and Mary Kay McCarthy Scholarship

This scholarship assists students enrolled in either the Arts and Sciences or Business Administration Colleges who are from Iowa and demonstrate financial need. Maintenance of at least a 2.5 cumulative grade average is required for renewal.

## Roma Nagengast McGahan Scholarship

This fund will provide financial support to a student enrolled in the School of Nursing who is of high academic standing and demonstrates financial need. It is renewable based on maintaining academic progress and continuing financial need.

## Fr. Richard D. McGloin, S.J., Scholarship

The Richard McGloin Scholarship Committee will annually award scholarships to undergraduate students who have shown academic achievement, with preference given to relatives of Creighton University alumni. It is renewable by maintaining satisfactory progress toward a degree.

## McGuire-Holden Family Scholarship

Established by Drs. Daniel J. McGuire and Andrea McGuire in honor of their parents, Pat and Rita McGuire and Warren and Dorothy Holden, this endowment recognizes students from rural Iowa or Nebraska who have high academic credentials and financial need. The scholarship may be renewed with normal academic progression within the College of Arts and Sciences.

## Memorial Scholarship

Awards from this endowed account are made by the Director of Financial Aid to academically qualified students who demonstrate financial need.

## Daniel and Mary Ellen Monen Scholarship

Each year these competitive scholarships are awarded to incoming freshmen who demonstrate above-average scholastic ability and financial need. They are renewable with a 2.5 Q.P.A.

## Joseph Miniace Sr. Scholarship

This scholarship assists students who are of high academic standing with financial need with a special interest in Labor and Management Relations. The scholarship may be renewed based on the student's academic progress and availability of funds.

## Harry G., Jr. and Marion M. Montgomery Scholarship

One freshman student will be selected to receive this award. Recipient will be selected based on financial need. The recipient should also show a keen interest in learning, working toward the betterment of mankind, and believe that participation, without excessive fanfare, in worthwhile programs is a duty of good citizenship. This award is renewable with a 2.5 Q.P.A.

## Rev. Michael G. Morrison, S.J. Scholarship

The scholarship was established by the Creighton University Board of Directors and friends to honor the Reverend Michael G. Morrison on his retirement as Creighton's President after nineteen years. It will provide support to needy undergraduate Native American students who are members of federally recognized tribes. Preference will be given to graduates of Red Cloud Indian School of Pine Ridge, SD.

## G. Robert Muchemore Foundation Grant

The Muchemore Foundation provides twelve full tuition scholarship awards to undergraduate students attending Creighton University. Recipients must have graduated from a Nebraska high school with at least a " B " average. The award may be renewed for three more years by maintaining normal progress to a degree, at least a 3.0 overall grade average and the availability of funds.

## Edward D. Murphy Scholarship

This endowment honors a man who gave decades of tireless service to the University. Any undergraduate student with financial need and the capacity to achieve may receive consideration. Renewal requires a 2.75 grade average.

## Orscheln Industries Scholarship

This scholarship assists students from areas served by an Orscheln store to attend an undergraduate school at Creighton. Freshman are given first priority and must also demonstrate financial need. The scholarship is renewable with at least a 2.0 grade average.

## Dr. Ray Palmer Baseball Scholarship

This scholarship is provided by Dr. Raynold Palmer, M.D. '32, the team physician from 1936-42 for the New York Giants baseball club, now the San Francisco Giants. The award is reserved for members of the baseball team with the recipient determined by the Athletic Department.

## Peter J. Phelan Memorial Scholarship

This award is available to both new and current students enrolled in any undergraduate college. Priority is given to financially needy students from Cedar Rapids, Iowa; then from Linn County Iowa; and lastly from the state of Iowa. It may be renewed based on continued need and satisfactory academic progress.

## Leonard H. and Madeline Kenney Powers Scholarship

This award recognizes an outstanding student in the School of Nursing who exhibits academic excellence and the potential to bring honor to the nursing profession. Candidates must show financial need and preference will be made to freshman students. By maintaining at least a 2.5 cumulative grade average, the scholarship is automatically renewed.

## John A. Quinlan Memorial Scholarship

This award is made by the Financial Aid Office to a financially needy student enrolled in the College of Business Administration. This scholarship may be renewed for future years as funding allows.

## Mark and Karen Rauenhorst Scholarship

Two scholarships are made each year from this fund; one to a student in the College of Arts and Sciences and the other to an Accelerated Nursing student. Recipients must show need in meeting their high education costs and maintain satisfactory academic progress.

## Leon Schmidman Memorial Scholarship

This award is given to College of Business Administration juniors with an interest in marketing, who have financial need and a minimum G.P.A. of 2.5. It may be renewed. Recipients are selected by the Dean of the College of Business Administration and the Director of Student Financial Aid.

## Louis and Alma Schreiber Scholarship

This competitive scholarship is awarded annually to undergraduate students demonstrating financial need. It is renewable provided satisfactory academic progress is maintained.

## John A. Scigliano Scholarship

Academically qualified students who demonstrate financial need and are either members, children or grandchildren of members of St. Thomas More Church, Knights of Columbus Council \#652 or are graduates of Fr. Flanagan’s Boys Home are eligible to apply. A separate application is required and available from Creighton or any of the above organizations. Renewability is not automatic, but a prior recipient is allowed to apply again for consideration.

## William and Ruth Scott Scholarship

This scholarship assists students in either the College of Arts and Sciences in a premed program or who are already in the School of Medicine to achieve their goal of becoming a physician. Primary consideration will be given to students from Eastern Europe, especially students from Poland, or any other foreign student who demonstrates the need for funding and high academic ability and achievement. The award may be renewed based on the student's academic progress and the availability of funds.

## Jesse J. Shelton Scholarship

This scholarship honors a man employed at Creighton for 19 years who left a legacy of racial and ethnic harmony upon his death in 1997. Because of his love of education and his admiration for those who teach, a student of color enrolled in the Education Department will be the recipient of this scholarship. It is renewable with a 2.5 Q.P.A. and Scholarship Committee approval.

## V.J. and Angela Skutt Scholarship

Two entering freshmen from South Dakota are selected each year with preference given to prelaw and business administration students. Selection is made on the basis of financial need and academic performance. At least a 3.0 Q.P.A. average is required for renewal.

## Dr. Patrick and Christine Smith Scholarship

This scholarship is available to deserving and financially needy students enrolled in any of Creighton's undergraduate schools. Freshman receive priority consideration and the award is renewable with normal academic progression toward a degree.

## Smola-McCormick Scholarship

This endowment assists undergraduate students who demonstrate financial need and academic achievement. It is restricted to graduates of Mercy High School, Omaha, NE who have maintained a "B" average or better.

## William Stockdale Minority Scholarship

This scholarship recognizes a minority student form the greater Chicago area enrolled in an undergraduate program at Creighton. Preference is given to students of African-American heritage. A minimum 2.0 grade average and normal porgression toward graduation allows for automatic renewal.

## Virginia Roehrig Tomczak Scholarship

This scholarship is provided by the estate of the donor and is awarded by the Financial Aid Office to students of high academic standing and who demonstrate financial need. The award is renewable with a 2.5 cumulative grade average.

## Dennis L. Toohey Memorial Scholarship

Recipients of this award will be students of color who demonstrate high academic ability and the need for assistance. A minimum 2.0 Q.P.A. is needed for renewal.

## Richard and Helen Upah Scholarships

College of Business Administration students, preferably from the South Omaha area, benefit from this fund. Financial need is considered in making a selection. Renewal will be considered by maintaining a 2.0 Q.P.A.

## Roger F. and Mary A. Warin Scholarship

This endowment supports students in the College of Arts and Sciences who have financial need, high academic standing with preference given to students from singleparent homes.

## Gerald J. Wieneke, M.D. Scholarship

This endowment helps to support undergraduate students who demonstrate financial need and high academic ability. Preference will be given to students from Palo Alto County, Iowa, then to students from an area outlined by the towns of Emmetsburg, Carroll, Ames, Marshalltown and Mason City,Iowa. Finally, any student from Iowa may be considered.

## Wiesner Family Scholarship

This scholarship is awarded to a junior or senior student in the College of Arts and Sciences with at least a cumulative college 3.0 Q.P.A. The recipient must also demonstrate financial need and show history of community service. It may be renewable.

## Rev. Roswell Williams, S.J. Scholarship

Students enrolled in the department of Journalism and Mass Communication are considered for this recognition. Candidates are selected based on an intent to or a declared major in journalism, above average academic standing and financial need. Freshman are given priority and the award is renewable based on the criteria above and by sustaining at least a 2.5 overall grade average.

## Jimmy Wilson Jr. Memorial Scholarship

This scholarship remembers a Creighton alumnus and Omaha police officer, killed in the line of duty. It is awarded to a financially needy undergraduate student from Nebraska enrolled in the College of Business Administration. A minimum 2.5 Q.P.A. is required for renewal.

## Yanney's Kids Scholarship

This scholarship assists students from the Omaha area who have successfully participated in the "All Our Kids" program, sponsored by Mr. Michael Yanney, an Omaha businessman. Each year, students from this program enrolled at Creighton will receive an equal award to help with their educational costs. Scholarship consideration is renewable by achieving normal progression to a baccalaureate degree.

## A. A. and E. Yossem Scholarships

Awards from this gift are made to students of the Jewish faith who are enrolled in any undergraduate school. Made by the Director of Undergraduate Admissions, scholarship recipients must show above average academic performance. Awards may be offered to new and continuing students and are renewable with a 2.5 cumulative Q.P.A.

## Patrick and Peggy Zenner Scholarship

This endowment assists students enrolled in either the College of Arts and Sciences or the College of Business Administration. Candidates must show financial need and high academic credentials.

## Outside, Private Scholarships

A scholarship(s) you have secured from an outside source must be reported to the Financial Aid Office and may comprise all or a portion of your aid award. Receipt of an outside award may result in a revision of the financial award offered by Creighton. Normally, any revision occurs first in loan or employment programs.

Receipt of a full-tuition outside scholarship will exclude a student from receiving the monetary value of his/her Creighton University scholarship. However, students will be accorded the recognition of a University award, and should an outside scholarship be forfeited, the University would review its offer subject to the stipulation of the program.

## GRANTS

Creighton University uses the Free Application for Federal Student Aid to determine eligibility for all grants. Each year a new application must be filed to qualify for grants for the following academic year. A grant does not have to be repaid.

## Federal Pell Grant

This Federal program provides grants to those students who meet the eligibility criteria established by the U.S. Congress. The exact amount of a Pell Grant will depend on your eligibility and the money appropriated by Congress to fund the program in any given year.

## Federal Supplemental Educational Opportunity Grant (FSEOG)

The FSEOG is awarded to undergraduate students demonstrating exceptional financial need. These grants vary annually depending upon the amount allocated by the government and the student's need. Pell grant recipients receive first priority.

## State Scholarship Award Program (SSAP), Student Assistance Program (SAP), Postsecondary Educational Award Program (PEAP)

These programs are funded by the Federal Government and the State of Nebraska and administered through the Nebraska Coordinating Commission for Postsecondary Education. Eligible students are selected by the Financial Aid Office. Recipients must be Pell Grant eligible, have exceptional need and preference is given to residents of Nebraska enrolled on a full time basis.

## Creighton University Grants

Creighton awards grants that are based on documented financial need. The amount of the grant will vary depending upon your need. Full-time enrollment status is required.

## Tuition Grants

Tuition grants are available to children of University employees. Receipt of a fulltuition grant will preclude a student from receiving the monetary value of any Creighton University scholarship, and/or institutionally funded grant. Employees must complete the Tuition Remission Application available from the Human Resources Office, and otherwise be eligible based on specific program criteria.

## Family Remission

A tuition remission of 25 percent is available to the second, third, and any other immediate family member when two or more are registered as full time students in
the same term. Immediate family is defined as father, mother, husband, wife, son, daughter, brother or sister. This reduction is applicable only to students enrolled in the College of Arts and Sciences, Business Administration, Nursing (four-year program), University College, and undergraduate programs of study in the School of Pharmacy and Allied Health Professions. The first member of the family may be enrolled in any school/college of the University. However, if the first member is enrolled in the Graduate School, the second and third members will be eligible for the reduction only if the graduate student is registered for eight or more hours in a semester.

When the person to whom the reduction is to be granted is already receiving other types of aid, the reduction granted will be calculated on the difference of tuition minus all other grant and/or scholarship funds. Family Remission applicants receiving a full-tuition internal scholarship or remission will not be allowed the monetary benefit of any other Creighton University scholarship or remission. If the first member of the family has received a full-tuition internal scholarship, the reduction will not apply to the second member.

## ATHLETIC SCHOLARSHIPS

Creighton University is a member of the National Collegiate Athletic Association (NCAA) and participates at the Division I level in several men's and women's intercollegiate sports. Athletic grants-in-aid are available and administered in accordance with NCAA rules and coordinated with other University, federal, state and private third-party student financial assistance programs. Specific information on athletic scholarships can be obtained from the Director of Athletics.

## LOANS

RECENTLY ENACTED CHANGES TO THE HIGHER EDUCATION ACT OF 1965, AS AMENDED, MAY ALTER THE TERMS, AWARD AMOUNTS, ELIGIBILITY REQUIREMENTS, DEFERMENTS AND OTHER ASPECTS OF THE FEDERAL LOAN PROGRAMS SHOWN UNDER THIS SECTION. INFORMATION UNDER EACH FEDERAL LOAN PROGRAM IS SUBJECT TO CHANGE WITHOUT NOTICE.

A loan is a type of financial aid that is repaid per the terms of the promissory note. Loan applications requiring a separate application (i.e., Stafford) must be received by the Financial Aid Office no later than the dates shown below. Applications received after these deadlines may be rejected.

Fall Term - October 30, or the next working day of the Fall Semester.
Spring term - March 15, or the next working day of the Spring Semester.
Summer term - Four (4) weeks prior to the last day of the enrollment period.

## Federal Perkins Loan

This loan, which is funded by the Federal government, has an interest rate of five percent per year. No payment on the loan is due and no interest accrues while the student is enrolled in school at least half-time. Interest begins to accrue and repayment begins nine months after the student is no longer enrolled in school at least half-time.

Students may receive up to $\$ 15,000$ during their total undergraduate careers and up to $\$ 30,000$ during both their undergraduate and graduate/professional careers. The student must have an exit interview with the Student Loan Accounts Manager prior to leaving Creighton University.

Partial loan cancellation privileges are available for borrowers who enter certain fields of teaching, or who teach in designated schools. In addition, there are various conditions for which payment and interest are deferred. Deferment and cancellation provisions are listed on the promissory note.

Repayment of the loan is made to the Creighton University Student Loan Accounts Office. During repayment, the student will be billed on a monthly basis and must make a minimum monthly payment of $\$ 40.00$; students have a maximum repayment period of 10 years.

Students must complete and return the statement of rights and responsibilities sent with the promissory note.

## Federal Nursing Loan (FNL)

The Health Manpower Act of 1958 set up a loan fund for students seeking a degree in nursing. These loans are interest free as long as the student is enrolled as at least a half-time student in the School of Nursing. Simple interest at the rate of five percent and repayment of principal begin nine months after the student leaves the University or the School of Nursing; at that time he/she also enters the repayment period which extends for a maximum of 10 years. Repayment is deferred if the student reenters the same or another such school within the nine-month grace period, during periods of active service in the military or Peace Corps, and during periods spent as a full-time student pursuing advanced professional training in Nursing. Interest does not accrue during periods of deferment.

The student must have an exit interview with the Student Loan Accounts Manager prior to leaving Creighton University. Repayment is made to the Creighton University Student Loan Accounts Office. During repayment, students will be billed monthly and must make a minimum $\$ 15.00$ monthly payment. Students must complete and return the statement of rights and responsibility sent with the promissory note.

## Federal Subsidized Stafford Student Loan

A student may borrow from a bank, savings and loan association, credit union, or other lender, and a state or other private nonprofit agency will stand behind the loan. All students must demonstrate financial need to be eligible for this subsidized loan. The amount a student may borrow depends on the student's financial need but may not exceed the yearly limits, which are $\$ 2,625$ for freshmen, $\$ 3,500$ for sophomores and $\$ 5,500$ for juniors and seniors. An undergraduate student may borrow up to an aggregate maximum amount of $\$ 23,000$. An origination fee must be paid by the student and normally will be deducted from the loan before it is disbursed. The Federal government pays interest on the loan while the student is in school. The interest rate is variable but capped at 8.25 percent. The student must have an exit interview with the Financial Aid or Business Office prior to leaving the University.

## Federal Unsubsidized Stafford Loan

An unsubsidized Stafford Student Loan is available to students not qualifying for a subsidized loan. Basic terms of the loan are identical except the borrower is responsible for payments of interest while in school. The Federal government does not make interest payments. The sum of both subsidized and unsubsidized Stafford loans may not exceed the annual or aggregate dollar limits listed above for dependent students. For independent students, the maximum yearly limits are $\$ 4,000$ to $\$ 5,000$, depending on grade level.

Deferments are available for a variety of situations and are listed on the promissory note. It is the borrower's responsibility to secure, complete and submit deferment requests in a timely manner.

Application. The Stafford Loan application will be included with the award letter from the Creighton Financial Aid Office. After the student fills out his/her portion of the application, the school must complete its section. If the lender agrees to make the loan, the lender seeks approval from the guarantee agency and then sends the funds to the University, in one or more payments, for disbursement. NOTE: Applications should be submitted to the Financial Aid Office no later than July 1 to ensure that the funds are available at fall registration.

## Federal Parent Loan (PLUS)

A parent of an undergraduate student may borrow from a bank, savings and loan association, credit union, or other lender, and a state or other private nonprofit agency will stand behind the loan. The PLUS loan is limited only by the total cost of education less other aid and has no aggregate maximum. Proceeds will be disbursed in two installments made payable to the school and the borrower. The Federal government does not pay the interest on the loan while the student is in school. Repayment and interest begin 60 days following the date of the second disbursement of loan proceeds. Interest rates vary but will not exceed 9 percent.

Your enrollment status during any term or the length of the academic program may limit your eligibility for Federal loans.

## SHORT-TERM LOANS

Various University-Controlled Emergency Short-Term Loans are available to students for documented emergency expenses.

Eligibility: Currently enrolled Freshmen, Sophomore, Junior, and Senior students in the College of Arts and Sciences, College of Business Administration, and School of Nursing.
Amount: Up to $\$ 200$ a semester as fund balances permit.
Procedure: Applications are available through the Student Financial Aid Office. No short-term loans are offered during the first two weeks or final week of a semester, and none are available during the summer.
Terms: Any emergency short-term loan advanced must be repaid prior to the next semester's registration.

The following loan funds are available for a limited number of loans:
Ak-Sar-Ben Loan Fund; The William E. Belfiore Memorial Student Loan Fund; Catherine B. Currie Memorial Loan Fund; The Frank G. Ciochetto Memorial Loan Fund; The Bing Crosby Loan Fund; The Reverend Francis X. Reilly, S.J. Loan Fund; Father Michael Sheridan Memorial Loan Fund; The Student Loan Fund; The Webster Student Loan Fund; the Neil Cahill Loan Fund; and the St. Joseph Alumni Loan Fund.

The Agnew Loan Fund was established in 1931 by students of the University in honor of the late Very Reverend William H. Agnew, S.J., a former President of the University. This fund is administered by a special committee of the Student Board of Governors. Loans up to $\$ 150$ a semester are made to finance unforeseen emergency educational expenses and must be repaid in six months. Applications are available through the Student Board of Governors.

## Note: Transcripts of credits are released only when short-term loans have been repaid in full.

## Summer School Financial Aid

Financial aid during any summer term is normally limited to Pell Grant or Stafford Loan eligibility. University scholarships and other aid programs are not available. The Financial Aid Office has an institutional Summer Aid application which must be secured from and returned to the Financial Aid Office no later than May 1. Funding received during summer terms may affect aid funding for ensuing fall/spring terms.

## Satisfactory Academic Progress

For all students in an undergraduate program, Creighton University administers a time frame for checking satisfactory progress of not more than one academic year which includes Summer, Fall, and Spring terms regardless of the semester in which the student entered.

Creighton University's minimum academic progress requirements are as follows:
At the end of each spring semester, students must have a cumulative pass rate of at least 75 percent for all hours completed versus attempted and have a cumulative grade-point average at least equal to the grade level requirement. The minimum Q.P.A. requirement is 1.75 for freshmen status and 2.0 for all other grade classifications. Failure to meet these standards will cause immediate termination fromall Federal aid programs and University need-based aid programs.
Satisfactory progress will be monitored on a cumulative basis each year at the end of the Spring Semester. Grades of AF, F, NP, UN, WF, X, incompletes and withdrawals will not count as credits earned, but will count as credits attempted.

Baccalaureate Degree seeking students in Arts and Sciences, Business Administration, Nursing, or University College may receive financial aid for a total of 170 credit hours or until the degree is acquired, whichever comes first. Students in University College seeking an Associate Degree may receive financial aid for a total of 85 credit hours attempted or until the Associate Degree is obtained, whichever comes first.

Eligible students in University College seeking a certificate may receive financial aid for a total of 50 credit hours attempted or the course work required to complete the academic program, whichever comes first.

## Transfer Students

All transfer hours will be counted as part of the satisfactory academic progress requirements. Students must maintain the required G.P.A. and the 75 percent completion rate of hours attempted versus hours completed.

## Termination

Financial aid termination will occur if the student fails to meet either the required G.P.A. or 75 percent of the cumulative hours attempted. No federal or other needbased aid will be awarded to a student in termination status.

Reinstatement of aid eligibility will occur when the student meets the minimum G.P.A. and 75 percent of the cumulative hours attempted. It is the student's responsibility to notify the Financial Aid Office of possible reinstatement of eligibility.

## Appeal

If extenuating circumstances have affected a student's progress, a written appeal must be received by the Financial Aid Office within 30 days of the date of the termination notification.

The following circumstances may qualify for a legitimate appeal:
a. Student illness requiring physician's care.
b. Major illness or death in the student's immediate family (spouse, mother, father, sister, brother, child, grandparent).

The appeal may be submitted by the student and/or parent along with appropriate documentation. Appeals will be reviewed and a written response sent to the student within ten days of the decision. Creighton University reserves the right, at any time, to review any individual case should the situation warrant.

## STUDENT EMPLOYMENT

## Federal Work-Study

If you wish to earn a portion of your educational expenses and can demonstrate financial need through the FAFSA, you may qualify for the Federal Work-Study program. Earnings under Federal Work-Study are not credited to your account. You will receive a paycheck every two weeks based on the number of hours you have worked.

Eligible students are paid at least the Federal minimum wage per hour. Students work at jobs on campus assigned to them through the Student Employment Office. A number of off-campus Community Service jobs are also available. The Financial Aid Office determines the number of hours you may work, based on your award value. Your exact work schedule should be designed flexibly so it won't interfere with classes.
A Federal Work-Study award normally requires working approximately $10-12$ hours per week during the academic year. You must assume a normal employer-employee relationship under the program. If you fail to assume this relationship, you may lose your Federal Work-Study award.

## Student Employment Services

Departments and offices on campus hire a number of students each year. Many office jobs are filled by Federal Work-Study students, but other jobs are also available on campus, i.e., environmental services, dormitory desk work, food service, libraries, Development, Kiewit Fitness Center, and the Student Center.

The Student Employment Office maintains up-to-date listings of both on and off campus part time and Summer jobs. These listings are available through the computerized Job Listing System (JLS). Computers that can access JLS are located in the Student Employment Office, Brandeis 217, or through Creighton's World Wide Web home page http://www.creighton.edu.


## STUDENT SERVICES

When Creighton admits a student she does so with a sincere concern for the student's well-being. With this in mind, the following services, in addition to those described elsewhere in this bulletin, are designed to assist each student to attain fulfillment in the college environment.

## CAREER SERVICES

## Career Advising and Academic Planning

The Career and Academic Planning (CAP) Center is designed to assist students in reaching their academic and career goals by providing valuable resources in one convenient location. The Center is available to students seeking basic advising regarding their academic preferences and course requirements, course selection, clarifying career goals, career options, vocational testing, internships, field trips and career-related part-time employment. Career counselors are available to meet with students on an individual basis. The CAP Center is located in the Career Services Office in Room B03, Brandeis Hall.

## Internships

The Career Services Office maintains information and listings for local, regional, and national internships. Sophomores are encouraged to contact the office prior to their junior year regarding the application process and specific qualifications.

## Employment

The Career Services Office, located in Room B03, Brandeis Hall, offers opportunities for employment through its On-campus Recruiting Program, Resume Referral System, and comprehensive Job Listing Service. The Career Resource Library houses volumes of current information on specific companies, job trends, industry profiles, graduate schools and salaries.

## Programs

The Career Services Office sponsors a number of seminars and workshops on resume writing, interviewing techniques, and job search strategies. Career fairs in the Fall and Spring semesters provide students with the opportunity to visit with representatives from a variety of businesses and organizations regarding career trends, internships, and employment opportunities. Additional information can be seen on the home page, http://cujobs.creighton.edu.

## COUNSELING AND GUIDANCE

## Counseling and Psychological Services

These professional services are designed to help students actualize themselves in the areas of effective learning, appropriate educational and vocational decision-making, and social and personal adjustment. In conjunction with counseling interviews, a complete selection of psychological tests and inventories are available to students so that they may explore values, interests, aptitudes, abilities, personality and lifestyle. Lifestyle includes both academic and social behaviors such as study skills as well as chemical impairment (including alcoholism).

Other services include the Master Student Class for academically troubled undergraduate freshman students and the Peer Education outreach programs on issues such as healthy eating, self-esteem, and alcohol use.
The staff are professionally trained psychologists and counselors who assist students with a wide range of developmental and crisis concerns. Students expressing concerns in areas such as studying, interpersonal relationships, communication, deci-
sion-making, choices of majors or occupations, or lifestyle and values clarification may benefit from talking with a staff member.

The staff members strive to be understanding, warm, and accepting-not making decisions for the student but assisting him or her in self-direction. Staff are specially trained and have experience with the counseling and psychological needs of the university student. Confidentiality is practiced and information is not released out of the service without the written consent of the student.

The Counseling and Psychological Services is located in Room 203, Brandeis Hall, 280-2733. Please call for an appointment.

## Other Services

All entering freshmen are required to take the ACT Assessment or the Scholastic Apptitude Test (SAT). These tests provide results that are used for placement and counseling purposes. The test scores and other data also provide a basis for helping students to understand themselves better and to plan for more effective college careers. Students are welcome to consult with the Dean or with counselors for analysis of their capabilities as revealed by the test data.

Campus Ministry-Members of the Campus Ministry team are ready at any time to talk over in a friendly and confidential manner the plans and problems which any student may wish to bring to them. The chaplain - counselors in the residence halls and the Jesuit counselors of the professional schools as well as the chaplains at St. John's are likewise available for helping students. A Lutheran chaplain is also available for counseling.

Veterans'Service-is provided by the Registrar's Office. Veterans and others eligible for educational benefits administered by the Veterans Administration are given assistance concerning proper and advantageous use of their benefits and to simplify and expedite transactions with the government. Information and application forms for VA educational benefits are available at the Registrar's Office.

## STUDENT ORIENTATION

Summer Preview and Welcome Week are the foundations of Creighton's Orientation Program. Summer Preview is held in the summer and is an opportunity to familiarize parents and students with the University and its services. Students meet with a faculty adviser and can review their class schedules at this time. Welcome Week is held several days before classes begin in August. All new students, including freshmen and transfer students, are involved in activities designed to acquaint them with the many aspects of University life and help them begin to feel comfortable in their new surroundings. They also meet other students, go through registration procedures, and meet with faculty advisers.

## STUDENT SUPPORT SERVICES PROGRAM

The Student Support Services Program at Creighton seeks to provide academic, emotional, and financial support for students who meet established Federal and program guidelines. In order to be eligible for program services, students must show need for academic services and meet one or more of the following criteria: first generation student status (when neither parent(s) has graduated from a four-year college with a baccalaureate degree); low-income, according to Federal guidelines; or disabled.

Enrolled participants receive academic advising, personal and career counseling, tutorial assistance, and assistance in applying for financial aid. A limited number of scholarships are available to program participants based on unmet financial need.

The Student Support Services offices are located in Markoe Hall, west of the Old Gymnasium. Call (402) 280-2749 for more information.

## STUDENT HEALTH SERVICES

## Mission Statement

Student Health Services is committed to promoting the health of the whole person. We do this as a campus health resource, primary care provider group, and an insurance plan sponsor. These services will support students in the performance of their academic endeavors. Our Ignatian tradition integrates the physical, mental, spiritual, and emotional aspects of the student's life. We will educate and prepare students to be advocates for their health.

## Student Health Services

The variety of services available at Creighton University Student Health Services will meet the health care needs of most students. Every effort is made to help students obtain appropriate consultation or referral when additional or specialized services are required. Services are provided by a physician, nurse practitioner, or physician's assistant.

## Services Include:

- Allergy Injections
- Illness/Injury Care
- Illness/Injury Care
- Physicals
- EKG's
- Travel Health Consultation
- Laboratory
- Office Visits
- Pap Smears
- Radiology
- Health Promotion
- Educational Materials

Services are provided through student fees, personal insurance, and/or self pay. Immunizations, laboratory tests, x-rays, splints, specialist referrals etc. not covered by personal/family health insurance will be the financial responsibility of the student.

## It is essential that a current insurance card be presented at each visit.

## How to obtain Student Health Services

Appointments can be made by calling 280-2735, Monday through Friday. Appointments should be made for all health needs other than emergencies. It is important that you keep scheduled appointments and that you arrive on time. If you will be late or must cancel, please call as soon as possible. Your courtesy will enable the best use of our available appointment times.

Students will be seen in the Student Health Services office located in the Kellom Valley (Shops) Center at 2530 Cuming Street.

## Who Provides the Services?

Physicians, nationally certified physician's assistants, and nurse practitioners provide the core staff of Student Health Services. An auxiliary staff of certified medical assistants, radiology tech and clerical personnel support them.
Medical specialty and dental care is provided by referral to physicians and dentists who are faculty members of the Schools of Medicine and Dentistry at Creighton University. Mental health services are provided by referral to Counseling and Psychological Services, the Department of Psychiatry in the School of Medicine, psychiatrists, and/ or therpists within the community.

## Participating Provider

Student Health Services providers are considered participating providers within the University sponsored insurance plan. It is important to check with your insurance plan to verify if services rendered at Student Health Services will be a covered expense under your plan.

## After Hours Care

Urgent care services are available at local urgent care centers. These centers have laboratory and x-ray services and can treat most acute illnesses and injuries. St. Joseph Hospital's Emergency Department is conveniently located adjacent to the Creighton campus. Any after hours care received will be the financial responsibility of the student.

## Services Available During the Summer

The services provided during the summer are the same as those offered during the academic year. These services are provided through personal health insurance and/or self pay.

## Immunization Requirements

Creighton University policy REQUIRES that all students born on or after January 1, 1957 provide documentation of two vaccinations for MEASLES, MUMPS AND RUBELLA PRIOR TO ENROLLMENT. Immunization must be given after 12 months of age. A second immunization must be given after 1980. History of the disease does not satisfy this requirement. This information is required once, at the time of admission or transfer.

## Additional Immunization Requirements for Health Science Students

In addition to the measles, mumps and rubella requirement, all Health Science student must comply with the following:

- must have the hepatitis B series of three immunizations and the follow-up titer proving immunity.
- must have a tuberculin skin test (PPD) every year. If you have had a positive PPD in the past. please contact Student Health Services for further instructions.
- must provide documentation of two (2) varicella immunizations or a positive titer to verify immune status.
- must provide documentation of current immunization status for diptheria/ tetanus and polio.
All of the above services are available at Student Health Services. If proof of compliance is not supplied, the cost of the required immunizations will be added to your tuition, PPD's excluded.


## Health Insurance Requirements

It is Creighton University policy that all full time students be covered by a comprehensive health insurance plan* for the entire academic year.

NOTE: The premium for the University-sponsored Student Health Insurance Plan will remain on the student's account unless a properly completed waiver form and a copy of both sides of a current health insurance card are received by Student Health Services before the deadline. This information is required on an annual basis.

* A comprehensive Health insurance plan fulfills the following requirements:

1. Coverage includes most inpatient and outpatient health services and is comparable to the University sponsored Plan.
2. Coverage is in effect for the entire academic year.
3. Coverage includes comprehensive benefits when out of area (away from home).

NOTE: Automatic enrollment into the University sponsored Plan will occur and the tuition statement will reflect a charge for the entire premium when Student Health Services becomes aware of a lapse in the student's health insurance coverage.

## Creighton University Student Health Insurance Plan

As a service to students, the University sponsors a comprehensive health insurance plan. This plan is available at a reasonable group rate and provides year-round coverage, wherever the student may be, as long as the semi-annual premium is paid. This plan provides benefits for laboratory tests and x-rays, the services of designated subspecialists and specific services at St. Joseph Hospital with minimal charges when referred by Student Health Services. Students enrolled in this plan can access our heath care providers by telephone, after-hours, for guidance for urgent or emergency care.

Enrollment into the Creighton Student Health Insurance Plan cannot be processed until a signed, completed enrollment from is received by Student Health Services.

## Contact Student Health Services for complete details.

For additional information please contact Creighton Student Health Services at: 2530 Cuming Street, Omaha, Nebraska 68131-1632, Phone: (402) 280-2735, Fax: (402) 280-1859, http://www.creighton.edu/StudentHealth.


## ADMINISTRATION AND SUPERVISION

## ACADEMIC ADMINISTRATION

## Student Responsibility

Each student is personally responsible for completing all requirements established for his or her degree by the University, the student's College or School, and Department. It is the student's responsibility to inform himself or herself of these requirements. A student's adviser may not assume these responsibilities and may not substitute, waive, or exempt the student from any established requirement or academic standard. The University reserves the right to modify requirements at any time.

Although the University encourages the widest amount of student responsibility, with a minimum of administrative regulation, it expects each student to maintain appropriate standards in his or her academic and personal life. The University reserves the right to terminate the registration of any student who does not meet the standards acceptable to the University.

## The Academic Year

The academic year is divided in two semesters. The first begins in late August and ends before the Christmas holidays; the second begins in mid-January and ends in May.

There is a one week midsemester holiday in the fall, a short Thanksgiving recess, a vacation of approximately a month between semesters, and a week in the spring. Instruction is also suspended on legal holidays.

## The Summer Session

The annual Summer Session includes a three-week pre-session and two five-week terms. These offer significant opportunities to entering freshmen, to students who wish to accelerate their studies and satisfy degree requirements, to teachers wishing to obtain credit for state certificates and/or for professional improvement, etc. A variety of short workshops and institutes on topics of current interest are part of each summer's offerings. Students may register in one, two, or all three of the basic components of the Summer Session: The Pre-session, Term 1, and Term 2. The student may earn three credits in the Pre-session and up to six semester hours of credit in each of the two fiveweek terms.

## Unit of Instruction

The semester hour is the unit of instruction used for computing the amount of work required for graduation. One semester hour is equivalent to one fifty-minute period of recitation or lecture per week for one semester. Two or three fifty-minute periods of laboratory are equal to one period of recitation or lecture.

## Course Levels

The arrangement and numbering of course offerings according to levels, from introductory and fundamental to advanced, is explained on page 165. Lower-division courses are numbered from 100 to 299; upper-division from 300 to 599; and graduate from 600 to 999 .

## Student Classification

Students in the Colleges of Arts and Sciences and Business Administration are classified according to the total number of semester hours and quality points they have earned:

Freshmen-those having up to 23 sem. hrs.
Sophomores-those having at least 24 sem. hrs. and a QPA of at least 2.00.
Juniors-those having at least 60 sem . hrs. and a QPA of at least 2.00.
Seniors-those having at least 96 sem. hrs. and a QPA of at least 2.00.
Students in the School of Nursing are classified according to the completion of specific curricular requirements and not merely on the basis of total semester hours.

## Class Attendance

Creighton University's primary obligation is the total education of her students. Implicit in the achievement of this goal will be the student's conscientious attendance of classes and laboratory sessions. Freshmen in particular will be held accountable for regular attendance.

Each teacher in the undergraduate colleges will at the start of the semester announce his or her specific procedures concerning class attendance, verification of excused absences, etc., preferably in written form. It is the student's responsibility to note these procedures and to follow them carefully. No teacher will drop the last class before or the first class after a University recess.

Officially excused absences for University-sponsored affairs must be cleared with the Academic Dean by the responsible faculty moderator.
A student who has been unavoidably absent but cannot make up the work of the course will be permitted to withdraw without penalty. The student receives a W and no credit. A student who is dropped from a course for unexcused absences will receive the grade of AF (absence failure). Once a grade of AF has been assigned, the student is not eligible to receive a W (withdrawal).

## Pass/No Pass Option

Beginning with their Sophomore year, students in good standing (cumulative QPA of 2.00 or above) may elect to register for courses on a Pass/No Pass (P/NP) grading basis. A limit of twelve Pass/No Pass hours will be permitted the eligible student. Courses to be taken on a P/NP basis must be selected from those outside the student's major and its supporting courses and educational courses leading to teacher certification. No CORE courses may be taken as P/NP. Course prerequisites must be met. Such hours passed will be counted toward graduation but will not be included in the qualitypoint average. Likewise, an NP does not affect the QPA. The grade of "C" will be the lowest pass grade. The P/NP status of a student is not made known to the instructor, who grades the student in the traditional manner. The final grade is converted to P or NP when the student's end-of-term grade report is processed. For all College of Business Administration students, P/NP will only be accepted for non-restricted electives.

Approval to take a course on a Pass/No Pass basis must be obtained from the Dean after registration. The deadline for signing up for Pass/No Pass is the same as for changing from credit to audit, i.e., four weeks following the first day of classes. No change in status from Pass/No Pass to regular grading or vice versa will be allowed after the first four weeks of the semester.

## Examinations and Grading

Final examinations in all courses are held at the close of each term (semester or summer session). Written tests and quizzes are held from time to time during the term, with or without previous notice to the students, at the discretion of the instructor. A student's scholarship rating in each of his or her courses is determined by the combined results of examination and class (and laboratory) work. This rating is reported by the instructor in accordance with the following grading system.

| A | outstanding achievement and an unusual degree of intellectual initiative |
| :--- | :--- |
| B+ | high level of intellectual achievement |
| B | noteworthy level of performance |
| C+ | performance beyond basic expectations of the course |
| C | satisfactory work |
| D | work of inferior quality, but passing |
| F | failure-no credit |
| AF | failure for excessive absences |
| WF | failure because of unauthorized withdrawal |
| I | work incomplete |
| X | absence from final examination |
| AU | audited course only-no credit |
| P | pass-credit |
| NP | not pass-no credit |
| SA | satisfactory work |
| UN | unsatisfactory work (failure)-no credit |
| W | official withdrawal from a course-no credit |

SA and UN are used to report student performance in a course that does not permit regular grading. It is not an individual grading option as is P/NP, but applies to all students in the course. Credit earned with SA (Satisfactory) may be counted toward graduation but is not included in the quality-point average; however, UN (Unsatisfactory) functions as a failure in computing the quality-point average.

## Incomplete and Absence from Final Examination

The I and X are marks used, as explained below, to reflect a student's irregular status at the time final end-of-term grade reports are due.

I (incomplete). A student who has failed to fulfill all requirements of a course may petition the instructor before the close of the term to assign an end-of-term mark of I indicating incomplete performance. The instructor may agree to this mark when, as a result of serious illness or other justifiable cause, the work cannot be completed by the end of the term. An I (incomplete) will not be granted to a student who has been excessively absent during the term or who has simply failed to complete the work of the course before the close of the term without an exceptionally good reason. Students in the College of Arts and Sciences must submit a Completion of Course Agreement form in order for an incomplete to be assigned. This form indicates the work to be completed and the deadline for completion. Both the student and professor must endorse the form.

The responsibility for completing all course work rests with the student. The maximum time limit for clearing an incomplete is one year from the start of the course. After one year the student must reregister for and satisfactorily complete the course if credit is desired. The I carries no penalty and does not affect the grade-point average. Student records will be audited periodically and students who show a consistent pattern of I's may be placed on academic probation.

An X is given to a student who missed the regularly scheduled final examination, and the X functions as a failure until it is cleared. If the reason for absence is acceptable to the Dean, an examination must be taken as soon as possible but not later than one month from the date of the regular final examination. A permanent grade is recorded after the final examination is taken. If the examination is not taken as specified or if the reason for absence was not acceptable, the student receives F in the course.

A student who is both incomplete and absent from the final examination will receive both an I and X (IX), which will function as a failure until cleared as specified above.

When an I or X (original entry) is cleared and a final grade, either passing or failing, is assigned, the final grade is entered on the student's permanent academic record in place of the I or X.

## Graduating Senior Examinations

Graduating seniors with a "B" or better average in a particular course, with the approval of the instructor, may be released from the final examination in that course. This option would, of course, be open only in those courses where adequate testing has been accomplished to satisfy the teacher in his or her determination of the grade. This decision will normally be made after the last regular class meeting of the semester. This policy in no way precludes a senior with a " B " or better from taking the final exam, should he or she choose to do so.

## Grade Reports

Grade reports are made available to students each midsemester and at the end of each term (semester or summer) via Creighton's touch tone telephone grade reporting system and via the web. Access to the system may be gained by calling the special phone number and entering the student's ID number (usually the social security number) followed by the special access code number assigned by the Registrar's Office. Midsemester grades are available only through the telephone grade reporting system or the web. Printed copies of end of term grades are available in person through the student's dean or advisor. In addition a copy of final grades is also mailed to one of the following: (1) to the parent or guardian if requested by the student; (2) to the superior of religious; or (3) to the student at the home address if the report is not mailed as indicated in (1) or (2). It should be noted that Federal law accords parents of dependent students (regardless of the student's age) the right to grade reports without prior consent of the student. After grades are submitted by the instructors, grade reports are assembled and issued by the Registrar's Office.

## Grade Appeals

The instructor has jurisdiction in determining grades; however, the student has the right to appeal a grade that the student believes to be in error. The appeal process may involve the following steps (the issue may be resolved at any level):

1. The student confers with the instructor involved.
2. The student and instructor (preferably together) confer with the chairperson of the department.
3. The student and instructor (preferably together) confer with the Dean of the College or School to which the department is attached.
4. In rare cases, when the foregoing steps do not resolve the issue, the student may initiate a formal written appeal to the Dean. Normally, the Dean will forward such appeal to the appropriate committee for its review and recommendation. A formal appeal should not be entered upon lightly by a student, nor lightly dismissed by an instructor. A formal written grade appeal may be made no later than the sixth week of the following semester.

Note: Nursing students should consult the School of Nursing Handbook for that school's appeal procedure.

## Policy on Academic Honesty

In keeping with its mission, the University seeks to prepare its students to be knowledgeable, forthright, and honest. It expects and requires academic honesty from all members of the University community. Academic honesty includes adherence to guidelines established by the University, its Colleges and Schools and their faculties, its libraries, and the computer center.
"Academic or academic-related misconduct" includes, but is not limited to, unauthorized collaboration or use of external information during examinations; plagiarizing or representing another's ideas as one's own; furnishing false academic information to the University; falsely obtaining, distributing, using or receiving test materials; falsifying academic records; falsifying clinical reports or otherwise endangering the well-being of patients involved in the teaching process; misusing academic resources; defacing or tampering with library materials; obtaining or gaining unauthorized access to examinations or academic research material; soliciting or offering unauthorized academic information or materials; improperly altering or inducing another to improperly alter any academic record; or engaging in any conduct which is intended or reasonably likely to confer upon one's self or another an unfair advantage or unfair benefit respecting an academic matter.

Further information regarding academic or academic-related misconduct, and disciplinary procedures and sanctions regarding such misconduct, may be obtained by consulting the current edition of the Creighton University Handbook for Students. However, students are advised that expulsion from the University is one of the sanctions which may be imposed for academic or academic-related misconduct.

The University reserves the right to modify, deviate from, or make exceptions to the foregoing or to the Handbook for Students at any time, and to apply any such modification, or make any such deviation or exception applicable to any student without regard to date of admission application or enrollment.

## Good Academic Standing-Quality-Point Requirements

To remain in good academic standing and to qualify for advancement and graduation, students, besides needing a given quantity of credit hours, must also achieve a certain quality of excellence determined on the basis of quality points.

Quality points are obtained by multiplying the number of hours assigned to a course by the quality-point value of the grade received in the course:

A yields 4 points for each hour C yields 2 points for each hour
$\mathrm{B}+$ yields 3.5 points for each hour D yields 1 point for each hour
B yields 3 points for each hour $\mathrm{F}, \mathrm{AF}$, and WF yield no points
C+ yields 2.5 points for each hour
One's quality-point average (QPA) is based only on work taken at Creighton and is computed by dividing the total quality points earned by the total number of hours of credit attempted including hours for courses failed (unless repeated and passed) and excluding credit hours for courses graded AU, P, NP, SA, or I. Thus 16 hours at straight C grades would give 32 quality points. Plainly, this QPA would be 2.00 ( 32 quality points earned divided by 16 semester hours attempted).

The terms "quality point" and "grade point" are synonymous, as are "quality-point average" and "grade-point average" The latter is abbreviated GPA.

## Quality-Point Average Requirements

A cumulative quality-point average of at least 2.00 is required for graduation. The average shall be computed only on the basis of all work attempted at Creighton.

Any student whose cumulative quality-point average is below 2.00 at the end of any semester will be placed on academic probation. Removal of academic probation requires achievement of a cumulative quality-point average of 2.00.

Whenever a student's quality-point average falls below 2.00, the student may not be permitted to carry a full schedule of studies. The student may also be advised to drop all extracurricular activities.

Any freshman whose cumulative quality-point average is not at least 1.75 at the end of the Freshman year may be dropped for poor scholarship. In some cases if a Freshman student's QPA is exceptionally low at the end of the first term of the first year, the student may be dismissed for poor scholarship.

Any student whose cumulative quality-point average is not at least 2.00 at the end of the Sophomore year or at the end of any subsequent semester may be dropped for poor scholarship.

Any student who has been dropped for poor scholarship may not apply for readmission to the University until a full year has elapsed. If readmitted, the student is placed on final academic probation.

## Satisfactory Progress Toward a Degree

A student meeting the foregoing minimum quality-point requirements will be considered making satisfactory progress if:

1. The student has acquired a minimum of 24 credit hours after one academic year, 48 credit hours after two academic years, and 72 credit after three academic years.
2. The student by the start of the third academic year, has declared in writing a specific degree in a major program of study, and successfully completes a reasonable number of courses in that program each semester thereafter.

## Repeating Courses

A student cannot repeat a course for which a final grade of C or better (including P and SA) has been earned. A student who has received a final grade of D or F (including NP or UN) in a course may repeat the course. The course to be repeated must be repeated at Creighton, it must be registered for just as any other course, and it with the grade earned will be entered on the student's record. The credit and quality points for the highest grade earned (one grade only) will be used to calculate the student's QPA. As with all other course work attempted, the original course entry and grade (D, F, NP, or UN) remain on the student's permanent record and will appear on any transcript issued. Similarly, courses with marks of AF, WF, AU, or W also remain permanently on the student's record. If such a course is repeated, a new course entry and grade is entered in the term in which the course is repeated. Also see the policy on auditing courses on page 48.

## Graduation Honors

Graduation honors are based only on a student's work at Creighton. To be eligible for honors, the student must have completed at least half of the prescribed hours for the degree in the undergraduate college at Creighton. Honors are applicable to the baccalaureate degree only. The diploma of a student who qualifies for honors is inscribed as follows:

Summa cum laude—for a QPA of 3.850-4.000
Magna cum laude-for a QPA of 3.700-3.849
Cum laude-for a QPA of 3.500-3.699

## Dean's Honor Roll

Full-time undergraduate students who have completed a semester with a grade-point average of 3.5 or higher and with no grades of I, IX, IF, or X are placed on the Honor Roll for that semester in their respective college or school. Full-time students with a grade of S (Satisfactory) or P (Pass) in a given semester qualify for the Dean's Honor Roll if a 3.5 quality-point average is earned in the graded courses. Honor Roll designation appears on the student's report card, and names of the students are posted on bulletin boards in the Deans' offices.

## College of Business Administration Dean's Honor Roll for Social Responsibility

The College of Business Administration recognizes that business should be a positive force in society. Hence, business education must include an appreciation of the relationship between business and social responsibility. Toward this end, the College of Business Administration's Honor Roll for Social Responsibility honors undergraduate students who take the opportunity to serve their community.

Full-time undergraduate students in the College of Business Administration who have performed 24 hours of confirmed community service between the first and last class days in a semester (excluding finals week) and have attended one of the Synthesis Sessions during that semester are placed on the Dean's Honor Roll for Social Responsibility for that semester. Honor Roll designation appears on the students' transcripts; Certificates of Achievement are mailed to the students' home addresses; and names of the students are publicly posted.

## Further Degree Requirements

A minimum of 128 semester hours is required for graduation, and students should check with their advisers and deans to be sure they have taken all the appropriate courses and fulfilled all necessary requirements. The Senior year consisting of the final thirty-two semester hours must be completed in attendance at Creighton University.

Transfer students must secure before graduation credits in all prescribed courses pertaining to the degree sought, and a minimum number of hours of a student's major must be taken at Creighton as follows: in the College of Arts and Sciences, at least fifteen; in the College of Business Administration, fifteen; in the School of Nursing, twenty. Students must earn at least 48 semester hours in residence to qualify for a degree.

Each candidate must file with the Registrar a formal application for the degree. This must be done in advance of the time one wishes to receive the degree, namely, by October 1 for graduation at end of First Semester, by February 15 for graduation at end of Second Semester and by June 15 for graduation at the end of Summer Session.

## COMMENCEMENT

Annual University Commencement Ceremonies are held in May and December. Students who complete their degree programs in the Spring Semester are required to be present at the Annual Commencement Exercises in May to receive their degrees. Students who complete their degree programs in the Fall Semester may attend Commencement ceremonies in December. Diplomas will be mailed upon confirmation of the completion of all degree requirements by the respective Dean. Students who complete their degree programs during the summer receive their degrees at the end of the Summer Sessions, but no ceremony is held; these students may participate in the preceding May Commencement. All candidates who receive degrees at the end of a Fall Semester or Summer Session are listed in the next Annual Commencement Program.
NOTE: A student may participate in only one Commencement ceremony for each degree granted.

To participate in the May Commencement, a candidate must have successfully completed all degree requirements and must be approved for graduation, or be able to and plan to complete all requirements by the date for conferral of degrees in the following August. The respective deans of the Schools and Colleges of the University shall have the responsibility for clearing all participants in the Commencement. Those participants in the May ceremony who have not completed all degree requirements shall be so designated in the Commencement Program.

## DISCIPLINE

The primary purpose of discipline is educational in nature and is aimed at the development of responsible student conduct.

The University has the right and the duty to protect its educational purpose through setting and maintaining standards and regulations considered essential to its purpose. The Student Handbook describes disciplinary procedures and penalties, which may include suspension or expulsion from the University.

## CONFIDENTIALITY OF STUDENT RECORDS

Creighton's policy relating to the confidentiality of student records is in keeping with the "Family Educational Rights and Privacy Act" (FERPA). Information about students or former students will not be released without the consent of the student other than in the exceptions stated in the Federal Act. FERPA affords students certain rights with respect to their educational records. They are:

1. The right to inspect and review the student's education records within 45 days of the day the University receives a request for access.

Students should submit to the Registrar, Dean, Department Chair, or other appropriate official, a written request that identifies the record(s) they wish to inspect. The University official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the official to whom the request was submitted, that official shall advise the student of the correct official to whom the request shall be addressed.
2. The right to request the amendment of the student's education records that the student believes are inaccurate or misleading.
Students may ask the University to amend a record that they believe is inaccurate or misleading. They should write the University official responsible for the record, clearly identifying the part of the record they want changed, and specify why it is inaccurate or misleading.
If the University decides not to amend the record as requested by the student, the University will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
3. The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosures without consent.

One exception which permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by the University in an administrative, supervisory, academic or research, or support staff position (including Public Safety personnel and Student Health staff); a person or company with whom the University has contracted (such as an attorney, auditor, collection agency, the National Student Loan Clearinghouse or the Voice FX Corporation); a person serving on the Board of Directors; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks.

A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.

Upon request, the University discloses educational records without consent to officials of another school in which the student seeks or intends to enroll.

FERPA also allows the University to disclose directory information without the written consent of the student. Directory information is information contained in an education record of a student which generally would not be considered harmful or an invasion of privacy if disclosed. Directory information includes the student's full name, the fact that the student is or has been enrolled full time/part time status, local and permanent address(es), e-mail address, telephone number(s), date and place of birth, dates of attendance, division (school or college), class, major field(s) of study and/or curriculum, degrees and awards received, participation in officially recognized activities and sports, weight and height of members of athletic teams, photograph, and previous educational agency or institution attended by the student.

A currently enrolled student may request any or all directory information not be released by completing and filing with the Registrar's Office a statement entitled "Student Request To Restrict Directory Information". Such filing of this request shall be honored for the remainder of the term in which the request is filed, except that such restriction shall not apply to directory information already published or in the process of being published.
4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by Creighton University to comply with requirements of FERPA.

The name and address of the office that administers FERPA are:
Family Policy Compliance Office
U.S. Department of Education

600 Independence Avenue, SW
Washington, DC 20202-4605

## TRANSCRIPTS

A copy of a student's academic record is called a transcript and is issued by the University Registrar upon written request of the student. A special Request For Transcript form is available at the Registrar's Office, A226. Copies are not made of transcripts of records on file from other institutions. Any additional copy of these must be requested by the student direct from the original issuing institution.

## SPECIAL PROGRAMS

## Freshman Seminar Program

Freshman Seminar seeks to aid the freshman student to make a successful personal and social adjustment to university life. Seminars meet weekly during the first semester in groups of about 20 students under the leadership of a faculty member, assisted by student advisers. One credit hour is awarded for successful completion, graded satisfactory or unsatisfactory.

Students in the College of Arts and Sciences, register for FRS 111; students in the College of Business Administration register for FRS 112; students in the School of Nursing register for NUR 115.

Specifically, Freshman Seminar seeks to attain the goals of:

1. Guiding students in developing a personal curricular plan;
2. Providing the freshman advising program with an advising focus and a regular meeting occasion;
3. Assuring freshmen personal access to a faculty member;
4. Introducing freshmen to basic information about Creighton University, especially curricular requirements and options, campus services, and extracurricular opportunities;
5. Giving freshmen a clear interpretation of test and background data so that they can make realistic academic and career choices;
6. Enabling students to see the relationship between formal education in college and personal development;
7. Exposing students to the range of academic disciplines and the relationships between disciplines;
8. Examining with students their motives for choice of a career and an academic major; providing a realistic context for choice; and familiarizing students with the job market for college graduates.

## Skills Development Program

The Skills Development Program for Freshmen assures that all students acquire necessary skills in major areas: writing, mathematics, and study skills. Participation may be required by the Dean's Office for those whose test scores indicate a need for further work in a skills area. Courses in this program are not applicable to CORE requirements but earn college credit.

Courses in the Skills Development Program include the following:
ENG 100 Introduction to Composition
MTH 101 Basic Algebra
MTH 103 Intermediate Algebra
CHM 105 Introductory Chemistry
FRS 120 Becoming a Master Student

## MILITARY SCIENCE

The Reserve Officers' Training Corps was authorized by the War Department and established at Creighton University in 1919. The program is a cooperative effort contractually agreed to by the Army and Creighton University as a means of providing junior officer leadership. It insures that men and women educated in a broad spectrum of American institutions of higher learning are commissioned annually in the Army officer corps.

Creighton's Military Science Program is an elective two-year or four-year program taken as any other elective course. Up to 21 credit hours may be earned through the Army ROTC Program. The four-year program includes a Basic Course, taken during the Freshman and Sophomore years, and an Advanced Course, normally taken during the Junior and Senior years. There is no service obligation connected with enrollment in the Basic Course.

## Program Objectives

The program provides training designed to qualify students for an Army Commission while also preparing them for civilian executive and management positions. Hence, the student may earn a commission while earning an academic degree in a discipline of his or her choice. The curriculum is interdisciplinary and encourages reflective thinking, assessment, goal setting and problem solving. The books, uniforms and equipment needed by students for ROTC courses are furnished.

Leadership training is the core of the Military Science program and is required each semester. It is accomplished, in part, through a leadership laboratory conducted each week and field exercises held each semester. The Basic Course develops an understanding of teamwork and leadership techniques. Leadership is enhanced through practical application in drill, leader reaction exercises and tactical exercises in field situations. Additionally, there are opportunities for optional adventure training in $\mathrm{He}-$ licopter Rappelling and Air Assault, Airborne and Mountain Survival Training. Advanced Course students plan, organize and conduct the Basic Course leadership program, thereby enhancing their management and supervisory skills. Further growth is achieved through field exercises and enrichment activities, Ranger Training, Physical Training, and Cadet Troop Leadership Training.

## Advanced Course

Although Military Science courses may be taken for credit by any student, only those students formally enrolling in and successfully completing the Advanced Course will receive a commission. If selected for and enrolled in the Advanced Course, the student must agree to complete the remaining two years of ROTC and to accept a commission, if offered, upon completion of the course.

Each Advanced Course student must attend a five-week Advanced Camp, normally at the end of the first year of the Advanced Course. Advanced Camp consists of the practical application of the instruction and skills learned at Creighton, with emphasis on leadership. Students are paid travel expenses to and from camp and an additional sum of approximately $\$ 700$. All accommodations, clothing, equipment, and food are provided.

A two-year program is available for students at or transferring to Creighton. Students enrolling in the two-year program must attend and successfully complete a five-week Basic Camp prior to entering the Advanced Course. Upon entering the Advanced Course, the two-year students follow the same curriculum as all other Advanced Course students. All students enrolled in the Advanced Course receive monthly subsistence payments of $\$ 200$ during the school year, or a total of $\$ 2000$ during the calendar year.

## Army Reserve/Army National Guard Simultaneous Membership Program (SMP)

The ROTC Program is normally a four-year program; however, under the Simultaneous Membership Program (SMP), qualified juniors (those who are veterans or those who have successfully completed three years of Junior ROTC or Basic Training with a reserve or national guard unit) may upon the approval of the PMS enter the Advanced Course and earn a commission. The student may apply for Active Duty with the U.S. Army upon graduation.

Qualified SMP students may apply for scholarships under the Guaranteed Reserve Forces Duty Scholarship program. This is a two-year scholarship that could be worth nearly $\$ 38,400$. Other scholarships may also be available. In addition to the $\$ 200$ per month and the Reserve unit pay, SMP students are still eligible for selected GI Bill college assistance programs. Total monetary entitlements for even a nonscholarship SMP student during the two-year program could exceed $\$ 3,800$.

## Special Opportunities

Students who have completed twelve months of service in one of the U.S. Armed Services and have achieved junior standing may upon approval of the PMS be granted credit for the Basic Course and enrolled in the Advanced Course. ROTC credit earned at other universities is transferable to Creighton.

Numerous associated and allied programs and extracurricular activities are available to ROTC students. These are designed to broaden their knowledge and understanding of the military profession and to allow them to acquire and develop new skills.

## ROTC Scholarships

Four- and three-year scholarships are available to all high school seniors who apply and are selected to receive these scholarships while they attend an institution offering a four-year Army ROTC program. Those students receiving a four- or three-year ROTC scholarship also receive a full room supplement award. The value of this supplement is equivalent to the current charge for a room in one of the four main campus residence halls (i.e., Swanson, Kiewit, etc.).To receive the room supplement, a student must enter Creighton with an ROTC scholarship commitment. Three-year scholarships are available to college students who elect to enroll in the ROTC program. Army ROTC scholarships pay up to $\$ 16,000$ per year for tuition, $\$ 450$ per year for books and fees, and $\$ 200$ per month during the school year. Four, three, and two year nursing scholarships are also available to qualified nursing students. Following Advanced Camp, nursing students may elect to attend a three-week nurse summer training program at one of many U.S. Army medical centers around the country for an intensive nurse perceptor program.

ROTC students who gain acceptance to a professional school in the medical field are eligible to apply for the Uniformed Services Health Professions Scholarship Program, which pays the recipient a monthly stipend plus tuition and other academic expenses. These scholarships are offered in medicine, osteopathy, and psychology (Ph.D., clinical or counseling). Students desiring graduate and professional education are permitted to apply for deferment of service obligation resulting from their ROTC enrollment until the completion of such additional studies. This educational delay is open to those persuing advanced medical or legal professions. Feel free to call if there are any questions at (402) 280-1155/2828.

## AIR FORCE ROTC (Aerospace Studies)

Air Force Reserve Officer Training Corps (AFROTC) training leading to a commission as a second lieutenant in the United States Air Force is available to qualified Creighton students through the AFROTC Program at the University of Nebraska at Omaha (UNO). Creighton students register for the courses at Creighton but attend Aerospace Studies Classes at UNO while pursuing their degree at Creighton. This opportunity results from an agreement between Creighton and UNO that permits Creighton students to participate in the Air Force ROTC Program at the University of Nebraska at Omaha.

High school seniors may compete for three and four-year AFROTC scholarships. Winners of these scholarships will receive a full residence hall room supplement upon activation of their scholarship at Creighton University. (Three-year scholarship winners must attend Creighton during their freshman year to receive this benefit when their scholarship is activated.) The two kinds of Air Force ROTC scholarships that can be applied at Creighton are the Type I and Type II. A Type I scholarship is an uncapped scholarship. Any and all tuition and fees are paid by the Air Force. A Type II scholarship is capped at $\$ 15,000$ yearly for tuition and fees. The student covers anything above that amount. In both cases $\$ 480$ a year is paid to offset the cost of books and each student receives $\$ 200$ per month for 10 or the 12 months in the year. This is a non-taxable allowance designed to offset the other costs associated with being a student.

Students who did not apply or receive an AFROTC scholarship during high school are eligible to compete for two- and three-year scholarships during their freshman or sophomore year in college. To be eligible to compete, students should enroll in AFROTC classes.

Students interested in a medical career may compete for an AFROTC prehealth scholarship during their freshman year in AFROTC. This is a three-year scholarship for cadets applying during their freshman year. Sophomore cadets may compete for a two-year prehealth scholarship. After graduation, AFROTC cadets may apply for entrance into the Armed Forces Health Professions Scholarship Program. Upon acceptance into medical school, the scholarship covers tuition, books, and lab fees. Up to four years of graduate-level health professions schooling is authorized.

Students may enroll in the AFROTC program even if they are not scholarship recipients. These students receive $\$ 200$ per month during their junior and senior year. Eligible juniors and seniors can also receive the Professional Officer Candidate Incentive (POCI). The incentive pays $\$ 3000$ per year for tuition and fees and $\$ 450$ per year for books. Together with the monthly allowance, the POCI adds up to $\$ 4950$ per year. To be eligible, students must be within certain age requirements, maintain a 2.00 term and cumulative GPA and be in good standing in the program.

If interested in any of these programs please contact AFROTC Detachment 470, University of Nebraska at Omaha, to obtain further information (phone 402-554-2436).

The Aerospace Studies courses of the four-year program are listed on page 279.

## ADVISERS FOR SPECIAL SCHOLARSHIP COMPETITIONS

Special advisers have been appointed to provide information and counseling for students who are eligible for certain scholarships. The scholarships and the special advisers from the College of Arts and Sciences are:
Fulbright
Goldwater
Luce
Jacob K. Javits Fellowship
James Madison
$\quad$ Fellowship Program
Marshall
Mellon
National Science Foundation
NSEP
Rhodes
Rotary Club

Truman
Udall

Dr. Richard J. White, Associate Professor of Philosophy Office of the Dean, College of Arts and Sciences
Dr. Juliane K. Soukup, Assistant Professor of Chemistry
Dr. Bridget M. Keegan, Associate Professor of English
Dr. Dennis Mihelich, Associate Professor of History
Dr. Bette N. Evans, Associate Professor of Political Science
Dr. Bridget M. Keegan,Associate Professor of English
Dr. Harry Nickla, Professor of Biology
Dr. Maria C. Krane, Director of International Programs
Dr. Jerry H. Hoffman, Associate Professor of History
Dr. Kathryn Thomas, Associate Professor of Classical and Near Eastern Studies
Dr. Kenneth Wise, Associate Professor of Political Science
Dr. Kathryn Thomas, Associate Professor of Classical and Near Eastern Studies


## PROGRAMS OF STUDY-I

## CREIGHTON COLLEGE OF ARTS AND SCIENCES

## GOALS OF LIBERAL EDUCATION

Creighton University's College of Arts and Sciences offers a liberal education whose primary goal is encouraging each student to become a free and responsible person. To further this goal, a liberal education delimits the natural and human boundaries within which free choice occurs, urges its students to see the need for such choice, and provides them with the means for making that choice responsibly. Creighton's students are encouraged to be free and responsible through systematic encounter with the various traditional liberal arts and empirical sciences. The College understands this encounterand freedom's ultimate goal-in an explicitly Christian context, one defined by the Catholic Church, vivified by the contributions of the Jesuit community, and shared by the many other religious and lay faculty and administrators serving the University.

Creighton's liberal education is and must be eminently practical as an education for life. A liberal education grows with its possessors and helps guide them through a lifetime of free and responsible choices. The student must be a willing, active, and earnest partner in this educational process. The reward of this partnership is a deepened appreciation for life and a strengthened ability to respond to its demands with critical intelligence. Thus, Creighton's liberal education demands responsible involvement from its students and promises, in return, personal and academic enrichment.

The College of Arts and Sciences provides a liberal education that requires disciplined inquiry but also allows students a wide range of elective choice within the curriculum. The College builds a foundation for a lifetime of responsible choices by shaping a reasonable structure of required courses, the Curriculum (CORE), that exposes students to the core elements of the arts and sciences.

The Core Curriculum addresses fundamental concepts, values and methods of scholarly inquiry and intellectual debate. CORE courses develop the general critical, ethical, analytical and expressive skills that are essential tools of educated persons.

Against this general background each student in the College focuses his or her development in a major subject, which provides depth and facility in one of the arts or sciences.

## GENERAL REQUIREMENTS FOR A BACHELOR'S DEGREE

Liberal education at Creighton requires each student to select a program of courses to assure breadth of general knowledge and competence in the skills of an educated person (the Core Curriculum), knowledge of an area in depth (the major and support area), and freedom for discovery (elective course work).

Completion of a bachelor's degree requires a minimum of 128 semester hours, including 48 hours in courses numbered 300 or above. Students must complete a minimum of 49 hours in the Core Curriculum (the remaining 12-15 hours could be waived via skills testing). In addition, students must complete a major program in one of the departments of the college and an approved sequence of support courses.
Normally, students must register for not less than twelve hours nor more than eighteen hours in each semester. The privilege of carrying more than eighteen hours is contingent upon the student's quality-point average and requires special approval of the Dean.

The Core Curriculum provides each student with the opportunity to develop ethical and religious understanding and conviction, to achieve a broad understanding of human culture and society, and to acquire competence in methods of knowing and investigating, and in forms of communication and creative expression.

The major concentrates a student's studies according to talents, interests, and future plans. A minimum of 18 semester hours as specified by a department is required to complete a major. Students should declare their choice of a major by the end of the Sophomore year.

In addition, each student completes a support area consisting of a minimum of 12 hours in one or more fields allied to the major. Such courses are chosen with the approval of the student's major department. Elective courses, chosen with the advice of a student's academic adviser, allow fuller development of skills and interests or support career or personal aspirations.

## Majors and Co-Majors for Business Administration and Nursing Students

Students in the School of Nursing and the College of Business Administration may complete an additional major field of concentration or co-major in the College of Arts and Sciences. The second major or co-major is in addition to the BSN or BSBA degree earned; students do not receive a second degree from Arts and Sciences. Requirements of the majors and co-majors are listed in each department's entry in the bulletin. Nursing students should contact the Associate Dean of Student Affairs in the School of Nursing and business students should contact the Dean of the College of Business Administration for advising and for referral for the application.


## CORE CURRICULUM REQUIREMENTS

The Core Curriculum (CORE) course requirements are organized into five categories. Each course in the CORE meets specific College criteria. Students must complete the designated number of hours for each category in approved courses from the lists below.

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CATEGORY A - Theology, Philosophy and Ethics - 18 hours
Christianity in Context (Theology) - 3 hours
Scripture (Theology) - 3 hours
Christian Theology (Theology) - 3 hours
God and Persons: Philosophical Reflections (Philosophy) - 3 hours
Foundations for Ethical Understanding (Philosophy/Theology) - 3 hours
Senior Perspective (Interdisciplinary) - 3 hours
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CATEGORY B - Cultures, Ideas, and Civilizations - 18 hours
Critical and Historical Introduction to Philosophy (Philosophy) - 3 hours The Modern Western World (History) - 3 hours
History of Non-Western World (History) - 3 hours
World Literature I: Pre-1600 (Classical Civilization/English) - 3 hours
World Literature II: Post-1600 (Classical Civilization/English) - 3 hours International/Global Studies (Choice) - 3 hours
CATEGORY C - Natural Science - $\mathbf{7}$ hours
May be taken from one or more departments (Must include one laboratory) Atmospheric Sciences/Biology/Chemistry/Environmental Science/Natural Science/Physics
CATEGORY D - Social and Behavioral Sciences - $\mathbf{6}$ hours
Must be taken from two different fields
Anthropology/Economics/Political Science/Psychology/Sociology
CATEGORY E - Skills - 12-15 hours

* College Writing (ENG 150) - 3 hours
* Mathematics (MTH 201 or 245) - 3 or 4 hours
* Speech (COM $152-3$ hours or Studio/Performing Arts) - 3 hours
* Language (Classics or Modern) - 6 hours $100-$ level if new language or 3 hours 200 -level if previous knowledge of language
*May take test to fulfill requirement.
Certified Writing Courses - 4 approved writing intensive courses may "double count" toward CORE or major requirements

Courses taken on Pass/No Pass basis may not be used to fulfill CORE requirements.
NOTE: The Core Curriculum courses listed are approved at the time of this Bulletin printing. Please check with the College of Arts and Sciences office or future Bulletins for additional courses.

## CORE CATEGORY A - THEOLOGY, PHILOSOPHY, AND ETHICS

Theology - (Required: THL 100, 2XX -Scripture course, 3XX-Christian Theology course)
THL 100 - Christianity in Context
THL/HRS 101 - Honors Christianity in Context

## Scripture:

THL 200 - Introduction to the Bible
THL 201 - Reading the Old Testament
THL 202 - Creation and Apocalypse
THLHRS 203 - Biblical Ancestors and Heroes
THL 205 - Sickness, Disability, and Healing in the Bible
THL 206 - Honors Sickness, Disability, and Healing in the Bible
THL 207 - Reading the New Testament
THL 208 - New Testament Communities and Their Stories

THL 209 - The Synoptic Gospels: The Life of Jesus
THL 210 - Applying the Memory of Jesus: The Community of John
THL 212 - Paul and His Legacy
THL/HRS 215 - Honors Reading the Old Testament
THL/HRS 219 - Honors Synoptic Gospels
Christian Theology:
THL 324 - Scripture and Theology: The Birth of Christian Doctrine
THL 325 - Catholicism: Creed and Question
THL 326 - Defending the Christian Faith
THL 330 - Jesus Christ and the Salvation of the World
THL 335 - Jesus Christ: Yesterday and Today
THL 336 - Belief and the Quest for Christian Identity: Theological Explorations
THL 337 - Nature, Grace and Sin
THL 338 - Eucharist: Sacrament of Unity or Disunity?
THL 339 - Theology of Church and Sacraments
THL 344 - Theology of Christian Marriage
Philosophy (Required: PHL 320)
PHL 320 - God and Persons: Philosophical Reflections
PHL/HRS 323 - Honors God and Persons: Philosophical Reflections
Ethics (Required: PHL 250 or THL 250 or JPS 250)
PHL 250 - Philosophical Foundations for Ethical Understanding
THL 250 - Theological Foundations for Ethical Understanding
JPS 250 - Theological Foundations for Ethical Understanding
PHL/HRS 253 - Honors Philosophical Foundations for Ethical Understanding
Senior Perspective: (Required: Interdisciplinary course)
SRP 401 - Science and Uncertainty in a Pluralistic World
SRP/ANT/SWK 409 - Race and Gender Relations: Moral and Ethical Dilemmas
SRP 412 - Sickness, Disability and Healing in the Biblical and Modern Worlds
SRP/THL 415 - Stories That Change Lives
SRP/THL 416 - For the Greater Glory: The Jesuits, their History and Spirituality
SRP/THL 418 - Jesus Through the Ages
SRP/PHL/THL 420 - Science and Religion
SRP/SWK 422 - Children of Poverty: An Interdisciplinary Perspective
SRP 424 - Can the Christian Life Be Heroic?
SRP/AMS 426 - The West of the Imagination: Art, History and Myth of the American West
SRP/PLS 430 - Ethics and Market Reforms in the Post-Communist Countries
SRP/HIS/MTH 431 - Mathematical History, Philosophy and Ethics
SRP/AMS/ENG 433 - The Mobile Heart: Permanence and Change in Modern British and American Culture
SRP/ENG/PHL 435 - Literature, Philosophy, and Economics: Critical Representations of Commercial Life
SRP/PLS 436 - Politics and Ethics of Science and Technology
SRP 437 - The Environment and Race, Class, and Gender
SRP/ENG 439 - Literacy, Technology, and Humanity: How Technology Shapes Cultural Literacy
SRP/ANT/JPS/PLS 444 - Non-Violence and Peaceful Resolution of Conflict: CrossCultural and Political Perspectives
SRP/ANT/EVS/SOC 455 - Food, Society, and Environment
SRP/HAP/PHL/THL 457 - Biomedical Ethics: Philosophical and Theological Approaches
SRP/PLS/THL 465 -Faith and Political Action
SRP 475 - Multiculturalism: History, Philosophy, Literature and Education
SRP/PLS 481 - Poverty, Development and Public Policy
SRP/AMS/BKS/HIS/PLS 482 - Race in America: Idea and Reality
SRP/COM/EDU/THL 488 - Personal and Spiritual Dimensions of Leadership
SRP/ANT/JMC/SOC 489 - Social Images of Cultural Minorities
SRP 496 - The Aesthetics and Ethics of Performance

## CORE CATEGORY B - CULTURES, IDEAS, AND CIVILIZATIONS

Philosophy - (Required: PHL 107)
PHL 107 - Critical and Historical Introduction to Philosophy
PHL/HRS 109 - Honors Critical and Historical Introduction to Philosophy
History - (Required: HIS 101 and one non-Western World course)
HIS 101 - The Modern Western World

HIS/HRS 102 - Honors The Modern Western World

## Non-Western:

HIS 103 - The Asian World
HIS 104 - The Latin American World
AFS/BKS/HIS 106 - The African World
HIS 107 - The Middle Eastern World
Literature - (Required: World Literature I and World Literature II)
CNE/ENG 120 - World Literature I
ENG 121 - World Literature II
CNE/ENG/HRS 122 - Honors World Literature I
CNE/ENG/HRS 123 - Honors World Literature II
International/Global Studies:
AFS/BKS/PLS 311 - Politics of Africa
AFS/ANT/BKS 342 - Peoples and Cultures of Sub-Saharan Africa
AFS/ANT/BKS 347 - Peoples and Cultures of Africa and Middle East
AFS/BKS/THL 356 - Christianity in Africa
AFS/BKS/ENG 390 - Introduction to African Literature
AFS/BKS/ENG 398 - Literature of Francophone Africa
AFS/ANT 400 - Seminar in African Studies (Topic - African Religions only)
AFS/BKS/HIS 485 - Society and Belief Systems in Africa
AFS/BKS/HIS 489 - Southern Africa: The Politics of Race
ANT 307 - Demography: World Population Issues
ANT/HAP/SOC 317 - Global Health Issues
ANT 343 - Native Cultures of North America
ANT 346 - People and Cultures of Latin America
ANT 348 - People and Cultures of Asia
ANT/SOC 350 - Social Change
ANT/THL 352 - Witchcraft, Oracles, and Magic: The Anthropological Study of Religion
ANT/SOC/EVS 355 - Environment and Society: Sociological Perspectives
ANT 360 - Gender and Culture
ANT 363 - Socio-Cultural Construction of Health, Illness and Healing
ANT 366 - Native Adaptation in Central and South America
ANT/CNE/THL 525 - Archeological Fieldwork and Analysis
ANT/CNE/THL 526 - Archeology of Roman Palestine
ART 319 - Art International
ART 386 - History and Aesthetics of Latin American Photography
ECO 408 - Current Issues in Social Economics and Political Economy
ECO 518 - Comparative Economic Systems
ECO 528 - International Economic Development
EDU 315 - World Geography
EVS/SOC 307 - Demography: World Population Issues
HIS 345 - Change and Revolution in the Modern Middle East
HIS 347 - The Arab-Israeli Conflict: Struggle for the Holy Land
HRS 402 - Honors Seminar in History
JMC 365 - International Mass Communications
MUS 375 - Music of the World's Peoples
PHL/THL 353 - Introduction to Buddhism
PLS 303 - Politics of Russia and the USSR Successor States
PLS 305 - Eastern European Political Systems
PLS 313 - Politics of the Middle East
PLS 314 - Politics of Post Communist South Eurasia
PLS 315 - Politics of Asia
PLS 317 - Latin American Government and Politics
PLS 318 - Caribbean Politics (only when taught in Dominican Republic)
PLS 319 - Politics of Developing Areas
PLS 340 - International Politics
PLS 345 - International Political Economy
PLS 347 - International Regimes
PLS 405 - Ethnicity, Nationalism and Democracy
PLS 435 - Global Poverty and Development
PLS 472 - International Conflict
PLS 537 - International Law
PSY 438 - Multicultural Issues in Psychology
SOC 485 - Sociology of the Caribbean: Dom. Rep. and Haiti (only when taught in

## Dominican Republic)

SWK 365 - Issues of Native American Experience
THL 354 - Introduction to Judaism
THL 357 - Introduction to Islam
THL 359 - Living Religions of the World
THL 574 - Faith and Food (only when taught in Dominican Republic)

## CORE CATEGORY C — NATURAL SCIENCES

(Required: 7 hours - must include one lab course)
ATS/EVS/NSC 113 - Introduction to Atmospheric Sciences
ATS/EVS/NSC 114 - Introduction to Atmospheric Sciences Laboratory
ATS/NSC 231 - Severe and Unusual Weather
BIO 111 - Life Science Investigations
BIO 141 - Charles Darwin: Life and Impact
BIO 149 - Human Biology
BIO 211 - General Biology: Molecular and Cellular
BIO 212 - General Biology: Organismal and Population
CHM 105 - Introductory Chemistry
CHM 203/204 - General Chemistry I Lecture and Lab
CHM 205/206 - General Chemistry II Lecture and Lab
CHM 285/286 - Honors Chemistry Lecture and Lab
NSC/PHY 107 - Introductory Astronomy
NSC/PHY 108 - Astronomy Laboratory
NSC/PHY 127 - Sound and Music
NSC/PHY 137 - Light, Color and Lasers
NSC/PHY 147 - Einstein and Modern Physics
NSC/PHY 187 - Introduction to Physics
NSC/PHY 188 - Physics in the Everyday World
NSC 205 - Natural Science I
NSC 206 - Natural Science II
PHY 187 - Introduction to Physics
PHY 211 - General Physics I
PHY 212 - General Physics II
HRS/PHY 211H - Honors General Physics I
HRS/PHY 212H - Honors General Physics II

## CORE CATEGORY D - SOCIAL AND BEHAVIORAL SCIENCES

(Required: 2 courses - must be separate departments)
ANT 111 - Human Variation
ECO 203 - Introductory Microeconomics
EDU 207 - Educational Psychology (EDU majors only)
EDU 210 - Child and Adolescent Development (EDU majors only)
PLS 101 - Introduction to Politics
PLS/HRS 103 - Honors Introduction to Politics
PLS 105 - Introduction to World Politics
PLS 121 - American Government and Politics
PLS 215 - Comparative Political Systems
PSY 111 - Introductory Psychology
SOC 101 - Self and Society
SOC 223 - Social Problems: Values, Issues and Public Policy

## CORE CATEGORY E - SKILLS

College Writing (Required: ENG 150)
ENG 150 - Rhetoric and Composition
Mathematics (Required: MTH 201 or MTH 245)
MTH 201 - Applied Mathematics
MTH 245 - Calculus I
Speech/Studio/Performing Arts (Required: COM 152 or Studio/Performing Arts course)
COM 152 - Principles of Communication Competence
COM/HRS 153 - Honors Principles of Communication Competence
Studio/Performing Arts:
ART 104 - Elementary School Art (EDU majors only)
ART 105 - Art Fundamentals
ART 153 - Three Dimensional Design

ART 211 - Introductory Ceramics
ART 253 - Beginning Sculpture Studio
ART 271 - Photography Studio I
ART 390 - Sculptural Glass Casting
DAN 101 - Introduction to the Dance
DAN 110 - Dance Workshop I
DAN 111 - Dance Workshop II
DAN 121 - Basic Modern Dance I
DAN 131 - Classical Ballet Studio Basic I
MUS 208 - Jazz Ensemble I
MUS 209 - Gospel Choir I
MUS 212 - University Chorus I/II
MUS 218 - Wind Ensemble I
MUS 219 - Javanese Gamelan
MUS 220 - University Chorus
MUS/THR 271 - Voice Class
MUS 313 - Chamber Choir
THR 121 - Oral Interpretation of Literature
THR 131 - Beginning Acting
THR/DAN 153 - Stagecraft
Languages (Required: 3 hours at $2 X X$ level if previous knowledge of language or 6
hours at 1XX level if learning a new language.)
ARA 111/112 - Elementary Modern Standard Arabic I and II
FRN 111/112 - Beginning French I and II
FRN 115 - Intensive Beginning French
FRN 211 - Intermediate French I
GER 111/112 - Beginning German I and II
GER 115 - Intensive Beginning German
GER 211 - Intermediate German I
GRK 101/102 - Beginning Greek I and II
GRK 201 - Selected Readings in Classical Greek
HEB 101/102 - Beginning Classical Hebrew I and II
JPN 111/112 - Beginning Japanese I and II
JPN 211 - Intermediate Japanese I
LAT 101/102 - Beginning Latin I and II
LAT 115 - Intensive Beginning Latin
LAT 201 - Intermediate Latin I
RUS 111/112 - Beginning Russian I and II
RUS 211 - Intermediate Russian I
SPN 111/112 - Beginning Spanish I and II
SPN 113 - Beginning Spanish for the Medical Professions I
SPN 114 - Beginning Spanish for the Medical Professions II
SPN 115 - Intensive Beginning Spanish
SPN 150 - Dominican Republic Spanish I
SPN 211 - Intermediate Spanish I
SPN 213 - Intermediate Spanish for the Medical Professions
SPN 250 - Dominican Republic Spanish II

## CERTIFIED WRITING COURSES

AFS/BKS/PLS 311 - Politics of Africa
AFS/BKS/THL 356 - Christianity in Africa
AFS/BKS/ENG 390 - Introduction to African Literature
AFS/BKS/ENG 398 - Literature of Francophone Africa
AFS/ANT 400 - Topical Seminar in African Studies (Topic - African religions only)
AFS/BKS/HIS 485 - Society and Belief System in Africa
AFS/BKS/HIS 489 - Southern Africa: The Politics of Race
AMS/SOC 310 - Religion and Contemporary American Society
AMS/PLS/SWK 339 - Public Policy and Poverty in the U.S.
AMS/BKS/HIS/PLS/SRP 482 - Race in America
AMS/HIS 302 - American Studies Seminar: The American Character
AMS/ANT 345 - Sports in American Culture
AMS/SRP 426 - The West of the Imagination: Art, History, and Myth of the American West
AMS/ENG/SRP 433 - The Mobile Heart: Permanence and Change in Modern British and American Culture

AMS/EVS/HIS 462 - The Land in the American Experience
AMS 491- Senior Seminar
ANT 302 - American Studies Seminar: The American Character
ANT/EVS/SOC 307 - Demography: World Population Issues
ANT/SOC 312 - Research Methods in the Social Sciences
ANT/SOC 350 - Social Change
ANT/EVS/SOC 355 - Environment and Society: Sociological Perspectives
ANT 360 - Gender and Culture
ANT 362 - Applied Anthropology
ANT 363 - Socio-Cultural Construction of Health, Illness, and Healing
ANT/JPS/PLS/SRP 444 - Non-Violence and Peaceful Resolution of Conflict: Cross-
Cultural and Political Perspectives
ANT 469 - Ethnohistorical Approaches ot Native America Cultures
ART/CNE/HIS 349 - Egyptian Art and Archeology
ART 361 - Art of the Renaissance in Europe
ART 369 - Modern European Art
ART 383 - History and Aesthetics of Photography
ART 386 - History and Aesthetics of Latin American Photography
ATS 542 - Radar Remote Sensing
ATS 574 - Stratospheric Dynamics
BIO 419 - Molecular Biology Laboratory
BIO/EVS 481 - Terrestrial Ecology
BIO/EVS 487 - Marine Ecology Laboratory
BIO 491 - Biological Investigations
BIO 532 - Cell Biology
BIO/EVS 549 - Environmental Physiology
BIO 563 - Introduction to Neurobiology Lab
BIO/EVS 572 - Animal Behavior Laboratory
BKS/ENG 393 - African-American Literature
CHM 342 - Physical Chemistry I
CHM 444 - Physical Chemistry II
CHM 497 - Directed Independent Research
CNE 306 - Literature of Ancient Greece
CNE 308 - Literature of Ancient Rome
CNE 311 - Classical Mythology
CNE 313 - The Hero in Antiquity
CNE 325 - Fable Literature
CNE/PHL 371 - History of Hellenistic Philosophy
CNE/HIS 420 - Selected Topics in Ancient History
CNE/THL 520 - The Dead Sea Scrolls
CNE/HIS/THL 524 - History of Ancient Israel
COM/ENG 310 - Writing Strategies for the Organization
COM/ENG 312 - Mass Media and Modern Culture
COM/EDU 320 - Leadership: Theories, Styles, and Skills
COM 321 -Persuasion
COM 361 - Interpersonal Communication
COM/ENG 380 - History and Criticism of Cinema
COM/HAP 390 - Health Communication
COM/SOC 440 - Gender Communication
COM/EDU/SOC 463 - Organizational Assessment
COM 464 - Organization Training and Development
COU 575 - Introduction to Peer Education in Student Development Programming
ECO 408 - Current Issues in Social Economics and Political Economy
ECO 528 - International Economic Development
EDU 210 - Child and Adolescent Development
EDU 311 - Teaching of Reading
EDU 424 - Speech and Language Development of the Exceptional Child
EDU 525 - Procedures for Mainstreaming the Mildly/Moderately Handicapped Student in the Regular Classroom
ENG 251 - Advanced Composition
ENG/HRS 252 - Honors Advanced Composition
ENG 254 - Writing About Literature
ENG 300 - Introduction to Creative Writing
ENG 301 - Creative Writing: Narrative Forms

ENG 302 - Creative Writing: Poetic Forms
ENG 315 - Technical and Professional Writing
ENG 381 - Literature and the Environment
ENG 410 - Women in Literature
ENG 420 - Utopian Literature
ENG/PHL/SRP 435 - Literature, Philosophy, and Economics: Critical Representations of Commercial Life
ENG/SRP 439 - Literacy and Technology: How Technology Shapes Cultural Literacy
ENG 481 - Senior Seminar II: Special Topics in British Literature
ENG 482 - Senior Seminar III: Special Topics in Amer. Literature
ENG 483 - Senior Seminar IV: Topics in Irish Literature: Yeats and Joyce
ENG 484 - Senior Seminar V: Special Topics
ENG 511 - Milton
ENG 512 - Studies in Major Authors
ENG 532 - The Irish Renaissance
EVS/PLS 333 - Environmental Politics and Policy
EXS 350 - Nutrition for Health and Sports Performance
EXS 407 - Basic Statistics and Research Design
EXS 491 - Exercise Leadership and Program Administration
HAP/PHL/SRP/THL 457 - Biomedical Ethics: Philosophical and Theological Approaches
HIS 300 - Historiography
HIS 400 - Research Methods in History
HIS/MTH/SRP 431 - Mathematical History, Philosophy and Ethics
HIS 478 - Jerusalem in History
HIS 500 - Senior Seminar
HRS 402 - Honors Seminar in History
HRS 420 - Honors Seminar in Social Science: Dangerous Words and the First
Amendment (this topic only)
JMC 219 - News Reporting
JMC 321 - Public Affairs Reporting
JMC 322 - Feature Writing
JMC 333 - Newswriting for the Electronic Media
JMC 339 - Case Studies in Public Relations
JMC 341 - Public Relations Writing
JMC 361 - Technical Public Relations Writing
JMC 433 - Advertising Media Writing
JMC 477 - Advanced Newspaper Production
MTH 581 - Modern Algebra I
MTH 591 - Analysis I
NSC 205 - Natural Sciences I
NSC 206 - Natural Sciences II
PHL 331 - Moral Philosophy
PHL/THL 353 - Introduction to Buddhism
PHL 357 - Bioethics
PHL 358 - Social and Political Philosophy
PHL 372 - History of Medieval Philosophy
PHL 373 - History of Modern Philosophy
PHL/SRP/THL 420 - Science and Religion
PHL 450 - Philosophy and Commercial Societies
PHL 462 - The Thought of John Paul II
PHY 351 - Physics in Medicine
PHY 491 - Physics Seminar
PHY 558 - Relativity: The Special and General Theories
PHY 562 - Nuclear Instruments and Methods
PLS 215 - Comparative Political Systems
PLS 301 - Western European Political Systems
PLS 303 - Politics of Russia and the USSR Successor States
PLS 305 - Eastern European Political Systems
PLS 313 - Politics of the Middle East
PLS 314 - Politics of Post Communist South Eurasia
PLS 315 - Politics of Asia
PLS 317 - Latin American Government and Politics
PLS 319 - Politics of the Developing Areas
PLS 326 - Governing Metropolitan Areas

PLS 331 - Managing the Public and Non-Profit Sectors
PLS 337 - Constitutional Law
PLS 342 - Foreign Policy and Diplomacy of Major Powers
PLS 345 - International Political Economy
PLS 347 - International Regimes
PLS 362 - Conservative Political Thought
PLS 367 - Theory of Law
PLS 405 - Ethnicity, Nationalism and Democracy
PLS 420 - Seminar on American Government and Politics: The First Amendment (this topic only)
PLS/SRP 430 - Ethics and Market Reforms in the Post-Communist Countries
PLS 435 - Global Poverty and Development
PLS 436 - Politics of Science and Technology
PLS 438 - Contemporary Issues in Civil Liberties
PLS/SRP/THL 465- Faith and Political Action
PLS/SRP 481 - Poverty, Development and Public Policy
PLS 491 - Senior Research Seminar in Political Science
PSY 312 - Experimental Psychology Laboratory
PSY 333 - Psychology and the Law
PSY 334 - Human Sexuality
PSY 491 - Honors Seminar
SOC 312 - Research Methods in Social Science
SOC 320 - Sociology of Deviant Behavior
SOC 321 - Sociology of the Criminal Justice System
SOC 323 - Law and Society
SOC 333 - Social Psychology
SRP 401 - Science and Uncertainty in a Pluralistic World
SRP 412 - Sickness, Disability, and Healing in the Biblical and Modern Worlds
SRP 416 - For the Greater Glory: The Jesuits, their History and Spirituality
SRP 424 - Can the Christian Life be Heroic?
SRP 436 - Politics of Science and Technology
SRP 437 - The Environment and Race, Class, and Gender
SWK 275 - Human Behavior and the Social Environment
SWK 301 - Social Welfare Policy
SWK/SRP 422 - Children of Poverty: An Interdisciplinary Perspective
THL 336 - Belief and the Quest for Christian Identity: Theological Explorations
THL 354 - Introduction to Judaism
THL 357 - Introduction to Islam
THL 359 - Living Religions of the World
THL 492 - Senior Seminar for Theology Majors
THL 508 - Gospel of Mark
THL 509 - The Gospel of Luke and the Acts of the Apostles
THL 516 - The Book of Revelation
THL 518 - Women and the Bible
THL 531 - Studies in Early Christianity
THL 538 - Seminar in Christian Anthropology
THL 552 - The Christian Church: Keeping the Faith Through Shifting Paradigms
THL 561 - Finding God in Daily Life: Prayer and Discernment
THL 563 - Contemporary Moral Problems
THL/JPS 565 - Catholic Social Teaching
THL 566 - Sin, Sex, and Intimacy
THL 568 - Women in the Christian Tradition
THL 571 - Understanding and Dealing with Suffering: Hebrew and Christian Perspectives
THL 575 - Foundations of Christian Spirituality
THL 580 - Christianity and Modern Humanism

## Field of Concentration

The field of concentration, the area in which most of a student's advanced work centers, consists of a major and a group of related courses to support and strengthen the major field of study. A student must achieve a cumulative quality-point average (QPA) of at least 2.00 for the minimum requirements of both the major and supporting courses in order to qualify for graduation.

To maintain satisfactory progress toward a degree, a student should have decided in writing a specific degree in a major program of study by the start of the third academic year. Ordinarily, students select a field of concentration during the sophomore year. However, some students may wish to apply for the major/field of concentration earlier, and application is permitted after completion of the first semester at Creighton. Transfer students may apply following completion of their first semester at Creighton. In order to apply, the student submits an application form to the College of Arts and Sciences office (Administration Building Room 228). Students must have an overall QPA of 2.00 and have satisfied any specific requirements as indicated by the major department in the Undergraduate Bulletin.

Department chairs may defer or decline students who do not meet the designated criteria. However, at the time of graduation, any student who meets all the published criteria of the University may request the College to award the degree and major regardless of the prior actions of the department. Such requests should be directed to the Associate Dean.

The following subjects are offered as major fields of study in Arts and Sciences for the Bachelor of Arts or Bachelor of Science degree. Specific requirements are given under each department's listing in the Courses of Instruction Section.
American Studies
Anthropology
Applied Communication
Applied Computer Science
Art
Art History
Studio Art
Arts Management
Atmospheric Sciences
Applied and Environmental Meteorology
Graduate School Preparation and
Research
Biology
Chemistry
Chemistry Education
Classical and Near Eastern Civilizations
Computer Science
Corporate Communication
Economics (See page 126.)
Education
Elementary Education
Special Education K-6
Secondary Education (Co-major)
Special Education 7-12
English
Creative Writing
Irish Literature
Environmental Science
Global Environmental Systems
Environmental Pollution
Organismal/Population Ecology
Environmental Policy and Society
Exercise Science
French

German
Graphic Design
Greek
Health Administration and Policy
History
International Relations
International Studies
Journalism and Mass Communication
Print and Broadcast News
Public Relations
Advertising
Visual Communications
Justice and Society
Latin
Latin Teaching
Mathematics
Music
Native American Studies
Organizational Communication
Philosophy
History
Problems
Physics
Physics
Health Science Physics
Physics/Engineering Dual/Degree
Political Science Public Policy Legal Studies
Psychology
Social Work
Sociology
Spanish
Theatre
Theology

The Classical Bachelor of Arts degree is awarded to students who complete the following: (1) four semesters of Latin or Greek beyond the 200-level; and (2) four semesters of another classical or modern language.

In addition to the regular B.A. and B.S. degree programs, the College of Arts and Sciences also offers certain degree programs providing greater concentration in a specific academic field or a professional field. The course requirements for these degrees, listed below, are given under the respective department's listing in the Courses of Instruction section.

> Bachelor of Fine Arts (B.F.A.) - major Art, Theater, Graphic Design
> Bachelor of Science in Atmospheric Sciences (B.S.Ats.) - major Atmospheric Sciences
> Bachelor of Science in Chemistry (B.S.Chm.) - major Chemistry
> Bachelor of Science in Computer Science (B.S.C.S.) - major Applied Computer Science
> Bachelor of Science in Environmental Science (B.S.Evs.) - major Environmental Science
> Bachelor of Science in Mathematics (B.S.Mth.) - major Mathematics, Applied Mathematics, Medical Mathematics, Mathematics/
> Computer Science
> Bachelor of Science in Physics (B.S.Phy.) - major Physics
> Bachelor of Science in Sociology (B.S. Soc.) - major Sociology
> Bachelor of Social Work (B.S.W.) - major Social Work

## Double Majors

Students in the College of Arts and Sciences may complete more than one major program. Students completing more than one major are responsible for all the normal requirements, including specified support courses, for these programs. The student must choose one major and the corresponding degree to be inscribed on the diploma. Students in the College of Arts and Sciences do not receive dual degrees. All major programs completed, however, are indicated on the student's official transcript.

## Co-Majors

Some departments offer the student the opportunity to complete a co-major in addition to his/her major. Co-majors offer students the opportunity to develop substantial knowledge in an area but do not require a support area and may allow students greater flexibility in the choice of courses. A minimum of 24 credit hours in a department is required to complete a co-major. Students must achieve a cumulative QPA of 2.00 in courses toward the co-major. No more than six credits counted toward the major field may be counted toward the co-major.

The following co-majors are available:
African Studies
American Studies
Anthropology
Applied Communication
Art $\quad$ Art History
$\quad$ Studio Art
Biology
Business ${ }^{1}$ (Certificate only)
Classical and Near Eastern
Civilizations
Creative Writing
English
German
Graphic Design
Health Administration and
$\quad$ Policy
History
International Studies
Justice \& Peace Studies
Organizational
$\quad$ Communication
Performing Arts:
$\quad$ Dance
$\quad$ Music
$\quad$ Theatre
Philosophy
Physics
Political Science
Secondary Education

## Sociology

Spanish
Theology
Women's and Gender Studies
${ }^{1}$ See Certificate in Business Administration on page 112.

## ASSOCIATE DEGREES

Refer to pages 144-146 for information about Associate Degree programs.

## INTERDISCIPLINARY PROGRAMS

The College of Arts and Sciences offers the student a number of opportunities for interdisciplinary and interdepartmental study through major and co-major programs in areas of current and classic concern. A description of these interdisciplinary programs is found below. The complete program of instruction can be found in the Courses of Instruction section of this Bulletin.

## African Studies

African Studies is an interdisciplinary program drawing from faculty in the Departments of History, English, Anthropology and Political Science. It attempts to provide students with factual and theoretical material necessary to understand the issues facing contemporary Africa through courses approaching Africa from humanistic, ethnographic, historical, institutional, and policy-oriented perspectives. The program also offers films, social events, symposia and visiting lecturers to go beyond course offerings.

## American Studies

American Studies is an integrated, interdisciplinary approach to the study of the United States. It incorporates social, economic, political, and cultural perspectives, and, while retaining the views of the traditional disciplines (e.g. history, political science, sociology, literature), it offers a unique vision and method, thereby providing as comprehensive an understanding of the United States as possible.

## Black Studies

The Black Studies Program offers an interdisciplinary support to undergraduate students in all disciplines who are especially interested in Africa and African Diaspora, especially the United States. Participating faculty come from the Departments of English, Fine and Performing Arts, History, Political Science, Sociology and Anthropology, Psychology, and Theology. The Program is designed to allow students to investigate more widely areas in the Humanities and Social Sciences connected to their areas of concentration or to further their special interests. Independent studies and independent research are available to advanced students.

## Graphic Design

Graphic Design is an interdisciplinary major for students interested in a unified and comprehensive program of study in the graphic arts which combines traditional handson art media (drawing, painting, printmaking, sculpture, and photography), electronic media (computer illustration, publication design, and web design), writing and visualization of texts, and history and theory of art. Students who undertake this major may intend to pursue careers in electronic media design such as graphic designer, webmaster, or digital artist, but will also learn to communicate in the other visual media. Prospective majors should meet as soon as possible with the head of the program, who will assign an appropriate advisor from either Journalism or Fine Arts. This interdisciplinary curriculum fulfills both major and support requirements of the College of Arts and Sciences.

## Health Administration and Policy

Creighton's major in Health Administration and Policy (HAP) is designed to provide the undergraduate student with a broad understanding of health care management and an awareness of the key issues facing the health care world. The program is truly interdisciplinary in nature and draws faculty and courses from several areas of study. The HAP program is designed to provide students with the opportunity to build a solid understanding of health care institutions, management processes, and public policy and social issues.

## Justice and Peace Studies Program

The Justice and Peace Studies Program, which offers a 24 -credit hour co-major, and in collaboration with the Department of Sociology and Anthropology, a 43-credit hour major in Justice and Society, is one way the Creighton College of Arts and Sciences seeks to live out "the promotion of justice" as called for in the University's Mission Statement. The program offers a multidisciplinary series of courses integrating community service, classroom analysis, and peer group reflection in the context of a faith that does justice and seeks a more peaceful world.

## Native American Studies

The Native American Studies Program is an interdepartmental, interdisciplinary program providing students with a broad exposure, awareness and appreciation of Native peoples, and their unique status in the United States. The historical, social, cultural and political aspects of Native people/Nations are linked to the promotion of understanding and reconciliation. A special feature of the program is its focus on linking and assisting Native American communities and tribal government/nations. Critical thinking, scholarship, research in helping Native communities and tribal governments/ nations is encouraged.

## Women's and Gender Studies

Women's and Gender Studies is a program in which Students and faculty from a variety of departments--English, Communication, Sociology, Anthropology, Social Work, History, Political Science, Theology, Philosophy, and Psychology--work collaboratively in a field which by nature is interdisciplinary. The Women's and Gender Studies program is designed to encourage students to question prevailing assumptions and to investigate the methods by which knowledge is established, interpreted, and taught.

## OTHER ACADEMIC PROGRAMS

## Arts-Engineering Program

2-2 Cooperative Engineering Program. The program consists of two years of preengineering at Creighton University followed by two years of cooperative engineering at the University of Detroit Mercy.
The cooperative plan of engineering, which is the exclusive means by which a degree may be obtained in the day-school program of the University of Detroit Mercy College of Engineering and Science, may be defined as an integration under which students alternate periods of attendance in school with a period on a training assignment in industry, business or government.


+ Because the first cooperative assignment occurs in the summer between the sophomore and junior year, it is very important for a student considering transfering to the University of Detroit Mercy to contact the Department of Engineering and Science at the Beginning of the sophomore year.
* PHY 301 and PHY 302 are required of Electrical Engineering majors only.
** CSC 221 Computer Programming I ( 3 credit hours) is recommended.
Students who successfully complete the above program, or an alternate approved program, will be unconditionally recommended for transfer to the Junior Class of the College of Engineering at the University of Detroit Mercy; they will be certified as being qualified for cooperative industrial training in the Chemical, Electrical or Mechanical departments. Students may also be admitted to the Junior Civil Engineering Class, but will be required to earn credit in Elementary Surveying by attending summer school prior to becoming certified as co-op students.


## Coordination with Engineering Programs of Other Institutions

The first-year program outlined for the University of Detroit Mercy is the standard first-year program for most engineering schools with slight variations. A study of the first-year program at the engineering college of your choice will reveal those variations which can be accommodated in your schedule.

Students wishing to spend a second year at Creighton before making application to an engineering school are advised to contact that school directly for explicit approval of a second-year schedule.

## Certificate in Business for Arts and Sciences Students

In cooperation with Creighton's College of Business Administration, students in the College of Arts and Sciences can earn a Certificate in Business Administration from the College of Business Administration. Students wishing to complete this program must file an application with the Undergraduate Coordinator of the College of Business Administration no later than the beginning of the Junior year.

At least 19 of the 31 semester hours of courses required to complete this program must be taken in residence at Creighton. In addition, students must achieve a cumulative QPA of 2.00. Arts and Sciences students are limited to no more than 31 semester hours of College of Business Administration courses.
Required Courses ..... Sem. Hrs.
Accounting 201 - Principles of Accounting I ..... 3
Accounting 202 - Principles of Accounting II ..... 3
Management Information Systems 353 - Management Information Systems ..... 3
Business 201 - Legal Environment of Business ..... 3
Business 229 - Statistical Analysis ..... 4
Economics 203 - Principles of Microeconomics ..... 3
Economics 205 - Principles of Macroeconomics ..... 3
Finance 301 - Managerial Finance ..... 3
Management 301 - Managerial Process and Organizational Behavior ..... 3
Marketing 319 - Principles of Marketing ..... 3

## Creighton House

For undergraduate students seeking a campus environment and life-style more like home than a dormitory, Creighton offers a special educational experience. In its most fundamental purpose and goal, Creighton House is a community of students who spend a year together learning how to live, study, and work with each other. The academic focus of the house is debate and allied arts (creative writing, theater arts, etc.). Students
majoring in or interested in one or more of these areas are encouraged to apply, though all undergraduates at the level of sophomore or above are eligible for residency, regardless of academic interest. Located at 2104 Davenport Street, comfortable and spacious Creighton House accommodates approximately 30 students who are selected primarily for their desire and potential ability to build and enjoy community life. Providing individual and group guidance are the Resident Director, as well as associated Jesuits and faculty members. Applications for residency are taken year-round and can be found at the House web site (http://mockingbird.creighton.edu/ncw/ch/creightonhouse.htm).

The Creighton House academic component normally consists of a noncredit lecture series, featuring invited speakers from campus and the community, held in the House during the Fall term. During the Spring term, residents undertake Community Service (CHS 351, 3 sem. hrs.), under the supervision of the Resident Director and a service professional from the Omaha area. The student's remaining courses each semester are selected from normal college and major offerings.

## Honors Program

The Honors Program is available to students in any of the undergraduate divisions, the College of Arts and Sciences, the College of Business Administration, the School of Nursing, and University College. The Program is designed for talented, imaginative students desirous of participating in discussion-oriented small classes and in courses on interdisciplinary and topical issues. It provides students with special opportunities and challenges to enhance their undergraduate experience and to contribute to the intellectual and cultural life of the University. If offers eligible students the opportunity to pursue a course of study that complements her or his major.

The Program requires a minimum of twenty-four (24) hours of Honors course work. Freshmen and sophomores should select lower-division Honors courses from areas such as English, History, Philosophy, and Theology to satisfy Core requirements. Honors students must take at least two Honors Seminars. Honors courses cannot be taken on the Pass/No Pass option.

## Semestre Dominicano in the Dominican Republic

The Creighton College of Arts and Sciences participates in a semester of immersion and study in Latin America. Each term, a group of selected undergraduate students and a Creighton faculty member study at ILAC's modern facilities in Santiago, a city of 850,000, in north central Dominican Republic. Both semesters are open to undergraduate students in each of the colleges. The curriculum in the Fall is the primary responsibility of the College of Business Administration and in the Spring, the Creighton College of Arts and Sciences.

Students enroll for 15 semester hours-two courses offered by the accompanying professor, another by an invited instructor from Santiago's Catholic University, a fourth course in the Spanish language, and a final one in community service (Arts students) or a business internship (Business students) under the supervision of an adjunct faculty member. This program is designed as a further expression of Creighton's mission to offer quality education in the formation of men and women who will be leaders in their professions and of service to the world

## PRE-PROFESSIONAL STUDY

Courses required as preparation for specialized professional study are organized into programs one, two, three or four years in length. Ordinarily they will be encompassed within a standard program leading to a Bachelor's degree. It is highly recommended that professional requirements be earned within the structure of a degree program even though the degree may not be completed.

In addition to the pre-professional programs outlined in this bulletin, a student in the College of Arts and Sciences may satisfy some of the pre-professional course requirements for professional education in architecture, dietetics, library science, mortuary science, optometry, osteopathy, veterinary medicine, etc. Students should consult the catalogs of the professional schools in which they are interested to identify the entrance requirements.

## PRE-ENGINEERING

Refer to page 111 for information about liberal arts-engineering and pre-engineering program.

## PRE-LAW STUDY

Schools of Law consider applicants who hold a bachelor's degree or its equivalent from an approved college or university. Additional standards and conditions for admission may also be imposed in some states. Although the completion of a bachelor's degree is recommended in most cases, Creighton's School of Law will in exceptional cases consider applicants for admission who have completed three-fourths of the credits required for an undergraduate degree.

No single major or set of courses is required or recommended to those who wish to prepare for legal study. However, students should select courses which contribute to their skill in comprehension and expression in language, a thorough understanding of human institutions and values, and a capacity for clear, logical and creative thought.

Individualized advice on courses and programs is available from members of the Pre-Law Advising Committee, College of Arts and Sciences, or Pre-Law Advisor, College of Business Administration.

## PRE-HEALTH SCIENCES PROGRAMS

Science in service to humanity in medicine, dentistry, and other health professions is a tradition at Creighton. The scientific and social challenges of today and tomorrow demand not only excellent professional training but also intellectual versatility, firmness of values, and commitment to lifelong learning, which are the heart of Creighton's undergraduate liberal education. For reasons such as these, medical and dental schools prefer applicants who will have completed an undergraduate degree with a broad general education before they enter professional school.

## Advising of Pre-Health Sciences Students

A committee of Arts and Sciences faculty serves as special advisers for pre-health sciences students. The committee maintains regular contacts with professional schools and associations to maintain up-to-date and sound advice. Counseling on the selection of courses and majors is available to freshman and sophomore students as well as evaluation of progress and assistance with the application process in the junior and senior years.

## Pre-Dental Program: General Requirements

In general, professional schools require applicants to have completed course work in the basic sciences, but not in areas that duplicate dental school courses, and they seriously encourage study in the social sciences, the humanities, and mathematics. At

Creighton, predental students carry out these studies in a variety of programs leading to the baccalaureate degree. Although most students major in biology, chemistry, or psychology, others have majored in such fields as physics, mathematics, English, philosophy, and theology. Each student's program is designed so that by the end of the Junior year he or she will have completed the basic requirements for application to professional school. The minimum requirements are as follows:

At least 90 semester hours (three years) of college work in an accredited institution, excluding physical education, and one-hour "drill-type" ROTC courses, but including 6 hours of English and one-year courses with laboratory in general biology, general chemistry, organic chemistry, and general physics.

Ordinarily at the end of the Junior year or the beginning of the Senior year, students take the national admission examination, the DAT (Dental Admission Test). During the Senior year, professional school admission committees review the students' applications. Decisions are usually announced at the end of the fall semester or early in the spring semester of the Senior year.

## Pre-Medical Program: General Requirements

The School of Medicine requires applicants to have completed specific courses in the basic sciences, and encourages students to consider advanced coursework particularly in biochemistry, but as well in cell biology, genetics, anatomy, or physiology. The School also encourages broad study of the social sciences, humanities, and mathematics, in addition to substantial experience in service to others. Extracurricular shadowing or work experiences related to the delivery of health care and scientific research are also highly valued by the Committee on Medical Admissions.

At Creighton, premedical students typically earn the baccalaureate degree with majors in the scientific fields of biology and chemistry, but a great many also major in other areas such as English, philosophy, psychology, and theology. Each premedical student's program should be designed so that by the end of the Junior year these specific course requirements for medical study will have been completed:
Creighton University Course Sem. Hrs.
Biology, General with laboratory, two courses (211 and 212) ..... 8
Chemistry, General I with laboratory (203/204) ..... 4
Chemistry, General II with laboratory (205/206) ..... 4
Chemistry, Organic I with laboratory (321/322) ..... 4
Chemistry, Organic II with laboratory (323/324) ..... 4
English, two courses, one of which must be English 150 ..... 6
Physics, General with laboratory, two courses (211 and 212) ..... 8

The Creighton premedical student should present a record of at least 90 hours of study excluding physical education and one-hour "drill-type" ROTC courses.

Ordinarily in the spring of the Junior year (April) or at the beginning of the Senior year (August), premedical students take the MCAT (Medical College Admissions Test). Applications should be submitted through AMCAS (American Medical College Application Service) as early as possible during the summer between the Junior and Senior years. During the Senior year, the Committee on Medical Admissions reviews applications and invites the most promising applicants for interviews. Admission to medical school at Creighton is on a 'rolling' basis, thus early application is strongly advised. The Creighton University School of Medicine website is http://medicine.creighton.edu.

## Pre-Pharmacy Program

Admission to the Creighton University School of Pharmacy and Allied Health Professions Pharmacy program requires at least two years of pre-pharmacy college preparation. The program of professional instruction in pharmacy leads to a Doctor of Pharmacy degree.

The pre-pharmacy preparation consists of at least 63 semester hours which includes the following specified courses and credits:
Creighton University Course Sem. Hrs.
General Biology I \& II - (BIO 211 and 212) ..... 8
General Chemistry I \& II - (CHM 203/204 and 205/206) ..... 8
Organic Chemistry I \& II - (CHM 321/322 and 323/324) ..... 8
Economics - (ECO 203 or ECO 205) ..... 3
Calculus (MTH 141 or MTH 245) ..... 3
English (including Composition, e.g., ENG 150 or 251) ..... 6
Principles of Communication Competence (COM 152) ..... 3
Theology ..... 6
Psychology (PSY 111 or higher level course) ..... 3
Electives ..... 15

At least one-half of the elective hours must be taken in areas of general education (e.g., humanities, behavioral and social sciences). Recommended social and behavioral sciences and humanities include philosophy, history, psychology, foreign language, music, and other courses that will help students to broaden their interests and their understanding of themselves and other people. General Chemistry courses should be taken in the first pre-professional year. Calculus should be preceded by high school algebra or MTH 135. The sequence of courses listed above should be taken by prepharmacy students in place of ordinary Arts and Sciences core curriculum requirements.

An early admissions program is available for Creighton University pre-pharmacy students who meet specified academic criteria. Please contact the Pharmacy admissions office (280-2662) or your academic advisor for details on the program. The deadline for receipt of early admissions applications is November 15.

Applications for regular admission are accepted any time after September 1. Files are reviewed when complete.

## The Pre-Occupational Therapy Program

Occupational Therapy is the art and science of facilitating well-being through occupation. The term "occupation" represents the flow of activities that fill a person's life and that have an effect on his or her health. The profession is particularly concerned with how people construct meaningful lives individually and in community. Occupational Therapy views people as multidimensional beings, blending knowledge from the biological and social sciences into a unique, distinct and holistic profession.

Creighton University offers a unique opportunity for doctoral level study in Occupational Therapy. Creighton's program is the first entry level (no baccalaureate degree required) occupational therapy professional doctorate in the country. Since the fall of 1999 the Doctor of Occupational Therapy (OTD) has been the sole professional occupational therapy degree offered to students matriculating into the School of Pharmacy and Allied Health Professions.

Admissions to the Creighton University School of Pharmacy and Allied Health Professions Doctor of Occupational Therapy Program requires a two-year pre-
occupational therapy program of study of at least 60 semester hours. Completion of the professional component of the degree requires an additional nine semesters (including two summers) and leads to a professional doctorate in Occupational Therapy. Graduates from the OTD program are prepared to assume leadership roles in professional service, administration, teaching, collaborative research, and ethics and health policy development., and to engage in work that is morally responsive to the needs of clients and communities they are entrusted to serve.

The sequence of courses listed below should be taken by pre-occupational therapy students. This sequence is reflective of a liberal education essential for occupational therapy professional practice, and is in close accordance with the Arts and Sciences core curriculum requirements at Creighton University. A liberal education foundation encourages students to become free and responsible people by delimiting the natural and human boundaries within which free choice and responsibility occur. Therefore the pre-occupational therapy course sequence introduces students to the various traditional liberal arts and empirical sciences which are later extended in the OTD program. Together, the prerequisite sequence and the OTD curriculum contribute to a broad understanding of human culture and prepare students to respond to the needs of society through professional practice.
The pre-occupational therapy preparation at Creighton University must include courses and credits selected from the specified categories listed below. Some courses may be cross listed in more than one category, but a single course may not be used to fulfill prerequisite requirements in more than one category. An updated list of acceptable pre-requisite courses can be obtained from the Occupational Therapy department at 280-1864.

CATEGORY A - Theology, Philosophy and Ethics (9 semester hours) Prerequisites in this category provide students with the opportunity to develop an ethical and moral understanding of their responsibility toward building a human community of justice, respect, and mutual concern. Courses must come from two fields: PHL107, PHL147, PHL 201, PHL 202, PHL 250, THL 100, THL 101, THL 205, THL 250.
CATEGORY B - Cultures, Ideas and Civilizations ( 9 semester hours) Prerequisites in this category contribute to understanding how cultures and civilizations have been shaped by ideas over history and for gaining insight into the variety of cultural, social, intellectual and religious backgrounds of the global society. Courses must come from three fields: AMS 327, BIO 141, CNE 381, COM 244, ENG 120, ENG 121, HIS 101, HIS 103, HIS 104, HIS 106, HIS 107, HIS 302, HIS 303, HIS 351, HIS 367, HIS 375, PHL107, PHL147, PHL 201, PHL 202, PHL 250, PHY 147.

CATEGORY C - The Natural Sciences ( 15 credit hours) Prerequisites in this category provide a broad foundation in the scientific investigation of the physical and biological dimensions of the world and human life. At least one course must include a lab. Courses must be taken from two fields:

1. Biological Sciences: BIO 211, BIO 212, BIO 333, BMS 111(ANA 111), BMS 112 (ANA 112), BMS 303 (PHS 303), BMS 404, CHM 105, CHM 111, CHM 112, CHM 113, CHM 203, CHM 204, CHM 205, CHM 206, EXS 331.
2. Physical Sciences:PHY 147, PHY 187, PHY 188, PHY 195.

CATEGORY D - Social and Behavioral Sciences (9 semester hours)
Prerequisites in this category provide a broad foundation leading to an understanding of human patterns of interaction between self, others, and society at the local, national and global levels. The following courses, as well as others that specifically involve community service and social betterment, are desirable. Courses must be taken from three separate subcategories:
Anthropology / Sociology / Justice \& Peace: ANT 111, ANT 244, ANT 350, ANT 360, ANT 363, HIS 372, JPS 250, SOC 215, SOC 223, SOC 225, SOC 235, SOC 317, SOC 318, SOC 321.

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            Psychology: COU 544, PSY 111, PSY 270 (235), PSY 271, PSY 341(223), PSY 342,
            PSY }344\mathrm{ (323), PSY 351(321), PSY 352 (332), PSY 361, PSY }369\mathrm{ (339), SOC }333
            Social Work: SWK 261, SWK 274, SWK 275, SWK 276, SWK 300, SWK }375
            Political Science / Global Studies:AMS 372, AMS 432, HAP 317, HAP 334, IDC 461,
            PLS 101, PLS 105, PLS }235
CATEGORY E - Creative Expression (9 semester hours)
            Prerequisites in this category contribute to the development of creativity, expressive
            skills and competent exchange of ideas. At least one course must be taken from each
            sub-category below:
            1. Fine and Performing Arts: ART 104, ART 105, ART 153, ART 211, ART 253,
                ART 271, ART 306, ART 321, ART 327, ART 331, ART 341, ART 345, ART
                346, ART 347, ART 382, DAN 101, DAN 110, DAN 131, THR }271
                    2. Communication: AMS 312, COM 152, COM 201, COM 301, COM 361, COM
                    363, COM 427, THR 131.
            3. Writing: ENG 251, ENG 254, ENG 300, ENG 301, ENG }315
CATEGORY F - Critical Discovery 9 semester hours)
            Prerequisites in this category permit in-depth exploration of areas of interest derived
            from categories A through E above. Courses lead to increased competence in
            methods of investigation and knowing, emphasizing critical thinking and analysis.
            Courses may be taken in any of the subcategories below:
            Theology, Philosophy and Ethics: THL 360, PHL 309, PHL 312, PHL 331, PHL 333,
            PHL 334, PHL 343, PHL 348, PHL 358, PHL 424, PHL 451, PHL 463, PHL 465, PHL
            467, SRP 401, SRP 409, SRP 465, THL }365
            Cultures, Ideas and Civilizations: HIS 300, HIS 390, HIS 400, PLS 310, SRP 444, SRP
            482, THL }465
            Natural Sciences: BIO 401, SRP 436, STA 513, STA 521, STA 525, STA }527
            Social and Behavioral Sciences: ANT 349, ANT 362, ANT 469, HAP 433, PSY 211,
                PSY 311, PSY 312, SOC 311, SOC 312, SOC 314, SOC 320, SOC 463, SOC 470,
                    SRP 422, SRP 437, SRP 481, SRP }489
                    Creative Expression: ART 376, COM 200, ENG }105
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An early admissions program is available for Creighton University pre occupational therapy students who meet specified academic criteria. Students who complete prerequisite coursework at Creighton University, who remain in good academic standing throughout all undergraduate coursework, and who maintain a 3.50 quality points average (QPA) in prerequisite courses are given consideration over other applicants. Please contact the School of Pharmacy and Allied Health Professions admissions office (280-2662) or, your academic advisor, or the Department of Occupational Therapy (280-1864) for details on the program. The deadline for receipt of early admissions applications is January 15.

Applications for regular admissions are accepted at any time. Review of completed files begins in February and continues until the class is full.

## Pre-Physical Therapy Program

Admission to the Creighton University School of Pharmacy and Allied Health Professions Physical Therapy program requires a minimum of three years of pre-physical therapy college preparation. The professional instruction in physical therapy covers eight semesters (including two summers) and leads to a Doctor of Physical Therapy degree.

The pre-physical therapy preparation consists of at least 90 semester hours. Required prerequisite courses include one year of English, one-year courses with laboratory in general biology, general chemistry, and general physics. Students seeking admission in 2002 must have successfully completed three semester hours of human or mammalian physiology. If the student is enrolled in a combined human anatomy/physiology course, six semester hours are required. Creighton University students that apply to the Physical

Therapy program must also complete 6 semester hours of theology. It is recommended that students select elective courses from psychology, mathematics, anatomy, histology, exercise physiology, organic chemistry, biochemistry, statistics, and medical terminology.

Graduate Record Examination (GRE) scores must be submitted at the time of application to the Physical Therapy program. Sixteen of the twenty-seven required science semester hours must be completed by the application deadline. Applicants must have achieved well academically, demonstrate an understanding of the profession, and be able to express an appropriate rationale for participation in the program. Applicants must complete 40 hours of observation in a physical therapy setting.

An early admissions program is available for Creighton University pre-physical therapy students who meet specified academic criteria. Please contact the Physical Therapy admissions office (280-2662) or your academic advisor for details on the program. The deadline for receipt of early admissions applications is November 15.

Applications for regular admission must be received by January 1 and all supporting information by February 1. Applications received after the January 1 deadline may be considered as long as class space is available.


## PROGRAMS OF STUDY-II

## COLLEGE OF BUSINESS ADMINISTRATION

The undergraduate program of the College of Business Administration is fully accredited by the International Association for Management Education (AACSB). This association is recognized by the National Commission on Accrediting as the highest official accrediting agency in collegiate education for business at the undergraduate and master's levels. Membership in the Association is open only to schools and colleges whose intellectual climate insures the offering of programs of high academic quality and whose teaching and administrative staff possess the qualifications, experience, professional interests, and scholarly productivity essential for the successful conduct of a broad and liberal, rather than unduly specialized, baccalaureate curriculum in business administration.

## STATEMENT OF OBJECTIVES

Within a Christian environment which professes a global objective of the recognition of the intrinsic value of men and women, the College of Business Administration is deeply concerned with the development of, and maturing of, philosophies of justice and respect; and ethical, moral, and social responsibilities toward the human community. The program of the College of Business Administration sets as its overall direction the development of independent thinking, a creative approach to problem solving, and a capacity to work with new ideas and change. These objectives are accompanied by a course of study involving current and timely academic content.

## REQUIREMENTS FOR GRADUATION

The University will confer the degree of Bachelor of Science in Business Administration (B.S.B.A.) on regular students who successfully complete all prescribed courses and fulfill the graduation requirements.

A candidate for a degree must have earned 128 semester hours of credit with a qual-ity-point average (QPA) of 2.00 or above for all courses attempted at this University, and a 2.00 average or above for all required courses in the field of concentration.

Normally, students must register for not less than twelve hours nor more than eighteen hours in each semester. The privilege of carrying more than eighteen hours is contingent upon the student's quality-point average and requires special approval of the Dean.

Approval of the faculty adviser and the Dean is required for semester study programs, including electives to be counted toward graduation. College policy states that 48 hours must be completed at Creighton with a minimum of 32 hours of business coursework completed at Creighton. All Business Administration students must complete the course in Strategic Management (BUS 471) with a grade of C or better.

## PROGRAMS OF STUDY

The four-year undergraduate program in business administration comprises two natural divisions, the first including the freshman and sophomore years, and the second the junior and senior years. The work of the first, or lower division, consists largely of required courses and has a two-fold purpose: to provide a broad cultural background, and to furnish necessary training in the fundamental principles of business and economics.

During the student's junior and senior years provision is made for a group of required and elective courses intended to provide a familiarity with the basic areas of business administration. In addition, the following major fields of study are offered: Accounting, Economics, Entrepreneurship, Finance, Marketing, Management Information Systems, and International Business. In each field instructional emphasis is not
directed toward the development of routine skills or to particular industries. Instead, every effort is made to stimulate students to think logically, to process and evaluate information, and to make sound decisions from the overall management point of view.

It is recommended that students select a field of concentration by the end of the second semester of their sophomore year or by the beginning of the first semester of their junior year. A major must be officially declared prior to the student's final semester. Some majors require departmental approval and have acceptance requirements that differ from general graduation requirements.

Students may earn multiple majors by satisfying the requirements for each as shown in the Bulletin. If a specific course satisfies the requirements of more than one major, that course may be counted toward fulfillment of each set of major requirements.

In addition to the basic fields of study, the College of Business Administration, in conjunction with the School of Law, offers a combined Business Administration-Law program-requiring a total of six years-which leads to both the B.S.B.A. with the Prelaw Business Major and the Juris Doctor degrees (see page 129).

## Majors and Co-Majors for Business Administration Students

Students in the College of Business Administration may complete an additional field of concentration or co-major in the Creighton College of Arts and Sciences. The second major is in addition to the BSBA degree; students do not receive a B.A. or B.S. degree from Arts and Sciences. Requirements of the co-major or field of concentration are listed in each department's entry in the catalog. To apply for a co-major, the student should contact the Dean's Office for appropriate advising and referral.

## GENERAL CURRICULUM

The General Curriculum requirements, as stated in Categories I-VII below, apply to all College of Business Administration students and to all fields of concentration. A required course which is failed should be retaken the following semester. Unless indicated otherwise, each course is a three-hour course.
Categories ..... Sem. Hours
I. Foundation Knowledge and Skills ..... 22 or 23
II. Theology, Philosophy, and Ethics ..... 12
III. Domestic and International Environment of Business ..... 18
IV. General Education Electives ..... 17-19
V. General Business Requirements ..... 24
VI. Field of Concentration ..... 18 or 21
VII. Other Requirements and Electives ..... 11-17
Total ..... 128
I. Foundation Knowledge and Skills ( 25 or 26 hours)
A. Communications:

Rhetoric and Composition (ENG 150)
Introduction to Critical Thinking (PHL 147)
Principles of Communication Competence (COM 152)
Managerial Communication (COM 314)
*Pre-Law/Business Students only may choose between COM 314 and Advanced Composition (ENG 251)
B. Mathematical Sciences:

Applied Mathematics (MTH 201)
Applied Calculus (MTH 141) or Calculus I (MTH 245, 4 hours)
Statistical Analysis (BUS 229, 4 hours)
II. Theology, Philosophy, and Ethics (12 hours)
A. Theology:

Religious Inquiry: Christianity in Context (THL 100)

Theology (200 level scriptural course, except 250)
B. Philosophy:

Critical and Historical Introduction to Philosophy (PHL 107)
Business Ethics (BUS 256)
III. Domestic and International Environment of Business ( $\mathbf{1 8}$ hours)
A. Domestic Environment

Legal Environment of Business (BUS 201)
Introductory Macroeconomics (ECO 205)
B. International Environment:

International Business-any one out of the specified courses:
International Accounting (ACC 538)
Comparative Economic Systems (ECO 518)
International Economic Development (ECO 528)
International Economics (FIN 558)
International Financial Management (FIN 558)
International Management (MGT 373)
Global Marketing (MKT 363)
International Culture - (1) any two modern language courses; one of these courses must be at the intermediate level, or (2) one international studies course and one course in a language native to that region; one of these courses must be at the intermediate level, or (3) two international studies courses selected from one of the following study groups; one of these courses must be at the intermediate level.
International Culture Requirement for Non-English Speakers - Students who are fluent in language other than English are deemed to have met the international culture requirements under IIIB. Students must provide documentation to support a request for an exemption. Hours freed up must be used to take non-business courses. International Business majors must choose two international culture courses from one study group listed below.
African Studies:
People and Cultures of Sub-Saharan Africa (AFS/ANT/BKS 342)
Christianity in Africa (AFS/BKS/THL 356)
Introduction to African Literature (AFS/BKS/ENG 390)
Literature of Francophone Africa (AFS/BKS/ENG 398)
Seminar in African Studies (AFS 400)
Cultures of Africa and the Mideast (ANT 347)
The African World (HIS 106)
Origins of Modern Africa (HIS 388)
Nationalist Movements in Colonial Africa (HIS 484)
Society and Belief Systems in Africa (HIS 485)
History of West Africa (HIS 487)
Southern Africa: The Politics of Race (HIS 489)
Politics of Africa (PLS 311)
Politics of the Developing Areas (PLS 319)
Global Poverty and Development (PLS 435)
Asian Studies:
People and Cultures of Asia (ANT 348)
The Asian World (HIS 103)
Women, Marriage, and Family in East Asian Society (HIS 464)
Popular Culture in Traditional China and Japan (HIS 466)
Modern China (HIS 467)
Modern Japan (HIS 468)
History of India: The Land of Bharota (HIS 593)
Politics of Asia (PLS 315)
Politics of the Developing Areas (PLS 319)
Global Poverty and Development (PLS 435)
Foreign Policy and Diplomacy of Major Powers (PLS 342)
Government and Politics of the People's Republic of China (PLS 415)
Introduction to Buddhism (PHL/THL 353)
Living Religions of the World (THL 359)
European Studies:
Introduction to Irish Literature (ENG 330) Must be taken in Ireland. Studies in Irish Literature (ENG 535) Must be taken in Ireland. Studies in Irish Literary History and Culture (ENG 536) Must be taken in Ireland. Inside Hitler's Germany - A Study of Nazi Tyranny (HIS 317)
Eastern Europe 1918-1989: Revolutions in Historical Perspective (HIS 319)

World War II in Europe: Triumph over Tyranny (HIS 320)
19th Century Europe (HIS 415)
Europe Since 1919 (HIS 417)
History of Scotland (HIS 543)
Seek the Fair Land: The History of Ireland (HIS 544)
Modern France (HIS 545)
Modern Germany (HIS 546)
Contemporary Europe Since 1945 (HIS 547)
Western European Political Systems (PLS 301)
Eastern European Political Systems (PLS 305)
The European Union (PLS 401)
Ethics and Market Reforms in the Post-Communist Countries (SRP 430)
Latin American Studies.
People and Cultures of Latin America (ANT 346)
The Latin American World (HIS 104)
Comparative American Character (HIS 351)
Mexico and the Mexican Revolution (HIS 371)
The United States and Latin America (HIS 375)
Heroes in Latin American History (HIS 474)
Cuba Under Castro (HIS 577)
Latin American Government and Politics (PLS 317)
Politics of the Developing Areas (PLS 319)
Global Poverty and Development (PLS 435)
Topical Seminar in Sociology (SOC 400)
Middle East Studies:
Cultures of Africa and the Mideast (ANT 347)
The Middle Eastern World (HIS 107)
Change and Revolution in the Modern Middle East (HIS 345)
The Arab-Israeli Conflict: Struggle for the Holy Land (HIS 347)
Muhammad and the Rise of Islam (HIS 348)
Jerusalem in History (HIS 478)
United States and the Middle East Since World War I (HIS 566)
Politics of the Middle East (PLS 313)
Politics of the Developing Areas (PLS 319)
Global Poverty and Development (PLS 435)
Introduction to Judaism (THL 354)
Living Religions of the World (THL 359)
Russian Studies:
Russia to Alexander I (HIS 432)
Late Tsarist Russia (HIS 533)
Russian History Through Literature and Art (HIS 535)
History of The Soviet Union: Its Formation and Fragmentation (HIS 548)
Politics of the USSR Successor States (PLS 303)
Foreign Policy and Diplomacy of Major Powers (PLS 342)
C. Strategic Management (BUS 471)
IV. General Education Electives (17-19 hours)
A. Modern Western World (HIS 101)
B. World Literature I or II (ENG 120 or ENG 121)
C. Natural Science-any one of the specified courses, 3-4 hours:

Introduction to Atmospheric Sciences (ATS/EVS/NSC 113) + LAB (ATS/EVS/NSC 114)
Severe and Unusual Weather (ATS/NSC 231)
Biochemistry (BMS 301)
Charles Darwin: Life and Impact (BIO 141)
Human Biology (BIO 149)
General Biology: Molecular and Cellular (BIO 211)
General Biology: Organismal and Population (BIO 212)
Introductory Chemistry (CHM 105)
Fundamentals of General Chemistry (CHM 111)
General Chemistry I (CHM 203) + LAB (CHM 204)
Introductory Astronomy (NSC/PHY 107) + LAB (NSC/PHY 108)
Sound and Music (PHY 127) + LAB (PHY 188)
Light and Color (PHY 137) + LAB (PHY 188)
Einstein and Modern Physics (PHY 147) + LAB (PHY 188)
Introduction to Physics (PHY 187) + LAB (PHY 188)

General Physics I (PHY 211)
D. Introductory Psychology (PSY 111)
E. Social Science-any one of the specified courses:

Human Variation (ANT 111)
Politics and the Human Condition (PLS 101)
Introduction to World Politics (PLS 105)
American Government and Politics (PLS 121)
Comparative Political Systems (PLS 215)
Self and Society (SOC 101)
F. Humanities-any one of the specified courses:

History and Myth: The American West (AMS/SRP 426)
The Artistic Heritage (ART 219)
Art International: The Art Culture of the Global Community (ART 319)
Greek Art and Archaeology (ART/CNE 355)
Art of the Middle Ages (ART 360)
Art of the Renaissance in Europe (ART 361)
Early Christian Art and Archaeology (ART/CNE 362)
Baroque Art (ART 363)
History of Architecture (ART 364)
Greek Art (ART/CNE 365)
Etruscan and Roman Art (ART/CNE 366)
Nineteenth Century Art (ART 367)
Survey of American Art (ART 368)
Modern European Art, 1900-1945 (ART 369)
Photojournalism I (ART/JMC 375)
History of American Architecture (ART 384)
History and Aesthetics of Latin American Photography (ART 386)
History and Methods of Art History (ART 391)
The Idea of Rome in the Arts (ART 466)
History of the Art of Spain and Her Colonies (ART 467)
Native American Art (ART 468)
Ancient Near Eastern Art and Archaeology (CNE 357)
Egyptian Art and Archaeology (CNE 358)
Ancient Near Eastern Art and Archaeology (CNE 367)
History and Criticism of Cinema (COM/ENG 380)
Introduction to the Dance (DAN 101)
Survey of Music History (DAN 267)
Photojournalism I (JMC 375)
Music Appreciation (MUS 273)
Music of the World's Peoples (MUS 375)
Theater Appreciation (THR 161)
American Theater History (THR 461)
Theater History (5th Century, B.C.-1700) (THR 465)
V. General Business Requirements (24 hours)

Principles of Accounting I (ACC 201)
Principles of Accounting II (ACC 202)
Introductory Microeconomics (ECO 203)
Management Information Systems (MIS 353)
Managerial Finance (FIN 301)
Managerial Process and Organizational Behavior (MGT 301)
Principles of Marketing (MKT 319)
Production and Operations Management (MGT 385)
VI. Field of Concentration ( $\mathbf{1 8}$ or 21 hours)
VII. Freshman Requirements and Other Electives (11-17 hours)
A. Freshman Seminar (FRS 112, 1 hour)
B. Business Electives (3-6 hours, depending on major and other courses selected)
C. Non-restricted Electives (4-13 hours, depending on major and other courses selected)
NOTE: The three credit International Business course may count in the field of concentration if approved for the area of concentration. Students using the International Business course in their field of concentration will need three more hours in their VII B. Business Electives.

## TYPICAL FOUR-YEAR DEGREE PROGRAM IN BUSINESS ADMINISTRATION

Outlined on this is a sample of a program that a typical student will follow during the freshman and sophomore years. The program for the junior and senior years will depend on the field of concentration selected.

The College of Business Administration Dean's Office has available four-year plans of study handouts for all Business Administration fields of concentration. Junior and senior year course planning requires an understanding of degree requirements and attention to the Schedule of Courses booklet.

Academic advising is performed by faculty members and department chairs in the College of Business Administration. Faculty advisors are assigned to freshmen and then students are reassigned to advisors within the respective discipline when a major field of concentration has been declared. Advisors serve as facilitators of communication, assist students in career planning, and perform academic progress reviews. Frequent advisor contact will help ensure students have current academic information and are making adequate progress toward educational goals.

## FRESHMAN YEAR

Fall Semester
Freshman Seminar (FRS 112)
Computer Literacy Workshop
Rhetoric \& Composition (ENG 150)
Critical \& Historical Introduction
to Philosophy (PHL 107)
Principles of Communication
$\quad$ Competence (COM 152)
Applied Calculus or Calculus I
$\quad$ (MTH 141 or MTH 245)
$\quad$ or
Applied Mathematics (MTH 201)
Social Science*

| Sem. Hrs. | Spring Semester | Sem. Hrs. |
| :---: | :---: | :---: |
| 1 | World Literature I or II | 3 |
| 0 | (ENG 120 or 121) |  |
| 0) $\begin{array}{r}3 \\ 3 \\ 3\end{array}$ | Religious Inquiry: Christianity in Context (THL 100) | 3 |
|  | Applied Mathematics (MTH 201) | 3-4 |
|  | or |  |
|  | Applied Calculus or Calculus I <br> (MTH 141 or 245) |  |
| 3-4 | Natural Science* | 3-4 |
|  | Introduction to Critical |  |
|  | Thinking (PHL 147) | 3 |
|  |  | 15-17 |

## SOPHOMORE YEAR

| Fall Semester Sem | Sem. Hrs. | Spring Semester | Sem. Hrs. |
| :---: | :---: | :---: | :---: |
| Principles of Accounting I <br> (ACC 201) | 3 | Principles of Accounting II <br> (ACC 202) | 3 |
| Introductory Microeconomics (ECO 203) | 3 | Introductory Macroeconomics (ECO 205) | 3 |
| Business Ethics (BUS 256) or | 3 | Legal Environment of Business (BUS 201) | 3 |
| Legal Environment of Business (BUS 201) |  | $\begin{gathered} \text { or } \\ \text { Business Ethics (BUS 256) } \end{gathered}$ |  |
| Statistical Analysis (BUS 229) | 4 | Modern Western World (HIS 101) | 3 |
| Introductory Psychology (PSY 111) or | 11) 3 | or Introductory Psychology (PSY 111 |  |
| Modern Western World (HIS 101) |  | Theology (200 level or above, exce | pet 250) 3 |
|  | 16 | Humanities* | 2-3 |

[^4]
## ACCOUNTING

## Supervised by the Department of Accounting

## Mission Statement

The Department of Accounting of the College of Business Administration exists to support the mission of the college in providing students with a value-centered, quality accounting education. To accomplish this mission, the department supports its faculty in their efforts to excel in teaching, research, and service, and encourages its faculty and staff to continue their personal and professional development.

## Program for Business Administration Students

For the degree of Bachelor of Science in Business Administration with Accounting as the field of concentration. The curriculum is concerned with conceptual understanding and accounting competence. The objective is to give the student an understanding of the functions of accounting, the underlying concepts of accounting theory, and their applications to business problems.

The program is designed to prepare students for leadership in the community and careers in governmental, managerial or public accounting; teaching positions; one of the sub-fields of accounting, such as tax, accounting systems, and others; and for further graduate professional training.

Required:

1. Accounting 313, 315, 319, 343, 377, 423.
2. A three-hour elective from the following: Accounting 493, 516, 521, 544, and 579.
Note: Admission to the Accounting Program requires junior standing, a cumulative overall quality-point average of 2.5 or better, no grade lower than "C" in 200-level Accounting courses and/or permission of the Department Chair. A student whose performance has been marginal or who has not completed enough courses at Creighton to provide a basis for judgment, may be accepted with probationary status or deferred until the probability of successfully completing the Program can be determined. Retention in the Program is conditional upon demonstrating competence in upper division accounting courses.

## ECONOMICS

## Supervised by the Department of Economics and Finance

## Program for Business Administration Students

For the degree of Bachelor of Science in Business Administration with Economics as the field of concentration. This program is designed to acquaint the student with the tools and techniques of economic analysis and the contribution of economic analysis to decision-making in the business firm and to society. The program is designed to prepare those interested in careers as economists or economic analysts in business, government, and non-government organizations and for graduate study in economics.

Required:

1. Economics 303 and 305 . These should be taken in the junior year.
2. Twelve hours of 300,400 or 500 -level economics courses selected with the approval of the major adviser. Economics 301 does not apply to this requirement.

## Program in Economics for Arts and Sciences Students

The Department of Economics also provides a program of study for students in the College of Arts and Sciences who wish to obtain the degree of Bachelor of Arts with economics as the field of concentration.

## The Field of Concentration for Arts and Sciences Students

Concentration major: Economics 203, 205, 303, 305, 508, and fifteen hours of upper division courses in economics. Economics 203 and 205 should be taken in the sophomore year. Economics 303 and 305 should be taken in the junior year. Economics 301 does not apply to the concentration major.

Supporting courses: Sixteen hours of upper division courses outside the field of economics selected with the approval of the major adviser. Four of the hours must be BUS 229 or its equivalent as approved by the Department Chair. The support courses are to be declared and on file with the Department Chair before pre-registering for the first semester of the senior year. Additional course work in mathematics, especially calculus, is strongly recommended.

## ENTREPRENEURSHIP

## Supervised by the Department of Marketing and Management

For the degree of Bachelor of Science in Business Administration with Entrepreneurship as the field of concentration. The entrepreneurship major is designed for students who have strong interest in starting their own businesses; it is also strongly recommended for students interested in the management of small, ongoing businesses and family-based businesses.

## Required:

1. BUS 311, FIN 402, MGT 475, and MKT 325.
2. Six hours of elective courses selected in consultation with the major advisor to allow for fuller development in a specific area.

## FINANCE

## Supervised by the Department of Economics and Finance

For the degree of Bachelor of Science in Business Administration with Finance as the field of concentration. This curriculum is concerned with the study of financial institutions, and business, government, banking, insurance, and personal financial management. Emphasis is on the analysis and development of financial principles in all areas of financial decision-making, as well as career preparation as financial analysts in business, insurance and banking, and government service.

## Required:

1. Finance 325 and 401.
2. Twelve hours from the finance electives ( 300 - or 400 -level).
3. With approval from the major adviser, one finance elective may be replaced by one of the following: Accounting 301, Accounting 313, or Economics 315.

INTERNATIONAL BUSINESS
Supervised by the Department of Economics and Finance
For the degree of Bachelor of Science in Business Administration with International Business as the field of concentration. This program is designed for those students who desire a broad-based understanding of international business operations, primarily from the viewpoint of a U.S. business entity. It is also designed to provide an

International Business perspective as related to the functional areas of business and to permit experiential learning in a specific world region through study abroad programs.

Required:

1. Fifteen hours of course work in International Business: International Accounting (ACC 538), International Economics (ECO 538), International Management (MGT 373), Global Marketing (MKT 363), and International Financial Management (FIN 558).
2. The International Culture Requirement (Category III-B) must be met through six hours of intermediate level course work in a language. The International Business course requirement does not apply to this major.
3. Study Abroad: Each student must experience study abroad, with a minimum of six hours of study overseas, preferably in a region of foreign language expertise of the student. Course work must include three hours of business, to be approved by faculty adviser.
4. A total of three business electives are required for the international business major.

## MARKETING

Supervised by the Department of Marketing and Management
For the degree of Bachelor of Science in Business Administration with Marketing as the field of concentration. This program is designed for those students interested in preparing for the general field of marketing and/or for those wishing to prepare for specific careers in retailing, industrial marketing, advertising, sales management, and marketing research.

Required:

1. Marketing 333, 343, 353, 473.
2. A minimum of six hours from the following: Marketing electives (300- or $400-\mathrm{level}$ ). Other courses may be utilized with special approval of the department chair.
Note: Students contemplating marketing as a major are advised to take Marketing 319 the first semester of their junior year or in the previous summer session.

## MANAGEMENT INFORMATION SYSTEMS

## Supervised by the Department of Information Systems and Technology

For the degree of Bachelor of Science in Business Administration with Management Information Systems as the field of concentration. This program is designed to combine the study of fundamental technical concepts of computer-based business information processing systems with a broad consideration of the organizational and behavioral issues associated with the design and management of such systems. It is designed to prepare students for careers in all areas of information management. In conjunction with a second major in another functional area of business, the program can be structured to provide a foundation for concentration in the management of specialized information resources.

[^5]
## PRELEGAL EDUCATION AND COMBINED BUSINESS ADMINISTRATION - LAW PROGRAM

A knowledge of business is highly desirable as a foundation for the study of law. Thorough knowledge of the principles and processes of our economic organization is essential to the proper understanding and application of legal principles. A knowledge of accounting is also helpful in connection with tax work.

## General Prelegal Requirements

The Creighton University School of Law will consider for admission applicants who have completed at least three-fourths of the college work required for the bachelor's degree in the College of Business Administration. Ninety-six semester hours are threefourths of the total required for a degree from the College of Business Administration.

There are no specifically required prelegal subjects; but not more than ten per cent of the college credits presented may be in non-theory courses such as basic military science, hygiene, domestic arts, physical education, or similar courses.

In considering applicants for admission, consideration is given to the results of the Law School Admission Test, the applicant's college record, and other pertinent information.

## Combined Business Administration-Law (3-3) Program

Business administration students may receive both the degree of Bachelor of Science in Business Administration with the Prelaw Business major and the degree of Juris Doctor at the end of the fourth and sixth years respectively, subject to the following requirements:

Students following the B.S.B.A./J.D. program will be considered candidates for the B.S.B.A. degree following the completion of the first year in law; i.e., the fourth year of the program. Such candidates for the B.S.B.A. must file an application for degree with the University Registrar by February 15 for the degree to be conferred in May.

The student must complete 32 credit hours, with at least a "C" average, in the first full year of the Creighton University School of Law, and the student must have completed at least 48 undergraduate hours at Creighton University.

## B.S.B.A., J.D., M.B.A.-Seven-Year Program

Qualified students who want to earn three degrees (B.S.B.A., J.D., and M.B.A.) within a seven-year period can do it by following the 3-3 program described above and in the seventh year enrolling in the M.B.A. program. These programs provide an excellent preparation for employment in either the private or public sector of the economy.

## Certificate in Business Administration

A student enrolled outside the College of Business Administration who does not plan to earn a bachelor's or master's degree from the College of Business Administration, may earn a Certificate of Business Administration. Students wishing to complete this program must file an application with the Undergraduate Coordinator in the College of Business Administration.

A certificate in Business Administration prepares a non-business student for graduate work in a Master of Business Administration Program. The certificate courses are the majority of the foundation courses, which along with a Bachelor's degree in any discipline, are required for a student seeking admission to the MBA, MS-ITM, and MS-ECM programs.

The required courses for the certificate are Accounting 201, Accounting 202, Business 201, Business 229, Economics 203, Economics 205, Finance 301, Management

301, Management Information Systems 353, and Marketing 319. While no specific mathematics courses are required for the certificate, successful completion of BUS 229 will necessitate mathematical proficiency equivalent to MTH 201 (Applied Mathematics) and either MTH 141 (Applied Calculus) or MTH 245 (Calculus I).

Of the 31 required hours, at most 12 hours of transfer credits can be applied toward the Business Certificate. Once a student has matriculated to Creighton, only 6 of the 12 transfer hours allowed may be taken as transient study. In addition, the student must attain a cumulative Q.P.A. of 2.0 or better in all business administration courses. Please Note: The 31 required certificate hours is the maximum number of credits in which a non-business administration student may enroll in the College of Business Administration.

Degree seeking students who have completed the requirements of the certificate will be awarded the Certificate of Business Administration at the time of graduation. Non-degree seeking students will be awarded the certificate upon completion of the requirements of the certificate.


## 3/3 PROGRAM SAMPLE PLAN OF STUDY FRESHMAN YEAR

## Fall Semester

Freshman Seminar (FRS 112)
Sem. Hrs
Computer Literacy Workshop
Rhetoric and Composition (ENG 150)
Critical and Historical Introduction to Philosophy (PHL 107)
Religious Inquiry: Christianity in Context (THL 100)
Social Science*
Applied Calculus or Calculus I
(MTH 141 or MTH 245 )
or
Applied Mathematics (MTH 201)
Total Hours
$\overline{16-17}$03Spring SemesterSem. Hrs.
1

World Literature I or II
3 (ENG 120 or 121)
Principles of Communication 3
Competence (COM 152)
Applied Mathematics (MTH 201) 3-4 or
Applied Calculus or Calculus I (MTH 141 or 245)
Natural Science* 3-4
Introduction to Critical 3 Thinking (PHL 147)
Total Hours ..... 15-17

## SOPHOMORE YEAR

$\left.\begin{array}{lrlr}\text { Fall Semester } & \text { Sem. Hrs. } & \begin{array}{c}\text { Spring Semester } \\ \text { Principles of Accounting II } \\ \text { Principles of Accounting I } \\ \text { (ACC 201) }\end{array} & 3\end{array} \begin{array}{r}\text { (ACC 202) }\end{array}\right)$

## JUNIOR YEAR



[^6]
## GRADUATE STUDY

## Master of Business Administration

The College of Business Administration offers, through the Graduate School, an evening program of advanced professional training leading to the degree of Master of Business Administration. The primary objective of this program is to provide an opportunity for qualified individuals to develop knowledge, abilities, attitudes, and understandings which will constitute a foundation for their growth into effective administrators and creative leaders in business, industry, and government. Effective managerial decision-making is stressed rather than advanced study in a single area of concentration.

Enrollment in the M.B.A. program is open to any student who meets the following requirements: (1) a baccalaureate degree from institutions accredited by a council on postsecondary accreditation that is a recognized institutional accrediting agency; (2) high scholastic achievement on the undergraduate level; (3) an acceptable score on the Graduate Management Admission Test (GMAT); (4) evidence of character, aptitude, and capacity for graduate study. The Admissions Committee will also consider an applicant's intellectual development during the course of his previous academic career, his extracurricular activities, employment experience, and other evidences of motivation for graduate work.

The minimum course requirements for graduates of accredited colleges of business administration consist of the satisfactory completion of thirty-three semester credit hours of strictly graduate study. Graduates of liberal arts, engineering or other nonbusiness schools who have had no previous business administration courses will be expected to complete prerequisite work in accounting, business law, calculus, economics, finance, management, marketing, operations management, and statistics.

The College of Business Administration, the College of Arts and Sciences, the School of Pharmacy and Allied Health, and the School of Law offer combined Master of Business Administration/Doctor of Pharmacy, Master of Business Administration/Juris Doctor, and Master of Business Administration/Master of International Relations degree programs. Candidates for these combined programs must make separate application to, and be independently accepted by the College of Business Administration, the College of Arts and Sciences, the School of Pharmacy and Allied Health and the School of Law.

## Master of Science in Information Technology Management

The College of Business Administration offers, through the Graduate School, an evening program leading to the degree Master of Science in Information Technology Management. The M.S. degree is designed to prepare qualified individuals for administrative careers in information technology management. Because the information technology management specialist needs more than substantial technical and theoretical knowledge, the curriculum is structured to combine rigorous study of computer hardware and software with course work addressing organizational issues that impact the computer specialist. Admission requirements are the same as the M.B.A. (above).

The minimum course requirements include thirty-three hours (upper level graduate) with an eighteen-hour core component and fifteen hours of elective course work. Admission presupposes high-level proficiency with personal computers, and students must complete CSC 221 and CSC 222 or their equivalents. Candidates should also have completed at least three hours of applied calculus. Candidates holding a nonbusiness baccalaureate degree must demonstrate proficiency in general foundation business administration areas that may be satisfied by successfully completing M.S. foundation courses (or their equivalent) in accounting, economics, statistics, finance, calculus, marketing, management, operations analysis, and information systems.

The College of Business Administration offers a combined Master of Business Administration/Master of Science in Information Technology Management dual degree program. This combined degree program enables students to earn both the M.B.A. and M.S.-I.T.M. degrees in a streamlined 48 credit hour program in considerably less time than if the two degrees were earned separately.

A joint Master of Science in Information Technology Management/Master of Computer Science degree program is also offered by the College of Business Administration and the College of Arts and Sciences. Candidates for this combined program must make separate application to, and be independently accepted by the Graduate School and the College of Business Administration.

## Master of Science in Electronic Commerce

The College of Business Administration offers, through the Graduate School, an evening program leading to the degree of Master of Science in Electronic Commerce. The M.S. degree is designed to prepare students to take on leadership positions in the electronic commerce field in business, government, and institutions. Graduates will understand the strategies and tactics of e-commerce and be able to apply them in the changing business environment. The curriculum will provide graduates with a solid technical skill set in e-commerce technologies (Internet languages, e-commerce ready Web sites, database design, telecommunications infrastructure, etc.) as well as marketing, advertising, legal, control, and privacy issues in e-commerce.

The minimum course requirements include thirty-three hours of strictly graduate study with a twenty-one hour core component, nine hours of elective course work, and a three-hour e-commerce project course. Admission requirements are similar to those of the M.B.A. (above). Applicants must demonstrate competency in a programming language and a fundamental understanding of business concepts (management, marketing, economics, statistics, and college algebra.). Each applicant's credentials will be evaluated separately to determine the foundation course work required.

The College of Business Administration and the School of Law offer a combined Master of Science in Electronic Commerce/Juris Doctor degree program. Candidates for this combined program must make separate application to, and be independently accepted by the College of Business Administration and the School of Law.

A Graduate E-commerce Certificate is available for individuals who are interested in understanding and leveraging E-commerce for organizational efficiency and effectiveness but do not wish to pursue a Masters degree in E-commerce. The certificate consists of eleven credit hours (upper level graduate), in addition to any prerequisite requirements (programming and marketing).

The Graduate Bulletin is the official publication of the Graduate School, and its contents direct and govern all graduate programs.

## PROGRAMS OF STUDY-III SCHOOL OF NURSING

The School of Nursing offers three programs for undergraduate study in nursing: the Traditional Program for qualified high school graduates, the Accelerated Nursing Curriculum (ANC) for qualified persons with non-nursing baccalaureate or higher degrees, and the RN-degree completion program known as Linking Education and Practice (LEAP) for qualified graduates of diploma or associate degree programs in nursing. The traditional and the LEAP Programs also are offered on the satellite campus in Hastings, Nebraska. Recently, the RN-degree completion program (LEAP) implemented distance education to various off-campus sites. In addition, the School of Nursing offers a graduate program in nursing designed to prepare nurses for advanced practice.

## STATEMENT OF OBJECTIVES

The School of Nursing seeks to provide opportunities and guidance for students to master the knowledge and skills necessary to become competent professional nurses and to develop their individual intellectual, spiritual, and physical potential. Qualities considered highly desirable for nursing are critical thinking skills, sensitivity to feelings, responses, and needs of others; verbal and nonverbal communication skills; integrity and a developed sense of values. The School believes that understanding and managing the care of clients can only be achieved by balancing the knowledge and skills gained in the humanities, basic sciences, and nursing.

Nursing is an applied discipline devoted to achieving the outcomes of health promotion, maintenance, and restoration for diverse populations in various settings. Nursing uses theoretical knowledge and research findings from the health sciences, physical and social sciences and from the humanities as the basis for managing the care of individuals, families, groups, and communities from diverse cultures. Collaboration among health disciplines in conjunction with clients enhances the quality of health care and achievement of outcomes related to health promotion, maintenance, and restoration. Throughout their educational career, students are provided learning opportunities that enhance their knowledge base, critical thinking abilities and professional competency. Completion of the program prepares students to practice as generalists in a variety of settings with diverse populations. Because of the School's belief that learning is a lifelong endeavor, completion of this program provides a foundation for advanced study at the graduate level.

## PROGRAM OF STUDY IN NURSING

The baccalaureate program in nursing is designed to prepare qualified graduates for practice in multiple settings with diverse populations. Upon completion of degree requirements, students are eligible to take the Registered Nurse (RN) licensure examination.

## Traditional Nursing Curriculum

The well-prepared high school graduate ordinarily spends four academic years completing the requirements for the degree of Bachelor of Science in Nursing. This four-year curriculum leading to the degree is referred to as the "traditional program" in nursing. During the freshman year, a student in the traditional program is enrolled in the nursing seminar and liberal arts and sciences courses. During the sophomore year, traditional program students are offered nursing courses in health assessment, pathophysiology, lifespan development, and nutrition as well as other basic science and humanities courses. These courses are the foundation for the practicum courses at the junior and senior levels. During their junior and senior years, traditional program students are enrolled in nursing practicum courses focusing on outcomes-based nursing practice. Emphasis is placed on the nurse's utilization of the care management model as a basis
for achieving optimal outcomes through health promotion, maintenance, and restoration of altered health states. The senior year culminates in a practicum designed to provide a concentrated experience in complex collaborative nursing care management under the supervision of a nurse preceptor. The practicum experiences are obtained in a wide variety of hospital and community-based agencies to enrich the learning opportunities. The School of Nursing provides the instruction for the practicum experiences in collaboration with the cooperating agencies.

## ACADEMIC REQUIREMENTS

## Admission

High school graduates who are first time freshmen wishing to pursue the traditional program of study leading to the degree of Bachelor of Science in Nursing apply to the Admissions Office of the University. The School of Nursing recommends that these students have high school courses in biology and chemistry and an ACT composite score of at least 22. Transfer students interested in Nursing apply directly to the School of Nursing. General admission requirements for freshman and transfer students are listed in the Creighton University Undergraduate bulletin under the heading "Admissions".

Transfer students from non-nursing and nursing majors may be admitted providing the School of Nursing can accommodate them. If transferring from another program of nursing, a letter of recommendation from the Dean or chair of the program of nursing in which the student was previously enrolled must be submitted.

## Advanced Placement and Credit

The policies of the College of Arts and Sciences governing the granting of advanced placement and/or credit apply to students in the School of Nursing except for selected nursing courses. Course descriptions or course syllabi of any previous nursing courses must be submitted for evaluation at the request of the School of Nursing's Undergraduate Admissions and Promotions Committee.

All applicants are required to complete the Technical Standards and Safety Form. Because of the integral relationship between the educational program in nursing and health care delivery system, students will be expected to meet additional requirements and expenses related to health examinations, uniforms, transportation to practicum experiences, and malpractice insurance while enrolled in clinical nursing courses. Specific information about these matters can be obtained from the Office of the Dean.

## Co-Major in Arts and Sciences

Students in the School of Nursing may complete an additional field of concentration or co-major in the College of Arts and Sciences. The second field is in addition to the B.S. in Nursing degree; students do not receive a B.A. or B.S. degree from Arts and Sciences. Requirements of the co-major or field of concentration are listed in each department's entry in the catalog. To apply for a second field of concentration or a comajor, the student should contact the Associate Dean of Student Affairs in the School of Nursing for appropriate consultation and referral.

## Requirements for Graduation

A candidate for a degree must have earned a minimum of 128 semester hours of credit with a quality-point average (QPA) of 2.00 or above. A 2.00 average or above is required for all courses in the field of concentration, all support courses to nursing, and all required physical and social sciences. See further degree requirements on page 90.

## CURRICULAR REQUIREMENTS

The nursing curriculum offers a prescribed sequence of courses and learning experiences that provide for the progressive development of knowledge and skills necessary for practice as a nurse generalist. Courses are sequential in nature and must be taken in the order identified. The program also establishes the foundation for graduate study in nursing.

Traditional Curriculum. The traditional baccalaureate curriculum is designed for recent high school graduates and requires eight (8) semesters of full-time study.
A. General Information

1. Freshman Nursing Students whose ACT Composite score is 21 or below are required to take FRS 120 "Becoming a Master Student" during their first semester.
2. Freshman Nursing students whose Fall mid-term QPA is below 2.2 are required to take the Student Success Program in the Fall semester. They also are required to preregister for FRS 120 - "Becoming a Master Student" for 2 credit hours in Spring Semester. If their first semester QPA is a 2.2 or higher, they may drop FRS 120.
B. Traditional Baccalaureate Curriculum Plan- Omaha and Hastings Campuses
3. Core Curriculum Categories - TOTAL $=57$ semester hours. General Education courses fall into five categories. The School of Nursing follows a modified version of the Core Curriculum established by the College of Arts and Sciences.
CORE CATEGORY A: Theology, Philosophy and Ethics (TPE) - $\mathbf{1 2}$ hours
Christianity in Context (Theology - THL 100) - 3 hrs
Scripture (Theology 200 level) - 3 hour
Foundations for Ethical Understanding (Philosophy/Theology -
PHL THL 250-3 hrs)
Applied Ethics (HPE 311 preferred) - 3 hours - Taken in senior year
CORE CATEGORY B: Cultures, Ideas and Civilizations - $\mathbf{1 2}$ hours History (100 level) - 3 hours Critical \& Historical Intro. to Western Philosophy (PHL 107) - 3 hours World Literature I: The Beginning to the 16th Century (ENG 120) - 3 hours World Literature II: The 16th Century to the Present (ENG 121) - 3 hrs
CORE CATEGORY C: Natural Science $\mathbf{- 1 9}$ hours

* Basic Human Anatomy ( BMS 111) - 4 hours
* Physiology (BMS 303) - 4 hours
* Fundamentals of General Chemistry (CHM 111) - 3 hours
* Fundamentals of Biological Chemistry (CHM 112/113) - 4 hours Microbiology (MIC 141) - 4 hours
CORE CATEGORY D: Social and Behavioral Sciences - $\mathbf{6}$ hours
* Introductory Psychology (PSY 111) - 3 hours
* Self and Society (SOC 101) or Human Variation (ANT 111) or Social Problems: Values, Issues, and Public Policy (SOC 223) - 3 hours
CORE CATEGORY E: Skills - $\mathbf{5}$ hours (Including but not limited to):
College Writing (ENG 150) Mathematics (MTH 135, 137, 201 or 245) Statistics (PSY 211) Speech/Studio and Performing Arts (COM 152/Fine \& Performing Arts) Languages (Classics and Modern Languages) (NOTE: Selection of courses in this category must represent at least two disciplines, e.g., Math and Languages.)


## CORE CATEGORY F: ELECTIVES - 3 hours (choice of student)

* Courses required to enter sophomore level nursing courses. Student must receive a "C" or better in each of these courses and in Microbiology.


## CREIGHTON UNIVERSITY SCHOOL OF NURSING Traditional Baccalaureate Curriculum-Omaha Campus

## FRESHMAN YEAR (34 Semester Hours)



| SENIOR YEAR (28 Semester Hours) |  |  |  |
| :--- | ---: | :--- | ---: |
| Sem. Hrs. | Spring Semester <br> Fall Semester | NUR 481 Senior Seminar in | Sem. Hrs. |
| NUR 471 Care Mgt. Processes for |  | Professional Nursing |  |
| Episodic \& Chronic Health | 5 | NUR 482 Senior Preceptorship | $\frac{10}{13}$ |
| Alterations II | 5 |  |  |
| NUR 472 Care Mgt. Practicum III |  |  |  |
| NUR 473 Leadership for | 2 |  |  |
| Care Management | $\underline{3}$ |  |  |
| Applies Ethics (HPE 311 preferred) | $\underline{15}$ |  |  |

Total Semester Hours = $\mathbf{1 2 8}$
Individualized plans of study have been established for students interested in pre-med. Plans also have been established for Hastings campus, Army and Air Force ROTC students. A five-year plan of study is also available.

## ACCELERATED NURSING CURRICULUM (ANC)

The Accelerated Curriculum in Nursing was initiated at Creighton University in May of 1975. It is a one-calendar-year program for individuals who hold non-nursing baccalaureate or higher degrees. Before admission to the program, an individual must have completed the courses in the social and physical sciences (or acceptable substitutes) required in the traditional program. A Bachelor of Science in Nursing degree is awarded at graduation.

## Admission

Individuals who hold a baccalaureate degree in another field and want to pursue a B.S.N. may apply directly to the School of Nursing. Admission decisions are based on the following criteria:

1. A baccalaureate or higher degree in another discipline from an accredited college or university.
2. Evidence of academic achievement of at least 2.5 quality point average or higher on a 4.0 scale. (No applicants are considered with a grade point average below 2.5).
3. Completion of courses (with a minimum of " C " or above) meeting or equivalent to prerequisite courses for a major in nursing.
4. Evidence of potential and motivation for nursing.
5. Evidence of prior work success and/or ability to handle academic schedules.

## Prerequisite Requirements

The following courses and other requirements must be completed prior to beginning the Accelerated (B.S.N.) Curriculum. Applicants may be conditionally accepted to the class of their choice prior to completion of designated prerequisites if their plan of study indicates that all will be completed prior to entry. All courses must carry a grade of C or above to be accepted for transfer to Creighton.

1. 36 semester hours of general education. (These will be allocated from the liberal arts and sciences completed in previous baccalaureate degree.)
2. 12 semester hours of behavioral sciences.
A. General Psychology (3 sem. hrs.)
B. General Sociology or Cultural Anthropology ( 3 sem . hrs.)
C. Developmental Psychology ( 3 sem . hrs.). This course should cover the lifespan through old age. If applicant completed a course in only child and adolescent Psychology, an additional independent study (through Creighton) in adulthood and aging is required prior to or concurrent with the first 8 weeks of the program.
D. Bioethics or Ethics ( 3 sem . hrs.). The application of ethical theories to contemporary problems of human life; emphasizes the process of making ethical/moral judgments. (Courses usually offered out of Philosophy departments.)
3. Physical and Biological Sciences ( 19 sem. hrs.)
A. Normal Nutrition (2 sem. hrs.)
B. Microbiology ( 4 sem. hrs.)
C. Chemistry (7 or 8 sem. hrs. - may be either General Chemistry I and II or a Chemistry Survey course followed by Organic and/or Biochemistry.)
D. Anatomy and Physiology ( 8 sem . hrs. - this may be two combined courses or a human anatomy course and a mammalian or vertebrate physiology course.)
E. If previous science courses are on the quarter system (qrt. $\mathrm{hr} .=2 / 3 \mathrm{sem}$. hr.) all the equivalent prerequisite courses must be completed and the total semester credits must be at least 18 (same as 27 qrt. hrs.) If science credits do not total 18, it will be necessary to take additional science credits. (Nutrition credit does not count toward the 18).
4. Science credits earned over ten years ago will be individually evaluated.

## LINKING EDUCATION AND PRACTICE PROGRAM OF STUDIES FOR RN'S (LEAP)

The Linking Education and Practice Program (LEAP) option is available for Registered Nurses (RNs) who wish to pursue a program of study leading to the degree of Bachelor of Science in Nursing. The LEAP Program is designed to meet the educational objectives of the traditional program while considering the special needs of RNs. All required courses have been specifically designed for the RN Student. The LEAP Program is comprised of transfer credit already earned, credits earned by validation and formal course enrollment. Nursing classes meet one day a week. Clinical requirements are individually designed and may be completed in the work setting.

## Admission

Registered Nurses who have graduated from an associate degree program or diploma program in nursing, who show evidence of consistent academic ability, and are eligible for licensure in Nebraska, may apply directly to the School of Nursing Admissions Office. RNs who have not practiced nursing in the past five years will be considered on an individual basis. Applicants must submit an application and the following documents to the School of Nursing Admissions Office:

1. Official college and School of Nursing transcripts
2. Safety and Technical Standards Form
3. A copy of current Nursing license
4. Two letters of reference, one from the director of the basic nursing program and one from the most recent nursing employer. If the student graduated longer than five years ago, both reference letters should be from employers or peers.
5. An interview may be required at the discretion of the Admissions and Promotions Committee.

## Progression Policies

General progression policies apply. A maximum of five years is allowed to complete the curriculum. Students who have not earned Creighton credit in a one-year period (unless on leave of absence) will be considered to have withdrawn and must apply for readmission to the program.

## LEAP Curriculum Requirements

There are 64 credits required as nursing support courses. These nursing support courses can be completed before, during, or after completion of the LEAP curriculum. Nineteen of these credits must be science hours. A three credit hour theology course and a three credit hour ethics course are required. A flexible transfer policy is in place. Prerequisites are the same as the traditional program. There are 39 credit hours in the nursing courses.

Following successful completion of NUR 317 and 318, students will be awarded 25 semester hours of nursing credit for validation of prior learning.

## NURSING SUPPORT COURSES

Chemistry, Microbiology, Anatomy and Physiology ........................................ 19
Sociology .......................................................................................................... 3
Psychology ........................................................................................................ 3
Developmental Psychology .............................................................................. 3
Liberal Arts ..................................................................................................... 30
Electives ......................................................................................................... 6
Total: 64

# CREIGHTON UNIVERSITY SCHOOL OF NURSING Linking Education and Practice (LEAP) RN-BSN Curriculum 

## SUMMER SESSION

NUR 108 RN Seminar ..... 1
NUR 224 Health Assessment ..... 2
NUR 225 Health Assessment Lab ..... 1
NUR 252 Pathophysiology ..... 3
NUR 317 Professional Nursing Transition ..... 2
NUR 318 Professional Practice Lab ..... 2
NUR 320 Informatics in Health Care ..... 1
NUR 321 Informatics Lab ..... 1
FALL SESSION
NUR 353 Principles of Population-Based Health Care ..... 3
NUR 441 Nursing Care Management and Outcomes Improvement I ..... 3
NUR 442 Care Management Lab I ..... 4
NUR 377B Research for Health Professionals ..... 3
SPRING SESSION
NUR 354 Power, Politics and Policy in Health Care ..... 3
NUR 461 Nursing Care Management and Outcomes Improvement II ..... 3
NUR 462 Care Management Lab II ..... 4
NUR 478 Leadership for Care Management ..... 2
NUR 490 Data Management Lab ..... 1
TOTALS HOURS REQUIREDNursing Credit Hours Required39
Validated Credit Hours ..... 25
Nursing Support Course Credits Required ..... 64
TOTAL CREDIT HOURS ..... 128

## PROGRAMS OF STUDY-IV

## UNIVERSITY COLLEGE

Creighton's University College is an undergraduate college for adult students who wish to pursue a degree or certificate program or who want to take classes for personal enrichment or professional advancement.

## THE MISSION

In order to provide a value-centered education for its students in an atmosphere of concern for the individual, University College participates in the Catholic and Jesuit mission of Creighton, extending the commitments and resources of the University beyond traditional academic boundaries.

## ADMISSION

The normal minimum age for admission to University College is 23 . Students may attend daytime or evening classes on a full- or part-time basis. Students will need to complete an application for admission. Students who have been accepted as degree- or certificate-seeking students are eligible to apply for financial aid. Special students taking courses not leading to a degree or certificate are not eligible for most financial aid. Persons who have been dismissed from any educational institution in the previous year are not eligible to enroll in University College.

## THE PROGRAMS

## Bachelor's Degree Programs

University College degree-seeking students may follow bachelor's degree programs from the College of Arts and Sciences or the College of Business Administration. Students may earn degrees in any of the major areas of study in either college. See page 108 for Arts and Sciences majors, and page 120 for Business Administration majors. While not all of these majors can be completed solely through evening offerings, there are many majors that lend themselves to the schedule of working adults. University College students may also follow a degree program offered in cooperation with the School of Medicine and leading to a Bachelor of Science in Emergency Medical Services.

## Degree Requirements for Bachelor of Arts, Bachelor of Science and Bachelor of Science in Business Administration

Specific degree requirements can be found on pages 98-109 and 120-131 for the Colleges of Arts and Sciences and Business Administration programs respectively.

## Degree Requirements for the Bachelor of Science in Dental Hygiene (BSDH)

Creighton University School of Dentistry, through University College, offers a degree completion program in Dental Hygiene. Applicants must have completed an associate's degree in dental hygiene from a program accredited by the American Dental Association (ADA) Commission on Dental Accreditation; successfully completed the Dental Hygiene National Board Examination; hold current licensure; and have satisfactory academic and professional references. Students who have completed the associate's degree dental hygiene program at Iowa Western Community College, which is affiliated with the Creighton University School of Dentistry, will be required to complete a minimum of 36 additional hours at Creighton University. Students who have met the above requirements from other institutions must complete a minimum of 48 hours at Creighton University.

Students will have a maximum of four years from the time of enrollment at Creighton University to complete their bachelor's degree requirements.

Degree requirements are listed below. Areas marked with (*) must be taken at Creighton.
Areas of Study
Semester Hours
Dental Hygiene ..... 64
Theology, Philosophy, Ethics* (Core A) ..... 6
Cultures, Ideas and Civilizations* (Core B) ..... 9
Natural Science (Core C) ..... 16
Social and Behavioral Sciences (Core D) ..... 6
Skills* (3 hrs. at Creighton) (Core E) ..... 9
Dental Science * (Core F) ..... 18
Total semester hours ..... 128
Core A: Theology, Philosophy, Ethics - 6 hours
THL 100 Christianity in Context or
THL 2XX Scripture Course
PHL/THL 250 Foundations for Ethical Understanding
Core B: Cultures/Ideas/Civilizations - $\mathbf{9}$ hours
PHL 107 Critical and Historical Introduction to PhilosophyMinimum of one History course:
HIS 101 The Modern Western World
HIS 103 The Asian World
HIS 104 The Latin American World
HIS 106 The African World
HIS 107 The Middle Eastern World
Minimum of one literature course:
ENG 120 World Literature I
ENG 121 World Literature II
Core C: Natural Sciences - $\mathbf{1 6}$ hours (Prerequisites for Iowa Western Community College Associate's Degree in Dental Hygiene Program)
BMS 111 Basic Human Anatomy
BMS 303 Physiology
BMS 301 Biochemistry
MIC 141 Microbiology
Core D: Social and Behavioral Sciences - 6 hours
(Choose one course from any two different areas)
ANT 111 Human Variation
ECO 203 Introductory Microeconomics
PLS 101 Introduction to Politics
PLS 105 Introduction to World Politics
PLS 121 American Government and Politics
PLS 215 Comparative Political Systems
SOC 101 Self and Society
SOC 223 Social Problems: Values, Issues, and Public Policy
PSY 111 Introductory Psychology
Core E: Skills - 9 hours
ENG 150 Rhetoric and Composition
MTH 135, 137, 201, or 245
College Algebra, Trigonometry, Applied Mathematics or Calculus I
PHA 444 Biostatistics and Research Design
COM 152 Principles of Communication Competence
Core F: Dental Science - $\mathbf{1 8}$ hours
CPD 111 Interpersonal Relationships and Communication (1 hr.)CPD 115 History of Dentistry ( 1 hr .)
CPD 132 Community Dentistry Field Experience (1 hr.)
CPD 133 Ethics in the Practice of Dentistry I (1 hr.)
CPD 311 Ethics in the Practice of Dentistry II (1 hr.)
CPD 433 Financial Planning and Jurisprudence (2 hrs.)
GDS 115 Dental Materials Science Lecture ( 2 hrs .)GDS 116 Dental Materials Science Laboratory (2 hrs.)GDS 135 Dental Materials Science Lecture (4 hrs.)GDS 136 Dental Materials Science Laboratory (2 hrs.)GDS 211 Infectious Disease Control in Dentistry ( 1 hr .)GDH214 Oral Hygiene and Recall Clinical (1 hr.)
GDS 219 General Pathology (10 hrs.)
GDS 235 Oral Pathology ( 8 hrs.)
GDD315 Oral Medicine (2 hrs.)
ORB 113 Histology (8 hrs.)
ORB 115 General Gross and Neuroanatomy (10 hrs.)
ORB 131 Head and Neck Anatomy (9 hrs.)
ORB 133 Oral Histology and Embryology ( 8 hrs .)
ORB 311 Dental Pharmacology I (5 hrs.)
ORB 331 Dental Pharmacology II (4 hrs.)
ORB 137 Nutrition (2 hrs.)
PDO 131 Behavioral Growth and Development (2 hrs.)
PDO 133 Introduction to Computing (1 hr.)
PER 213 Periodontology Lecture ( 2 hrs .)
PER 233 Periodontology Lecture ( 2 hrs .)
PER 313 Periodontology Lecture ( 2 hrs .)
GDS, PER or CPD Directed Studies (1-3 hrs.)
Degree Requirements for the Bachelor of Science in Emergency Medical Services (BSEMS)
General Education CategoriesTheology/Philosophy/Ethics

15 Sem. Hrs.

THL 100-Christianity in Context
THL 2XX-200-level scripture course
PHL 343-Ethics and the Professions
THL 3XX—Christian Theology course
THL 567-Ethical Issues in Health Care
Culture/Ideas/Civilization

18 Sem. Hrs.

HIS 101-History of the Modern Western World
PHL 107-Critical/Historical Introduction to Philosophy
Twelve hours of electives from the following departments:
English, History, Classical Civilization; orInternational/Global Studies in Anthropology,Sociology, Journalism, or Social Work
Natural Sciences
7-8 Sem. Hrs.
Two courses from the departments of Biomedical Sciences (Anatomy), Atmospheric Sciences, Biology, Chemistry, Natural Sciences, and Physics

## Social/Behavioral Sciences

6 hours
Two courses from the departments of Anthropology, Economics, Education, Political Science, Psychology, and Sociology

## Skills

ENG 150—Rhetoric and Composition
Fine and Performing Arts OR Foreign Language
MTH 135-College Algebra OR MTH 201—Applied Mathematics
COM 152- Principles of Communication Competence

## Support

ECO 203-Introductory Microeconomics*
MKT 319-Principles of Marketing OR MGT 301
PHL 343-Ethics and the Professions*
THL 567-Ethical Issues in Health Care*
*Also Applicable to General Education Categories

## Major

45-49 Sem. Hrs.
Prerequisite: EMS 101 Fundamentals of Emergency Medical Services - with grade of "C" or better or equivalent course and successful completion of entrance exam.

## Required Courses

EMS 301 - Preparatory
EMS 303 - Patient Assessment
EMS 305 - Airway Management/Ventilation
EMS 307 - Trauma Management
EMS 320 - Clinical Practicum I
EMS 321 - Field Practicum I
EMS 310 - Medical Emergencies I
EMS 312 - Medical Emergencies II
EMS 314 - Medical Emergencies III
EMS 316 - Medical Emergencies IV

| EMS 322 - Clinical Practicum II |  |
| :--- | :--- |
| EMS 323 - Field Practicum II |  |
| EMS 311 - Special Considerations |  |
| EMS 313 - Operations |  |
| EMS 315 - Assessment Based Management |  |
| EMS 324 - Clinical Practicum III |  |
| EMS 325 - Field Practicum III |  |
| Free and EMS Electives | (Variable) |
| TOTAL SEMESTER HOURS FOR BSEMS: | $\mathbf{1 2 8}$ |

## NOTE: Students who have successfully completed the major courses are eligible for national registry or state certification as paramedics.

## AWARDING OF DEGREES

Most degrees are awarded by the college in which the program originates. Bachelor of Arts, Bachelor of Science, Associate in Arts and Associate in Science degrees are awarded by the College of Arts and Sciences; the Bachelor of Science in Business Administration is awarded by the College of Business Administration. The Associate in Science in Emergency Medical Services and the Bachelor of Science in Emergency Medical Services are awarded by the School of Pharmacy and Allied Health Professions. The Bachelor of Science in Dental Hygiene is awarded by the School of Dentistry.

University College students complete the degree requirements of the school awarding the degree. See pages 120-131 for the general and major requirements for a Bachelor of Science in Business Administration. General requirements for College of Arts and Sciences degrees can be found on pages 98-109. Specific Arts and Sciences major requirements are given under each department's listing in the Courses of Instruction section. General and major requirements for the Bachelor of Science in Emergency Medical Services and the Bachelor of Sciences in Dental Hygiene are above and on the preceding pages.

## ASSOCIATE DEGREES

Associate degrees are available to students enrolled in University College only. A candidate for an Associate in Arts or Associate in Science degree must have earned 64 semester hours of credit with a quality-point average (QPA) of 2.00 or above for all courses attempted at Creighton University and 2.00 or above for all courses in the field of concentration. The ASEMS degree requires a total of 73 semester hours. Students who earn an associate degree may continue on for a bachelor's degree. All work completed in an associate degree program can be applied toward a bachelor's degree.

At least half (32) of the hours for the Associate in Science or Associate in Arts must be completed in residence at Creighton University. At least 15 semester hours in the major field must be completed at Creighton.

Associate in Arts degrees are offered in five major fields: Journalism/Public Relations, Ministry, Organizational Communication, Spirituality, and Theology. The Associate in Science degree is offered with majors in Computer Science and Mathematics. Associate Degree requirements follow.

## Associate Degree Requirements

Core Curriculum for All Majors Sem. Hrs.Category A: Theology, Philosophy, and Ethics9THL 100-Religious Inquiry ( 3 hrs .)THL 2XX——cripturePHL 250 OR THL 250 -Foundations for Ethical Understanding(3 hrs.)
Category B: Cultures, Ideas, and Civilizations ..... 9ENG 120—World Literature I ORENG 121—World Literature II (3 hrs.)HIS 101-The Modern Western World (3 hrs.)PHL 107-Critical and Historical Introduction to Philosophy (3 hrs.)
Category C: Natural Sciences ..... 4
One approved course with laboratory from the following departments: AtmosphericSciences/Biology/Chemistry/Environmental Sciences/ Natural Science/Physics (4 hrs.)
Category D: Social Sciences ..... 3
One approved course from the following departments:Anthropology/Economics/Political Science/Psychology/Sociology( 3 hrs .)
Category E: Skills ..... 6-7
Two courses from the followingENG 150-Rhetoric and Composition (3 hrs.)MTH 201 Applied Mathematics OR
MTH 245 Calculus I (3-4 hrs.)
COM 152-Principles of Communication Competence ORStudio/Performing Arts (3 hrs.)
Classical or Modern Languages (3 hrs.)
Total Core Requirements (Applicable to all majors except Emergency Medical Services) ..... 31-32
Associate in Arts Degrees
Spirituality Major
Sem. Hrs.
Core Curriculum Requirements (See above) ..... 31-32
Major Requirements ..... 25
1 course in OT; 1 course in NT, THL 250, 491, 544, 561, 575; two courses fromTHL 325, 335, 339
Electives 7-8
Total core, major, and elective hours for the A.A. Degree ..... 64
Theology Major
Core Curriculum Requirements (See page 142) ..... 31-32
Major Requirements ..... 25
1 course in OT, 1 course in NT, THL 250, 491, 561; two courses from THL
325, 335, 339; two 300-500-level courses chosen in consultation with advisor
Electives7-8
Total core, major, and elective hours for the A.A. Degree ..... 64
Journalism/Public Relations MajorSem. Hrs.
Core Curriculum Requirements (See page 142) ..... 31-32
Major RequirementsJMC 219, 323, 331, 339, 34115
Support 6Six semester hours (300-level or above) approved by themajor adviser in one or more departments
Electives 11-12Total core, major, and elective hoursfor the A.A. Degree64

Organizational Communication Major
Core Curriculum Requirements (See page 100)
Major Requirements
COM 320, 360, either 361 or 362 , either 463 or 464,495 ; and
12 hours upper-division COM courses
33
Support 6
Total core, major, support, and elective
hours for the A.A. Degree
64

## Associate in Science Degrees

Computer Science Major
Core Curriculum Requirements (See page 100)

## Sem. Hrs.

31-32
Major Requirements
18
CSC 221, 222 and 12 semester hours in 500-level CSC courses
Support 7
MTH 135 and 245
Electives 7-8
Total core, major, support, and electives for the A.S. Degree
Mathematics Major
Core Curriculum Requirements (See page 100)
Major Requirements
MTH 245, 246, 347, 545, 581, 591, 64
and either MTH 523 or 529
Electives 8-9
Total core, major, and elective hours for the A.S. Degree

64

## Associate in Science in Emergency Medical Services <br> Emergency Medical Services Major <br> Sem. Hrs.

Core requirements
Theology/Philosophy (6)
Culture/Ideas/Civilizations (6)
Social/Behavioral Sciences (3)
Skills (9)
Total Core Requirements 24
Major Requirements24

EMS 101, 301, 303, 305, 307, 320, 321,
$310,312,314,316,322,323,311,313,315,324,325$
Total Core and major requirements for ASEMS degree 73
(Call the University College Dean's Office, 280-2424 or 1-800-637-4279, to request a brochure listing suggested courses for the ASEMS degree.)


## CERTIFICATE PROGRAMS

Persons who may not initially want to follow a Bachelor's degree program may enroll in one of the twenty-two certificate programs offered by University College. Those without prior college work may elect to complete a certificate program first and have the option of continuing with the complete degree program. Others who have previously completed a Bachelor's degree may want to enroll in a certificate program for personal enrichment or in order to show a concentration in another area of study.

Courses required in most of the certificate programs are equivalent to major requirements in the degree programs. (The Certificate in Business Administration includes the introductory courses in Accounting, Business, Economics, Finance, Management, Marketing, and Systems. These are most of the foundation courses necessary for admission to the typical MBA program.) The certificate programs are:

| Applied Communication | Irish Literature and Culture |
| :--- | :--- |
| Applied Computer Science | Liturgy |
| Applied E-Commerce | Mathematics |
| Atmospheric Sciences | Ministry |
| Business Administration | Organizational Communication |
| Computer Science | Pre-Health Sciences |
| Corporate Communication | Psychology |
| Creative Writing | Public Relations |
| Environmental Science | Spirituality |
| Health Administration and Policy | Theology |
| Human Resources Administration | Visual Communications |

To be eligible for a certificate, students must complete all required courses with grades of C or better. Courses completed with grades below C must be repeated. Unless otherwise stated, at least half of the course work must be completed at Creighton.

Students who complete courses required for a certificate may also use these courses to meet degree requirements.

Individuals who want to follow a certificate program should complete the Application for Admission available in the Dean's Office.

## Specific Requirements for Certificate Programs

## Certificate Program in Applied Communication

A Certificate of Applied Communication will be awarded to the students who successfully complete a total of 27 semester hours from the following courses:

## Required Courses ( $\mathbf{1 8}$ hours):

COM 152 Principles of Communication Competence
COM 200 Introduction to Communication Research Methods
COM 320 Leadership: Theories, Styles, and Skills OR
COM 321 Persuasion
COM 340 Communication Theories
COM 361 Interpersonal Communication
COM 362 Small Group Communication
Select 9 hours from 300-level or above Communication Studies courses.

## Certificate Program in Applied Computer Science

A Certificate in Applied Computer Science will be awarded to students who complete the following requirements, a total of 24 semester hours:
CSC 221 Computer Programming I
CSC 222 Computer Programming II
CSC 538 Networks-LAN \& NOS

CSC 542
Relational Database Design
CSC 544
GUI Development
CSC 548 Object-Oriented Programming
CSC 551 Web Programming
CSC 552 Windows Programming

## Certificate Program in Applied Electronic Commerce

A Certificate of Applied Electronic Commerce will be awarded to the students who successfully complete the a total of 24 semester hours from the following courses:
CSC 221 Computer Programming I - C++
CSC 222 Computer Programming II - C++
CSC 542 Relational Database Design
CSC 551 Web Programming
CSC 526 Website Administration
CSC 328 Electronic Commerce
JMC 382 Internet and World Wide Web Publishing
Choose one course from the following electives:
JMC $313 \quad$ Principles of Advertising
JMC $323 \quad$ Principles of Public Relations
MKT $319 \quad$ Principles of Marketing

## Certificate Program in Atmospheric Sciences

Atmospheric Sciences 113 is a prerequisite for most upper division courses in Atmospheric Sciences.

Advanced placement is available to students who qualify, particularly for those with meteorological training with the aviation industry, the National Weather Service, or branches of the military. For information contact the Department Chair, Dr. Dean Morss.

A Certificate of Atmospheric Sciences will be awarded to students who complete the following courses:
ATS 113 Introduction to ATS 571 Dynamic Meteorology I
Atmospheric Sciences ATS 572 Dynamic Meteorology II
ATS 553 Tropical Meteorology MTH 245 Calculus I
ATS 555 Satellite Meteorology MTH 246 Calculus II
ATS 561 Synoptic Meteorology PHY 211 General Physics I \& Lab
ATS 562 Synoptic Meteorology II PHY 212 General Physics II Lab

## Certificate Program in Business Administration

A Certificate of Business Administration will be awarded to students who successfully complete the following requirements, a total of 31 semester hours:*
ACC 201 \& 202 Principles of Accounting I, II
BUS 201 Legal Environment of Business
BUS 229 Statistical Analysis
ECO 203 \& 205 Introductory Micro- and Macroeconomics
FIN 301 Managerial Finance
MGT 301 Managerial Process and Organizational Behavior
MIS 353 Management Information Systems
MKT $319 \quad$ Principles of Marketing
*NOTE: This is the maximum number of hours that a non-College of Business Administration student may complete in the College of Business Administration.

Mathematics-While no specific mathematics courses are required, successful completion of BUS 229 will necessitate mathematical proficiency equivalent to MTH 141-Applied Calculus or MTH 245-Calculus I and MTH 201—Applied Mathematics.

Successful completion of the courses listed introduces the student to the fundamentals of the six functional areas of business: accounting, economics, finance, marketing, management, and systems; and provides an excellent background in Business Administration.

These courses are the majority of the foundation courses which, along with a Bachelor's degree in any discipline, are required for a student seeking admission to the graduate program leading to the degree of Master of Business Administration (M.B.A.). However, entrance into Business Administration masters' programs depends upon whether the student meets the standards of the College of Business Administration.

NOTE: Students must have completed a minimum of 60 semester hours in an accredited institution in order to be admitted to the 300 -level courses required to complete this certificate program. At least 19 of the 31 hours required for the Certificate in Business Administration must be taken at Creighton, and the student must attain a cumulative Q.P.A. of 2.0 or better in these courses.

## Certificate Program in Computer Science

A Certificate in Computer Science will be awarded to students who complete the following:

## Core Requirements

21 Semester hours selected from the following list:

## General Courses

CSC 221 Computer Programming I (Required)
CSC 222 Computer Programming II (Required)
CSC 509 Discrete Structures
CSC 523 Applied Linear Algebra

## Computer Hardware

CSC 514 Introduction to Computer Organization
CSC 515 Computer Architecture

## Theoretical Foundation of Computer Science

CSC 525 Automata, Computability and Formal Languages
CSC 527 Data Structure and Algorithm Analysis
Computer Software
CSC 533 Organization of Programming Languages
CSC 535 Introduction to Compiler Design
CSC 536 Introduction to Systems Programming and Operating Systems
CSC $539 \quad$ Operating Systems Structure and Design
CSC 571 Introduction to Data Communications and Networks
Computer Information Management
CSC 540 Introduction to File Organization and Data Base Systems
CSC 541 Database Management Systems Design
Applications-Computer Science
CSC 550 Introduction to Artificial Intelligence
CSC $555 \quad$ Computer Graphics

## Other Requirements:

Nine additional semester hours of any CSC courses.
Total Hours For A Certificate
NOTE: It is recommended that students who wish to pursue a B.S. degree in Computer Science should take the following courses: CSC 221, 222, 509, 514, 527, 536 and 540.

## Certificate Program in Corporate Communication

A Certificate of Corporate Communication will be awarded to the students who successfully complete a total of 27 semester hours from the following courses:

## Required Courses (21 hours):

COM 152 Principles of Communication Competence
COM 200 Introduction to Communication Research Methods
COM 314 Managerial Communication
COM 321 Persuasion
COM 361 Interpersonal Communication OR
COM 362 Small Group Communication
COM 463 Organizational Assessment
JMC 323 Principles of Public Relations
Plus 6 credit hours chosen from the following options:
JMC $341 \quad$ Public Relations Writing OR
JMC $379 \quad$ Publication Design
AND 3 hours of electronic communications from the following:
JMC 381 Computer Illustration
JMC 382 Web Publishing

## Certificate Program in Creative Writing

A Certificate in Creative Writing will be awarded to the students who successfully complete a total of 21 semester hours from the following courses:

## Prerequisite:

Entry to the Certificate program requires evidence of prior achievement in creative writing in the form of a submitted manuscript (6-8 pages of poetry or 1015 pages of fiction), to be judged by the Director of Creative Writing and/or a fulltime member of the creative writing faculty.
Required Courses ( $\mathbf{2 1}$ hours):
ENG 300 Introduction to Creative Writing
ENG 301 Narrative Forms
ENG 302 Poetic Forms
ENG 402 Seminar in Creative Writing (6 hours)
Two literature courses chosen in consultation with major advisor. Students are strongly encouraged to take ENG 254 Writing About Literature as one of the required literature courses.

## Certificate Program in Environmental Science

A Certificate in Environmental Science will be awarded to students who complete the following requirements, a total of 61 semester hours:

| Core Courses |  | Sem. Hrs. |
| :--- | :--- | :---: |
| NSC/ATS/EVS 113 | Introduction to Atmospheric Sciences | 3 |
| NSC/ATS/EVS 114 | Introduction to Atmospheric Sciences Laboratory | 1 |
| BIO 211, 212 | General Biology I and II | 8 |
| CHM 203, 204, | General Chemistry I and II with labs | 8 |
| 205, 206 | Environmental Science |  |
| EVS 390 | Senior Seminar | 3 |
| EVS 491 | Satellite Meteorology | 2 |
| ATS/EVS 555 | Total Core Hours | $\underline{\mathbf{2 8}}$ |

## Area of Specialization Requirement

Students take a minimum of 15 credit hours from one of the following areas:

## I-Global-Environmental Systems

BIO/EVS 341 General Botany 4
BIO/EVS $435 \quad$ Field Biology in the Southeastern United States 4
BIO/EVS $440 \quad$ Field Biology of the Desert Southwest 4
ATS/EVS 443 Environmental Geology 4
BIO/EVS 481 Terrestrial Ecology 4
BIO/EVS $485 \quad$ Marine and Freshwater Ecology 3
BIO/EVS 486 Freshwater Ecology Laboratory 1
BIO/EVS 487 Marine Ecology Laboratory 2
ATS/EVS 541 Atmospheric Diffusion, Air Pollution, 3
and Environmental Impact Analysis
ATS/EVS/ 544 Hydrology 3
ATS/EVS 547 Applications of Remote Sensing 3
ATS/EVS 548 Introduction to Solar-Terrestrial Environment 3
ATS/EVS 553 Tropical Meteorology 3
ATS/EVS 556 Introduction to Physical Oceanography 3
EVS/ATS 566 Climate Theory 3
II-Environmental Pollution
CHM 315 Quantitative Analysis 4
CHM 321/322 Organic Chemistry I and Lab 4
CHM 323, $324 \quad$ Organic Chemistry II and Lab 4
CHM 416 Instrument Analysis 4
ATS/EVS 443 Environmental Geology 4
CHM 506 Environmental Chemistry and Natural Resources 3
BIO/EVS 511 Radiation Biophysics 3
BIO/EVS 523 Environmental Toxicology 3
ATS/EVS 541 Atmospheric Diffusion, Air Pollution, 3
and Environmental Impact Analysis
ATS/EVS 544 Hydrology 3
BIO/EVS 545 Applied Limnology 3
ATS/EVS 552 Boundary Layer Meteorology 3
ATS/EVS 556 Introduction to Physical Oceanography 3
$\begin{array}{lc}\text { III—Organismal and Population Ecology } \\ \text { BIO/EVS } 335 & \text { Zoology }\end{array}$
BIO/EVS 341 General Botany 4
BIO/EVS $435 \quad$ Field Biology in the Southeastern United States 4
BIO/EVS $440 \quad$ Field Biology of the Desert Southwest 4
ATS/EVS 443 Environmental Geology 4
BIO/EVS 481 Terrestrial Ecology 4
BIO/EVS 449 Animal Physiology 3
BIO/EVS 450 Animal Physiology Lab 1
BIO/EVS $483 \quad$ Vertebrate Natural History Lecture 3
BIO/EVS $484 \quad$ Vertebrate Natural History Laboratory 1
BIO/EVS $485 \quad 3$
BIO/EVS 486 Freshwater Ecology Laboratory 1
ATS/EVS 548 Introduction to Solar-Terrestrial Environment 3
BIO/EVS 487 Marine Ecology Laboratory 2
ATS/EVS 548 Introduction to Solar Terrestrial Ecology 3
BIO/EVS 549 Environmental Physiology 3
BIO/EVS 561 Entomology 4
BIO/EVS 571 Animal Behavior ..... 3
BIO/EVS 572 Animal Behavior Laboratory ..... 2
BIO/EVS 581 Evolution ..... 3
IV-Environmental Policy and Society (At least one course must come from Group B)Group A:
EVS/SOC 307 Demography: World Population Issues ..... 3
EVS/PLS 333 Environmental Politics and Policy ..... 3
ECO/EVS 353 Environmental Economics ..... 3
SOC/EVS 355 Environment and Society ..... 3
MGT/EVS 374 Management of Environmental Risk ..... 3
HIS/AMS/EVS 462 The Land in the American Experience ..... 3
Group B:
CHM 506 Environmental Chemistry and Natural Resources ..... 3
EVS 523 Environmental Toxicology ..... 3
EVS 541 Atmospheric Diffusion ..... 3
Total Area of Specialization Hours ..... 15
Support Courses
PHY 211, 212 General Physics I and II with Labs* ..... 8
MTH 245 Calculus I* ..... 4
Optional Support Courses
EDU 315 World Geography ..... 3
EVS/PLS 333 Environmental Politics and Policy+ ..... 3
ECO/EVS 353 Environmental Economics+ ..... 3
PHL/EVS 354 Environmental Ethics ..... 3
SOC/EVS 355 Environment and Society+ ..... 3
ATS 564/EVS 401 Statistics ..... 3
MTH 363
EVS 374 Management of Environmental Risk+ ..... 3
HIS/AMS/EVS 462 The Land in the American Experience+ ..... 3
EVS/ATS/NSC 533 Inadvertent Climate Modification ..... 3
Total Support Hours for Certificate ..... 18

* Required for all students
+ Cannot be used to fulfill both Area IV and Support Requirements. Note: Area IV students may use any advanced (non-core) natural science course(s) as elective support.

Special Courses: (These courses are available to all students in the EVS Program as additional electives. They do not substitute for any course requirements for the major).

| EVS 480 Environmental Science Internship | $1-3$ credits |
| :--- | :--- |
| EVS 493 Directed Independent Readings | $1-3$ credits |
| EVS 495 Directed Independent Study | $1-3$ credits |
| EVS 497 Directed Independent Research | $1-3$ credits |

NOTE: While the majority of the required and optional courses for the Certificate in Environmental Science are offered during the late afternoon and early evening hours, some are offered only during daytime hours. The student may find it necessary to take some day courses. Transfer hours are accepted; however, a minimum of thirty (30) semester hours of the certificate program must be completed at Creighton University.

For more information, call the University College Office, (402) 280-2424 or 1-800-637-4279.

## Certificate Program in Health Administration and Policy

A Certificate of Health Administration and Policy will be awarded to the students who successfully complete a total of 24-27 semester hours from the following courses:
Required Courses ( $\mathbf{1 2}$ hours)

| HAP 200 | Introduction to Health Administration |
| :--- | :--- |
| HAP/SOC | 215 Sociology of Health Care |
| HAP/COM | 390 Health Communication |
| HAP/PLS | 334 Public Policy of Health Care |

Management Focus (3 hours)
Take one of the following:
MGT 310 Managerial Process and Organizational Behavior
COM 314 Managerial Communication
PLS 331 Managing Public and Non-Profit Organizations
Finance or Law Focus (3 or6 hours)
Take one of the following:
ACC $201 \quad$ Principles of Accounting I
AND HAP 310 Health Finance and Budgeting
HAP 315 Law and Health Systems

## HAP Electives (6 hours)

Students have two options:
6 hours from other courses that count toward the HAP major (page 252), at least one of which must be at the 400 -level, OR 6 hours tools sequence consisting of ECO 203 Microeconomics and BUS 229 or SOC 314 (Statistics)

## Certificate Program in Human Resources Administration

A Certificate of Human Resources Administration will be awarded to the students who successfully complete a total of 27 semester hours from the following courses:

## Required Courses ( $\mathbf{1 8}$ hours):

COM 152 Principles of Communication Competence
COM 320 Leadership: Theories, Styles and Skills
COM 360 Organizational Communication Theories
COM 361 Interpersonal Communication OR
COM 362 Small Group Communication
COM 370 Human Resource Administration
COM 464 Organizational Training and Development
Select 9 hours from 300-level or above Communication Studies courses or other options as approved by major advisor.

## Certificate Program in Irish Literature and Culture

A Certificate of Irish Literature and Culture will be awarded to students who complete the following requirements, a total of 36 semester hours beyond CORE courses. Students complete the following:

## CORE Courses:

Six semester hours of basic literature requirement
One three-hour course in composition (ENG 150)
Students complete the following:
ENG 254 Writing About Literature
ENG 330 Introduction to Irish Literature
ENG 340 English Literature I: Medieval/Early Renaissance
ENG 341 English Literature II: Late Renaissance/Neo-Classical
ENG 342 English Literature III: Romantic/Victorian
ENG 509 Shakespeare

ENG 520 History of the English Language
ENG 532 The Irish Renaissance
ENG 533 Contemporary Irish Literature
Students complete three additional Irish literature courses, including one Irish Period or Genre course, one Irish Author course, and one Senior Seminar chosen in consultation with the major adviser.

## Certificate Program in Liturgy:

This certificate program in Liturgy is a program open to persons of all denominations who desire a curriculum with a solid theological base and practical application in liturgy. A Certificate in Liturgy will be awarded to participants who successfully complete the following requirements ( 25 semester hours):

## Required:

One class in New Testament THL 207, 208, 209, 210 or 212
One class in Old Testament THL 201, 202, 203 or 204
THL 250 Theological Foundations for Ethical Understanding
THL 491 Seminar in Liturgy/Ministry/Spirituality/Theology
THL 561 Finding God in Daily Life: Prayer \& Discernment
THL 338 The Eucharist: Sacrament of Unity or Disunity
THL 544 Christian Celebration: The Liturgical Year
THL 339 Theology of Church \& Sacraments
One of the following:
THL 325 Catholicism: Creed \& Question
THL 335 Jesus Christ: Yesterday \& Today

## Certificate Program in Mathematics

A Certificate in Mathematics will be awarded to students who successfully complete the following requirements, ( 30 semester hours).
MTH $245 \quad$ Calculus I
MTH 246 Calculus II
MTH 346 Calculus III

## Eighteen semester hours selected as follows:

Six semester hours from the following courses:
MTH 509 Discrete Structures
MTH 523 Applied Linear Algebra
or
MTH 529 Linear Algebra
MTH 581 Modern Algebra I
MTH 582 Modern Algebra II
Six semester hours from the following courses:
MTH 543 Numerical Analysis
MTH 545 Differential Equations
MTH 571 Linear Programming
MTH 591 Analysis I
MTH 592 Analysis II
Six semester hours from the following courses:
MTH 561 Mathematical Statistics I
MTH 562 Mathematical Statistics II
MTH 563 Mathematical Statistics III
MTH 573 Probabilistic Models

## Certificate Program in Ministry

This certificate program in Ministry is a program open to persons of all denominations who desire a curriculum with a solid theological base and practical application in church ministry. A Certificate in Ministry will be awarded to participants who successfully complete the following requirements ( 25 semester hours):

## Required Courses:

One class in New Testament
THL 207, 208, 209, 210 or 212
One class in Old Testament
THL 201, 202, 203 or 204
THL 250 Theological Foundations for Ethical Understanding
THL 491 Seminar in Liturgy/Ministry/Spirituality/Theology
THL 561 Finding God in Daily Life: Prayer \& Discernment
THL 392 Practicum in Ministry
THL 560 Theology of Ministry
Two of the following:
THL 325 Catholicism: Creed \& Question
THL 335 Jesus Christ: Yesterday \& Today
THL 339 Theology of Church \& Sacraments

## Certificate Program in Organizational Communication

(Communication Studies)
A Certificate of Organizational Communication will be awarded to the students who successfully complete a total of 27 semester hours from the following courses:

## Required Courses ( $\mathbf{1 8}$ hours):

COM 152 Principles of Communication Competence
COM 320 Leadership: Theories, Styles and Skills
COM 360 Organizational Communication Theories
COM 361 Interpersonal Communication OR
COM 362 Small Group Communication
COM 495 Special Topics in Communications Studies
COM 464 Organizational Training and Development OR
COM 463 Organizational Assessment
Select 9 hours from 300-level or above Communication Studies courses

## Certificate Program in Pre-Health Sciences

A Certificate in Pre-Health Sciences will be awarded to students who successfully complete a minimum of 24 hours chosen from the following courses:

| BIO 211 | General Biology: Molecular and Cellular (4 hours) |
| :--- | :--- |
| BIO 212 | General Biology: Organismal and Population (4 hours) |
| CHM 203, 204 | General Chemistry I and Lab (4 hours) |
| CHM 205, 206 | General Chemistry II and Lab (4 hours) |
| CHM 321, 322 | Organic Chemistry I and Lab (4 hours) |
| CHM 323, 324 | Organic Chemistry II and Lab (4 hours) |
| PHY 211 | General Physics I and Lab (4 hours) |
| PHY 212 | General Physics II and Lab (4 hours) |
| MTH 245 | Calculus I (4 hours) |
| Plus electives chosen from other courses recommended by the pre-health sciences |  |
| advisory committee. |  |

## Certificate Program in Public Relations

A Certificate of Public Relations will be awarded to the students who successfully complete a total of 24 semester hours from the following courses:
JMC 219 News Reporting
JMC 323 Principles of Public Relations
JMC $331 \quad$ Editing
JMC $339 \quad$ Case Studies in Public Relations
JMC $341 \quad$ Public Relations Writing
JMC $379 \quad$ Publication Design
JMC $483 \quad$ Public Relations Internship (6 semester hours)

## Certificate Program in Psychology

## Prerequisite:

Psychology 111 - Introductory Psychology is prerequisite to all psychology courses unless otherwise indicated.
A Certificate of Psychology will be awarded to students who successfully complete the following requirements: all courses in Group A, at least one course each from of Groups B-E, one additional course from Groups B-E, and three additional psychology courses, a total of 34 hours.
Group A
PSY 111Introductory Psychology
PSY 211 Introductory Statistics
PSY 311 Experimental Psychology Lecture
PSY 312 Experimental Psychology Lab
Group B
PSY 423 Tests and Measurements
PSY $424 \quad$ History and Systems of Psychology
Group C
PSY 431 Cognitive Psychology
PSY 434 Learning: Basic Processes
PSY 436 Sensation and Perception
PSY 437 Physiological Psychology
Group D
PSY 341 Infant and Child Development
Or
PSY 342 Adolescent and Adult Development
PSY $343 \quad$ Psychology of Personality
PSY $344 \quad$ Social Psychology
Group E
PSY 351 Abnormal Psychology
PSY 352 Health Psychology
PSY 353 Industrial Psychology

## Certificate Program in Spirituality

This certificate program in Spirituality is a program open to persons of all denominations who desire a curriculum with a solid theological base and practical application.

A Certificate in Spirituality will be awarded to participants who successfully complete the following requirements ( 25 semester hours):

## Required:

One class in New Testament
THL 207, 208, 209, 210 or 212
One class in Old Testament THL 201, 202, 203 or 204
THL 250 Theological Foundations for Ethical Understanding

THL 491 Seminar in Liturgy/Ministry/Spirituality/Theology
THL $561 \quad$ Finding God in Daily Life: Prayer \& Discernment
THL 544 Christian Celebration: The Liturgical Year
THL 575 Foundations of Christian Spirituality
Two of the following:
THL 325 Catholicism: Creed \& Question
THL 335 Jesus Christ: Yesterday \& Today
THL 339 Theology of Church \& Sacraments

## Certificate Program in Theology

This certificate program in Theology is a program open to persons of all denominations who desire a curriculum with a solid theological base.

A Certificate in Theology will be awarded to participants who successfully complete the following requirements ( 25 semester hours):

## Required:

One class in New Testament Thl 207, 208, 209, 210 or 212
One class in Old Testament Thl 201, 202, 203 or 204
THL 250 Theological Foundations for Ethical Understanding
THL 491 Seminar in Liturgy/Ministry/Spirituality/Theology
THL 561 Finding God in Daily Life: Prayer \& Discernment
Two of the following:
THL 325 Catholicism: Creed \& Question
THL 335 Jesus Christ: Yesterday \& Today
THL 339 Theology of Church \& Sacraments
Two 300-500 level electives chosen in consultation with advisor.

## Certificate Program in Visual Communications

A Certificate of Visual Communications will be awarded to the students who successfully complete a total of 21 semester hours from the following courses:
JMC $375 \quad$ Photojournalism I
JMC $379 \quad$ Publication Design
JMC 381 Computer Illustration
JMC 382 The Internet and World Wide Web Publishing
JMC $423 \quad$ Multimedia Design I
JMC $479 \quad$ Graphics Design Internship
JMC $455 \quad$ Projects I Communication

## OTHER PROGRAMS OF STUDY

Many of the courses required for the following programs may be completed at night:

## Pre-Master in Business Administration (MBA) Program

See page 164.

## Pre-Health Sciences Program

Certificate in Pre-Health Sciences. See page 155.
Predental and Premedical Programs. See page 114.
Prepharmacy Program. See page 116.
Pre-Occupational Therapy Program. See page 116.
Pre-Physical Therapy Program. See page 118.

## Teacher Certification

Consult with an advisor in the Department of Education, Room 106 in the Communication Arts Building, for information on certification/endorsement requirements. Telephone (402) 280-2820.

## INDEPENDENT STUDY PROGRAM

## Director—Dean Dickel

All students are eligible to register for correspondence courses in Creighton's Independent Study Program. The Independent Study Program offers students the opportunity for access to undergraduate general education courses developed by Creighton faculty members. Correspondence is the key to receiving the personalized instruction that is ordinarily given in the traditional college classroom. The Independent Study Program maintains the same high degree of instructional quality that is maintained in on-campus courses at Creighton.

The minimum course completion time is 12 weeks, and the maximum is six months from the date of enrollment. Tuition is $\$ 600$ per course, except for NUR 223 (2 credits), which is $\$ 400$. Textbook and supplementary course material costs are in addition to tuition. Independent Study Program catalogs are available in the University College Office, B-11, College of Business Administration, (402) 280-1253 or 1-800-637-4279. Students may register for an Independent Study Program course any time during the year.

## AVAILABLE COURSES

## ANT 111 Human Variation (3) (CORE D)

Focus on the basic concepts of anthropology. Covers the basics of the subareas of physical, cultural, and archaeological anthropology. Includes a look at human and cultural variation in terms of evolutionary adaptation. Course Writer: Suzanne M. Baker, Ph.D.

## ENG 120 World Literature I (3) (CORE B)

A chronological introduction to Western and non-Western literatures from the Ancient world through the Renaissance. This course juxtaposes Greek, Roman, English literature from the Old English, Middle English, and Renaissance periods with contemporaneous literatures from India, China, Japan, Middle-Eastern, and other non-Western cultures. Course Writer: Fidel Fajardo-Acosta, Ph.D.

ENG 121 World Literature II (3) (CORE B)
A chronological introduction to Western and non-Western literatures after the Renaissance to the present, with special units on 18th Century, 19th Century, 20th Century, and non-Western literatures. Works by and about women are incorporated throughout the course. The contemporary non-Western component places particular emphasis on African/African American and Latin American/Chicano literature. Course writer: Thomas Kuhlman, Ph.D.

## ENG 125 Introduction to Literature II: Fiction (3)

Examination of essays that discuss the short story as a literary form, its origin and development, and a wide sampling of stories, from early and traditional stories by Herman Melville, Nathaniel Hawthorne, and Edgar Allen Poe all the way to more modern works by contemporary writers such as Walker, Updike, and Beattie. Examination of some elements of the novel and how the elements of fiction are handled in one representative modern novel, John Steinbeck's "The Grapes of Wrath." Course Writer: Reloy Garcia, Ph.D. Revised by Hannah Doyle, M.A.

## ENG 150 Rhetoric and Composition (3) (CORE E)

Teaches skills of expressive, expository, and argumentative writing, focusing on prose essays and other prose forms (available in independent study and on-line formats). Course writer: Robert Wipple, Ph.D.

## HIS 101 The Modern Western World (3) (CORE B)

A survey of the evolution of the Western societies of Europe and North America from the 15 th Century to the present. Course writer: Dennis N. Mihelich, Ph.D.

## HIS 107 The Middle Eastern World (3) (CORE B)

A survey of developments in the Middle East from the 15 th century to the present through an examination of the region's peoples, religious, social and political institutions, and encounters with the West. P: HIS 101 or HIS 105. Course Writer: John C.M. Calvert, Ph.D.

## NUR 223 Nutrition (2)

Principles of normal nutrition applied to growth and maintenance of health at all ages with consideration of adequate individual and family diets. Course Writer: Deborah A. Cohen, M.M.S.C., R.D.

PHL 107 (205) Critical and Historical Introduction to Philosophy (3) (CORE B)
An introductory course in philosophy focusing on philosophical problems concerning the human person. Course approach is a combination of historical and problems. The historical part includes reading several philosophical classics. The problems part covers the relationship of man to the state, social justice, the mind-body problem, life after death, and existence of God. Course Writer: Eugene E. Selk, Ph.D.

## PSY 111 Introductory Psychology (3) (CORE D)

Introduction to the methodologies and basic concepts in the study of behavior. Course is intended to give the nonmajor an overview of the science of psychology while serving as a foundation for further study in psychology. Course Writer: Debra L. Schwieso, Ed.S.

## PSY 223 Child Psychology (3)

The psychology of the child from prenatal development to middle childhood. Covers the norms of physical and psychological development as well as the range of individual differences. Focus is on normal developmental issues, both theoretical and practical, rather than on abnormal child psychology. Course attempts to present new and current information, integrate this information with prior knowledge of the student, and encourage better observation of and interaction with children. Includes sources for continued study of children. Course Writer: Debra L. Schwieso, Ed.S.

## PSY 335 Marriage and Family Values (3)

Values clarification approach in exploring numerous value judgments that are made within the context of marriage and family living, e.g., decisions about dating practice, marriage partners, work allotment, leisure, child rearing. Course writer: Louis E. Gardner, Ph.D.

## THL 209 Life of Jesus (3) (CORE A)

Describing and understanding Jesus and the Jesus movement group (the "historical Jesus") from ca. 30 A.D. by means of traditions set down in writings a generation or more later. Course Writer: Bruce J. Malina, Ph.D.

## NONCREDIT OFFERINGS

University College provides the opportunity for interested persons to increase their knowledge and enhance their skills on a continuing education basis that is non-degree and not for credit. Many of these courses lead to a certification of the student's capabilities through structured programs in which he or she can earn a diploma or certificate.

## DEVELOPED PROGRAMS CONCERNING MINISTRY

## Noncredit Ministry Programs

Leadership in Family Ministry Training Program (LFM)—This noncredit training program was co-developed in 1982 with the Family Life Office of the Archdiocese of Omaha. It is designed to develop, educate, train and sustain lay and religious leaders so that they may better share responsibility of ministry to families.

## Credit Ministry Programs

Certificate/Diploma Program in Liturgy, Ministry, Spirituality, or Theology, in Omaha and Norfolk, Nebraska. These 25 -credit programs which may also be taken for audit, were co-developed in 1985 with the following Offices of the Archdiocese of Omaha: Family Life, Pastoral Development, Religious Education, Religious Consultation Center, and Catholic Charities. They are open to persons of all denominations who desire a curriculum with a solid theological base and practical application in ministry.

Certificate/Diploma Program in Liturgy, Ministry, Spirituality or Theology, in West Des Moines, Iowa. These 25 -credit programs, which may also be taken for audit, were co-developed in 1986 with the St. Joseph Education Center in West Des Moines, Iowa. They are taught at the St. Joseph Education Center by theology professors from Creighton University and resource theologians from the St. Joseph Education Center in West Des Moines, Iowa.

Certificate/Diploma Program in Ministry in Omaha, Nebraska, affiliated with the Youth Ministry Certificate of the Office of Religious Formation, Archdiocese of Omaha, in 1988. The Youth Ministry Certificate can be taken for credit through University College of Creighton in cooperation with the Certificate/Diploma Program in Ministry. The courses are presented especially for persons working with youth and young adults. Either the Office of Religious Formation (554-8493) or University College (280-2424) can be contacted for further information.

## NON-PROFIT MANAGEMENT CERTIFICATE PROGRAM

The Midlands Institute for Non-Profit Management was developed as a joint effort with the University of Nebraska at Omaha to provide a week-long training experience each July for non-profit executives, managers, staff, board members and volunteers from throughout the Upper Midlands.

Participants completing this program will receive a Certificate in Non-Profit Management.

## Outreach Programs

University College has established several off-campus programs, bringing the resources of the university to other Omaha metropolitan areas, to several different states, and to other countries.

The Ministry Programs in Norfolk, Nebraska and Des Moines, Iowa are examples of Creighton's University College Outreach Programs.

Discipline With Purpose courses are offered to teachers and parents in many parts of the United States.

These outreach programs offer students the opportunity to participate in the Creighton tradition and experience the excellence of Creighton faculty without coming on campus for courses.

## TUITION FOR FALL AND SPRING EVENING CLASSES

University College students are assessed a special tuition rate that is two-thirds of the regular rate for the academic year for up to six hours of night classes per semester.

For persons who were enrolled in University College in the fall of 1983 or spring of 1984, and who are eligible for the University College Scholarship, the tuition is fifty percent of the regular rate for up to six credit hours.

Tuition for undergraduate classes that are not under the sponsorship of University College (i.e., day classes), or for more than six and less than twelve hours of classes, is assessed at the regular per credit-hour rate. Students who enroll in twelve to eighteen hours of classes are assessed full-time tuition.

Other fees and current tuition rates are published each semester in the Schedule of Classes, which lists both day and evening (University College) classes.

## SPECIAL TUITION RATES FOR TEACHERS, SCHOOL ADMINISTRATORS, PERSONS IN MINISTRY, PARENTS, AND HIGH SCHOOL STUDENTS

## Special Tuition Rate for Teachers and School Administrators

Teachers and school administrators who are employed full time in public or private elementary or secondary schools and enroll as part-time students at Creighton may receive a tuition discount of $50 \%$ for three semester hours of course work each semester (fall and- or spring) and unlimited hours in summer. This discount may not be taken in addition to the regular University College discount. Students must complete an "Application for Teacher Improvement Remission" form verifying full-time employment status each term. These forms are available in the Business Office (280-2707) or University College (280-2424).

## Special Tuition for Post-Baccalaureate Elementary Education Majors

Persons who hold a bachelors degree with at least a 2.5 QPA who are interested in becoming elementary teachers, are eligible for a $50 \%$ tuition discount for all major requirements. This discount may not be taken in addition to the regular University College discount. Students must be accepted into the major as well as accepted as certificate-seeking students to the University. Contact University College for an information packet (800-637-4279 or 402-280-2424 or the Education Department at Creighton University for more information about major requirements 402-280-2820).

## Special Tuition Rate for Persons in Ministry

Persons who work on a consistent basis in certain ministries may receive a tuition discount of $50 \%$ off the regular rate for up to nine semester hours of Theology courses each semester. This discount may not be taken in addition to the regular University College discount. An application for remission must be completed each semester. Contact University College for information on specific criteria.

Contact the Graduate School, (402) 280-2870, for information on the special rates for graduate courses.

## Special tuition rate for Parents of Creighton Undergraduate Students

Parents of full-time Creighton University students in the College of Arts \& Sciences, College of Business Administration, and School of Nursing are eligible to take one day or evening undergraduate course on a space-available basis each semester for $\$ 150$ plus fees. Books and supplies are extra. Contact University College at (402) 2802424 or 800-637-4279 for more information.

## Special Tuition Rate for High School Students

Academically eligible high school juniors and seniors may take a Creighton University undergraduate course at the special rate of $\$ 75$ per credit hour. There is an additional cost for the University fee and textbooks. Students must submit a letter of recommendation from a high school guidance counselor, or teacher in the academic area in which they want to study. More information can be obtained by calling (402) 280-2424 or 800-637-4279.

## FULL-TIME, PART-TIME STATUS

Undergraduate students are considered part time when registered for eleven or fewer semester hours. Students registering for twelve or more credit hours in a semester are full-time students and are subject to regular full-time tuition and fee rates. Full- or part-time status is determined by the total semester hours of credit assigned to the courses for which a student registers in a given term, including courses being audited, but excluding Independent Study Program courses.

## FINANCIAL AID

University College students who have been accepted into degree or certificate programs and register for six or more semester hours each semester may be eligible for Federal grant and loan programs. Financial Aid information can be found on pages 5478 of this Bulletin.

## VETERANS' BENEFITS

Courses for college credit in all schools and colleges of the University are approved for veterans' education and training for degree-seeking students. Veterans' service is provided by the Registrar's Office. Veterans and others eligible for educational benefits administered by the Veterans Administration are given assistance to assure proper and advantageous use of their benefits and to simplify and expedite transactions with the government. A student who intends to apply for veterans' benefits must also apply for admission to University College as a degree-seeking student and have official transcripts sent to University College from all prior colleges or universities attended. (Application for Admission forms are available in the Dean's Office.) Questions regarding veterans benefits should be directed to (402) 280-2701.

## VOCATIONAL REHABILITATION

Vocational rehabilitation provides handicapped and disabled persons financial assistance to attend college to improve their skills and assist them in obtaining employment. In most states, vocational rehabilitation clients must first apply for Federal assistance prior to receiving assistance through vocational rehabilitation. In Nebraska, contact the state office in Lincoln, 301 Centennial Mall South, Lincoln, NE 68509. (402) 471-2961.

## EMPLOYEE BENEFITS

Many employers offer tuition assistance plans for employees who are enrolled in credit courses. Persons who are employed should contact their personnel offices to determine if such plans are available.

## TUITION DEFERMENT LOAN PROGRAM

Creighton Federal Credit Union offers the Tuition Deferment Loan Program to University College students who are eligible for their employer's tuition reimbursement program. A tuition deferment loan allows a student to borrow the amount of tuition and postpone repayment of the loan until three weeks after the last day of class. Loan applications are available in the University College office, or by calling the Credit Union at (402) 341-2121. Applications can also be made via the credit union's web site at www.creightonfederal.org.

## OTHER AWARDS AND SCHOLARSHIPS

## Dean's Merit Awards

Realizing that many academically strong, working adults with the desire to attend University College-even those with some partial assistance from other sourcesmay find the tuition cost-prohibitive, the college provides Dean's Merit Awards. In addition to financial need, other considerations for these awards are the applicant's (1) academic potential, (2) work-related experience, and (3) desire to develop new career skills. Awards vary in value from $\$ 100$ to $\$ 700$ per term. Dean's Merit Awards are renewable. Other requirements are that applicants be enrolled in a degree or certificate program and complete the special application by May 1 for the summer sessions, August 1 for the fall semester and by December 15 for the spring semester.

## The LeAnne M. Iwan Scholarship

This scholarship is available to University College students who have applied and been accepted in a certificate or degree program in the department of Journalism and Mass Communication. The Iwan Scholarship is funded by the Midlands Business Journal and is available for one course during each of the three terms: Fall, Spring, and Summer Sessions. The value of the scholarship will be the approximate cost of one University College course as determined by the Dean. The scholarship may be renewed upon application. Eligibility criteria include academic performance in secondary and/or post-secondary institutions, involvement in community or university service, and financial need. Application deadlines are August 1 for the Fall semester, December 15 for the Spring semester, and May 1 for Summer Sessions.

## Other Scholarships

In addition to the grants, loans and scholarships listed here, there are several scholarships funded by various organizations and other private and University endowed scholarships. A financial aid brochure which lists these and other sources is available in the University College Office.

## PREPARING FOR GRADUATE STUDY

Many Creighton students continue their education on the graduate level. Students considering graduate study at the master's or doctoral levels should consider the following points. (Also see "Pre-Professional Study.")

Graduate programs often require foreign language proficiency; the traditional requirement is one language at the master's level and two at the doctoral level. The choice of particular language should relate to the research interests of the student's graduate program. Graduate departments in some fields allow students to substitute statistics and computer programming for foreign language skills.

Graduate study requires that students master the tools and techniques of research in a field. Graduate admissions committees look for evidence that applicants have demonstrated creativity and skill in independent study.

Admissions and financial aid decisions are usually based on three main pieces of information: the student's undergraduate record, particularly in the major field of interest; scores on standardized examinations (the Graduate Record Examination or Graduate Management Admissions Test); and recommendations from the student's faculty members.

Advice about graduate study in particular fields and the choice of an appropriate graduate school should be obtained from a student's major adviser.

## UNDERGRADUATE PREPARATION FOR M.B.A. PROGRAMS

## Foundation Courses for Graduate Study in Business

Graduate programs leading to the degree of Master of Business Administration (M.B.A.) are designed to give a broad overview of the executive world of business. An undergraduate degree in business is not a prerequisite to an M.B.A. program; in fact, many M.B.A. students hold degrees in the arts and sciences, technical fields or business.

Although a degree in business is not a prerequisite for admittance, a minimum number of foundation courses in business are necessary. Successful completion of the courses listed below introduces a student to the fundamentals of the six functional areas of business: accounting, economics, finance, marketing, management, and systems. The following courses or their equivalents are required for students seeking admission into M.B.A. programs:

ACC 201 and 202 — Principles of Accounting I, II
BUS 201 - Legal Environment of Business
BUS 229 - Statistical Analysis
ECO 203 and 205 - Introductory Micro- and MacroeconomicsEconomic Analysis and Policy, can be substituted for ECO 203 and 205
FIN 301 - Managerial Finance
MGT 301 - Managerial Process and Organizational Behavior
MGT 385 - Production and Operations Management
MIS 353 - Management Information Systems
MKT 319 - Principles of Marketing
MTH 141 - Applied Calculus or MTH 245 Calculus I
The M.B.A. foundation courses provide an excellent background in business administration for students in Arts and Sciences without compromising the liberal arts content of a curriculum. (Also see "Certificate in Business for Arts and Sciences students.")

Questions concerning the M.B.A. program at Creighton should be directed to Dr. Jack Krogstad, Associate Dean, College of Business Administration, Creighton University, Omaha, NE 68178. Telephone: (402) 280-2620.


## COURSES OF INSTRUCTION

## INTRODUCTION

The courses of instruction are listed here by department (subject) or program in alphabetical order. Hence the offerings of the College of Arts and Sciences, the College of Business Administration, and the School of Nursing are intermingled. Courses offered by the College of Business Administration are listed under Accounting, Business, Economics, Finance, Management, Management Information Systems, and Marketing. Courses offered by the Division of Allied Health Professions are listed in the School of Pharmacy and Allied Health Professions Bulletin. With the exception of Nursing courses and a few courses indicated as being offered by the School of Medicine, all other courses listed in this issue of the Bulletin are offered by the College of Arts and Sciences.

Three-letter symbols are used to designate the different departments (subjects), for example, ACC for Accounting, CHM for Chemistry, ENG for English, etc. These symbols are used to identify the subject area of course offerings in schedules, grade reports, transcripts of records, etc.

The courses listed in this Bulletin are a statement of the plans of the various departments covering the period from the 2002 Summer Session to the Second Semester of 2003. Also included, as a matter of record, are courses that were given during the period covered by the last issue of the Bulletin for the College of Arts and Sciences, College of Business Administration, and School of Nursing but did not appear in that issue. A special bulletin for the courses offered in the Summer Session is published early each year. The University reserves the right to modify or to cancel any of the courses listed.

## COURSE NUMBERING SYSTEM

Courses appearing in this Bulletin are numbered according to the following system:

| 001-099 | Pre-college level courses (not applicable to a degree). |
| :--- | :--- |
| 100-299 | Lower-division courses (when applicable, 100-199 freshmen; <br> 200-299 sophomores) undergraduate credit only. 300-499 <br> Upper-division courses (when applicable, 300-399 junior; 400- |
| 499 senior) undergraduate credit only. |  |

The credit value of each course is included with its description. Unless indicated otherwise, the class meetings per week normally equal the number of semester hours of credit shown for the course. For example, for a three-semester-hour course there are three fifty-minute class periods or their equivalent held each week of the semester. During summer sessions, class periods are held five days a week and the class periods are lengthened; hence, an equivalent amount of class time is devoted to a course whenever it is given.

## KEY TO SYMBOLS

The standard course description includes a variety of symbols or abbreviations indicating essential information. The following is a sample course description with the individual symbols explained in the order in which they appear in that description.

## BIO 523 Environmental Toxicology (3) II 1994-95

Principles of environmental tolerance, bioenergetics and nutrition, homeostasis, and toxicology and disease will be developed and related to the organismal and population levels and to comparative responses to environmental disturbance. The course uses a reading/discussion format. 3R. P: BIO 211 \& 212.

BIO | Department (subject or discipline) abbreviation. Standard three- |
| :--- |
| letter symbols are used throughout the University to identify the |
| subject fields. |

Environmental Toxicology-Course Title
(3) Credit value of the course in terms of number of semester hours of credit.
II Term offered. I indicates fall semester; II indicates spring semester; S indicates summer session; PS indicates pre-session;
W indicates winter interterm; M indicates mini-semester.
1994-95 Year in which course offered. If no year designation is given, course is offered each year during the term(s) indicated, unless the symbol OD (on demand) appears indicating that the course is offered only when there is sufficient demand.
AY Alternate year, indicating that the course will be offered every other year after the term and year shown.
$\mathrm{S}(\mathrm{OD}) \quad$ Indicates the course is also offered in the summer session on demand.
ENY, ONY Indicate that course is offered in term shown of even-numbered years (ENY) or odd-numbered years (ONY).
3R, 3L Class structure. R, L, S, C, D, Q indicate recitation lecture, laboratory, studio, conference, discussion, quiz. Hence, 3R, 3L indicates three hours of lecture-recitation and three hours of laboratory per week. For courses consisting of lecture-recitation periods only, the number of class hours per week, unless indicated otherwise, is the same as the credit value of the course and is not specified in the course description.
P Prerequisite: the preliminary requirement that must be met before the course can be taken. When prerequisites are set forth in the introductory departmental statements preceding the course listings, they apply as indicated even though not repeated with the individual course descriptions.
CO Corequisite: a requirement, usually another course, that must be completed in the same term.
DC, IC DC, department consent, and IC, instructor consent, signify that a student must have the permission of the department or instructor in addition to or in lieu of other course prerequisites.
NOTE: Not all of the foregoing information may be noted in any individual course.

## ACCOUNTING (ACC)

Professors Krogstad and Raval; Associate Professors Flinn, Lewis, Purcell, and Shimerda.
Requirements for Accounting as the Field of Concentration - see page 126.

## ACC 201 Introduction to Financial Accounting (3) I, II, S

The course includes a thorough discussion of the fundamental principles of financial accounting with an emphasis on the corporate form of a business entity. These principles are studied in connection with financial accounting systems, and are taught with the use of assigned problems and questions. Information technology and various other means are used for problem solving and to study the applications of the basic principles as they relate to financial statement preparation and understanding. P: So. stdg.

ACC 202 Introduction to Managerial Accounting (3) I, II, S
The course includes a thorough discussion of the fundamental principles of managerial accounting with an emphasis on traditional and modern cost measurement, recording, and reporting systems to support managerial decision making. Specific managerial accounting topics covered include cost and revenue classification approaches; planning and control techniques, including operational budgeting; cost behavior analysis; cost-volume-profit analysis; and product costing, including activity-based costing. Also included in the course is coverage of the statement of cash flows, financial statement analysis, and individual and corporate income taxes. Information technology and various other means are used for managerial problem solving. P: ACC 201; So. stdg.
ACC 301 Fundamentals of Income Taxation (3) OD
This course provides an overview of the federal income tax system. It includes an analysis of the individual and corporate tax systems including recognition of tax issues, tax return preparation, and basic tax planning. Coverage includes general concepts of gross income, deductions and credits, property transactions, capital cost recovery provisions, tax impact of choice of business entity with particular emphasis on small businesses and methods of tax accounting.
This course is not open to accounting majors. P: Jr. stdg.
ACC 313 External Financial Reporting Issues (3) I, S
The course involves an intermediate study of contemporary accounting theory and practice. Emphasis is placed on understanding the four financial statements presented in an audited set of financial reports, including an in-depth examination of earnings per share and the statement of cash flows. Financial accounting standards and practices related to cash, receivables, and inventory are examined in detail. The functions, nature, and limitations of accounting as expressed in professional literature are analyzed. Skills for assessing and solving problems in unstructured business settings are introduced in the course. P: Jr. stdg. and grade of C or bettter in ACC 202.

ACC 315 Managerial Accounting for Decision Making (3) I, II
The course includes a study of cost and managerial accounting issues, including costing systems, cost-volume-profit analysis, operational budgeting, and cost allocation. The course highlights the importance and significance of cost data for management decision making. Current topics and cost accounting techniques used in industry and the private business sector are presented. P: ACC 202; Jr. stdg.
ACC 319 Financial Accounting and Reporting Standards (3) II, OD
The course involves an in-depth study of the theory and concepts of accounting with the emphasis placed on corporations. Financial accounting standards and practices related to fixed assets, current liabilities, investments in securities, stockholders' equity, and leases are examined in detail. Financial accounting standards and practices for governmental entities are also studied in depth. The interpretation and application of relevant professional literature, including accounting pronouncements, to specific business situations are stressed. The means of analyzing and interpreting accounting data, including financial reports, is also presented in the course. P: ACC 313; Jr. stdg.

ACC 343 Federal Tax Accounting I (3) I
This is an introductory course in federal income taxation. The emphasis is placed on technical rules, underlying theory, and applications, with primary coverage of the concepts of income, deductions, tax entities, and property transactions. Greater emphasis is placed on income
taxes for individuals than for corporate entities. A tax planning approach is integrated throughout the course, and tax research methodology is introduced. P: ACC 202, MIS 353; Jr. stdg.

## ACC 366 Accounting Internship (3) I, II

The course is designed to provide students with practical accounting experience by applying accounting concepts and technical skills learned in the classroom. It requires 150 hours with an employer, designated class meetings, written assignments, and oral presentations. The College of Business Administration solicits internships from local and national employers and agencies. Students must submit a current resume and application one semester prior to participation in the course. Placement will be based on a) an interview with the sponsoring employer, b) relevance of the internship to the students' accounting course work, and c) approval of the faculty coordinator. The course is pass/fail and may be taken only once. Enrollment is limited. P: Second semester Jr. or higher stdg.

ACC 377 Accounting Information Systems (3) II
An introduction to the design and use of computer-based information systems in accounting. Topics addressed include computer-based accounting systems, systems development, accounting cycles, and internal controls in and auditing of computer-based systems. P: ACC 202, MIS 353; Jr. stdg.

## ACC 423 Auditing (3) I

This course provides an introduction to the auditing profession, an overview of the auditing process, and an orientation to the tasks and procedures involved in an audit. Emphasis is placed on analytical thinking, the exercise of judgment, the evaluation of risks and controls, and how to add value to clients. Ethical issues and the expanding role of assurance services are considered. P: ACC 313, 315; Sr. stdg.

ACC 491 The Financial and Accounting World: A Campus and Travel Course (3) I or II
A course designed to provide students with on-site understanding of accounting and financial processes to complement campus-based study of the same topics. The course includes up to 20 hours of on-campus study prior to the travel portion of the course that will comprise of up to 30 hours of study with experts in the field. The travel portion of the course may involve various destinations. P: Sr.stdg; six hours of upper-level accounting courses.

## ACC 493 Directed Independent Readings (1-3) OD

This is a directed readings course that investigates current developments in accounting theory and/or practice. The course permits individual students to pursue areas of interest within the field of accounting in greater depth than is covered in the normal curriculum. It also permits a student to do independent research on a specialized topic not ordinarily treated in regular course offerings. P: Sr. stdg; DC and Dean's approval.

## ACC 516 Special Managerial Accounting Issues (3) OD

The course covers advanced managerial accounting topics, such as capital budgeting, management control systems, and activity-based costing and activity-based management. It deals with the need to adapt traditional management accounting methods as changes take place in the new business environment. The sources of change include the continued movement away from manufacturing and into the service industry, the globalization of business, information technology, and the need for more nonfinancial measures of evaluation. P: ACC 315; Jr. stdg.

## ACC 521 Advanced Accounting (3) II

The course involves the study and application of financial reporting concepts to specialized accounting problems and cases, including accounting for business combinations, consolidated financial statements, nonprofit entities, and entities operating in the international environment. The course also includes the in-depth study of specific corporate financial accounting standards and practices related to accounting for income taxes, long-term liabilities, dilutive securities, long-term investment in bonds, and accounting changes. The means of analyzing and interpreting accounting data is also emphasized in the course. P: ACC 315, 319; Sr. stdg.
ACC 538 International Accounting (3) I
An overview of accounting issues faced by multinational firms. The course will focus on the challenges accountants and managers face when organizations produce, market or provide services in foreign cultures. P: ACC 202; BUS 256.

An advanced consideration of federal taxation concepts relating to corporations, partnerships, estates and trusts, as well as consideration of wealth transfer taxes. Emphasis is on recognition of fact patterns producing taxable events and on planning to minimize taxes. P: ACC 343; Jr. stdg.

## ACC 579 Seminar in Accounting (3) II OD

Exploration and analysis of selected problems and issues in the accounting area of today's environment. Course content changes from semester to semester. P: ACC 201, 202; Sr. stdg.
500 -series courses are open to both undergraduate and graduate students; however, additional graduate level work products (papers, case presentations, planning projects, etc.) are required of graduate students in these courses. Graduate-level courses (600-700 series courses open only to graduate students) that are offered by the Department of Accounting are listed in the Graduate School issue of the Creighton University Bulletin under the heading Master of Business Administration.

## AFRICAN STUDIES (AFS)

An interdisciplinary program leading to a co-major.
Professor Wunsch (Program Director), Associate Professors Welch and Chiwengo.

## African Studies as a Co-Major

Completion of the co-major in African Studies requires completion of: AFS/BKS/HIS 106; AFS/ BKS/PLS 311; AFS/ANT/BKS 342; AFS/BKS/ENG 390; and twelve additional hours of courses included in the African Studies program.

AFS 106 The African World (3) I II (Same as BKS/HIS 106)
AFS 311 Politics of Africa (3) AY (Same as BKS/PLS 311)
AFS 342 Peoples and Cultures of Sub-Saharan Africa (3) AY (Same as ANT/BKS 342)
AFS 347 Peoples and Cultures of Africa and the Middle East (3) AY (Same as ANT/BKS 347)
AFS 356 Christianity in Africa (3) OD (Same as BKS/THL 356)
AFS 388 Origins of Modern Africa (3) AY (Same as BKS/HIS 388)
AFS 390 Introduction to African Literature (3) (Same as BKS/ENG 390)
AFS 398 Literature of Francophone Africa (3) II (Same as BKS/ENG 398)
AFS 400 Seminar in African Studies (3) OD
Seminars offered on special topics related to African Studies. May be repeated under different subtitles.

AFS 484 Nationalist Movements in Colonial Africa (3) II (Same as BKS/HIS 484)
AFS 485 Society and Belief Systems in Africa (3) II (Same as BKS/HIS 485)
AFS 487 History of West Africa (3) OD (Same as BKS/HIS 487)
AFS 489 Southern Africa: The Politics of Race (3) OD (Same as BKS/HIS 489)
AFS 493 Directed Independent Readings (3) OD
Individualized program of reading in an area of special interest under the direction of a faculty member. P: AFS coordinator consent.

AFS 495 Directed Independent Research (3) OD

## AMERICAN STUDIES (AMS)

Professor Le Beau (Coordinator). An interdisciplinary program.

## The Field of Concentration

A major in American Studies consists of 30 semester hours in American Studies distributed as follows: AMS 300; at least two of the following seminars: AMS 301, 302, 303; a minimum of 18 hours in a topical area of concentration; AMS 491.

Supporting Courses: At least 12 semester hours of course work arranged with and approved by the Program Coordinator from one or more of the other departments of the College of Arts and Sciences.

## American Studies as a Co-Major

For those students who are majoring in another discipline, but who wish to have a co-major in American Studies, the AMS concentration requires AMS 300; at least two of the following seminars: AMS 301, 302, 303; a minimum of 12 hours in a topical area of concentration; and AMS 491.

## AMS Major Leading to a Social Science Field Endorsement for Secondary Education

AMS majors studying to become secondary school teachers may earn a social science field endorsement that qualifies them to teach history and a variety of social science classes. The endorsement requires completing a state-regulated number of hours in history and other social sciences. See the AMS Coordinator or the Secondary School Adviser in the Department of Education for a handout that lists the actual course distribution.
Criteria for acceptance into the major or co-major:
Successful completion of AMS 300.
AMS 101 An Introduction to the United States (3) I
An introduction to American cultures, society, politics, and economics for foreign students. P: AMS Coordinator's approval.
AMS 300 Introduction to American Studies (3) I
An introduction to the field of American Studies. Students will be provided with a history of American Studies; consider its methodologies; be introduced to a sampling of subjects in which students of American Studies have been particularly interested; and read the classic, or seminal, works in the field. P: So. Stdg.
AMS 301 American Studies Seminar: The American Culture (3) AY
Comprehensive study of the mass culture of the United States, including past and present, low brow and high brow, mass media and regional differentiation, fads, tastes and values. P: So. stdg.

AMS 302 American Studies Seminar: The American Character (3) AY (Same as HIS 302, ANT 302)

Comprehensive study of the values, attitudes, and characteristic behaviors of the American people. How and why are Americans different from others? What is the national character? What historical forces have formed this character? P: So. stdg.

AMS 303 American Studies Seminar: The American People (3) II AY (Same as HIS 303) Comprehensive study of the various ethnic and social groups that compose the American people. Study of Native American groups and the various immigrants, and how they have interacted culturally and biologically to produce a new people. P: So. stdg.

AMS 310 Religion and Contemporary American Society (3) II ENY (Same as SOC 310)
An examination of religious beliefs, behaviors, and structures as they relate to contemporary America. In addition to studying established religious forms, attention is also given to the public controversies connected with religion and to new religious movements and trends. P: Jr. stdg.
AMS 312 Mass Media and Modern Culture (3) OD (Same as COM 312, ENG 312)
Examination of the role of film, television, and print media in American life. P: Jr. stdg.

AMS 317 Philosophy of Sport (3) OD (Same as PHL 317)
Philosophical examination of the nature, meaning, and significance of sport, with special emphasis onF the relationships among sport, play, and game. Investigation of ethical issues in sport, including sportsmanship, cheating, drug-testing, sexual equality, competition, and winning. Treatment of the relation of sport to social-political and aesthetic issues. P: PHL 107 or 109, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.

AMS 318 Gender in American Society (3) I (Same as SOC 318)
Comprehensive examination of the forces shaping the position and behavior of women and men in modern American society. How and why do these positions and behavior differ? What are the consequences of these differences? Emphasis on gender as enacted across the spectrum of multicultural diversity in American society, with some comparison to other societies. P: Jr. stdg.

AMS 327 Minority Politics in America (3) OD (Same as PLS 327)
Explores the political experience of American racial and ethnic minorities with particular attention to the experience of black Americans. Includes review of roots and patterns of unequal treatment of minorities, tactics and strategies used to attack these patterns, and contemporary situation. Particular attention will be paid to the tension between integrationist and self-determination strategies. P: So. stdg.
AMS 328 Mass Media in American Politics (3) AY(Same as PLS 328)
Examination of the inter-relationships among the media, the mass public and government. The role of the media as a channel between citizens and government is considered both in political campaign settings and in day-to-day government. P: PLS 121 or So. stdg.

AMS 329 American Literature/American Identity (3) II (Same as ENG 329)
Analysis of the treatment of the American identity as it is represented in American literature of the colonial period to the present. P: ENG 120, 121.
AMS 333 Federal Indian Policy and Law (Same as NAS/SWK 333)
This course investigates the relationships between Native Americans and the Euro-American in terms of how the Natives were perceived and the impact this has had on Colonial and Federal policies relating to Native populations. Emphasis is on the historical, political and cultural aspects of the relationship.
AMS 339 Public Policy and Poverty in the United States (3) AY (Same as PLS 339, SWK 339)
Government policies and programs affecting the poor in the United States. Issues include various elements of welfare programs and policies, entitlement programs such as Medicare and Social Security, problems of intergovernmental activity in administrating social welfare. Examination of various critiques of social welfare policy and a review of reform proposals. Role of organized interests and public support relative to programs affecting the poor. Skill development includes policy formulation and analysis. P: PLS 121 or So. stdg.
AMS 341 American Cultural Minorities (3) I (Same as ANT 341, BKS 341, SOC 341)
Determinants and consequences of prejudice and discrimination; race, ethnocentrism, religious conflict, class structure. Consideration also given to proposed strategies for reducing inter-group tension. P: Jr. stdg.
AMS 345 Sport in American Culture (3) OD (Same as ANT 345)
A look at how American cultural norms, values, and beliefs are reflected in and are influenced by sport. Included will be issues of basic cultural values and ideology, racial and ethnic groups, gender, and the role sport plays in American culture. P: Jr. stdg.
AMS 351 Comparative American Character (3) AY (Same as HIS 351)
Study of political and social values projected by contemporary societies of the United States, Canada, and Latin America; how and why they differ from each other; is there a common American value system? P: So. stdg.
AMS 359 The City in United States History (3) OD (Same as HIS 359)
This course examines the development of urban areas in teh United States during the 19th and 20th centuries. Of particular concern are the elements of urban architecture, economics, politics, demographics, and violence. To go beyond the generalizations of the assigned readings, the city of Omaha will be used as a laboratory for investigating these themes in a spicific setting. P: So. stdg. of the political processes whereby minorities have influenced the formulation and implementation of policy and governmental responses to demands for equal treatment. P: So. stdg.

AMS 384 History of American Architecture (3) II 1994-95 (Same as ART 384)
A survey of the most important works of major architects from the Colonial period to the present. P: So. stdg.

AMS 395 Selected Topics (3) OD
Course designed for the development of a relevant class of interest to the program and suited to the special-interest, one-time offering. An example of a topic is History of the American City. P: Jr. stdg.; AMS coordinator consent.

AMS 400 Topical Seminar in American Studies (3) OD
Seminars offered on special topics related to American Studies. Topics vary from semester to semester. May be repeated under different subtitles. P: Jr. stdg.
AMS 426 The West of the Imagination: Art, History and Myth of the American West (3) OD (Same as SRP 426)
This is an interdisciplinary course that compares the West of American history to the West of popular culture. It will examine the history of the frontier and the West and study their impact on American culture. The course begins with the mixing of European, African, Mexican, Asian and Indian cultures in the late 19th century in the trans-Missouri West and culminates with an analysis of the current state of affairs in that geographic area. P: Sr. Stdg.
AMS 432 Democratic Theory (3) I OD (Same as PLS 432)
Major themes and thinkers on the role of government and the nature of a democratic political culture. Using both historical and contemporary materials, the course explores issues such as popular control, public participation, local autonomy, individualism, political liberty, and variations in American political ideology. P: PLS 101 or 121 or Jr. stdg.

AMS 437 Religion and Public Life in the United States (3) OD (Same as PLS 437)
This course transcends the designation "church and state" because it considers the noninstitutional behavior of religious individuals in groups, and their impact on our public life far beyond that of government. P: PLS 121 or IC.

AMS 460 The History of Women in the United States (3) OD (Same as HIS 460)
The economic, social, and political status of women in the United States from colonial times to the present. Concentration on four major topics: the family, the work place, the community, and the feminists movements. An integral part is the examination of the traditional roles of women in society as well as changes in those roles. P: So. stdg.

AMS 462 The Land in the American Experience (3) (Same as EVS 462, HIS 462)
This course serves as an introduction to American environmental history, whereby students will gain a better appreciation of the problems of modern human interaction with the environment. P: So. stdg.

AMS 469 Ethnohistorical Approaches to Native American Cultures (3) II AY (Same as ANT/NAS 469) This course's approach is ethnohistorical, combining the disciplines of history and anthropology to obtain multiple perspectives on the historical interactions between native and non-Native peoples. We will research historical and cultural topics concerning both Native and Euroamerican groups from the time of European incursion into North American to the present. The result of this course will be a final research paper on some theme in the history and culture of Native peoples. P: So. stdg.

AMS 482 Race in America: Idea and Reality (3) OD (Same as BKS/HIS/PLS/SRP 482)
An examination of the idea and reality of race during key phases of U.S. history, with an emphasis on the contemporary situation. To understand the multiple meanings and experiences of race, the course draws on sources from science, literature, law, and philosophy. P: Sr. Stdg.

AMS 491 Senior Seminar (3) II
A research seminar required of all American Studies majors and co-majors. P: Sr. AMS major or co-major.

Course designed to allow an individual student with an interest in a particular area to pursue it under the direction of a willing faculty member. P: AMS coordinator consent.

AMS 497 Directed Independent Research (3) OD
Course designed to allow an individual student with an interest in a particular area to pursue it under the direction of a willing faculty member. P: AMS coordinator consent.
AMS 585 American Studies Internship (3) I, II, S
A supervised on-the-job experience at governmental or private agencies in applying American Studies knowledge and skills to cultural resources management; museum, library, and/or archival work; historic preservation; and other areas. P: AMS major; Jr. stdg.; DC.
The remainder of the American Studies courses may be taken from the United States oriented classes offered by the cooperating departments of Anthropology, Art, Communication Studies, Economics, English, History, Journalism and Mass Communication, Philosophy, Political Science, Sociology, Theology, and Theatre. See the AMS Coordinator for a list of certified classes.

## ANTHROPOLOGY See Department of Sociology and Anthropology

## ART See Department of Fine and Performing Arts

## CREIGHTON INSTITUTE FOR INFORMATION TECHNOLOGY AND MANAGEMENT (AIT)

Creighton Institute, a division of the College of Business Administration, is the professional development center of Creighton University. Programs provided through the Institute are accelerated, in-depth and specialized in the hottest areas of Information Technology (IT) and business for today's new economy. The Institute is housed in the Creighton University West Omaha campus at 11111 Mill Valley Road, Omaha, NE 68154.

Applicants are required to register through the Creighton Institute for all programs offered through the Institute. Tuition includes all books for each program and is separate from Creighton University. Tuition is payable one week prior to the start of the program for which the student is registered. Students may pay for tuition by personal check, money order or credit card (Visa, Mastercard, Discover). For more information about IT and other programs offered at Creighton Institute, call 399-0560.

## AIT 110 A+ Certification (2)

A+ certification is a vendor neutral program that certifies the proficiency of entry-level service technicians in the computer industry. Individuals taking this certification will acquire the necessary knowledge and skills essential in the business community to become a successful entry-level computer service technician. Completion of two exams is required for A+ certification: Core Hardware and Operating System Technologies. P: High school degree/equivalent.

AIT 210 Oracle Certification Program (9)
This certification program is designed for individuals who want to gain or enhance their knowledge base in Oracle application development, and to design and implement an Oracle database. Material covered includes database modeling and design, SQL, PL/SQL, plus advanced Oracle features which include procedures, packages, functions and triggers. Students will also gain the advanced skills and expertise necessary to test for the Oracle Certification Professional (OCP) exam. P: High-school degree/equivalent, plus programming experience in a language such as VB, C, Cobol, or Java.

AIT 221 Java 2 Internet Programmer Certificate (3)
This program prepares students for the exam required by the popular Java 2 Certified Programmer certification delivered by SUN Microsystems. Through hands-on approach, students will build their object oriented development skills using Java. The course begins with programming and HTML fundamentals and moves directly to object-oriented development and Java fundamentals. Advanced techniques including graphics, animation, branching, classes, event handling, interfaces, threading for application performance improvement, GUI devel-
opment, the Abstract Window Toolkit (AWT), and other tools are utilized. Students acquire a solid foundation to progress to the Java 2 Internet Developer course. P: High-school degree/ equivalent, plus programming experience in any object-oriented or procedural language.

AIT 222 Java 2 Internet Developer Certificate (6)
This program prepares students to satisfy the requirements of the popular Java 2 Certified Solutions Developer certification delivered by SUN Microsystems. The course builds upon the foundation established by the Java 2 Internet Programmer certificate and covers advanced object-oriented design and Java development topics. Material covered includes Unified Modeling Language (UML), working with objects, extensive modeling techniques, further work with classes, logical diagram structure development and system design topics and a Rational Rose case tool. The capstone section of this course allows students to apply GUI principles and techniques learned to code an actual Java application using IBM's Visual Age which interacts with a networked DB2 database server. Students get hands-on experience building Applets, working extensively with Java Beans, implementing advanced Swing techniques, and using JDBC. P: High-school degree/equivalent plus Java programming experience or Java 2 Internet Programmer Certificate.

AIT 230 CISCO Certified Networking Associate (CCNA) (9)
In a lab setting closely corresponding to the real world, students will learn by doing as they design and develop both local- and wide-area networks (LANs and WANs). A student will acquire the skills needed to design, build and maintain small- to medium-sized networks, as well as prepare the student for the Cisco Certified Networking Associate exam. Hands-on workshops in the CISCO lab setting will comprise approximately $40 \%$ of the class. P: Highschool degree/equivalent and A+ certification, or permission of CI Director.
AIT 240 Microsoft Certified Systems Engineer (MCSE) (9)
An MCSE certification validates the skills of professional planning, implementing and troubleshooting network operating systems. Students learn the skills and knowledge needed to analyze business requirements and to design and implement the infrastructure for business solutions based on the Windows 2000 platform and Microsoft Server software. Students will be prepared to take seven certification exams from this curriculum. P: High-school degree/equivalent, plus network experience. A+ certification recommended.
AIT 250 Applied Business Technologies Boot Camp (9)
A unique program exclusively from Creighton Institute, this vendor-neutral program prepares students to enter the field of Information Technology. The program is designed for both entrylevel IT professionals and non-IT individuals interested in expanding their knowledge base in IT. Students will develop a well-rounded knowledge base and understanding of networks, operating systems, programming fundamentals, database management, project management and web development.

AIT 260 Web Application Developer Certificate (6)
This advanced web development program provides aspiring web content development professionals with solid expertise and a sound knowledge set within the web development arena. Students will learn Javascript, HTML, DHTML, Active Server Pages (ASP), and XML to develop and write code for web applications.

In addition, students will work with data types, variables, literals, operators and control statements, functions and various object types to develop web application interfaces and optimize the presentation level of web sites. Students will also gain expertise working with frames and forms, learn methods to validate date, become proficient in browser detection techniques to ensure compatibility, object layering and positioning, communication between a web form and back-end server, generating web-based reports, maintaining code, implementing debugging techniques, working with customer arrays and cookies, and communicating with Java applets and server-side applications. P: High school degree/equivalent, plus HTML and XML foundations course or equivalent programming experience.
AIT 270 Project Management (6)
The Project Management program prepares students for the Project Management Institute's PMP certification exam, a widely recognized and valued project management professional designation. The program integrates an in-depth exposure to project management concepts and techniques with direct application within the Project 98 project management software. Students will develop and manage project plans using multiple project planning models, risk and cost estimation/management methodologies, work breakdown structures (WBS), PERT charts, Gantt charts, and other tools.

By the end of this program students will know how to define project objectives, develop accurate estimates, assess project scope, develop project plans, manage unexpected project changes, manage risk and contingencies, effectively report status and implement planning components within project management software. Based upon a case study, students will manage a complex project from start to finish during this course - role-playing stakeholder, project team leader and project team member roles - with project planning presentations as the capstone to the program. P: High school degree/equivalent, plus working knowledge of computer office products including spreadsheets and word processing.

## ATMOSPHERIC SCIENCES (ATS)

Associate Professor Douglas (Chair); Assistant Professor Penc; Adjunct Lecturers Bensman, McAtee, McDonald, Swanson, Demmert and Miller.
Atmospheric Sciences is a major within the Atmospheric Sciences Program, Department of Environmental and Atmospheric Sciences.

## Prerequisites

Atmospheric Sciences 113 and 114 are prerequisites for most upper-division courses in Atmospheric Sciences. Advanced placement is available to students who qualify, particularly for those with extensive meteorological training with the National Weather Service, branches of the military, or the aviation industry. For information contact the Department Chair.

## The Field of Concentration for Degree of Bachelor of Science

This degree program can prepare the student for occupations in the National Weather Service, TV and radio weather forecasting, agricultural and industrial meteorology, oceanography, environmental protection fields, and meteorology programs in the military services. It is also excellent preparation for work in which a liberal education is desirable with an emphasis in earth sciences and global change.

Concentration major: Requires Atmospheric Sciences 113, 114 and a minimum of seven (7) courses (at least 20 semester hours) in 300-, 400-, or 500-level courses arranged with the approval of the Program Director. Courses must include Atmospheric Sciences 542, 555, 561, 562, 571, and 572. In addition, ATS 497 is highly recommended and is taken for a total of three (3) semester hours during the students' senior year, during which the student will develop a written report and present a seminar on an individual research project.

Supporting Courses: Mathematics 245 and 246; and Physics 211 and 212 are required. Additional courses in one or more of the following fields are highly recommended: physics, computer science, chemistry, mathematics, or biology.

## The Field of Concentration for the Degree of Bachelor of Science in Atmospheric Sciences

This program requires a greater depth of concentration in atmospheric sciences and will prepare students for graduate work, as well as for technical work in the National Weather Service, or other government laboratories such as the Environmental Protection Agency, NOAA, research labs or departments with weather energy related problems.

Concentration major: Two options are available. Each requires completion of the following courses: ATS 113, 114, 542, 555, 561, 562, 571, 572.

Option A for Applied Meteorology: Requires a minimum of four (4) courses (at least 12 semester hours) from the following list of courses: ATS 443, 533, 541, 544, 545,548,553, and 564.

Option B for Graduate School and Research Preparation: Requires a minimum of four (4) courses (at least 12 semester hours) with two (2) courses coming from ATS 545, 552, and 573. Highly recommended courses include ATS 531, 548, 553, 564, 565, and 574.

Supporting Courses: Mathematics 245 and 246, and Physics 211 and 212 are required. One course (at least three (3) semester hours) in computer sciences or ATS 315 is required. All students expecting to attend graduate school or considering future employment with the National Weather Service need to take Mathematics 347 and 545. A meteorology course stressing physical meteorology, such as ATS 541, 552, or 573, is also highly recommended for students seeking potential employment with the National Weather Service.

ATS 113 Introduction to Atmospheric Sciences (3) I, II, S (Same as EVS 113, NSC 113) Introduction to causes of the weather for science and nonscience majors. Topics covered include cloud identification; factors influencing the development of storm systems; effects of jet streams on storm development; the formation of thunderstorms, tornadoes, and hurricanes; climatic change, and man's influence on climate and weather systems.

ATS 114 Introduction to Atmospheric Sciences Laboratory (1) I, II, S (Same as EVS 114, NSC 114)

Laboratory designed to familiarize students with analysis techniques in meteorology. Topics include weather observations; weather symbols and coding; map plotting and analysis; and basic forecasting techniques. Students will become familiar with the PCMcIDAS system. CO: ATS 113.

ATS 231 Severe and Unusual Weather (3) I, II (Same as NSC 231)
Discussion of the development and occurrence of severe and unusual atmospheric phenomena. Topics include severe thunderstorms, tornadoes, hurricanes, blizzards, droughts, and heat waves.

ATS 315 Computer Applications in Meteorology (3) OD
Computer methods used in both the operational and research environments in Atmospheric Sciences. Emphasis on the interaction between numerical and graphical techniques. Topics include floating point operations, computer display of meteorological information, software packages, and an introduction to parallel processing. P: ATS 113 or IC.

ATS 438 Natural History of the Caribbean (3) (Same as EVS 438) OD (Last offered Spring 1994) Study of the natural history of the Caribbean basin in a field setting. Emphasis on the geological history of the islands and the evolution of their endemic biotas. Field trips stressing identification of the local flora and avifauna. Investigation of land use and the resultant effect on the ecology of the region. This course was offered to students in the Semester Abroad Program in the 1994 Spring Semester. P: Dean's Office Approval; Jr. or Sr. stdg.

## ATS 443 Environmental Geology (4) I 1996-97, AY(Same as EVS 443)

An introduction to physical geology designed for environmental science majors. Topics include an examination of rock types, evolution and geological times, soil development and processes, earthquakes and global tectonics. In-class laboratories will be devoted to identification of rock types, soil analysis, and determination of fossil types. P: Soph. stdg. or IC.

ATS 480 Military Weather Service Internship (1-6) I, II, S
Placement in a military weather service office on a part-time basis for one semester (or a comparable period during the year). Students are required to work at least 60 hours at the military weather service office. Students must apply for the internship program at least two months prior to their proposed starting date. Duties vary according to the office but may include work with forecasting, radar analysis, DHA operations, and providing information to military users. May be repeated to a limit of six semester hours, but only three hours are applicable to the major. P: DC.

ATS 481 National Weather Service Internship (1-6) I, II, S
Placement in a National Weather Service Office. Students are required to work at least 20 hours per semester hour of credit at the National Weather Service Office. Participation is limited to a maximum of 2 students per semester. Departmental and Government application forms (available from the ATS Departmental Office) are required; both sets of forms will be filed with the Department Chair at least two months prior to the proposed starting date of the Internship. Duties vary according to the office but may include work with forecasting, radar analysis, AFOS operations, NOAA radio and providing information to the public. At the end of his/her study, the student will prepare a written report which highlights the activities and training received during the Internship. Government regulations stipulate that the internship be completed within 60 days of initiation of activities at the Weather Station. May be repeated to a limit of six semester hours, but only three hours are applicable to the major. P: ATS 113, 562 , Chair approval of application package.

ATS 482 Atmospheric Sciences Internship with Industry (1-6) I, II, S
Placement with a local industry on a part time basis for one semester ( or a comparable period during the year). Students are to work at least 60 hours at the worksite identified by the particular company. This may be in conjunction with local city, state, or federal government
contracts at the contract work site associated with the atmospheric sciences data collection, processing, and display tasks of the date. Tasks to which the students may be assigned include such diverse activities as document development/review, testing new software on forecasting work stations, data analysis and assimilation studies, or participation at contract formal review meetings with the contracting client. May be repeated to a limit of six semester hours, but only three hours are applicable to the major. P: DC

ATS 493 Directed Independent Readings (1-3) I, II, S<br>Credit by arrangement. P: DC. May be repeated to a limit of six hours.<br>ATS 495 Directed Independent Study (1-3) I, II, S<br>Credit by arrangement. P: DC. May be repeated to a limit of six hours.<br>ATS 497 Directed Independent Research (1-3) I, II, S<br>A research project under the personal direction of a member of the ATS faculty. At the end of the work a written report describing the project and its outcome will be prepared; the paper will form the basis for a seminar to be presented to the department. In this manner the student will be formally introduced to scientific research methods, and provided the opportunity to refine oral and written communication skills. P: Senior standing or DC.

ATS 531 Operational Prediction Models (3) OD (Last offered Fall 1994)
Examination of the use of forecast models from the National Meteorological Center (LFM, Spectral, NGM). Additional models from other sources will also be examined (UKMET, ECMWF, USAF, and USN). Study of model domain, resolution and formation with respect to physical processes. Model performance is described and scrutinized (with respect to systematic errors and to particular synoptic situations). Comparative diagnostics of forecast and observed fields employed to examine model behavior. P: ATS 562 or IC.

ATS 532 Objective Meteorological Analysis (3) OD (Last offered Fall 2001)
Application of techniques and principles for temporal and spatial computer analysis of atmospheric data based on dynamical concepts, with a focus on the structure, movement, and development of weather systems. Topics include data time series, statistical inference techniques, Fourier analysis, and map projections and grid systems used in meteorology. P: ATS 571 and computer programming.
ATS 533 Inadvertent Climate Modification (3) AY (Same as EVS 533, NSC 533) (Last offered Spring 1998)
Exploration of the influence of human beings on the atmosphere. Discussion of theories and models of natural climate change and of that induced by human beings. The ethical issues of inadvertent and planned change of climate by humans will be raised. Major topics include effects of $\mathrm{CO}_{2}$ warming (greenhouse effect), ozone depletion; human-induced desertification; cloud seeding; acid rain; urban microclimates; and nuclear winter. Methods of monitoring these systems will be stressed relative to an increased world-wide need to limit or prevent human-induced climate changes.
ATS 541 Atmospheric Diffusion, Air Pollution, and Environmental Impact Analysis (3) II (Same as EVS 541, NSC 541)
Survey of the theoretical and practical aspects of diffusion, dispersion, and turbulent transport of pollutants in an atmospheric boundary layer. Includes observational and instrumentation techniques; plume models; regional pollution transport; and diffusion from point, line and area sources. Chemical and physical transformations of the pollutants, precipitation scavenging, and dry deposition are studied. Reviews Federal environmental laws, air quality standards, environmental impact assessments, ethics, and guidelines for writing environmental impact statements. P: ATS 113 or equiv.

ATS 542 Radar Remote Sensing (3) I
The theoretical and practical aspects of weather radar. Stress placed on the capabilities and limitations for severe storm investigation. P: MTH 245, PHY 212 and ATS 113; or IC.
ATS 544 Hydrology (3) OD (Same as EVS 544, NSC 544) (Last offered Fall 1994)F Study of the waters of the earth, especially with relation to the effects of precipitation and evaporation upon the occurrence and character of water in streams, lakes, and on or below the land surface. In terms of hydrologic cycle, the scope of this course may be defined as that portion of the cycle from precipitation to reevaporation or return of the water to the seas. P: ATS 113 or 231.

Examination of the theory of convection as related to models of squall lines and thunderstorms and the application of this theory to the forecasting and analysis of sub-synoptic scale systems. P: ATS 562 \& 571.

ATS 548 Space Weather (3) OD (Same as EVS 548) (Last offered Presession 1998)
Course designed to acquaint the student with the basic phenomenology associated with solar processes and activity, and the impact of these processes upon the earth and its atmosphere. Designed to familiarize the student with the concepts of upper atmospheric energetic processes and their influence upon everyday activities. P: MTH 246 \& PHY 212.
ATS 552 Boundary Layer Meteorology (3) OD (Same as EVS 552) (Last offered Fall 1998) Structure of the boundary layer, surface energy budget, vertical profiles of temperature, humidity and wind, turbulence, Monin-Obukhov theory. Determination of surface heat and moisture fluxes. Some discussion of applications to diffusion and dispersion of substances in the atmosphere. P: ATS 572 or equiv.
ATS 553 Tropical Meteorology (3) S (Same as EVS 553)
Characteristics of the tropical atmosphere including convection, boundary layer processes, local and diurnal weather phenomena, meso-scale tropical systems, tropical storm structure, and energetics. This course relies heavily on satellite interpretation of tropical cloud systems. P: ATS 113.

ATS 555 Meteorological Remote Sensing (3) II (Same as EVS 555)
First section of the course is devoted to meteorological interpretations of cloud fields as observed from weather satellites. Second section of the course devoted to examination of general and specific applications of remote sensing of the environment. Includes imagery from satellite, ground based, and airborne systems; data analysis and decision methodsl multispectral analysisl analysis and evaluation of water, terrain, mineral, forest, and soil resources. P: ATS (EVS, NSC) 113 or IC.
ATS 556 Introduction to Physical Oceanography (3) OD (Same as EVS 556, NSC 556) (Last offered Fall 1998)
Geomorphology of the ocean bottom; properties of sea water; salinity and temperature distributions; major ocean currents and circulations; equations of motion, horizontal wind-driven currents; thermohaline circulations; wind waves and swell.

ATS 561 Synoptic Meteorology I (4) I
Examination of weather code, plotting and map analysis. Includes a review of cyclone and frontal theory using case studies to develop diagnostic and forecasting techniques. Practical applications of air mass and frontal analysis are related to weather forecasting. P: ATS 113 or IC.

ATS 562 Synoptic Meteorology II (3) II
Detailed examination and use of fax charts, PCMcIDAS displays, and other tools employed in analysis and forecasting. Review of methods in short-term, medium and long-range forecasting. P: ATS 561 or IC.
ATS 564 Statistical Applications in the Atmospheric Sciences (3) OD (Last offered Spring 1997) Study of the statistical distributions of scalars and vectors, sampling theory, regression, correlation, and time series. Applications to statistical forecasting and forecast verification. P: MTH 245.

ATS 565 Atmospheric Circulation Systems (3) OD 1994-95 (Last offered Spring 1995) Examination of the general circulation of the atmosphere. Emphasis on seasonal variation in both hemispheres. Exploration of formation of anomalous circulation types with respect to anomalous boundary layer conditions. Detailed discussion of tropical-mid latitude interactions. P: ATS 562 or IC.

ATS 566 Climate Theory (3) OD (Same as EVS 566) (Last offered Spring 1995)
Theories of global climate and variability. Examination of climate models, including internal and external parameters and feedback mechanisms P: ATS 113, 561.
ATS 571 Dynamic Meteorology I (3) I
Equations of motion and thermodynamics will be vigorously derived and applied to the atmosphere. Topics include thermodynamics of dry and moist air, hydrostatic and hypsometric
approximations, geostrophic and gradient wind balance, mass continuity, and vorticity. P: PHY 212 and MTH 246 and ATS 113; or IC.

ATS 572 Dynamic Meteorology II (3) II
Concepts presented in ATS 571 will be further developed and applied to the following topics: barotropic and baroclinic instability, atmospheric oscillations, quasi-geostrophic theory, and simple numerical modeling. P: ATS 571.

ATS 573 Cloud Physics and Dynamics (3) OD (Last offered Spring 1988)
Thermodynamic processes which control the development and growth of clouds. Relationship between atmospheric properties and cloud structure. Distribution of condensation nuclei, water droplet spectra. Initiation and growth of cloud hydrometers. Structure of severe storms, radiative effects of clouds. P: ATS 571.

ATS 574 Stratospheric Dynamics (3) OD (Last offered Fall 1996)
Study of the principles governing atmospheric motions in the stratosphere. Includes a brief review of chemical processes, radiative effects, and the resulting thermal structures that govern the mean stratospheric circulation; forcing mechanisms and conditions for wave generation in the stratosphere; discussions of sudden warmings, quasi-biennial and semiannual oscillations, and tropical wave phenomena in the stratosphere. P: ATS 571.
ATS 575 Environmental Measurements Practicum (3) (Same as EVS 575)
This course is designed to provide the students with instruction on the principles and practices associated with environmental measurements of the atmosphere, soil and hydrologic courses. Heavy emphasis will be placed on the theory of sampling ambient and pollutant sources, instruments and measurement techniques, ant the consequences of the pollutant. The course will include several exercises as well as field trips to local sites of interest to demonstrate the practical and operational aspects of environmental measurement and monitoring programs. P: EVS/ATS 113, MTH 245 and PHY 212 or IC.
Graduate-level courses in Environmental and Atmospheric Sciences are listed in the Graduate School issue of the Creighton University Bulletin.

## BIOLOGY (BIO)

Professor Schalles (Chair); Professors Burk, Nickla, Platz; Associate Professor Vinton; Assistant Professors Austerberry, Cullum, Dulka, Reedy, and Treonis; Professor Emeritus Curtin, Belknap, Roberts, and Schlesinger.

## Prerequisites

Biology 211 and 212 are prerequisites for all 300-level courses and above, unless otherwise indicated.

## The Field of Concentration

Concentration major: A minimum of twenty-five semester hours in Biology beyond 200level, consisting of at least seven upper-level courses (three or more credit hours each). Biology 493, 495, and 497 do not apply toward this nor any other Biology Department requirement. Upon petition prior to enrollment, courses in departments other than Biology (such as CHM 381, PSY 422, BMS 521, MIC 541, or MIC 543) may be approved for non-laboratory Biology major credit; a student may exercise this option for only one such course. A minimum of four lecture+laboratory or laboratory-only courses. All four-hour courses offered by the Biology Department include a laboratory component. Biology 318, 419, 450, 484, 486, 487, 490, 563 and 572 are one or two-hour laboratory-only courses. At least two courses (three or more credit hours each) from each of the $300-$, 400 -, and 500 -level series. Biology 491 may be applied at any level. At least one course from each of the following three areas: Molecular/Cellular Biology 317, 417, 455, 532, 562, 573. Organismal: Biology 333, 335, 341, 449, 467, 549, 562, 571, 573. Population/Ecology/Evolution: Biology 390, 435, 440, 481, 483, 485, 523, 540, 545, 561, 581.

Required Supporting Courses: General Chemistry (Chemistry 203/204 and 205/206). An additional year of chemistry (Chemistry 315 and 416, or Chemistry 321, 322, 323, and 324). General Physics (Physics 211 and 212).

Concentration Major for Secondary Education Students: Biology majors intending to become secondary level teachers should consult carefully with advisors in the Biology and Education Departments. Microbiology 541 or equivalent should be taken as one of the upper-level courses
for the major; Physics 187 and either Atmospheric Sciences 113 and 114, Environmental Science 443 or Physics 107 and 108 should be substituted for Physics 211 and 212 as supporting courses.

Co-Major in Biology: Students pursuing another College of Arts and Sciences major may obtain a co-major in biology. Requirements for the biology co-major are 24 hours of biology courses, including Biology 211, 212, and one course (three or more credit hours) at each of the $300-$, 400-, and 500-levels (excluding Biology 493, 495, and 497). At least two upper-division lecture+laboratory or laboratory-only courses must be taken. Courses from other departments will not be accepted toward the biology co-major. There are no support course requirements for the biology co-major.

## BIO 141 Charles Darwin: Life and Impact (3) I, AY

The life and work of Darwin with emphasis on the importance of his ideas in modern biological science, the development of his evolutionary theories, and the reciprocal influence of Victorian society and his work. Study of Darwin's writings is used to exemplify the nature of scientific investigation and the role of the scientist in society. No formal biological background is required.

BIO 149 Human Biology (3) II, S
Survey course designed for nonmajors who have only a high school background in the sciences. Covers the major areas of human structure, function, nutrition and genetics. Examination of both the normal condition and examples of disorders in this condition. Discussion of related topics of current interest. This course may not be taken for credit toward the Biology major.

## BIO 211 General Biology: Molecular and Cellular (4) I, S

Introduces the conceptual bases of biology and presents in detail the molecular and cellular aspects of metabolism, genetics, and development. Course includes lecture and laboratory. 3R. 3L. Note: The prerequisite for BIO 211 is a one-year high-school chemistry course of sufficient depth and rigor to enable the student to participate in the study of the molecular aspects of biology.
BIO 212 General Biology: Organismal and Population (4) II, S
Organismal and population biology with emphasis on organismal diversity, structural and functional strategies of organisms, ecological and behavioral relationships, and evolutionary mechanisms. The diversity of adaptive specialization based on the fundamental unity of life is the theme of the course. Course includes lecture and laboratory. 3R. 3L.

BIO 317 Genetics (3) I, II, S (OD)
Science of heredity and variation. Basic principles of Mendelian genetics, cytogenetics, molecular genetics, human genetics and evolution are examined. P: BIO 211 \& 212. P or CO: CHM 205/206.

BIO 318 Genetics Laboratory (1) II
Laboratory projects designed to illustrate basic genetic principles will be conducted with the aid of bacteria, fungi, and Drosophila as experimental organisms. P or CO: BIO 317. Offered only in conjunction with BIO 317.

BIO 333 Vertebrate Comparative Anatomy (4) I, S (OD)
Lecture and laboratory study of the comparative morphology of representative members of the phylum Chordata. Lectures incorporate the developmental and evolutionary bases of anatomy. 3R, 3L. P: BIO 211 \& 212.

BIO 335 Zoology (4) II, S (OD) (Same as EVS 335)
Biological concepts and principles exemplified by both invertebrates and vertebrates with emphasis on animal diversity, morphology, evolution, and ecological relationships. 3R, 3L. P: BIO 211 \& 212.

BIO 341 General Botany (4) II (Same as EVS 341)
Modern biological concepts and principles exemplified by the plant kingdom with emphasis on plant diversity, taxonomy, and evolution. 3R, 3L. P: BIO 211 \& 212.

BIO 351 Microbiology (3)
Microbiology is the study of organisms too small to be seen with the naked eye. Despite their small size, these organisms are ubiquitous and play important roles in human health, industry,
and the functioning of ecosystems. This course is designed to cover a wide range of material in lecture and through laboratory exercises, introducing students to the breadth of microbial diversity and physiology, as well as the basic techniques used in microbiology.

## BIO 362 Introductory Cell Biology (3)

Emphasizes the fundamental importance and experimental underpinnings of knowledge in cell biology. The course consists of four segments; 1) common techniques in cell biology research, 2) basic principles of cell structure and function including membranes, vesicular transport, protein sorting, and the cytoskeleton, 3) how cells multiply, assemble into tissues, and interact with their environment, and 4) cell motility, the immune response, and cancer.

BIO 390 Environmental Science (3) II (Same as EVS 390)
Course presents a balanced, scientific approach to the study of the environment and stresses the application of ecological concepts within a systems perspective. Topics include ecological concepts, population principles, endangered species and habitats, resources, air and water pollution, environmental health, and global perspectives. P: BIO 211 \& 212 or CHM 205/ 206.

BIO 401 Biometry (4) I, S (OD) (Same as EVS 401)
Introduction to measurement theory as applied to biological studies. Data acquisition, analysis, and display procedures. Introductory statistical methods emphasizing sampling procedures, frequency distributions, measure of central tendency, analysis of regression lines, log doseresponse curves (graded and quantal), bioassay. Lectures supplemented by problem-solving sessions. (Qualifies as laboratory course). 3R, 3L. P: BIO 211 \& 212.

BIO 417 Molecular Biology Lecture (3) I, S (OD)
Description of contemporary concepts and techniques in molecular biology. Topics include gene structure, coding, regulation, protein synthesis, mutation, recombination, recombinant DNA technology, transposable elements and chromosome structure. P: BIO 317.

BIO 419 Molecular Biology Laboratory (2) II
Laboratory activities using contemporary methods of genomic inquiry. Emphasis on fundamental aspects of gene structure and function. P: BIO 317 or 417.

BIO 435 Field Biology in the Southeastern United States (4) S, AY (Same as EVS 435)
Three-week field trip. Exploration of natural communities in the Blue Ridge mountains of North Carolina, the South Carolina Coastal Plain, the Georgia coast and barrier islands, and the tropical environments of southern Florida. Emphasis on organisms and their adaptation to the environment, field collection techniques, and ecological relationships. Students will work from and stay in established biological field stations at Highlands, North Carolina, Sapelo Island, Georgia, Lake Placid, Florida, and Key Largo, Florida. (Qualifies as a laboratory course.) P: One organismal-level or field course in biology or IC.
BIO 440 Field Biology of the Desert Southwest (4) PS (OD) (Same as EVS 440)
A field course designed to allow students to study the flora and fauna of the southwest. Participants spend the term out-of-doors examining plant and animal relationships in both alpine and desert habitats. Also involves collecting, identifying and preserving study specimens. Base camps include Portal, Arizona, at the foot of the Chiricahua Mountains on the Sonoran Desert; Red Cliffs State Park, north of St. George, Utah (northern perimeter of the Mohave); and Capitol Reef National Park, Utah. Side trips include the Boyce Thompson Arboretum at Superior, Arizona, the Arizona Sonoran Desert Museum at Tucson, Zion National Park, and Mesa Verde, Colorado. (Qualifies as a laboratory course.). P: Two upper-division biology courses or IC.
BIO 449 Animal Physiology (3) I, S(OD) (Same as EVS 449)
A study of the functions of animals from the cellular to the organ-systems level with emphasis on vertebrate systems physiology. P: BIO 211 \& 212; Jr. stdg.

BIO 450 Animal Physiology Laboratory (1) I (Same as EVS 450)
Laboratory exercises designed to illustrate several physiological processes in animals, including cellular and whole animal metabolism, heart and muscle function, osmoregulation and responses to thyroxine and cold acclimation. P or CO: BIO 449.

BIO 455 Biology of the Protists (4) I
Introduction to the morphologies and survival strategies of the protists (eukaryotic organisms without multiple tissues). Includes parasitic forms of medical importance and both parasitic
and free-living forms of scientific, economic, and ecological importance. 3R. P: BIO 211 \& 212.

BIO 467 Developmental Biology (Embryology) (4) II
Animal development with emphasis on the higher vertebrates. Gametogenesis, cleavage patterns and basic body plans, organ system formation, embryo-maternal relationships. Control of growth, differentiation, and morphogenesis. 3R, 3L. P: BIO 211 \& 212; Jr. stdg.
BIO 481 Terrestrial Ecology (4) I, S (OD) (Same as EVS 481)
Introduction to the interactions of organisms and the environment, especially the biology of populations, communities, and ecosystems. Individual adaptations, the nature of the environment, population dynamics, and community organization are stressed. Laboratory exercises include field trips to terrestrial habitats. 3R, 3L. P: BIO $211 \& 212$.
BIO 483 Vertebrate Natural History Lecture (3) II, S (OD) (Same as EVS 483)
Lecture series designed to provide students with a modern overview of vertebrate diversity. Lectures encompass ancestry, major adaptive shifts between classes of vertebrates, geographic distribution based on physiological limits, specialized feeding and locomotor modes, courtship patterns, reproductive strategies, and conservation issues. P: BIO 211 \& 212 . Recommended as useful prior to enrollment in BIO 440 (Field Biology of the Desert Southwest) and for students seeking a general understanding of vertebrate life, or those who are interested in teaching biological sciences.
BIO 484 Vertebrate Natural History Laboratory (1) II, S (OD) (Same as EVS 484)
Laboratory exercises that will provide experience in the following areas: dissection of representatives of each major vertebrate class with emphasis on the diagnostic differences between groups; identification and preservation of vertebrate specimens. Field trips are available on a limited basis. P or CO: BIO 483.

BIO 485 Marine and Freshwater Ecology (3) I (Same as EVS 485)
An introduction to the community structure, biological production, and physical and chemical properties of aquatic ecosystems. The major features of water columns, benthic substrates, and lotic zones will be reviewed and compared. P: BIO $211 \& 212$.

BIO 486 Freshwater Ecology Laboratory (1) I (Same as EVS 486)
Introduction to methods for analyzing lake, stream, and wetland habitats. Exercises will examine physical and chemical properties, biological production and food chains, and water quality of freshwater ecosystems. CO: BIO 211/212. P or CO: BIO 485 or IC.

BIO 487 Marine Ecology Laboratory (2) I (Same as EVS 487)
Direct observation of marine coastal habitats (reefs, sea grass beds, mangrove forests, rocky intertidal zones, and offshore waters) at Roatan Island, Honduras. Exercises in the field and campus laboratory sessions will examine physical and chemical properties; marine organisms, and community structure and productivity of marine ecosystems. P: BIO 211 \& 212; CO: BIO 485 or IC.

## BIO 490 Seminar in Undergraduate Biology Instruction (1) I

Required of all undergraduate Teaching Assistants in those semesters in which they are teaching. Course provides instruction in both course content and its effective communication. Emphasis on laboratory and field skills, preparation of examinations, classroom supervision, and student evaluation. P: IC.

BIO 491 Biological Investigations (3) I
An introduction to the history, traditions, ethics, and standard procedures of biological research. Format includes lectures and discussions on the nature of scientific investigation, the career environment, and instruction in scientific writing and oral presentations. Course is designed primarily for students wishing to include biological/biomedical research in their careers. P: Jr. or Sr. stdg.
BIO 493 Directed Independent Readings (1-3) I, II, S
Assigned readings in the student's area of interest. Course is only an addition to and not a substitution for any portion of the major requirement. No more than 12 semester hours of credit may be accrued in any combination of BIO 493, 495, and 497. P: Sr. stdg. or IC.
BIO 495 Directed Independent Study (1-3) I, II, S
A program of independent study with emphasis on activities other than laboratory or field research. (Examples include library research or special course attendance.) Course is only an
addition to and not a substitution for any portion of the major requirement. 2-4 C and/or L . No more than 12 semester hours of credit may be accrued in any combination of BIO 493, 495, and 497. P: Sr. stdg. or IC.

BIO 497 Directed Independent Research (1-3) I, II, S
A program of independent study with emphasis on laboratory or field research. Course is only an addition to and not a substitution for any portion of the major requirement. No more than 12 semester hours of credit may be accrued in any combination of BIO 493, 495, and 497. P: Sr. stdg. or IC.

BIO 511 Microbiology in the Environment (4) AY (Same as EVS 511)
Explores microbiology within an environmental context. Includes an introduction to physiology of microorganisms, emphasizing activities performed by microbes and microbial responses to environmental factors. The course emphasizes community and ecosystem microbial ecology, including functions integral to healthy ecosystems and impact of resistance to antibiotics. Laboratory exercises include aseptic technique, isolation and enumeration from environmental samples, water and air quality procedures, fermentation processes, and collection trips to local habitats and industrial sites. P: BIO 211, 212.

BIO 523 Environmental Toxicology (3) II 1994-95 (Same as EVS 523)
Principles of environmental tolerance, bioenergetics and nutrition, homeostasis, and toxicology and disease will be developed and related to the organismal, population and community levels and to comparative responses to environmental disturbance. The course uses a reading/ discussion format. 3R. P: BIO 211 \& 212.
BIO 532 Cell Biology: Regulatory Mechanisms (3) II
Molecular mechanisms controlling the growth and differentiation of eukaryotic cells, including gene expression, cell growth and division, signal transduction, development, germ cells, immunity, and cancer. 3R. P: BIO 317 or 417.
BIO 540 Flora of the Great Plains (4)
Introduction to the plants of the Great Plains region, including identification, ecological associations, and biology. Class activities include lectures, laboratories, and collection trips at local field sites. Students make a collection of local flora. P: BIO 211 and BIO 212.
BIO 549 Environmental Physiology (3) II (Same as EVS 549)
Impact of environmental changes and environmental extremes on animals and their physiological mechanisms. Examines primarily vertebrates and their responses to variations in temperature, pressure, and salinity. Basic physiological principles associated with each adaptive response covered in lecture and reading assignments. P: BIO 333 or 335 or BIO 483 or BIO 449.

BIO 561 Entomology (4) I (Same as EVS 561)
Introduction to insect biology with emphasis on the major insect groups. Anatomy, physiology, and behavior of insects and their ecological, agricultural, and medical importance. 3R, 3L. P: BIO $211 \& 212$.

BIO 562 Introduction to Neurobiology (3) I
Introduction to the fundamental concepts of comparative neurobiology and the neural basis of behavior. Topics covered include the cell biology of the neuron, neural systems, sensory systems, motor systems, sensory-motor integration and higher brain functions, the interactions between hormones, brain and behavior, and human neurobiology. Lectures emphasize the comparative approach of studying the structure and function of nervous systems by using both invertebrate and vertebrate model systems to illustrate how the brain controls behavior. P: BIO 211 and BIO 212.

BIO 563 Introduction to Neurobiology Laboratory (2) I
Introduction to neurobiological and behavioral research methods using experimental techniques to understand functional aspects of neurophysiology and the neural basis of behavior. P or CO: BIO 562.

BIO 567 Cellular and Developmental Neuroscience (3)
This course will provide an introduction to processes regulating the development of the mammalian central nervous system. Attention will be given to how classic research findings in the field of developmental neuroscience have formed the modern understanding of the formation, functioning, and repair of the central nervous system. behavior, behavioral ecology and genetics of behavior. 3R. P: BIO $211 \& 212$.

BIO 572 Animal Behavior Laboratory (2) II (Same as EVS 572)
Introduction to animal behavior research methods using structured observations and experiments in laboratory and field settings. 3L. P: BIO 571.
BIO 573 Behavioral Endocrinology (3) II
Introduction to the fundamental concepts of comparative behavioral endocrinology with emphasis on how hormones modulate behavior and how behavior affects hormone release. Topics include 1.) Sex determination and sexual differentiation of the brain, 2.) Cellular and molecular mechanisms of hormone action in the brain, 3.) Sexual dimorphisms in brain structure and function in animals and humans, 4). Hormonal control of male and female sexual behavior, 5.) Social influences on hormones, brain and behavior. P: One upper-division BIO course; Jr. stdg.
BIO 581 Evolution (4) I, S (OD) (Same as EVS 581)
Lectures and discussion designed to provide junior and senior students with a broad understanding of the science of evolutionary biology. Organized in three parts, each takes a chronological approach: (A) evolutionary theory, (B) mechanisms of evolution, (C) the implications and consequences of theory and mechanism; and as part of both the lecture and laboratory experience in ( C , above) topics in evolutionary medicine will be covered. Laboratory sessions include computer modeling exercises to illustrate the mechanisms of evolutionary changes, an excellent film series, discussion opportunities designated to explore in more depth questions and topics associated with speciation, biodiversity and human evolution as well as a review session prior to each exam. 3R, 3L. P: One upper-division BIO course or Jr. stdg.

## BIOMEDICAL SCIENCES (BMS)

Courses offered by the Department of Biomedical Sciences of the School of Medicine.

## BMS 111 Basic Human Anatomy (4) I

Designed to provide nursing students with a basic knowledge of human anatomy. Lecture topics range from anatomical terminology to comprehensive overviews of the individual organ systems, including aspects of gross anatomy, histology, and embryology. 4R. P: Registration in Nursing Program or IC.
BMS 301 Biochemistry (4) I
An introductory course designed for students in the School of Pharmacy and Allied Health Professions. Undergraduate majors from other disciplines are welcome. Topics concerning structure, function and metabolism of important biomolecules, biologically active peptides, detoxification and molecular biology will be surveyed. P: CHM $323 \& 324$ or equiv. Fall Semester.

BMS 303 Physiology (4) II
Designed to provide Nursing students and Exercise Science students with a basic knowledge of human physiology. An overview of the function of the major organ systems is presented in a series of lectures and discussions. 4R. P: Registration in the Nursing program or Exercise Science program or IC.
BMS 311 Basic Human Anatomy (4) I
Course designed to provide an overview of gross, histological, neuroanatomical and embryological aspects of the human body. A systemic approach is used. Dissected cadaver specimens and anatomical models are available as learning aids. P: IC.
BMS 361 Physiological Chemistry (3) II
An elementary introduction to Physiological Chemistry designed for Liberal Arts Majors and others interested in learning about the field of biochemistry. Human biochemistry will be emphasized, but a rigorous chemical approach will be avoided. This course is not intended to replace offerings designed for pre-professional students or science majors. P: High school biology and chemistry courses.

BMS 404 Human Physiology (4) II
Designed to provide pharmacy, occupational therapy and physical therapy students with a knowledge of human physiology. The function of the major organ systems is covered in a series of lectures and discussions. 5R. P: Registration in the pharmacy, occupational therapy or physical therapy programs or IC.

BMS 521 Principles of Biochemistry (4) II
Fundamental principles of structural biochemistry, enzymology, metabolism and molecular biology. P: CHM 323 \& 324 or equiv.; Sr. or Gr. stdg.; Jr. stdg. only with IC.

BMS 540 Nutrition: Facts and Fads (2) II
A nutrition course designed for people with health care interests emphasizing proper nutrition, omnivorous diets, and basic food science concepts. The inadequacies of food faddism and identification of bogus claims and quackery will also be considered. P: Advanced BIO course or a BMS course or IC.

## BLACK STUDIES (BKS)

Associate Professor Welch (Program Coordinator). An Interdisciplinary Program.

## Black Studies as a Support Area

The support area for students majoring in other departments consists of twelve semester hours in Black Studies courses. This interdisciplinary program involves work in the departments of Anthropology, History, English, Political Science, Sociology and Theology. The prerequisites of each department must be met before enrollment in a Black Studies course.
BKS 106 The African World (3) I, II (Same as AFS/HIS 106)
BKS 309 The Urban Social System (3) I (Same as SOC 309)
BKS 311 Politics of Africa (3) II (Same as PLS/AFS 311)
BKS 341 American Cultural Minorities (3) I (Same as AMS/ANT/SOC 341)
BKS 342 Peoples and Cultures of Sub-Saharan Africa (3) AY (Same as AFS/ANT 342)
BKS 347 Peoples and Cultures of Africa and the Middle East (1) AY (Same as AFS/ANT 347)
BKS 356 Christianity in Africa (3) OD (Same as AFS/THL 356)
BKS 367 The Afro-American Experience (3) AY (Same as HIS 367)
BKS 372 Equality, Minorities, and Public Policy (3) II AY (Same as AMS/HIS/PLS 372)
BKS 384 Black History Through Literature (3) OD (Same as HIS 384)
BKS 388 Origins of Modern Africa (3) AY (Same as AFS/HIS 388)
BKS 390 Introduction to African Literature (3) OD (Same as AFS/ENG 390)
Contemporary African literature. Relationship between African literature and society, emergence of national and cross-African literatures, issues of cultural conflict, language and oral tradition, and other topics.
BKS 393 African-American Literature (3) (Same as ENG 393)
BKS 396 Seminar in Black Studies (3) OD
Topical seminar with topics changing in different semesters. Examination of particular ideas, developments, and issues of relevance to Africa and the African diaspora. Topics in different semesters might include detailed examination of justice and ethnicity, politics and ethnicity, comparative slave systems, slave narratives, or colonial rule in Africa and the Caribbean. P: So. stdg.
BKS 398 Literature of Francophone Africa (3) (Same as AFS/ENG 398)
BKS 482 Race in America: Idea and Reality (3) OD (Same as AMS/HIS/PLS/SRP 482)
BKS 484 Nationalist Movements in Colonial Africa (3) II (Same as AFS/HIS 484)
BKS 485 Society and Belief Systems in Africa (3) II (Same as AFS/HIS 485)
BKS 487 History of West Africa (3) OD (Same as (AFS/HIS 487)
BKS 489 Southern Africa: The Politics of Race (3) OD (Same as AFS/HIS 489)
BKS 493 Directed Independent Readings (3) OD
Course designed to allow an individual student with an interest in a particular area to pursue it under the direction of a willing faculty member. P: BKS Coordinator's consent.
BKS 497 Directed Independent Research (1-3) OD

## BUSINESS (BUS)

Associate Professor Wells (Chair); Professors Gleason, and Goss ;Associate Professors Fitzsimmons, Hoh, and Purcell; Assistant Professors Knudsen, Kracher, Mallenby, and McNary.

## BUS 121 Dynamics of Business (3) I, II

An introduction to business that examines the interrelated roles of accounting, economics, ethics, finance, information systems, law management, marketing operations, and the technology as they affect business enterprises both domestically and internationally. P: Open to all students in Arts and Sciences and to College of Busines Administration students with freshman or sophomore standing only.

BUS 201 Legal Environment of Business (3) I, II
Focuses on laws that affect managerial action. Introduction to the traditional sources of law, the U.S. Constitution and its Amendments; the basic characteristics of the U.S. legal system, the law of contracts, torts, and property, and understanding of the various business entitlements, their creation, operation, and termination; a basic understanding of the administrative agency process, antitrust, employer-employee relations, laws against discrimination, consumer protection, environmental laws, and the myriad of other laws that affect business action and changing public policy regarding law. P: So. stdg.

BUS 229 Statistical Analysis (4) I, II, S
Use of descriptive and inferential statistical methods in the analysis of business and economic data. Topics include probability distributions, confidence intervals, tests of hypothesis, multiple regression and correlation, time series analysis and index numbers, and decision analysis. P: MTH 141 or 245; MTH 201.

BUS 256 Business Ethics (3) I, II, S
Study of the principles and practice of good moral behavior by the business community. Lectures are supplemented by case discussion, community service, and other experiential activities that directly involve students in ethical and socially responsible behavior. P: So. stdg.
BUS 301 Business Law (3) II
Detailed analysis of specific areas of law that most impact the operation and management of business enterprises. Course serves as an introduction to the study of law as a discipline and as a preparation for those students planning to sit for the CPA examination. P: BUS 201; Jr. stdg.

BUS 311 Entrepreneurship and Small Business Management (3) I
This course offers a framework for understanding the entrepreneurial process and exposes students to most problems and issues faced by entrepreneurs who start new businesses. Focuses on how to identify and evaluate market opportunities, develop business plans, assess and obtain the required resources, and manage the growth of the new venture. Lectures are supplemented by case studies field projects, and guest speakers. P: MKT 319 and FIN 301, or IC.

BUS 366 Business Internships (3) I,II
This course is designed to give credit to students for major-related significant practical business experience. The internship should allow the students to apply concepts and technical skills learned in the classroom to a real work setting. Students must work 150 hours during a semester; write a final paper describing the learning value of their internship; and participating in an end-of-semester synthesis session. The student's internship employment must be secured before registering for the class. The course is graded on a satisfactory/unsatisfactory basis and can be taken only once. P: 2nd Sem. Jr. or Higher stdg. in CoBA.
BUS 371 Quantitative Analysis and Production (3) I, II Quantitative approaches to the solutions of business problems. Course acquaints the student with current concepts of quantitative analysis as applied to business and management decisions. Topics covered include decision theory, linear programming, inventory models, production, and networks. P: MTH 141 or 245; BUS 229; Jr. stdg. Acceptable graduate equivalent: MBA 523.

BUS 471 Strategic Management (3) I, II
Course utilizes a series of actual business cases concerning the major areas of strategic planning. Students analyze the cases to determine the current management style and organization strategy. The analyses are used to make recommendations for changes in managerial exper-
tise, corporate and line-of-business strategy, and organization structure. P: Bus. Admin. Sr. stdg; FIN 301; MGT 301; MKT 319.

BUS 479 Seminar in Business Law (3) I or II
Exploration and analysis of selected problems, topics, and issues in today's legal environment of business. Course content necessarily changes each semester as selected topics and issues are discussed. P: BUS 201.

BUS 493 Directed Independent Readings (3) OD
Limited to students who want to develop a more in-depth knowledge of a subject beyond the regular course coverage and who have a QPA of 3.0 or better. Sr. stdg.; DC \& Dean's approval.

## CHEMISTRY (CHM)

Associate Professor Michels (Chair); Professor Mattson; Associate Professors Dobberpuhl, Harris, Hulce, Kearley, Klein, and Snipp; Assistant Professors Anderson, Estes, Gross, and Soukup; Instructors de la Cruz and Doyle.

## Prerequisites

Chemistry 203 and 204 and Chemistry 205 and 206 are prerequisites for all courses 200-level and above. Chemistry 285 and 286 may be substituted for Chemistry 205 and 206, respectively.

## The Field of Concentration for Degree of Bachelor of Science

A. Chemistry Major: Twenty-nine semester hours composed of Chemistry 315, 321, 322, 323, $324,341,342,416,443,491$, and 501.

Supporting courses: Mathematics 245, 246; Physics 211 and 212; and at least three semester hours selected from Chemistry 381, 421, 444, 470, 492, 496, 497, 502, 506, 521, 523, 525, 532, 575; BMS 521 (Principles of Biochemistry); PSC 231 (Medicinal Chemistry), or any lecture course above 300 in Physics, Mathematics, or Computer Science. Cross-listed courses require Department approval. Computer literacy is expected.
B. Chemistry Education Major: Twenty-one semester hours composed of Chemistry 315, 321, 322, 323, 324, 341, 342, 381, 491.

Supporting courses: Mathematics 245 and 246; Physics 211 and 212, Biology 211; ATS/EVS 113 and 114 or ATS/EVS 443. In addition the student must complete the requirements for a secondary teaching endorsement: EDU 103, 207, 210, 341, 342, 445, 461, 462, 464, 525, and 548.

## The Field of Concentration for Degree of Bachelor of Science in Chemistry

 (Professional Degree)Chemistry Major: Thirty-five semester hours composed of Chemistry 315, 321, 322, 323, 324, $341,342,416,443,491,496,7$ (combined total of three hours), 501, and 532. CHM 532 can be replaced by taking MTH 545, Differential Equations, and MTH 529, Linear Algebra.

Supporting courses: Mathematics 245 and 246; Physics 211 and 212, and three additional credit hours chosen from any lecture courses above 300 in Chemistry, Physics, Mathematics, or Computer Science. CHM 444 (Physical Chemistry II Laboratory), CHM 496, BMS 521 (Principles of Biochemistry), and PSC 231 (Medicinal Chemistry) would also satisfy this requirement. CHM 506 (Environmental Chemistry and Natural Resources) will not satisfy this requirement. Cross-listed courses require Department approval. Computer literacy is expected.

## CHM 105 Introductory Chemistry (3) II

A one-semester introduction to the concepts and theories basic to the science of chemistry. Recommended as an entry-level course for those who have had no high school chemistry or who consider their high school preparation in chemistry weak. Topics covered include problem solving, scientific method, measurements, calculations, matter, energy, the periodic table, atomic theory, chemical nomenclature, chemical reactions, chemical composition, mole calculations, ionic and covalent bonding.
CHM 111 Fundamentals of General Chemistry (3) I
A one-semester survey of general chemistry for nursing and other allied health majors. Topics covered include electronic structure and periodicity, molecular structure, chemical reactions, states of matter, acid-base chemistry, and nuclear chemistry.

## CHM 112 Fundamentals of Biological Chemistry (3) II

Survey of organic and biological chemistry for nursing and other allied health majors. Includes the study of organic functional groups and reactivity, plus the chemistry of biomolecules such as proteins, carbohydrates, lipids, and nucleic acids. P: CHM 111 or equivalent.

CHM 113 Fundamentals of Chemistry Laboratory (1) II
Laboratory course to be taken in conjunction with CHM 112 which demonstrates basic chemical tools and illustrates basic chemical principles.

CHM 203 General Chemistry I (3) I, S
Course in introductory chemistry which includes basic concepts: atomic structure, the mole, stoichiometry, gas laws, bonding theories, molecular structure and properties, thermochemistry, and some common reactions. This is the first half of a two semester sequence. CO: CHM 204.

CHM 204 General Chemistry Laboratory I (1) I, S
Laboratory portion of Chemistry 203. Experiments relevant to the content of CHM 203 are performed. CO: CHM 203.

CHM 205 General Chemistry II (3) II, S
Continuation of CHM 203. Concepts and theories covered include thermodynamics, kinetics, chemical equilibria, and applications of equilibrium theory to solubility, acids and bases, oxidation-reduction, and coordination chemistry. P: CHM 203. CO: CHM 206.

CHM 206 General Chemistry Laboratory II (1) II, S
Laboratory portion of Chemistry 205. Experiments relevant to the content of CHM 205 are performed. P: CHM 203, CHM 204. CO: CHM 205.

CHM 285 Honors Chemistry (3) II, S (Same as HRS 285)
A second-semester general chemistry course designed for honors students, potential chemistry majors, and for those students interested in the health sciences who want an advanced treatment of general chemistry topics. The course will focus on kinetics, thermodynamics, and especially expressions of solution equilibria with applications to quantitative chemical analysis. The approach will be from a conceptual understanding of solution chemistry leading into a quantitative treatment of solution phenomena. P: CHM 203. CO: CHM 286.

CHM 286 Honors Chemistry Laboratory (2) II, S (Same as HRS 286)
A laboratory-based course covering the theories and methods used in classical chemical analysis. Topics include statistical methods for evaluating and interpreting data, theory of chemical analysis and sources of error, and experiments based upon the principles of stoichiometry and equilibrium as applied to titration, precipitation, electrochemistry, and spectroscopy. One hour of recitation and three hours of laboratory per week. P: CHM 203; CHM 204. CO: CHM 285.

CHM 297 Directed Research (1-2) I, II, S
Participation in a research project under the direction of a member of the faculty. P: IC, DC.

## CHM 315 Quantitative Analysis (4) I, S

An integrated lecture and laboratory course that presents the theories and chemical methods for solving a variety of real problems in chemical analysis. Topics covered include: statistical methods for evaluating and interpreting data, sources of error in chemical analysis, principles of stoichiometry and equilibrium as applied to precipitation, acid-base, complexometric, electrochemical, and spectroscopic analysis. P: CHM 205; CHM 323.

CHM 321 Organic Chemistry I (3) I, S
Study of the structure and properties of organic compounds, as exemplified by alkenes, alkynes, alcohols, and alkyl halides. Stereochemistry, molecular structure, principles of reaction theory, and reaction mechanisms. P: CHM 205. CO: CHM 322.

CHM 322 Organic Chemistry Laboratory I (1) I, S
Fundamental techniques of experimental organic chemistry. Isolation, purification, and organic synthetic methods. P: CHM 205. CO: CHM 321.

CHM 323 Organic Chemistry Lecture II (3) II, S
Continuation of Chemistry 321. Further study of the principles of organic structure and reaction theory, including delocalized systems. Exploration of the chemistry of aromatic compounds, carbonyl compounds, and others, with additional emphasis on organic synthesis and structural analysis by spectroscopic methods. P: CHM 321 CO: CHM 324.

CHM 324 Organic Chemistry Laboratory II (1) II, S
Further study of practical organic reactions, the use of spectroscopic methods (NMR and IR) to elucidate and confirm organic structures, and multistep organic synthesis. P: CHM 322. CO: CHM 323.

CHM 341 Physical Chemistry I (3) II
CHM 341 and CHM 443 together comprise a complete introduction to Physical Chemistry. Topics covered include thermodynamics, gas-phase and solution transport properties, equilibrium, statistical mechanics, quantum chemistry, spectroscopy, and kinetics. A combination of macroscopic and microscopic emphasis will be used. Topics will be introduced with some historical background and developed with an appropriate level of physics and mathematical rigor. P: PHY 211.

CHM 342 Physical Chemistry I Laboratory (2) II
Experiments in thermodynamics and equilibrium will be conducted in an introductory research format. The writing of manuscripts and the maintenance of a laboratory research journal will carry equal import with experimental work. CO: CHM 341.

CHM 381 Fundamentals of Biochemistry (3) I
A one-semester survey of biochemistry for undergraduate science majors. Topics covered include structure-activity relationships of important biomolecules; metabolism and bioenergetics; DNA/RNA structure, function, repair and protein synthesis. P: CHM 323.

CHM 382 Biochemistry Laboratory (1) I
A one-semester laboratory course designed to support CHM 381, Fundamentals of Biochemistry. Introduction to methods and instrumentation for biochemical measurements: analysis and isolation of biologically-important compounds, strategies for assaying biological activity, cloning and purification techniques for DNA/RNA. P or CO: CHM 381.

CHM 416 Instrumental Analysis (4) II
Study of the major instruments used in analytical chemistry with an emphasis on modern instrumentation and laboratory techniques. P: CHM 443.

CHM 421 Selected Topics in Organic Chemistry (3) OD
Study of classes of compounds and reactions of organic chemistry not covered in the regular two-semester sequence (CHM 321, 323). Possible topics include sterochemistry, natural products, computational methods in organic chemistry, physical organic chemistry, photochemistry and other topics of current interest. P: CHM 323.
CHM 443 Physical Chemistry II (3) I
See CHM 341. P: PHY 212.
CHM 444 Physical Chemistry II Laboratory (2) I
Experiments in quantum and statistical chemistry and chemical dynamics will be conducted in an introductory research format. The writing of manuscripts and the maintenance of a laboratory research journal will carry equal import with experimental work. P: 342.

CHM 470 Chemical Literature (1) OD
Introduction to the literature of chemistry. Development of skills in information-finding through print and electronic resources. P: CHM 323.

CHM 491 Careers in Chemistry (1) II
A seminar course in which students are introduced to some of the careers within chemistry by speakers who work in the areas represented. Obligatory for and open only to chemistry majors (both degree programs). (One meeting a week.) P: CHM 321.

CHM 492 Industrial Internship (1-3) I, II
Each student will spend one day per week or its equivalent in an industrial plant or laboratory. Registration must be preceded by the student submitting a resume, a letter of application, and arranging for a personal interview with one or more industrial concerns prior to the registration date. Each student must be accepted by or have worked for an industrial employer prior to registration. P: CHM 315.
CHM 493 Directed Independent Readings (1-3) I, II, S Assigned reading in a special area of interest. P: CHM 341.
CHM 495 Directed Independent Study (1-3) I, II, S
P: CHM 341.

## CHM 496 Directed Independent Research I (1-2) I, II, S

Initial participation in a preapproved independent research project under the direction of a member of the department faculty. Research projects in chemistry conducted outside the department may also be acceptable. P: CHM 315 or CHM 285,6.

CHM 497 Directed Independent Research II (1-2) I, II, S
Continuation in a preapproved independent research project under the direction of a member of the department faculty. Students register for this course in their final semester of research. They are required to give a public presentation of their work and submit a research report. Research projects in chemistry conducted outside the department may also be acceptable. P: CHM 315 or CHM 285,6.

## CHM 501 Inorganic Chemistry I (4) I

Relation of atomic and molecular structure to chemical and physical properties. Periodicity and descriptive chemistry of inorganic classes and groups. Topics covered include group theory, MO theory, molecular and ionic structures, redox reactions, acid/base theories, and coordination compounds. Laboratory (3 hours weekly); descriptive inorganic chemistry P: CHM 341.

CHM 502 Inorganic Chemistry II (3) II
Additional topics in inorganic chemistry. Emphasis on organometallic chemistry of transition metals, molecular binding, synthesis and chemical reactivities of inorganic and organometallic compounds. P: CHM 501.

## CHM 506 Environmental Chemistry and Natural Resources (3) II

The nature, identification, and quantitative determination of air and water pollutants. Study of natural resources and energy production. Topics covered include the atmosphere, ozone, the troposphere, natural water, acid rain, drinking water, metals, organochlorine compounds and waste management. P: CHM 205.
CHM 521 Advanced Organic Chemistry: Synthetic Organic Methods (3) (OD)
A contemporary survey of the analysis, design, and execution of new methods and innovative total syntheses in organic chemistry. Approaches and techniques for critical reading, discussion, and application of the literature of organic chemistry will be introduced and developed. P: CHM 323.

CHM 523 Bioorganic Chemistry (3) OD
A survey of current topics at the boundary between organic chemistry and biology, with emphasis on enzyme mechanisms, enzyme inhibition, enzyme models, and natural products. The current chemical literature will serve as source material for study and discussion. P: CHM 323.

CHM 525 Organic Spectroscopic Analysis (3) OD
A study of infrared, nuclear magnetic resonance, and ultraviolet spectroscopy and mass spectrometry. Emphasis on both the theoretical basis of each method and the application of the methods to structure determination and other interesting chemical problems. P: CHM 324, CHM 341, or IC.

CHM 532 Mathematical Concepts in Chemistry (3) I
Applications utilizing statistics, mathematical operators, vectors, determinants, group theory, series expansions, and basic differential equations in the modeling of chemical systems. P: MTH 246.

CHM 543 Selected Topics in Physical Chemistry (3) OD
Selected topics from physical chemistry that match the interests of faculty and students, e.g. macromolecular chemsitry, will be discussed. The course will begin with review of related material from the year's course in physical chemistry and end with current research. P: CHM 443.

## CHM 544 Quantum Chemistry (3) OD

This course is designed to teach the mathematical background of quantum chemistry. Topics covered include operator algebra, quantum mechanical postulates, rigid rotor and harmonic oscillator model systems, applications to chemical systems, and computational chemistry. P: CHM 443.

## CHM 545 Advanced Kinetics (3) OD

This course is designed to teach the mathematical skills necessary for modeling kinetic systems in chemistry. Topics covered include differential equation techniques, elementary rate laws, composite rate laws, collision theory, transition state theory, reaction dynamics, and potential energy surfaces. P: CHM 443.
CHM 546 Use of Demonstrations in the Teaching of Chemistry I (2-3) S
This course concentrates on the use of demonstrations, activities, and other new ideas for use by the teacher in the presentation of chemical principles in the classroom. The theory behind each activity will be thoroughly discussed along with appropriate safety precautions.

## CHM 551 Descriptive Inorganic Chemistry (3) OD

Descriptive inorganic chemistry and laboratory practicum. A systematic study of the main group elements with an emphasis on chemicals and chemical reactions and processes of importance to society. Includes ten seven-hour sessions consisting of a four-hour lecture/discussion and three-hour laboratory format. Each laboratory session includes $10-15$ short experiments or activities. Many of the activities could be utilized at the high school level; however, the purpose of the course is to extend the participant's depth of knowledge of descriptive chemistry by first-hand laboratory experience. Students completing this course are excused from the laboratory portion of CHM 501.

## CHM 555 Microscale Gas Chemistry (1-3) S

Lecture/Laboratory course designed to present the use of gases to teach or experimentally discover important concepts of the high school and college chemistry curriculum. Environmental issues, reaction stoichiometry, intermolecular forces, catalysis, combustion, and molar mass are a few examples. High school teacher participants will learn to safely and conveniently generate over a dozen gases for classroom and use in the teaching laboratory. Each gas can be used in a variety of experiments or classroom demonstrations. Each experiment will be linked to one or more chemistry concepts with discussion of pedagogy as appropriate.

## CHM 575 Nucleic Acid Biochemistry (3) OD

This course presents an in-depth investigation of the current research in nucleic acid biochemistry. The class will focus on the structure and function of nucleic acids, biochemical processes involving nucleic acids, interactions of nucleic acids with proteins and drug molecules, catalytic nucleic acids, and the genome and genetic engineering. The current literature will serve as source material for study and discussion.

CHM 586 Elementary School Science Demonstrations and Classroom Activities (3) S This course offers elementary teachers practical methods for doing science in the classroom. Demonstrations and classroom activities that use a hands-on, interactive approach with students will be presented. The current methodology for interfacing science with language arts will be presented.

## CLASSICAL AND NEAR EASTERN STUDIES

Associate Professor Bakewell (Chair); Professor Greenspoon; Associate Professors Carlson, Simkins (secondary appointment), Stephens (secondary appointment), Thomas; Assistant Professor Bucher, Habash; Adjunct Associate Professor McGloin.

Courses offered by the Department of Classical and Near Eastern Studies are listed as Arabic, Classical and Near Eastern Civilizations, Greek, Hebrew, or Latin. A knowledge of ancient languages is not required for Classical and Near Eastern Civilizations courses.

## The Fields of Concentration

Concentration major in Classical and Near Eastern Civilizations: Thirty semester hours of upper-division work including one course in each of the following areas: literature, history, philosophy, and art/archaeology. The student must complete three semesters of one of the ancient languages, or demonstrate the equivalent ability. With the consent of the Chair, as many as three related courses from other departments may be accepted toward this major.

Co-major in Classical and Near Eastern Civilizations: Twenty-four semester hours of upperdivision work including one course in ancient literature and one course in ancient history. No knowledge of ancient languages is required. With the consent of the Chair, two related courses from other departments may be accepted toward this co-major.

Concentration major in Greek. At least eighteen semester hours of upper-division courses. Of these, at least twelve must be in Greek authors. The remaining may be selected from Greek, Hebrew, Latin, or Classical and Near Eastern Civilizations courses.

Concentration major in Latin: At least eighteen semester hours of upper-division courses. Of these, at least twelve must be in Latin authors or Latin composition. The remaining may be selected from Greek, Hebrew, Latin, or Classical and Near Eastern Civilizations courses.

Concentration major in Latin-Teaching: At least twenty-four semester hours of upper-division courses, including LAT 303 and LAT 450. The remaining courses may be selected from the Latin author courses. Supporting courses should be selected from the offerings in Classical and Near Eastern Civilizations.

Supporting courses for all majors. Twelve semester hours in 300-500-level courses in one or more departments with the approval of the major advisor.

## ARABIC (ARA)

## ARA 111 Elementary Modern Standard Arabic I (3) I

Pronunciation and writing drills; the basic inflection of the regular and hollow verb, form I through X; inflection of nouns and adjectives; root and pattern system and basic use of the dictionary; basic syntax; oral and written exercises. Open only to non-speakers of the language.

## ARA 112 Elementary Modern Standard Arabic II (3) II

Continuation of ARA 111. Doubled verbs, defective verbs; the subjunctive, passive and imperative; the passive voice; complex syntax; the masdar, active and passive participles; the adverb; conditional sentences; exclamations; oral and written exercises; reading. Open only to non-speakers of the language. P: ARA 111 or IC.

## CLASSICAL AND NEAR EASTERN CIVILIZATIONS (CNE)

Knowledge of ancient languages not required.

## CNE 120 World Literature I (3) I, II (Same as ENG 120)

A chronological introduction to Western and non-Western literatures from the ancient world through the Renaissance. The course juxtaposes Greek literature, Roman literature, English literature from the Old English, Middle English, and Renaissance periods with contemporary literatures from Asia, the Middle East, and other non-Western cultures.

CNE 122 Honors World Literature I (3) I (Same as ENG 122)
This course is open to first-year students eligible to enroll in honors courses. It requires the consent of the Director of the Honors Program.
CNE 301 Research and Writing in the Classics (3) OD
Historical development of major areas of classical scholarship; primary and secondary bibliographies. Introduction to the principles, techniques, and presentation of classical scholarship. Problems in criticism and research.

CNE 304 History of Greece and Rome (3) I AY (Same as HIS 304)
Historical survey of the Mediterranean region in the Hellenic and Roman periods. The Greek city-state, Hellenistic kingdoms, the Roman Republic and Empire. Political, economic, and cultural institutions.

CNE 306 Literature of Ancient Greece (3) OD
Survey of ancient Greek literature from Homer to Plato, including works of epic, drama, lyric, history and philosophy.
CNE 308 Literature of Ancient Rome (3) OD
Survey of ancient Roman literature, including epic, drama, lyric, oratory, satire, fable, and philosophy.
CNE 311 Classical Mythology (3) II
Nature and function of myth and legend; artistic, religious, psychological, and anthropological implications; influence on early and later literature and on art.

CNE 313 The Hero in Antiquity (3) OD
Literary criticism of a broad range of ancient literature, including epic, tragedy, comedy, lyric poetry, and philosophical dialogues, with special focus on the role of heroism within society.

CNE 315 Religions in the Greco-Roman World (3) OD
Beliefs and rituals of the religions of ancient Greece and Rome, including the mystery religions.
CNE 321 Epic Literature (3) OD
Homer's Iliad and Odyssey, Vergil's Aeneid, and, for purposes of comparison, the Epic of Gilgamesh and other epic literature with attention to cultural context, the heroic character and poetic technique.
CNE 323 Classical Greek Drama (3) I (Same as THR 323)
Selected works of Greek dramatists. The influence of Greek drama on English literature and on modern drama.

CNE 325 Fable Literature (3) II AY
Analysis of the major fable writers of the Western tradition, including Aesop, Babrius, Phaedrus, LaFontaine, Iriarte, Krylov, and Thurber, and the fables found in Kalila and Dimna. The course's coverage of fable includes the tradition of illustration of Aesopic fables and modern development of the joke-fable and anti-fable.

CNE 348 Muhammad and the Rise of Islam (3) OD (Same as HIS 348)
The course examines the emergence and flowering of Islamic civilization from the time of the prophet, Muhammad, until the sack of Baghdad by the Mongols in 1258. Topics include Muhammand's prophetic mission, the Arab Kingdom of Damascus, the rise of the Abbasids, and the classical civilization of the High Caliphate. P: So. stdg.

CNE 349 Egyptian Art and Archaeology (3) OD (Same as ART/HIS/THL 349)
This course will explore the history, society, culture, and religion of ancient Egypt from the predynastic era through the Ptolemaic period, as revealed through its artistic and material remains. Attention will be given to how sculpture, painting, architecture, and other material remains provide a window on Egyptian life and though. P: So. stdg.
CNE 350 Archaeology of Syria-Palestine (3) OD (Same as ART/HIS/THL 350)
A chronological survey of the archaeology of Syria-Palestine in which material culture provides a window on the history of society, economy, and religion from the Neolithic to Hellenistic times. Special topics include the emergence of farming and pastoral societies, the formation and dissolution of Bronze Age city-states, and the rise and fall of Iron Age kingdoms such as Israel, Moab, and Edom.

CNE 354 Greek Art and Archaeology (campus) (3) II (Same as ART 354)
Study of the sculpture, painting, architecture, and sites of ancient Greece with emphasis on their archaeological, historical, and geographical aspects.
CNE 355 Greek Art and Archaeology (travel course) (3) II S (Same as ART 355) Travel course. Twenty-three days. Mainland tour includes Athens, Eleusis, Corinth, Mycenae, Epidaurus, Sparta, Pylos, Olympia, Delphi, Meteora, Brauron, and Sounion. Island visits include four days on Crete and two days on Santorini. On-site and background lectures.
CNE 356 Greeks and Romans in the Bay of Naples (2) S
Two-week study course at the Villa Vergiliana, Cume, Italy. Study of the physical remains of Italic, Greek, and Roman culture on and near the Bay of Naples and the relationships between these remains and ancient literature (particularly Vergil) and history. Sites to be visited include Puteoli, Lake Avernus, Naples, Paestum, Benevento, Capua, Misenum, Pompeii, and Herculaneum.

CNE 357 Ancient Near Eastern Art and Archaeology (3) OD
History of painting, sculpture, architecture, and minor arts in the Ancient Near East from c. 3500 B.C. to the conquest of Achaemenid Persia by Alexander the Great in 331 B.C. Regionally, the course will survey the arts in Mesopotamia, in such peripheral areas as Anatolia and the Levant, and in ancient Iran.

CNE 362 Early Christian Art and Archaeology (3) II OD (Same as ART 362)
Study of the development of early Christian architecture, painting, sculpture, and industrial arts; archaeological excavation of early churches and catacombs with emphasis on problems of interpretation; Western and Byzantine iconography.

CNE 365 Greek Art (3) OD (Same as ART 365)
Sculpture, painting, and the minor arts of Greece.
CNE 366 Etruscan and Roman Art (3) OD (Same as ART 366)
Sculpture, painting, and the minor arts of the Etrusco-Roman people.
CNE 370 History of Classical Greek Philosophy (3) AY (Same as PHL 370)
Examination of the origins and development of Western philosophy during the classical period in ancient Greece; the pre-Socratics; Socrates and the Sophists; substantial study of the works of Plato and Aristotle.
CNE 371 History of Hellenistic Philosophy (3) AY (Same as PHL 371)
Examination of the development of Western philosophy after Aristotle during the Hellenistic period in ancient Greece and imperial Rome. The study of Epicureanism (pleasure is the highest good), Stoicism (living in agreement with nature is the highest good), Skepticism (peace of mind is gained by suspending one's judgment on all dogmatic claims to truth), and Neo-Platonism.

CNE 381 Ancient Medicine (3) II OD
Development of medical and surgical techniques and the philosophical, religious, sociological, political, and literary aspects of health care delivery in the ancient world; classical medical treatises, including Hippocrates and Galen.

CNE 410 Stoicism (3) OD (Same as PHL 410)
Study of the philosophy originated by Zeno of Citium in the Stoa Poikile in Athens around 300 BCE and the influence of Stoicism in the history of Western philosophy. Investigation of the Stoic system of physics, logic, and ethics; the doctrines of naturalism, rationalism, fatalism, providence, cosmopolitanism, autarky, apatheia, and suicide. Possible topics include philosophy of mind, philosophy of language, freedom and determinism, and political philosophy.
CNE 420 Selected Topics in Ancient History (3) OD (Same as HIS 420)
Topical approach to select problems or special periods in ancient history. Course will be subtitled in the Schedule of Courses.
CNE 421 Roman Social Satire (3) OD
Readings from Horace, Juvenal, Petronius, and other Roman satirists.
CNE 423 Greek and Roman Comedy (3) OD
Origins, literary characteristics, and influence of Greek Old and New Comedy and Roman Comedy: Aristophanes, Menander, Plautus, and Terence. Theory of the comic.

CNE 430 Selected Topics in Ancient Art and Archaeology (3) OD (Same as ART 430)
Topical or regional focus in the area of ancient art and/or archaeology. Course will be subtitled in the Schedule of Courses.

CNE 440 Selected Topics in Classical Literature (3) OD
Topical approach to selected problems or themes in ancient literature. Course will be subtitled in the Schedule of Courses.
CNE 460 Selected Topics in Ancient Philosophy (3) OD (Same as PHL 460)
Topical approach to selected problems or themes in ancient philosophy, or focus on an individual philosopher or school of philosophy. Course will be subtitled in the Schedule of Courses.
CNE 493 Directed Independent Readings (2-4) I, II, S
Credit by arrangement. Designed to meet the special needs of qualified students. May be repeated to a limit of six hours.

CNE 497 Directed Independent Research (1-3) OD
May be repeated to a limit of six hours. P: DC.

CNE 520 The Dead Sea Scrolls (3) OD (Same as THL 520)
Introduction to the Dead Sea Scrolls and various theories about their origin. Exploration of the light they shed on the textual history of the Hebrew Bible, developments in ancient Judaism, and the early history of Christianity.

CNE 524 History of Ancient Israel (3) OD (Same as HIS 524, THL 524)
An examination and reconstruction of the history of ancient Israel from biblical and other ancient Near Eastern literary texts, and from archaeological and epigraphic materials.

CNE 525 Archaeological Fieldwork and Analysis (3) S (Same as ANT/THL 525)
The student learns the principles of stratigraphic archaeology (or underwater archaeology) by participating in an excavation for a minimum of four weeks. The student will learn stratigraphic theory and excavation strategy, basic archaeological techniques, and the basic analysis of archaeological materials recovered from the site. (Underwater archaeologists will learn basic underwater techniques in place of some terrestrial methods.) CO: CNE 526.
CNE 526 Archaeology of Roman Palestine (3) S (Same as ANT/THL 526)
This is a study of ancient Palestine from the rise of the Herodian dynasty in the first century BCE to the aftermath of the Muslim conquest in the seventh century CE. The material of the course is the physical remains of archaeological sites throughout modern Israel, along with movable cultural remains that issued from these sites. The major focus of the course will be the interaction between classical Mediterranean civilization on the one hand, and the Jews and other Middle Eastern peoples on the other, in the age that yielded Rabbinic Judaism, Christianity and Islam. CO: CNE 525.
CNE 529 Translations of the Bible (3) OD (Same as THL 529)
Various ancient translations of the Bible and their significance.

## GREEK (GRK)

NOTE: Students who have had two or three years of high-school study in Greek should begin their study of Greek at Creighton University with a 200 -level Greek course. Students who have had four years or more of high-school Greek should begin their study at Creighton with a 200-500 level Greek course. The Greek faculty will be happy to discuss placement in Greek courses with any interested student.

GRK 101 Beginning Greek I (3) I
Basic vocabulary, syntax, and morphology for reading classical and New Testament Greek authors.

GRK 102 Beginning Greek II (3) II
Completion of study of basic vocabulary, syntax, and morphology. P: GRK 101 or equiv.
GRK 111 Beginning Greek: New Testament (3) OD
Basic vocabulary, syntax, and grammar of Koine Greek. Reading of special chapters from the Gospel of John.

GRK 201 Selected Readings in Classical Greek (3) I
Reading of selections of classical Greek prose and poetry; study and review of syntax. P: GRK 102 or see notation under Greek heading.
GRK 211 Readings in the New Testament (3) OD
Critical study of the form and content of several books of the New Testament. P: See notation under Greek heading.

GRK 215 Euripides (3) II AY
Reading of the Medea of Euripides; study of the tragic meters and the development of Greek drama. P: See notation under Greek heading.
GRK 225 The Odyssey of Homer (3) II AY
Reading of selections from the Odyssey; study of the Homeric dialect, Greek hexameters, the cultural background of Homer, and oral poetics. P: See notation under Greek heading.
GRK 310 Terminology of the Medical Sciences (3) I, II (Same as LAT 310)
Study of Greek and Latin prefixes, suffixes, stems, derivatives, word combinations and related expressions to clarify the origins and correct usage of the terminology of science. Recommended to students preparing for the health professions. P: So. stdg.

GRK 493 Directed Independent Readings (2-4) OD
Designed to meet the special needs of qualified students. Credit by arrangement. May be repeated to a limit of six hours.

GRK 501 Greek Orators (3) OD
Selected speeches of various orators; the historical background; the development of Attic prose.
GRK 502 Greek Historians (3) I AY
Selections from Greek historians and a study of their historical methods.
GRK 523 Plato: Dialogues (3) I AY
Readings from the Apology, Crito, Phaedo. Development of the dialogue as a literary form.
GRK 525 Aristotle (3) OD
Reading of selections from the moral, political, and literary treatises of Aristotle; problems in Aristotelian scholarship.
GRK 527 The Greek Fathers (3) OD
Extensive readings from the Apostolic Fathers including selections from St. John Chrysostom.
GRK 528 The Septuagint (3) II (Same as THL 528)
Readings from the Greek Old Testament, commonly known as the Septuagint (LXX); study of its cultural and religious background.
GRK 531 Greek Lyric Poetry (3) II
Selections from Greek lyric poetry, including Sappho, Solon, Simonides, Pindar, and Bacchylides; study of lyric dialects and meters.

GRK 542 Greek Tragedy (3) I AY
Selections from the Greek tragedians.
GRK 544 Greek Comedy (3) II AY
Reading of selected comedies; the origins and characteristics of Greek Old and New Comedy.
GRK 552 The Iliad of Homer (3) II AY
Reading and interpretation of selected passages from the Iliad of Homer; study of the Homeric dialect, development of Greek epic, and historical and poetic aspects.

## HEBREW (HEB)

HEB 101 Introduction to Classical Hebrew I (3) I Introduction to Classical Hebrew: alphabet, paradigms, introductory grammar.
HEB 102 Introduction to Classical Hebrew II (3) II
Continuation of Classical Hebrew I with emphasis on grammar, structure, and compositional techniques, leading to a study of Hebrew narrative. P: HEB 101
HEB 201 Introduction to Classical Hebrew Poetry (3) OD
Literary analysis of select Biblical poetry (prophets and psalms) with emphasis on structure, cultural context, and linguistic styles. P: HEB 102

## LATIN (LAT)

NOTE: Students who have had two or three years of high-school study in Latin should begin their study of Latin at Creighton University with a 200-level Latin course; students who have had four or more years of high-school Latin should begin their study at Creighton with a 300-500-level Latin course. The Latin faculty will be happy to discuss placement in Latin classes with any interested student.

LAT 101 Beginning Latin I (3) I, II Survey of basic forms. Reading selections. Exercise in prose composition.
LAT 102 Beginning Latin II (3) I, II Continuation of Latin I. Selections from classical Latin authors. P: LAT 101 or equiv.

## LAT 115 Intensive Beginning Latin (6) S

Intensive introduction to the grammar and vocabulary of Latin. Course will cover all of the basic grammatical elements of Latin and introduce much of the basic vocabulary; at the end of the course some Latin authors will be introduced to present the grammar and vocabulary in context.

LAT 201 Intermediate Readings in Latin Prose (3) I
Selections from Cicero's orations and/or other verse authors. This course applies and extends the language study done in LAT 101 and 102. P: LAT 102 or equivalent. See notation under Latin heading.

LAT 202 Intermediate Readings in Latin Verse (3) II
Selections from Vergil's Aeneid and/or other authors. Metrical readings. This course applies and extends the language study done in a student's first three semesters and prepares the student for advanced Latin courses. P: LAT 201 or equivalent. See notation under Latin heading.
LAT 300 Readings in Latin Authors (3) OD
Selected readings of major Latin authors from the republican and imperial periods. Review of basic Latin grammar and syntax. Study of prose and poetic syles of the authors studied. P: See notation under Latin heading.

LAT 301 Ovid (3) OD
Survey of the works of Ovid to move beyond the basics of reading Latin verse to the interpretation of Ovid's poetic technique. See notation under Latin heading.
LAT 303 Latin Composition (3) I, II
Presentation of sufficient material for exercising the finer points of Latin style. Imitation of the masters of Latin style, especially Caesar, Cicero, and Vergil. P: See notation under Latin heading.
LAT 310 Terminology of the Medical Sciences (3) I, II, (Same as GRK 310)
Study of Greek and Latin prefixes, suffixes, stems, derivatives, word combinations and related expressions to clarify the origins and correct usage of the terminology of science. Recommended for students preparing for the health professions. P: So. stdg.
LAT 450 Methods and Content in Secondary-School Latin (3) OD (Same as EDU 450)
Basic principles of Latin teaching in the high school. Objectives and content of the four years of Latin. Comparison of various methods of teaching.
LAT 493 Directed Independent Readings (2-4) I, II, S
Designed to meet the special needs of qualified students. Credit by arrangement. May be repeated to a limit of six hours.
LAT 506 The Latin Fathers (3) OD
Extensive readings from selected authors, including Augustine, Jerome, and Tertullian.
LAT 509 Medieval Latin (3) OD
Selected readings from St. Bernard, St. Anselm, St. Thomas, and St. Bonaventure.
LAT 510 Silver Latin (3) OD
Study of one genre from Silver Latin (tragedy, epic, history, biography, epigram), and an introduction to the styles and tastes of the period.

LAT 514 Roman Historians (3) II AY
Selections from Roman historians including Sallust, Livy, Tacitus; a study of their historical methods.

LAT 518 Roman Philosophy (3) AY
Selected readings from Lucretius' De rerum natura and/or Cicero's philosophic works; study of Roman philosophic interests, especially Epicureanism and Stoicism.

LAT 520 Roman Satire (3) OD
Readings of selections from the Satires and Epistles of Horace, the Satires of Persius, and the Satires of Juvenal, with discussion of the origins and development of Roman satire, and the nature and purposes of satire as a genre of literature.

LAT 524 Latin Lyric (3) II
Study of the odes of Horace and select poems of Catullus.

LAT 529 Latin Elegy (3) OD
Study of the elegiac poems of Catullus, Tibullus, Propertius, and Ovid.
LAT 534 Latin Oratory (3) II
Selections from Cicero's political and courtroom orations; syntax and method of composition; historical and legal background.
LAT 538 Latin Epistles and Essays (3) I OD
Selections from the letters and essays of Cicero and Seneca with emphasis on their philosophical content. A comparison of Golden Age and Silver Age Latin.
LAT 544 Roman Comedy (3) I AY
Reading of representative plays of Plautus and Terence; theory of the comic; origins, literary characteristics, and influence of Roman comedy.
LAT 551 Vergil (3) I AY
Selections from the Aeneid; study of Vergil's structure, imagery, diction, and meter; reference to the Homeric poems and the contemporary political situation.

## COMMUNICATION STUDIES (COM)

Associate Professors Danielson (Chair), Matthiesen, and Pawlowski; Assistant Professors Birkholt, Ford, Kirby; Instructor Hellbusch.

COM 152 and a QPA of 225 are the prerequisites for the Applied, Organizational or Corporate Communication major and Applied or Organizational Communication Co-Major.

## The Field of Concentration

Applied Communication: Thirty-three hours including COM 200, 320 or 321, 340, 361, 362; 18 hours of upper-division COM courses (no more than six of which may be debate and forensics).
Corporate Communication: Thirty-three hours including COM 200, 314, 321, either 361 or $362,463,495,496$, JMC 323 , JMC 341 or 379 ; 6 additional hours, 3 of which must be in electronic communications (e.g., COM/EDU 564, 565, COM/JMC/EDU 572).
Organizational Communication: Thirty-three hours including COM 320, 360, either 361 or 362, 463 or 464,495 ; 18 hours of upper-division COM courses (no more than three hours of which may be in debate or forensics).
Supporting courses: Twelve semester hours in 200-500 level courses in one or more departments with the approval of the major advisor.

## Co-Major in Applied Communication:

Twenty-one hours in Communication Studies including COM 200, 320 or 321, 340, 361, 362; plus six upper division hours.
Co-Major in Organizational Communication:
Twenty-one hours in Communication Studies including COM 320, 360, 361 or 362,463 or 464,495 ; plus six upper division hours.

COM 151 Effective Public Speaking (3) OD
Practical study in the effective communication of thought and emotion in public speaking. Development of skills in message organization, reasoning, topic analysis, and delivery. Individual performances with teacher criticism.

COM 152 Principles of Communication Competence (3) I, II, S
An introduction to the process by which informed, sound, and sensitive messages are formulated and delivered to influence decision-making. Emphasis on acquiring common analytic approaches to message preparation: the sources, credibility, and uses of evidence; patterns of inference; and the selection and presentation of judgments. Students apply critical thinking skills to solve problems and build consensus in interpersonal, small-group, organizational, and public settings.
COM 153 Honors Principles of Communication Competence (3) OD
An introduction to the process by which informed, sound, and sensitive messages are formulated and delivered to influence decision-making. Emphasis on acquiring common analytic approaches to message preparation: the sources, credibility, and uses of evidence; patterns of
inference; and the selection and presentation of judgments. Students apply critical thinking skills to solve problems and build consensus in interpersonal, small-group, organizational, and public settings. P: Consent of the Director of the Honors Program prior to Early or Final Registration.

COM 200 Introduction to Communication Research Methods (3) II, S
Examination and practical application of research methods in Communication Studies. Includes rhetorical, cultural, interpretive, quantitative methods of analyzing communication artifacts such as content analysis, field research, ethnography, rhetorical criticism, among others. Applied to such areas culture, group, interpersonal, family, organization, and media.
COM 201 Introduction to Debate and Forensics (1-3) I, II Foundations of debate and forensics. $11 / 2$ R. P: IC.

COM 205 Parliamentary Procedure (3) OD
Fundamentals of Parliamentary Law; practice in conducting typical meetings held by clubs and school and civic organizations. A study of constitutions, by-laws, minutes, and committee reports.

COM 244 Cross-Cultural Communic ation (3) II ENY (Same as ANT 244)
Course combines attention to sociolinguistic theory and analysis with practical strategies for maximizing communication between people from varying national, ethnic, professional, religious, and regional backgrounds. P: So. stdg.

COM 301 Intermediate Debate and Forensics (1-3) I, II
Further studies in debate/forensics techniques and practice. $11 / 2$ R. May be repeated to a limit of three hours. P: IC.

COM 305 Speech Techniques for the Classroom Teacher (3) OD
Analysis of speech problems encountered in the classroom particularly on the elementary level. Practical experience will be offered in speech assignments that can be utilized in various courses. The teacher's own speaking will receive attention.

COM 310 Writing Strategies for the Organization (3) OD (Same as ENG 310)
Presentation of written communication used in organizations. Topics include preparation of memos and letters, research skills, and the formal report.
COM 311 Ethics and the Uses of Rhetoric (3) OD (Same as ENG 311)
Survey of the major works on rhetoric that treat ethics from the time of Plato to the Moderns. P: Jr. stdg.
COM 312 Mass Media and Modern Culture (3) I, II (Same as AMS 312, ENG 312) Examination of the role of film, television, and print media in American life. P: Jr. stdg.
COM 314 Managerial Communication (3) I, II, S
Theory and practice of advanced topics in managerial communication. Topics include organizational structure and lines of communication; interpersonal and group communication in organizational settings; problem solving; interviews; techinques for written and oral presentations. P: COM 152 and Jr. stdg.
COM 317 Studies in Argumentation and Debate (3) OD
Practical course in the study of oratorical and debate techniques.
COM 319 Language, Culture, and the Individual (3) AY (Same as ANT 319)
The anthropological approach to the study of language examines the biological source and manner of human communication as well as the cultural processes that structure languages, their meanings, means of acquisition, and transformations. The course examines the interrelationship of individuals, groups, and the wider culture through language.
COM 320 Leadership: Theories, Styles, and Skills (3) I, S (Same as EDU 320)
Course designed to offer participants an opportunity to gain a working knowledge of leadership theories and group dynamics. Designed to develop and improve leadership skills and to learn how to apply these skills in a practical setting.
COM 321 Persuasion (3) II
Theory and practice for the advanced student interested particularly in psychology and method of persuasion. Useful for professional fields which deal in persuasion, or for anyone interested in better understanding the world of persuasion in which he or she lives.

## COM 325 Communication Psychology (3) OD

Examination of the psychological variables that affect interpersonal, group, and family life. Units include the physiology and development of communication; family communication patterns; nonverbal communication; an introduction to psycholinguistics; psychodynamic theories of speech; and the intrapersonal communication of dream and fantasy.

COM 333 Film Interpretation: Archetypal Approaches to Movie Genres (3) OD (Same as ENG 333) An introduction to critical film viewing, concentrating on recent American movies from several genres. An overview of the elements of film from the perspectives of archetypal and mythological criticism.

COM 340 Communication Theories (3) I
Overview of the basic communication discipline through examination of basic theories and research in various communication contexts. Focuses on understanding and strategies of written and spoken communication used in interpersonal, intercultural, family, organizational, group, and mass media.

COM 353 Speaking Strategies for the Organization (3) OD
Practical training in speeches for informal and formal business/professional settings. Practice in sales presentations, technical reports, impromptu speaking, and speeches for special occasions. Special focus on use of visual and graphic support, message organization and delivery. Extensive use of videotape to record and evaluate student performances. P: COM 151 or 152.

COM 360 Organizational Communication Theories (3) I
Introduction to the basic theories, research, and methods of effective communication needed in the organizational setting. Review of the strategies of spoken and written communication to increase understanding and to affect the actions of others. Topics include theories of management, models of communication, formal and informal communication networks, the elements of superior-subordinate communication, and communication styles and problems.
COM 361 Interpersonal Communication (3) I
Examination of person-to-person communication. Topics include perception, motivation, language and meaning, nonverbal communication, and listening.

COM 362 Small Group Communication (3) II
Examines the need for communication within and between groups within the organization. Theory and practice in methods for improving communication within and between groups, including leadership, conflict management, and decision-making.

COM 363 Family Communication (3) I
An introduction to the process by which students can use the principles of interpersonal and group communication to create and sustain healthy family relations. Course seeks to enable students to create and sustain cohesion and adaptability two prerequisites for successful family relations. Topics covered include communication patterns and family meaning, the communication of intimacy, the communication of family roles, decision making in families, family conflict resolution, and communication strategies for reducing family stress.

COM 370 Human Resource Administration (3) II
Introduction to human resources mangement and practices in business and non-profit settings. Topics include role of human resources in organizational settings, particularly in the light of Workforce 2000; equal employment opportunity; analyzing and staffing jobs; employee recruitment and selection; training and development; employee appraisal; and human resources administration as a career path.
COM 380 History and Criticism of Cinema (3) S (Same as ENG 380)
Motion pictures as a distinctive medium of communication and as an art form; film language; film history; film appreciation; critical assimilation of film content. 2R, 3L.

COM 390 Health Communication (3) II (Same as HAP 390)
This course investigates research and theories and permits students to demonstrate practical applications of communication within health care situations. The course emphasizes understanding communication variables such as verbal, nonverbal, conflict, listening, and self-disclosure in health care contexts. The course also examines issues of ethics and relationships between health care providers, patients, and families.

COM 401 Junior Varsity Debate and Forensics (1-3) I, II
Competitive debate and forensics. 1 1/2R. May be repeated for credit to a limit of three hours. P: IC.

## COM 421 Seminar in Speech and Oral Interpretation (3) OD

Discussion-laboratory course in which projects will be developed to meet special needs of individual students. Focus on sharing with an audience the full thought and emotional content of the written word in natural, forceful, and attractive interpretive reading. Individualized instruction especially relevant for students interested in ministry, teaching, law, and communication.

COM 427 Interviewing (3) I
Study of research, theories, and strategies for effective interviewing. Practical work with students in interview situations, both for interviewer and interviewee. Study of employment interviews, information-gathering interviews, persuasive/sales interviews, and resume writing.

COM 431 Special Studies in Forensics (1-3) OD
Projects in oral interpretation, rhetorical criticism, and advanced public speaking. P: IC.
COM 440 Gender Communication (3) II (Same as SOC 440)
Focuses on the similarities and differences in the communicative behaviors of women and men. Lectures, in-class experiential exercises, role-playing, and group discussions devoted to such topics as female-male roles and stereotypes; differences in verbal and nonverbal codes; partnership styles and alternatives; specific communication skills aimed at female-male relationships in a variety of settings (e.g., education, the workplace, the media, etc.); and special problem areas of female-male communication.

COM 447 Special Methods in Teaching Secondary School Speech (3) OD (Same as EDU 447)
To meet the needs of the teacher, or speech major who anticipates a teaching career. Practical methods and materials for a survey course in speech fundamentals. P: DC of Communication Studies, Education.

COM 463 Organizational Assessment (3) I (Same as EDU 463, SOC 463)
Workshop evaluating characteristics of organizations (including schools and service organizations). Practical training in assessing the effectiveness of such interventions as curriculum, training and development, and personnel. Special emphasis on planning, conducting, and interpreting surveys; developing questionnaires, interpreting results, and writing final reports.
COM 464 Organizational Training and Development (3) II
Practical experience in designing, conducting, and evaluating training and development workshops within organizations. Topics include analyzing training needs; adult learning styles; setting training objectives; conducting instructional workshops; consulting practices; and training evaluation.

COM 470 Seminar in Film Studies (3) OD (Same as ENG 470)
Topical seminar with topics changing in different semesters. Examination of particular areas of film and popular culture. Topics in different semesters might include detailed examination of a film genre (e.g., the western; science fiction; detective films), or film and cultural studies (e.g., women and film; film and developing nations). May be repeated for credit to a limit of six hours.

COM 488 Personal and Spiritual Dimensions of Leadership (3) OD (Same as EDU/SRP/THL 488) The purpose of the course is to give students the opportunity to engage in introspection and examination of their personal belief and value systems as it relates to leadership. The course begins from the assumption that leadership is "a journey that begins within" and examines the relationship between leadership theory and Christian spirituality. Biographical examples will be analyzed; biographies will be drawn from diverse fields such as health, science, business, government, sports and education. P: Sr. stdg.

COM 493 Directed Independent Readings in Communication (1-3) I, II, S
In-depth survey of literature on a topic determined in consultation between a student and faculty supervisor. Requires extensive library work and a written analysis of readings. Subject matter and method constructed to meet the individual needs of students. P: DC and approval of major adviser prior to early registration. May be repeated for credit to a limit of six hours.

COM 494 Directed Independent Study in Communication (1-3) I, II, S
Subject matter and method constructed to meet the individual needs of students. P: DC and approval of major adviser prior to early registration. May be repeated for credit to a limit of three hours.

COM 495 Special Topics in Communication Studies (3) OD
Focus on developing practical application of communication concepts in a variety of contexts. Course will be subtitled in the Schedule of Courses. No more than 6 hours of Communication Studies 495 may be taken for credit toward a degree. P: Major status or IC.

COM 496 Communication Internships (1-3) I, II, S
Students are placed in organizations for the purpose of applying the principles and theories learned in the classroom. Supervision provided both on site and on campus. May be repeated for credit to a limit of six semester hours. P: COM 340 or COM 360, and COM 361 or COM 362 or IC.

## COM 497 Practicum in Debate (3) OD

Workshop for high-school debate coaches in the methods and techniques of preparing secondary school students for competitive debating.
COM 501 Varsity Debate and Forensics (1-3) I, II
Intercollegiate competitive debate and forensics. Credit by arrangement. May be repeated for credit to a limit of three hours. P: IC.

## COMPUTER SCIENCE (CSC)

Professor Cheng (Chair, Department of Mathematics/Computer Science); Associate Professor Nair (Director, Computer Science) Professors Malik, Mordeson; Associate Professors J. Carlson, Wierman; Assistant Professor Reed.

## The Field of Concentration for the Degree of Bachelor of Science

Concentration major: Students must take Computer Science 221, 222, 509, 514, 527, 533, 536, and 542; and any four 500-level computer science courses. No more than six semester hours of 493, 495, 497, 499 MTH, STA or CSC courses may be applied to the major.

Supporting courses: Mathematics 245, 246, and 529.
The Department of Mathematics offers a Mathematics/Computer Science track yielding the degree of Bachelor of Science in Mathematics. See Mathematics department for details.

Computer Science/Mathematics 509 may not be used to satisfy both Computer Science and Mathematics requirements.

## The Field of Concentration for the Bachelor of Science in Computer Science

 with a major in Applied Computer ScienceA total of 36 semester hours of Computer Science (CSC) courses.
Required Courses: CSC 221, 222, 538, 542, 544, 546, 548, and 552. In addition, the student chooses four optional 500-level computer science courses. One may be substituted by CSC 231.

## The Major for the Associate in Science Degree

Open only to students enrolled in University College. To obtain this degree a student must complete 64 semester hours including CSC 221, 222, and 12 semester hours in 500-level CSC courses; MTH 135 and 245; the Core requirements (see page 145), and 12 hours of electives.

CSC 102 Applications Software (3) S 1995
Designed to teach the basic concepts of word processing, spreadsheets and database management to the computer novice. Topics include Microsoft Word, Excel, and Access.
CSC 103 Applications Software II (3) OD
Designed to teach advanced concepts of text and HTML editing, spreadsheet database management, and presentational software to software users of the intermediate level or above. Microsoft Word, Excel, Access, Frontpage, and Powerpoint will be used. P: CSC 102 or IC.

CSC 107 Introduction to Computing Concepts (3) I, II
Introduction to the computer's ability to store, process, and generate information. Includes using a wordprocessor, spreadsheet, and database.
CSC 108 Introduction to Personal Computing (3) I, II
Hardware and software for the IBM compatible PC. Using Windows and command line DOS. Windows/DOS file structure.

CSC 205 Introduction to Desktop Publishing (3) OD
Typesetting and pasting up; use of Page Maker for windows and Corel Draw 3.0.

CSC 221 Computer Programming I (3) I, II
Computer organization; algorithm development; structured programming design. CO: MTH 135.

CSC 222 Computer Programming II (3) I, II
Further algorithm development and structured programming design; simple data structures; string processing; searching and sorting techniques. P: CSC 221.
CSC 230 Program Design with Visual Tools and Objected Oriented C++ (3) OD
Data typing; arithmatic expression; logical expressions; conditional statements; recursion; pointers; dynamically allocated storage; encapsulation; abstraction modularity; hierarchy; inheritance; overloading. P: Open only to Bus. Ad. students.
CSC 231 COBOL Programming Language (3) II
COBOL programming language; structured programming; business applications.
CSC 324 WEB-based Interface Design (3) I
HTML will be used to design web-pages. HTML fundamentals, as well as Image Maps, Forms, Frames, Style Sheets, and Plug-ins will be covered. The development of simple graphics, the fundamentals of graphic design philosophies will be studied.
CSC 328 Electronic Commerce (3) I
The student is expected to integrate the knowledge gained in the previous five classes in the design and instigation of a business Website. HTML forms are expected to feed data into an online database via a scripting language. The class will probably use Excel databases fed by vb Script programs. Additional issues considered are security, and privacy. P: CSC 221, 324, 526, 542, and 557.

CSC 338 C++ Programming (3) OD
Course designed to present a complete ANSI version of the C++ language. The terminology of object-oriented concepts are defined, and the way in which these concepts are supported by $\mathrm{C}++$ is discussed. Object-Oriented programming is stressed throughout the course. P: CSC 222 or industry experience.
CSC 493 Directed Independent Readings (1-3) OD
Directed readings course investigating either topics not offered in the curriculum or topics offered in the curriculum in depth. May be repeated to a limit of six hours. P: DC.

CSC 495 Directed Independent Study (1-3) OD
Directed study course investigating current topics in computer science. May be repeated to a limit of six hours. P: DC.

CSC 504 Visual Basic (3) OD
First the course presents the VB environment and the basic set of widgets available for project development. Each widget has properties and functionality. In this context the VB language, consisting of statements, data types, control structures and subroutines, is developed. Advance topics include files, database files, drag-and-drop, graphics, and DLLs.

CSC 509 Discrete Structures (3) I (Same as MTH 509)
Logic; Boolean algebra; switching circuits; graphs; groups; semi-groups; finite state machines; coding theory; grammars; algorithms. P: CSC 221; 6 hrs. college MTH.

CSC 514 Introduction to Computer Organization (3) II
Digital logic design, basic addressing modes, instruction formats and interpretation, I/O devices, memory organization, computer arithmetic, microprogrammed control.
CSC 515 Computer Architecture (3) I or II
Components of micro-, mini-, and mainframe architectures; microprogramming; stack computers; parallel computers; pipeline and vector processing, VLSI and systollic architectures, RISC architecture. P: CSC 514.

CSC 525 Automata, Computability, and Formal Languages (3) OD (Same as MTH 525)
Finite state concepts; acceptors; formal grammars; computability; Turing machines. P: CSC 509.

CSC 526 Web Site Administration (3) II
The main topic of this class is the installation and configuration of web-servers. At a minimum, the two most common types of small business servers, those based on Windows NT
and the UNIX operating systems, will be covered. This class will provide hands-on experience.

CSC 527 Data Structures and Algorithm Analysis (3) II
Graph algorithms, sorting techniques-internal and external, different types of binary trees, B-trees, static and dynamic tables. P: CSC 222, 509.
CSC 533 Organization of Programming Languages (3) I or II
Language definition structure; data types and structures; control structures and data flow; run-time consideration; interpretative languages; lexical analysis and parsing. P: CSC 527.

## CSC 535 Introduction to Compiler Design (3) OD

Review of program language structures, grammars, translation, loading, execution and storage allocation; compilation of simple structures. Organization of a compiler including compile-time symbol tables, lexical scan, syntax and semantic analyzer, object code generation, error diagnostics; object code optimization techniques, and overall design. P: CSC 527.
CSC 536 Introduction to Systems Programming and Operating Systems (3) I
Assembler, loader, linker, introduction to operating systems, interrupt processing; memory management; multitasking; input/output control systems. P: CSC 527.

## CSC 538 Networks LAN \& NOS (3) I or II

Lan, topologies, bus, star, ring, interface cards, network operating systems, passwords, login scripts, menu, filter, print services, file services, security. P: CSC 222 or industry experience.

CSC 539 Operating Systems Structure and Design (3) I or II
Concurrency control; memory management; CPU Scheduling; file structure; security and protection. P: CSC 536.

CSC 542 Relational Database Design (3) I or II
Relations, relational algebra, SQL, normal forms, Database design, data dictionaries, recovery, concurrency control, two phase commits, application program generator. P: CSC 222 or industry experience.

CSC 543 Numerical Analysis (3) OD (Same as CSC 543)
Numerical differentiation and integration, solutions of equations and systems of equations, polynomial approximation, error analysis and eigenvectors, and applications using digital computers. P: MTH 246.

CSC 544 Graphical User Interfaces Development (GUI) (3) I or II
Overview of shrinkwrap/industry standard GUI; experience defacto GUI design, word processors, spreadsheets, graphics packages, GUI design; user-centric design principles, standard GUI components/usage, list boxes/radio buttons/ checkboxes/ pull-down menus/ icons/ toolbars/ etc., GUI navigation. P: CSC 222 or industry experience.
CSC 546 Client/Server Fundamentals (3) I or II
Client server fundamentals; philosophy, distributed data, processing. P: CSC 222 or industry experience.
CSC 548 Object Oriented Design (3) I or II
Encapsulation, information hiding, object responsibility, member functions, instantiation, class, inheritance, abstraction, ad hoc polymorphism, operator overloading, parametric polymorphism, decomposition, messages, interfaces, coupling, assertions, analysis, problems, solutions, information, entities, events, relationships, notation, reusability, extensibility, portability, maintainability. P: CSC 222 or industry experience.
CSC 550 Introduction to Artificial Intelligence (3) OD
Problem-solving systems and search methods; representation of knowledge and expert systems; game playing; machine learning and perception; implementing artificial intelligence systems. P: CSC 527.
CSC 551 Web Programming (3) I, II
An advanced study of Internet and Web protocols and integration of programming techniques with a Web interface. Both client-side and server-side programming are covered, with topics including HTML, client-side scriping, server-side programming via the Common Gateway Interface, and current development technologies. P: CSC 222.

Programming the Microsoft Windows API. Event driven programming. GUI programming. Widgets and toolboxes. Includes GDI concepts and procedures. P: CSC 222 or industry experience.

CSC 555 Computer Graphics (3) I, AY
Display memory; generation of points, vectors, shapes, etc.; interactive versus passive graphics; graphics display devices and plotters, analogue storage of images; digitizing and digital storage; pattern recognition; data structures and graphics; the mathematics of 2-D and 3-D transformations; projections; applications in computer-aided design and instructions. P: CSC 527.

CSC 557 Java Programming (3) S
Java applets, Java application, AWT event model, menus, images, components, containers and layout managers, graphics java tool kit, sprite animation.
CSC 571 Introduction to Data Communication and Networks (3) OD
Teleprocessing; data communication systems; components; communication protocols and interfaces; functional layers; switching and error handling; networking and interfaces; routing and flow control; broadcasting; local/broad area network; reliability, security and other issues. P: CSC 514.
Graduate-level courses (600-700-series courses, open only to graduate students) offered by the Department of Computer Science are listed in the Graduate School issue of the Creighton University Bulletin.

## CREIGHTON HOUSE SEMINAR (CHS)

See page 112 for further details.
Assistant Professor Stefaniak (Resident Director)

## CHS 351 Community Service (3) II

Semester-long community service positions, arranged by the Director and supervised on-site by a designated professional; the gained experiences broadened through independent reading and shared through regular meetings with fellow resident-volunteers. Required for residents only.

## DANCE See Department of Fine and Performing Arts.

## ECONOMICS (ECO)

Professors Wingender (Chair), Allen, Goss, and Murthy; Associate Professor Fitzsimmons (Coordinator); Assistant Professor Knudsen; Professor Emeritus Nitsch; Associate Professor Emeritus Funk.

## ECO 203 Introductory Microeconomics (3) I, II, S

Nature of economics and the economic problem. Principles and problems of resource allocation and income distribution in a market economy with special reference to the American economic system; basic microeconomics of the household, firm and product and factor markets. Open to all students who have completed a minimum of 15 semester hours of college credit.

ECO 205 Introductory Macroeconomics (3) I, II, S
Microeconomics versus macroeconomics; major macroeconomic problems in an open economy. Measurement, analysis, and control of the overall levels of income, production, employment, and prices with a focus on the modern U.S. economy; monetary, fiscal and related policies for economic growth and stability. P: ECO 203.

ECO 277 American Economic History (3) OD
History and development of the U.S. economy from its European origins to modern times examined in light of basic economic concepts and principles.

## ECO 301 Economic Analysis and Policy (3) I or II

Intensive survey of selected microeconomic and macroeconomic principles and policies. P: Open to juniors and seniors in Arts and Sciences and students in degree programs above the bachelor's level who do not have college credit in economics. May not be used to meet requirement for the major in economics.

## ECO 303 Intermediate Microeconomics (3) I

Further analysis of resource allocation and income distribution. The individual household and market demand; market supply and production/cost relationships. Price and output decisions of firms in different types of market structures; factor market relationships. General equilibrium analysis and welfare economics. P: ECO 205; MTH 141 or 245; Jr. stdg.
ECO 305 Intermediate Macroeconomics (3) II
Further analysis of the measurement, determination, and control of national income and product and the aggregate levels of employment and prices; problems of, and policies for, economic growth and stability. P: ECO 205; Jr. stdg.
ECO 315 Money and the Financial System (3) I or II
Analysis of the functions of money; U.S. monetary and banking system and the role of financial markets; monetary policy, price level, interest rates, national income, international finance, and integration with fiscal policy. P: ECO 205; Jr. stdg.

ECO 318 Economics of Public Finance (3) I or II
Theoretical and applied aspects of public budgetary management. Public budgets and their relation to the overall level of economic activity, resource allocation, and income distribution. P: ECO 205; Jr. stdg.

ECO 353 Environmental Economics (3) I or II (Same as EVS 353)
The application of economic analysis to environmental issues. Emphasis on global environmental problems and policies and environmental problems and policies that are common to all nations. This course is not open to Economics majors or students registered in the College of Business Administration. P: Jr. stdg.

ECO 403 Managerial Economics (3) I or II
Applied microeconomic theory with focus on theoretical and empirical models of business firm behavior. P: ECO 205; Jr. stdg.
ECO 408 Current Issues in Social Economics and Political Economy (3) II
Selective examination of current socioeconomic problems confronting both developed and developing countries and the world at large in light of the major politico-economic philosophies of the day. P: ECO 205 or 301; Jr. stdg.

ECO 413 Market Power and Antitrust Policy (3) I or II
Study of the economic and legal forces affecting the evolution and performance of large firms in concentrated markets in the United States. Focus on the structure, conduct, and performance of concentrated industries and the role of the antitrust laws in regulating behavior in these industries. P: ECO 205; Jr. stdg.

ECO 418 Econometrics (3) I or II
Application of economics, mathematics, and statistics to the quantification of economic relationships. Intensive use of computer. P: Jr. stdg.; ECO 205; BUS 228, 229 or equivalent.

ECO 423 Transportation Economics and Policy (3) I or II
Relationship of transportation to the national economy and to the business sector. Focus on principles of transportation economics, government regulation, passenger and freight transport, and such urban policy issues as energy and environment. P: ECO 205; Jr. stdg.

ECO 433 Regional Economic Analysis (3) I or II
Examination of regional economic problems and solutions as they relate to public policy initiatives. Course consists of theory development and empirical testing with statistical models. Emphasis on the use of the most recent advancements in computer hardware and software. P: ECO 205; BUS 229 or equiv.

## ECO 443 Labor Economics (3) I or II

The study of labor market theory and policy. The relevant theoretical analysis of labor demand and supply. Analysis of current labor market policies and institutions including
discrimination, unemployment, immigration, minimum wages, and unions. P: ECO 205; Jr. stdg.
ECO 493 Directed Independent Readings (1-3) I, II
Directed readings course investigating theory and problems in the field of economics. Limited to students who want to develop a more in-depth knowledge of a subject beyond the regular course coverage and who have a QPA of 3.0 or better. P: Sr. stdg.; DC \& Dean's approval.

ECO 497 Directed Independent Research (1-3) OD
Supervised independent research on topics in theoretical/applied economics. Limited to students who want to develop a more in-depth knowledge of a subject beyond the regular course coverage and who have a Q.P.A. of 3.0 or better. P: Sr. stdg.; DC and Dean's approval.

ECO 508 Development of Political Economy (3) I or II
Evolution of economic doctrines and analysis from biblical and Graeco-Roman origins to modern times, with an emphasis on "orthodox" or "mainstream" schools and developments and critical movements and departures therefrom. P: Jr. stdg.; ECO 205 or equivalent for Graduate students.

ECO 518 Comparative Economic Systems (3) I or II
Analysis of modern variants of capitalism and socialism in light of the basic problems and principles applicable to all social economies. Fulfills the College of Business Administration requirement for an international course. P: Jr. stdg.; ECO 205 or equivalent for Graduate students.

## ECO 528 International Economic Development (3) I or II

Contemporary theories of economic development and their relationship to the continuing problems of unemployment, income distribution, population growth, urbanization, and economic growth in the Third World. Fulfills the College of Business Administration requirement for an international course. P: Jr. stdg; ECO 205 or equivalent for Graduate students.
ECO 538 International Trade and Finance (3) I or II
Basic theory of inter-regional and international trade; analysis of the international economy, including the institutions, procedures and policies of world trade and finance. Fulfills the College of Business Administration requirement for an international course. P: Jr. stdg.; ECO 205 or equiv. for Graduate students.
Graduate-level courses offered by the Department of Economics are listed in the Graduate School issue of the Creighton University Bulletin under the headings Business Administration (MBA) and Economics.

## EDUCATION AND COUNSELOR EDUCATION EDUCATION (EDU)

Associate Professor Ponec (Chair) and Associate Professor Ishii-Jordan (Associate Chair) Professor Dickel; Associate Professor Brock, Doyle; Assistant Professors Cook, (Director of Secondary Education), Durow, Houtz (Director of Elementary Education), Olson, Smith and White; Professor Emeritus O'Connor; De Mott, (Director of M.A.G.I.S. Program).

Most teacher education courses include an off-campus field experience at an elementary or secondary school. Students must arrange their own transportation to these sites. Prior to any field experience, the student must sign and have notarized two affidavits assuring that a.) the student does not have a felony or misdemeanor conviction involving abuse, neglect, or sexual misconduct and b.) the student is of sound mental capacity. Individuals unable to provide these affidavits must successfully appeal to the Nebraska State Board of Education before they will be allowed to enroll in these classes.

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## Special Education Program for Mildly/Moderately Handicapped K-6

Students who are completing the Elementary Education major may also prepare to teach students with mildl/moderate disabilities. This program is fully accredited by the National Council for Accreditation of Teacher Education (NCATE) and incorporates the standards of the Council for Exceptional Children (CEC). In addition to Elementary Education requirements, completion of this sequence requires EDU 215, EDU 421, EDU 422, EDU 423, EDU 424, EDU 482, EDU 501, and EDU 458/459.

## Special Education Program for Mildly/Moderately Handicapped 7-12

Students who are completing the Secondary School Teaching Endorsement (7-12) may also prepare to teach students with mildl/moderate disabilities. This program is fully accredited by the National Council for Accreditation of Teacher Education (NCATE) and incorporates the standards of the Council for Exceptional Children (CEC). In addition to the Secondary Education co-major and content major, course requirements include EDU 215, EDU 421, EDU 423, EDU 424, EDU 460, EDU 468, EDU 469, EDU 482, EDU 500, EDU 501, and EDU 588, with EDU 505 as an elective.

## Post Baccalaureate Program: Mildly/Moderately Handicapped Endorsement (K-6)

Students who have already met the requirement for an initial teaching certificate in Nebraska can apply for an additional endorsement in Mildly/Moderately Handicapped (K-6). The following courses must be completed: EDU 215, EDU 421, EDU 422, EDU 423, EDU 424, EDU 482, EDU 458, EDU 459 and EDU 501. A Human Relations class may be required by the Nebraska Dept. of Education for teachers who have not had this class. Iowa certification requires the completion of EDU 505 as well.

## Post Baccalaureate Program: Mildly/Moderately Handicapped Endorsement (7-12)

Students who have already met the requirements for an initial teaching certificate in Nebraska can apply for an additional endorsement in Mildly/Moderately Handicapped (7-12). The following courses must be completed: EDU 215, EDU 421, EDU 423, EDU 424, EDU 460, EDU 468, EDU 469, EDU 482, EDU 500, EDU 501 and EDU 588. A Human Relations class may be required by the Nebraska Department of Education for teachers who have not had this class. Iowa certification requires the completion of EDU 505 as well.

## Secondary School (7-12) Teaching Endorsement

Students planning to teach in junior or senior high school must complete a major in an approved academic subject and a co-major in secondary education.

An academic subject, at least 30 semester hours, is required for Nebraska certification. The subjects available are Biology, Chemistry, English, French, German, History, Journalism, Latin, Physics, Political Science, Psychology, Religious Education, Sociology, Speech/Drama, and Spanish. Computer Science is a 15 -hour endorsement that can supplement another teaching endorsement.

Although not identified in the Bulletin, the unit also provides field endorsements in Art, Language Arts, Mathematics, Natural Sciences, and Social Sciences.

Whether a B.A. or B.S. is awarded will depend on the major chosen. Creighton's program in Secondary Education is fully accredited by the National Council for Accreditation of Teacher Education (NCATE). For further information, contact the Department of Education.

Required Courses: EDU 103, EDU 207/EDU 210 (concurrent registration required), EDU 341, EDU 342, EDU 525, EDU 461, EDU 462, EDU 464, and EDU 548.

In addition, students are required to take at least one special methods course in their major area. These courses are ordinarily offered in the fall term. The courses meeting this requirement include EDU 440, EDU 441, EDU/JMC 442, EDU 443, EDU 444, EDU 445, EDU 446, COM/ EDU 447, EDU 448, EDU 449/THL 590 or EDU/LAT 450.

## Post Baccalaureate Program: Secondary School (7-12) Teaching Edorsements

 College graduates with majors in certain subject areas may complete the professional education courses listed above in a one-year accelerated program that begins each June and concludes in May of the following year. For admissions procedures and information, please contact University College (280-2424) or the Director of Secondary Education.
## Admissions Criteria

Students will be allowed to register for upper-division Education courses (300-level and above) only after receiving formal admission to the Education Department. In order to be considered
for admission, students must maintain a minimum QPA of 2.5, achieve acceptable scores on the Pre-Professional Skills Test (PPST), receive acceptable grades in EDU 103, 207, and 210, and complete department application procedures. In addition, an interview and portfolio review may be requested by the Selection and Retention Committee.

## Student Teaching

Student teaching is a one semester ( 14 weeks), full-day teaching experience. This experience is divided into two quarters. EDU 451, 458, 461, and 468 constitute the first student teaching experience ( 7 weeks) in the first quarter. This is followed by EDU 452, 459, 462, and 469 which encompasses the second student teaching experience in the second quarter (7 weeks). All students must participate in the appropriate Student Teaching Seminar for their area (EDU 453 or EDU 464). Students must reserve the entire teaching day for participation in a K-12 school's student teaching experience. Students follow the calendar of the K-12 school rather than the Creighton University calendar during the student teaching semester. Any deviation from the program must be cleared in writing by the Education Department's Selection and Retention Committee.

EDU 101 College Major Selection and Career Planning (3) I, II
This course will assist the student in understanding the essential elements of selecting a college major and how those various majors fit into specific careers. The course will also concentrate on career exploration and the developmental process.
EDU 103 American Education and the Interactive Process (3) I, II
Course, both lecture and laboratory oriented, provides an approach to teacher education that includes an opportunity for students to acquire a basic understanding of the history and philosophy of education and to become involved in interacting and role playing in problem-solving situations. Emphasis on cultural diversity and human relations characterizes this course.

EDU 109 Skills for Academic and Career Success (1) I
Designed to orient and teach the student how to use the resources available on campus to increase academic and career success. Includes an orientation and tour of the campus including Jesuit mission, an orientation to the library and library technology, the Writing Lab, campus computer resources and computer basics including: e-mail, the web, HTML basics, P.A.L.S. and Microsoft Word. Students will complete a career assessment inventory, learn about career development and exploration, adult learning styles and test-taking strategies. P: University College students only.

EDU 131 Literature for Children (3) I, II
Study of children's literature, pre-primary through junior high; history; types; the contemporary scene; extensive required readings.

EDU 207 Educational Psychology (3) I, II
Application of psychological principles in promoting the learning of individuals and groups. Emphasis on motivation, theories of learning, transfer of training, development and measurement of intelligence and achievement. Students must register for both EDU 207 and 210. A total of 35 clock hours of K-12 classroom aiding required in conjunction with EDU 207 or 210. P: EDU 103; CO: EDU 210.

EDU 209 Physical Education in the Elementary School (3) I, II
Organizational and instructional techniques for elementary school physical education activities. Specific emphasis on dance, games, and educational gymnastics. Combination of lecture and laboratory sessions. P: EDU 103, 210, and DC.
EDU 210 Child and Adolescent Development (3) I, II
An overview of maturation in childhood and adolescence focusing on individual differences and similarities in biological, social, cognitive, and affective development from the perspectives of psychology, sociology, and anthropology. Emphasis on processes that have practical application for teachers and parents. P: EDU 103; CO: EDU 207. Certified Writing Course.
EDU 215 An Introduction to Special Education: Field Experience (3) I, II
An introductory course designed to provide knowledge of different disabilities, special education law, and procedures for referral, identification, and placement of students with disabilities. Aiding with special education students in schools is also required. P: IC.

EDU 242 Computer Related Technologies in Teacher Education (1) I, II
Introduction to computer related technologies in the elementary and secondary classroom. Designed to give students a working knowledge of technologies currently being used in schools as curriculum enhancers and productivity tools. P: EDU 103, DC.

EDU 301 Methods of Teaching Language Arts in Elementary School (3) I, II
Emphasizes content and methods in teaching language arts in elementary and middle school. Students complete 36 hours of practicum in public school classroom. P: EDU 103, 207, 210, Adm. to Dept.; CO: EDU 311.

EDU 302 Methods of Teaching Social Studies in Elementary School (3) I, II
Emphasizes content and methods in teaching social studies in elementary and middle school. P: EDU 103, 207, 210; Adm. to Dept.

EDU 303 Methods of Teaching Mathematics in Elementary School (3) I, II
Emphasizes content and methods in teaching mathematics in elementary and middle school. Students complete a 25 hour practicum (EDU 303/304). P: EDU 103, 207, 210, Adm. to Dept.; CO: EDU 304.

EDU 304 Methods of Teaching Science in Elementary School (3) I, II
Emphasizes content and methods in teaching science in elementary and middle school. Students complete a 25 hour practicum (EDU 303/304). P: EDU 103, 207, 210, Adm. to Dept. CO: EDU 303.

EDU 311 Teaching of Reading (3) I, II
Designed to assist in understanding the process of developmental reading and to acquaint the student with the newest as well as the traditional tools for teaching reading. P: EDU 103, 207, 210, Adm. to Dept; Certified Writing Course. CO: EDU 301.

EDU 315 World Geography (3) I, II
World patterns of land and water distribution, landforms, climatic regions, population and natural resources, socio-economic implications. Meets CORE requirement for Global Studies. P: EDU DC.

EDU 319 Language, Culture, and the Individual (3) I (Same as ANT/COM 319)
The anthropological approach to the study of language examines the biological source and manner of human communication as well as the cultural processes that structure languages, their meanings, means of acquisition, and transformations. The course examines the interrelationship of individuals, groups, and the wider culture through language.
EDU 320 Leadership: Theories, Styles, and Skills (3) OD (Same as COM 320)
Course designed to offer participants an opportunity to gain a working knowledge of leadership theories and group dynamics. Designed to develop and improve leadership skills and to learn how to apply these skills in a practical setting. P: Jr. stdg. or IC.
EDU 341 General Methods in Secondary Teaching (3) I, II
General principles of method in relation to secondary-school teaching. Planning of learning experiences with particular reference to assignments, recitation procedures, organizing group discussions, directed study; selection and organization of learning materials. Students serve as teacher aides two afternoons a week. P: EDU 103, 207, 210; Jr. stdg, Adm. to Dept. CO: EDU 342.

EDU 342 Technology Laboratory in Secondary Education (1) I, II
Development of skills in computer-related technology as curriculum enhancers and productivity tools for teaching and learning in secondary schools. P: EDU 103, 207, 210; Jr. stdg. CO: EDU 341.

EDU 421 Teaching Students With Moderate Disabilities (3) I
Course addresses the nature of children with moderate disabilities. Designed to develop the relationship between the school and families, the assessment and teaching of students, the historical practices of the past, the curriculum implications of today, the issues of placement and inclusion. P: Jr. stdg.; EDU 215 or EDU 525.
EDU 422 Multicategorical Methods for the Mildly Handicapped (3) I
Special methods and materials in teaching and testing the slow learner or students with mild disabilities in the elementary classroom; the curriculum, educational expectations, and orga-
nizational plans designed to meet the needs of the various levels from pre-school through prevocational are examined. P: Jr. stdg.; EDU 215 or EDU 525.
EDU 423 Diagnostic and Prescriptive Teaching of the Mildly and Moderately Handicapped Child (3) II
Techniques for assessing the learning processes, style and knowledge of students with mild/ moderate disabilities. Designed to teach the student how to formulate instructional plans and how to teach students with disabilities in a diagnostic and prescriptive manner. P: Jr. stdg; EDU 215 or EDU 525.

EDU 424 Speech and Language Development of the Exceptional Child (3) II
Course focuses on teaching techniques for aiding the special child in the acquisition of communication skills. Normal speech and language development is contrasted with the language and speech of exceptional children. P: EDU 215 or EDU 525, Jr. stdg. Certified Writing Course.

EDU 428 Promoting Physical and Mental Wellness (3) II OD
Addresses the antecedents of physical and mental wellness through such topics as nutrition and exercise as well as coping skills, self-esteem, and support systems. Consideration of numerous life challenges to wellness.
EDU 430 The Value of Children (3) OD (Same as SWK 430)
Interdisciplinary, integrative course designed to help students explore and evaluate personal, community, institutional, and global values as they pertain to the needs and rights of children. It is intended to promote interdisciplinary understanding as well as interdisciplinary cooperation. P: Jr. stdg.

EDU 440-450 Special Methods of Teaching in the Secondary School (3) I
Each course deals with the objectives and functions of the particular subject in terms of sec-ondary-school learning experiences. Attention is directed to the selection, organization, and presentation of meaningful materials; selection, use and evaluation of textbooks and related aids. P: or C: EDU 341 and 342; Jr. Stdg.

440 Teaching of Art
441 Teaching of English
442 Teaching of Journalism
443 Teaching of Mathematics
444 Teaching of Modern Languages
445 Teaching of Science
446 Teaching of Social Studies
447 Teaching of Speech (Same as COM 447) OD
448 Teaching of Drama OD
449 Teaching of Religion (Same as THL 590)
450 Teaching of Latin (Same as LAT 450) OD
EDU 451 Elementary School Observation and Student Teaching (5-6) I, II (Not in S)
Practical experience in the observation and conduct of classroom teaching and related activities. This experience is obtained under the immediate supervision of a fully experienced cooperating teacher and a University supervisor. Application to the Director of Field Experiences for all student teaching must be made before February 1 for the Fall Semester and October 1 for the Spring Semester. P: EDU 301-304 \& 311, EDU 525; Sr. stdg; CO: EDU 452, 453.

EDU 452 Advanced Elementary School Observation and Student Teaching (5-6) I, II (Not in S) Practical experience in the observation and conduct of classroom teaching and related activities. This experience is obtained under the immediate supervision of a fully experienced cooperating teacher and a University supervisor. Application to the Director of Field Experiences for all student teaching must be made before February 1 for the Fall Semester and October 1 for the Spring Semester. P: EDU 301, 302, 303, 304, 311, 525, Sr. stdg. CO: 451; 453.

EDU 453 Seminar in Elementary School Student Teaching and Observation (2) I, II
Student teachers deal with issues of physical and mental wellness, communication with families and communities, applications, portfolios, interviews, and relevant teaching concerns. CO: EDU 451, 452.

Practical experience in the observation and conduct of classroom teaching and related activities for the mildly/moderately handicapped. This experience is obtained under the immediate supervision of a fully experienced cooperating teacher and a University supervisor. Application to the Director of Field Experiences for all student teaching must be made before February 1 for the Fall Semester and October 1 for the Spring Semester. P: EDU 451, 452; Sr. stdg; CO: EDU 459.

EDU 459 Advanced Elementary School Observation and Student Teaching the Mildly/ Moderately Handicapped (5-6) I, II (Not in S)
Practical experience in the observation and conduct of classroom teaching and related activities for the mildly/moderately handicapped. This experience is obtained under the immediate supervision of a fully experienced cooperating teacher and a University supervisor. Application to the Director of Field Experiences for all student teaching must be made before February 1 for the Fall Semester and October 1 for the Spring Semester. P: EDU 451, 452; Sr. stdg; CO: EDU 458.

EDU 460 Programming for the Adolescent with Learning and Behavior Problems (3) OD
The course is designed to acquaint students with specific characteristics of the adolescent with learning and behavioral problems. Characteristics are discussed in terms of academic and social needs and programming for these. Career education and self-management topics are included in the course. Students will practice diagnosing and programming for adolescents with mild and moderate disabilities. P: EDU 215 or EDU 525.
EDU 463 Organizational Assessment (3) AY (Same as COM 463, SOC 463)
Workshop evaluating characteristics of organizations (including schools and service organizations). Practical training in assessing the effectiveness of such interventions as curriculum, training and development, and personnel. Special emphasis on planning, conducting, and interpreting surveys; developing questionnaires, interpreting results, and writing final reports.
EDU 468 Secondary School Observation and Student Teaching the Mildly/Moderately Disabled (6) I, II, (not in S)

Practical experience in the observation and conduct of classroom teaching and related activities for students with mild/moderate disabilities. This experience is obtained under the immediate supervision of a fully experienced cooperating teacher and University supervisor; scheduled conferences with both are required. Application to the Director of Field Experiences for all student teaching must be made before Feb. 1 for the fall semester and October 1 for the spring semester. P: EDU 461, 462, 464, Sr. stdg., CO: EDU 469.
EDU 469 Advanced Secondary School Observation and Student Teaching the Mildly/
Moderately Disabled (6) I, II (not in S)
Practical experience in the observation and conduct of classroom teaching and related activities for students with mild/moderate disabilities. This experience is obtained under the immediate supervision of a fully experienced cooperating teacher and University supervisor; scheduled conferences with both are required. Application to the Director of Field Experiences for all student teaching must be made before February 1 for the fall semester and October 1 for the spring semester. P: EDU 461, 462, 464, Sr. stdg. CO: EDU 468.
EDU 482 Seminar in Consultation and Collaboration Strategies (3) II
Designed to teach skills and techniques in consultation, collaboration, and teaming with school professionals, parents, support services, and the community. P: EDU 215 or EDU 525.
EDU 488 Personal and Spiritual Dimensions of Leadership (3) OD (Same as COM/SRP/THL 488)
The purpose of the course is to give students the opportunity to engage in introspection and examination of their personal belief and value systems as it relates to leadership. The course begins from the assumption that leadership is "a journey that begins within" and examines the relationship between leadership theory and Christian spirituality. Biographical examples will be analyzed; biographies will be drawn from diverse fields such as health, science, business, government, sports and education. P: Sr. stdg. hours.

EDU 500 Remedial Reading (3) I, II, S
Focus of the course is on meeting the variety of individual educational needs that confront any teacher of reading. Techniques, methods, materials, and organizational systems that can be used within the framework of daily instruction. Students complete a 10 hour practicum. P: EDU 311.

EDU 501 Psychology of Exceptional Children (3) I, PS
A multidisciplinary and life span approach to the study of persons with differences. P: Jr. stdg.
EDU 505 Methods and Strategies for Working With Families and Support Personnel for Exceptional Children and Youth (3) I (Same as SWK 505)
Course designed to address the needs of families of exceptional children and youth and train the support personnel who work with exceptional children. P: EDU 501; Jr. stdg.

EDU 520 Foundations of Catholic Education (3) S AY
Course designed to trace the history and philosophy of Catholic education, elementary school to university, as it has evolved through the centuries. The focus will be on the concept of "Catholic identity" of schools as the magisterium and scholars throughout history have interpreted it. Church documents will serve as the main text for the course. The culmination will be a project whereby students apply theory to educational practice in the Catholic school setting.

EDU 522 Introduction to Linguistics (3) OD (Same as ENG 522)
Survey of the history of the English language and an examination of the structure of modern English grammars. P: Jr. stdg.
EDU 525 Procedures for Including Students with Mild/Moderate Disabilities in the Regular Classroom (3) I, II
Course designed to acquaint the regular elementary or secondary classroom teacher with the characteristics of students with mild/moderate disabilities. Discussion of diagnostic and remedial techniques for students with disabilities in the general classroom. Students complete a practicum under supervision of a special education teacher. CO: teaching methods course.

EDU 531 Current Trends in Teaching Mathematics and Science K-8 (3) OD
Designed to provide information for teachers K-8 on recent trends in the teaching of mathematics with emphasis on new standards by the National Council for Teachers of Mathematics standards and the National Science Education Standards.

EDU 532 Sharing Christian Values: How To Do It In the Classroom (3) OD
The question often confronting teachers in Catholic elementary and secondary schools is, "How can we become more effective in transmitting the values of the Gospel and our own school's philosophy?" Course designed to help teachers clarify their own understanding of faith and Christian values. Consideration given to the question of how teachers of so-called secular subjects can be instrumental in forming the values and faith of students. P: Jr. stdg.
EDU 533 Shakespeare in the Classroom (3) OD
Four-day intensive study for teachers of English and drama. Exploration of innovative educational strategies and practical application of Shakespearean texts in today's classroom. Lecture and demonstration, small group and private instruction. Instructors include members of Twelfth Night, the Theatre company. Participants will develop an individual or group project and compile a source book of activities presented during the workshop. Includes preparation of an in-depth unit of study, appropriate to grade level, incorporating inter-disciplinary and multicultural strategies.

Course has three major components: learning styles theory and practice, movement activities which enhance brain integration, and the emotional and developmental needs of children as related to their self-esteem.

## EDU 535 Human Relations and Cultural Diversity (3) OD

Course designed to provide teacher educators with human relations skills and to foster insight into effective communication with diverse racial and/or cultural groups. This course meets the human relations requirement of the Nebraska Department of Education. P: DC.

## EDU 536 Human Relations - Attitudes and Skills (1) OD

Course designed for Catholic school teachers to fulfill the objectives of the Nebraska state certification requirement relative to human relations training. It requires the development of understanding and knowledge of diversity of cultures, effective responses to dehumanizing biases, and instructional strategies to effect the same development in students. P: current state certification as teacher or administrator.

## EDU 541 Curriculum Design for English as a Second Language (3)

This course is designed to provide students with the knowledge and skills necessary for understanding and designing curricular models for P-12 students who are acquiring English as their new language. Students will learn theories of second language acquisition, English as a Second Language (ESL) legislation and issues, models and evaluation of curriculum design, and language assessment. P: DC.

EDU 542 Methods in English Language Learning (3)
This course is designed to provide students wit the knowledge and skills necessary for using appropriate strategies and techniques with P-12 students who are acquiring English as their new language. Students will learn theories of second language acquisition, conduct language assessments, plan and implement lessons using bilingual/bicultural materials, and understand how to work with culturally/linguistically diverse families and interpreters. P: DC.
EDU 548 Teaching Reading in Content Areas in Middle and Secondary Schools (3) I
Course designed for junior-high and secondary-school content-area teachers who have had little or no background in the field of teaching reading. Practical concepts, techniques, strategies and activities designed to enable the content-area teacher to develop better a student's reading skills and abilities while utilizing content materials. Offered only in fall semesters. P: Jr. stdg; Adm. to Dept.

EDU 559 Discipline with Purpose: An Introduction (1) OD
A ten hour didactic and five hour laboratory introduction to Discipline with Purpose provides a practical and theoretical approach to understanding the difference between discipline and self-discipline. Participants are introduced to 15 self-discipline skills that can be taught developmentally to students in grades K-9. Participants will review and teach lesson plans to their respective students and self-evaluate the effectiveness.
EDU 560 Discipline with Purpose: Advanced Part II (2) OD
A twenty hour advanced orientation to Discipline with Purpose provides a practical and theoretical approach to understanding the difference between discipline and self-discipline. Participants review classroom management styles as they relate to 15 self-discipline skills that can be taught developmentally to students in grades K-9. The major emphasis of this course is the development of a project that will promote the teaching of self-discipline either throughout the total school or within a classroom.

## EDU 561 Discipline with Purpose: An Introduction (3) OD

A twenty to twenty-four hour didactic and laboratory introduction to Discipline with Purpose provides a practical and theoretical approach to understanding the difference between discipline and self-discipline. Participants are introduced to 15 self-discipline skills that can be taught developmentally to students in grades K-9. Lessons developed to teach the skills as well as the utilization of infusion, pre-teaching, and modeling will be field tested. Developing a project that will promote the teaching of self-discipline either throughout the total school or within a classroom is the major emphasis of their course. Participants are expected to have completed a 10-12 hour discipline with Purpose workshop, implemented the concepts for a year and then repeat the 10-12 hour workshop and then complete a special project implementing the program.

Course designed to acquaint the student with research findings in the area of computer based learning and to explore the principles of effective use of computers in classrooms. Introduction to Hypercard as a vehicle for creating effective computer based learning environments.

EDU 581 Teaching Students How To Think, Level I (3) S
A Level I Training Session in the Feuerstein Instrumental Enrichment Program, a classroom curriculum designed to diagnose and correct deficiencies in thinking skills and to help students learn how to learn. P: Sr. stdg.

EDU 582 Teaching Students How to Think, Level II (3) OD
A Level II Training Session in the Feuerstein Instrumental Enrichment Program, a classroom curriculum designed to diagnose and correct deficiencies in thinking skills and to help students learn how to learn. A continuation of EDU 581 at the advanced level. P: EDU 581.

EDU 583 Management Practices for Classroom Teachers (3) I, II, S
Creating and/or maintaining a positive learning environment through techniques of observation, description, measurement and evaluation for optimum student learning. P: Jr. stdg.

EDU 586 Selected Topics in Education (2-3)
Course designed to deal with current theory, research and practices in a specific area, e.g., social studies education. Faculty will provide a subtitle and a brief description for inclusion in the "Schedule of Courses."

EDU 587 Methods of Teaching Religion in Elementary School (3) I, AY (Same as THL 587)
The course is designed to prepare students to effective religious educators in Catholic elementary schools. The course content will encompass the four dimensions of religious education: message, community, service and worship. Students will not only become acquainted with methods and materials for teaching religion, but they will also gain experience planning liturgical celebrations.
EDU 588 Developing Vocational Skills for the Mildly/Moderately Handicapped Ages 3-21 (3) OD
Exploration of current, innovative vocational programs for students with mild/moderate disabilities; why and how these programs developed; ways to implement such programs.
EDU 590 Teacher Induction (3) OD
Designed to ease the isolation and provide continuity between the theory of pre-service preparation and the realities of teaching. Assistance provided in acquiring additional knowledge and instructional skills, combating the effects of isolation, and becoming integrated into a school community. P: Certified to teach; contracted for a Fall teaching position.

EDU 591 Secondary School Observation and Student Teaching (3-6) I, II (Not in S)
Practical experience in the observation and conduct of classroom teaching and related activities. This experience is obtained under the immediate supervision of a fully experienced cooperating teacher and a University supervisor. Application to the Director of Field Experiences for all student teaching must be made before February 1 for the Fall Semester and October 1 for the Spring Semester. P: EDU 341; EDU 342, EDU 525, EDU 548, and one Special Methods Course from EDU 440-450; Sr. stdg. CO: EDU 462, 464.

EDU 592 Advanced Secondary School Observation and Student Teaching (3-6) I, II (Not in S) Practical experience in the observation and conduct of classroom teaching and related activities. This experience is obtained under the immediate supervision of a fully experienced cooperating teacher and a University supervisor. Application to the Director of Field Experiences for all student teaching must be made before February 1 or the Fall Semester and October 1 for the Spring Semester. CO: EDU 461, EDU 464, Sr. stdg.
EDU 593 Seminar in Secondary School Student Teaching and Observation (1) I, II
Student teachers deal with issues of classroom management, communication with families and communities, applications, portfolios, interviews, and relevant teaching concerns. CO: EDU 461, 462.
Graduate-level courses (600-700-series courses, open only to graduate students) offered by the Department of Education are listed in the Graduate School issue of the Creighton University Bulletin.

## COUNSELOR EDUCATION (COU)

The Graduate Program in Counseling is in a major revision process. This revision will lead to application for accreditation by the Council for Accreditation of Counseling and Related Educational Programs (CACREP). Current program information may be obtained from the Director of the Counseling Program.

COU 390 Residence Halls Advising (3) I, II
Designed to give resident assistants (RA's) knowledge of the role of residence halls in promoting the growth and development of college students and to provide them with the requisite knowledge and skills in helping, problem-solving, crisis management, community development, and programming to achieve this goal. P: Resident halls advisers only.

COU 540 Professional Orientation and Ethics in Counseling (3) I, II, S (Same as PSY 540)
A survey of the counseling process, including the role of the counselor, characteristics of the client(s), helping and referral skills, and theories of counseling. P: Sr. stdg.
COU 542 Seminar in Counseling (1) I, II, S
Self assessment of skills appropriate to counseling by means of psychometric assessment and participation in a personal growth group. P: IC. CO: COU 540.
COU 544 Life Span Development (3) I, S, AY
Focuses on a broad overview of physical, social, and psychological aspects of human development from conception to old age. P: Jr. stdg.
COU 573 Treatment Modalities in Marriage and Family Therapy (3) OD
The primary family systems modalities in marriage and family therapy are presented both in theory and in case study analysis. The presenting problem, history of the problem, family history, identification of dysfunctional dynamics, goals, plan of treatment, and outcome/evaluation are emphasized in each modality. P: IC.
COU 575 Introduction to Peer Education in Student Development Programming (3) OD
Introductory course in the conceptualization, development, and practical application of innovative outreach programming in student service settings. Emphasis on presentation development in such areas as interpersonal relationships, health and wellness issues, stress management, alcohol and drugs, career planning, and leadership development. P: Jr. stdg.

COU 580 Theory and Treatment of Addictive Disorders (3) I
Presentation of substance abuse theory, various treatment approaches, and intervention strategies which are currently in use in chemical dependency treatment and prevention programs. Students will have the opportunity to explore several theoretical approaches, incorporate these approaches into their own on-going developmental body of knowledge, and develop an integration plan to utilize their own personal theory of counseling in a program of treatment for chemical dependency. P: Jr. stdg.
COU 582 Family Dynamics of Addictive Disorders (3) OD
Designed to provide students with an understanding of various ways in which the family is affected by the addiction of one or more of its members. Students will have the opportunity to explore several theoretical approaches to family work, become aware of current research in the area, gain an understanding of current intervention strategies used with the family, and explore the variety of ways in which the family is involved in the rehabilitation process. P: Jr. stdg.
COU 583 Case Planning and Clinical Treatment in Chemical Dependency (3) OD
Designed to provide students with an understanding of the need to serve those who live with substance abuse/dependence or related disorder. This course provides comprehensive problem definitions, treatment goals, objectives, interventions, and DSM IV TR diagnosis for 29 substance abuse related disorders.
COU 584 Stress and Crisis Management (3) OD
An understanding of the nature and causes of personal stress and crisis situations, methods of intervention and management. Emphasis on practical application through simulation and practicum situations from both a personal and professional perspective. P: COU 540.

COU 586 Drug Use and Human Behavior (3) OD
Examination of the effects of drug use on society and the effects of society on drug and alcohol use with emphasis on substance abuse and addiction. Discussion of the history of legal restrictions on the possession and sale of drugs in the United States. The pharmacology of commonly abused drugs will be described in terms that can be understood by those who are not in the health professions. P: Jr. stdg.
COU 590 Counseling Significant Losses (3) I
An investigation of the counseling process as applied to life events that occur in the area of significant loss. An investigation of the role of the counselor, characteristics of clients, helping and referral skills, and theories of counseling as applied to significant loss events. P: IC.

## EMERGENCY MEDICAL SERVICES (EMS)

Professor Dickel (Dean, University College); Assistant Clinical Professor Walker (Medical Director); Assistant Professor Brekken.

## Prerequisites:

EMS 101 with grade of " C " or higher, and successful completion of challenge examination. Formal acceptance by the EMS Program

## Additional Requirements:

Because of the close integral relationship between classroom and field components, students are expected to meet additional clinical requirements and expenses related to health examinations, uniform and transportation to clinical agencies while enrolled in the co-requisite courses for hospital and field training. More detailed information can be obtained from the EMS Education Office at 2514 Cuming St., Omaha, NE. The telephone number is (402) 280-1280.

## The Field of Concentration:

All required courses within the EMS Degree program (see pages 139-140). Additional information relating to all requirements within the degree program can be obtained from University College, (800) 637-4279 or (402) 280-2424.

## EMS 101 Fundamentals of Emergency Medical Services (4)

Emphasis on the fundamental principles and practices of emergency care and procedures in the prehospital area. Course based on DOT (Department of Transportation) EMT-Basic Curriculum. P: American Heart Association in Basic Life Support for Health Care Providers; Immunizations; current CPR certification.

EMS 160 Out of Hospital Care Course for Nurses (4)
The objective of the DOT curriculum is to improve the quality of emergency care rendered to victims of accidents and illness, the major thrust of the out of hospital Emergency Care Course for Nurses is aimed toward the RN or LPN who wishes to work as an EMT in the field. P: Current Basic Life Support, Current RN or LPN License.

## EMS 301 Preparatory (5)

Based on the DOT 2000 EMT-Paramedic curriculum includes: The Well Being of the Paramedic, Roles and Responsibilities, Illness/Injury Prevention, Medical/Legal, Ethics, Pathophysiology, Pharmacology, Medication Administration, Therapeutic Communications and Life Span Development
EMS 303 Patient Assessment (3)
Based on the DOT 2000 EMT-Paramedic curriculum; includes History Taking, Techniques of PE, Patient Assessment, Clinical Decision Making, Communications, Documentation. P: EMS 301

EMS 305 Airway Management/Ventilation (1)
Based on the DOT 2000 EMT-Paramedic curriculum; includes Airway and Ventilation. P: EMS 303

EMS 307 Trauma Management (4)
Based on the DOT 2000 EMT-Paramedic curriculum; includes Trauma Systems/MOI, Hemorrhage and Shock, Soft Tissue Injury, Burns, Head and Face Trauma, Spinal Trauma, Thoracic Trauma, Abdominal Trauma and Musculoskeletal Trauma. P: EMS 305

EMS 310 Medical Emergencies I: Respiratory (2)
Based on the DOT 2000 EMT-Paramedic curriculum.

Based on the DOT 2000 EMT-Paramedic curriculum.
EMS 314 Medical Emergencies III: NEAGR (5)
Includes Neurology, Endocrine, Allergy/Anaphylaxis, Gastrointestinal, Renal. Based on the DOT 2000 EMT-Paramedic curriculum.

EMS 316 Medical Emergencies IV: THEIB (4)
Includes Toxicology, Hematology, Environmental, Infectious Disease, Behavioral. Based on the DOT 2000 EMT-Paramedic curriculum.
EMS 311 Special Considerations (3)
Based on the DOT 2000 EMT-Paramedic curriculum; includes Neonatology, Pediatrics, Geriatrics, Abuse \& Assault, Pts. With Special Challenges and Acute Interventions in CCP. P: EMS 309

## EMS 313 Operations (2)

Based on the DOT 2000 EMT-Paramedic curriculum; includes Medical Incident Command, Rescue, Hazardous Materials and Crime Scene Awareness. P: EMS 311

## EMS 315 Assessment Based Management (1)

Based on the DOT 2000 EMT-Paramedic curriculum; includes laboratory sessions designed to test the students overall comprehension of patient management techniques learned throughout the course. P: EMS 313

## EMS 320 Clinical Practicum I (2)

Based on the DOT 2000 EMT-Paramedic curriculum; includes hospital rotations through the Emergency Department, Operating Room, Respiratory Therapy, Critical Care Units, Pediatrics, Labor and Delivery, Psychiatric and Geriatric Units. Emphasis is on Patient Assessment and Management. P: Admittance to program.
EMS 321 Field Practicum I (2) Based on the DOT 2000 EMT-Paramedic curriculum; includes practical application of emergency medical services practices in field situations. Specific areas include scene management, patient assessment and treatment, communications, record keeping and interface with treatment facilities and other health care professionals. P: Admittance to program.
EMS 322 Clinical Practicum II (1)
Based on the DOT 2000 EMT-Paramedic curriculum; includes hospital rotations through the Emergency Department, Operating Room, Respiratory Therapy, Critical Care Units, Pediatrics, Labor and Delivery, Psychiatric and Geriatric Units. Emphasis is on Patient Assessment and Management. P: Admittance to program.

EMS 323 Field Practicum II (1)
Based on the DOT 2000 EMT-Paramedic curriculum; includes practical application of emergency medical services practices in field situations. Specific areas include scene management, patient assessment and treatment, communications, record keeping and interface with treatment facilities and other health care professionals. P: Admittance to program
EMS 324 Clinical Practicum III (2)
Based on the DOT 2000 EMT-Paramedic curriculum; includes hospital rotations through the Emergency Department, Operating Room, Respiratory Therapy, Critical Care Units, Pediatrics, Labor and Delivery, Psychiatric and Geriatric Units. Emphasis is on Patient Assessment and Management. P: Admittance to program.
EMS 325 Field Practicum III (2) Based on the DOT 2000 EMT-Paramedic curriculum; includes practical application of emergency medical services practices in field situations. Specific areas include scene management, patient assessment and treatment, communications, record keeping and interface with treatment facilities and other health care professionals. P: Admittance to program
EMS 440 Educational Planning and Assessment for Emergency Managers (3)
Theories and principles of learning and teaching including development of effective EMS course objectives, lecture outlines, and examinations. Course includes introduction to use of DOT curricula and materials. P: EMS 101; Must be BLS Instructor. Must show EMT-B Certification or higher.

Course designed to prepare the RN for the assessment, care, transport, and communication requirements of the sick and injured in the out of hospital setting. While giving the RN credit for nursing expertise, this segment supplements and augments skills already gained to enable the participant to function as a valuable prehospital team member with both ground and air service programs. After successful completion, the RN may challenge the National Registry for Paramedics. P: R.N., EMS 101 or equiv.; two years critical care experience, ACLS provider.

EMS 470 Management of Emergency Medical Systems (3)<br>Emphasis on knowledge, skills and abilities required of first-line managers of EMS systems including personnel, operations and equipment. P: EMS 101.

EMS 493 Directed Independent Readings (1-3)
May be repeated to a limit of six hours. P: DC.

## EMS 495 Directed Independent Study (1-3)

May be repeated to a limit of six hours. P: DC.
EMS 497 Directed Independent Research (1-3)
May be repeated to a limit of six hours. P: DC.

## ENGLISH (ENG)

Associate Professor Keegan (Interim Chair); Professor Garcia; Associate Professors Chiwengo, Dornsife, Fajardo-Acosta, Keegan, T. Kuhlman, Spencer, Stein, Whipple, and Zacharias; Assistant Professors Aizenberg, Churchill, Gardiner, Houston, Rettig, Stefaniak, and Stenberg; Adjunct Assistant Professors Dittrick and M. Kuhlman; Professor Emeritus Karabatsos; Associate Professor Emerta Fogarty; Associate Professor Emeritus Sundermeier.

## English Requirements

Arts and Sciences students will follow the requirements of the Core curriculum on page 100. Specific requirements for Nursing are listed on pages 131-138. Specific requirements for Business Administration are listed on pages 117-130.

## Concentration Majors:

Track 1—English Major: Thirty-six semester hours beyond the core, including English 254, $340,341,342$ or $330,350,351,352$ or 532 or 533,509 , and 520 . One Period or Genre course, one Author course, and one Senior Seminar to be chosen in consultation with the Major Advisor. Students must take the comprehensive exam.
Track 2—English Major—Irish Literature Concentration: Thirty-six semester hours beyond the core, including English 254, 330, 340, 341, 342, 509, 520, 532, 533. One Irish Period or Genre course, one Irish Author course, and one Senior Seminar to be chosen in consultation with the Major Advisor. Students must take the comprehensive exam.
Track 3—English Major-Creative Writing: Thirty-six semester hours beyond the core, including English 251, 254, 300, 301, 302, 403, 492, and another course chosen by the Director of Creative Writing. Two of the following courses: 340, 341, 342. Two of the following courses: 350, 351, 352. Students must take the comprehensive exam.
Track 4-English Major, Subject Endorsement: (Consult the English Major Advisor and the Secondary Education Advisor). Students must take the comprehensive exam.
Track 5-English Major, Language Arts: Teacher Education: (Consult the English Major Advisor and the Secondary Education Advisor). Students must take the comprehensive exam.

## Co-Major in English:

Students wishing to pursue a co-major in English must consult with a major advisor in the English Department. In addition to the 9 hours of Core requirements, students must complete 24 hours of course work. No course taken toward a major may be counted toward a co-major. Upon completion of the program, students will be granted a "Certificate of Co-Major in English" issued by the English Department. Requirements include the following: ENG 120, 121, 150, and 254; ENG 340, 341, or 342; ENG 350, 351, or 352; ENG 480, 481, 482, 483, or 484 (senior year only); ENG 509, 510, 511, or 512; and any three English courses at the 300-level or above.

## Co-Major in Creative Writing:

Students wishing to pursue a co-major in creative writing must consult with a major advisor in the English Department. In addition to the 9 hours of Core requirements, students must complete 24 hours of course work. No course taken toward a major will be counted toward a co-major. Requirements include the following: ENG 120, 121, 150, 251, 254, 300, 301 OR 302, and 403; ENG 340, 341, or 342 ; ENG 350, 351, or 352; and one of the following: ENG 480, 481, 482, $483,484,509,510,511$, or 512.

ENG 61 Premedical Reading Review (4) OD
Extensive review of vocabulary; efficient reading techniques; flexibility and rate of reading; individualized instruction; pre- and post-testing. P: Open only to students in the special Postbaccalaureate Premedical Program sponsored by the School of Medicine.

ENG 71 Premedical Writing Review (4) OD
Concentrated review of grammar/usage fundamentals and basic writing skills: summaries, independent paragraphs, and essay-test responses. Coordination with the Reading Review course. P: Open only to students in the special Postbaccalaureate Premedical Program sponsored by the School of Medicine.

ENG 100 Introduction to Composition (3) I
Individualized approach to the skills and strategies of expository writing. P: By placement only.

ENG 105 Library Research Skills (1) OD
Designed to give the undergraduate student a focused introduction to efficient library research techniques. A search strategy concept forms the basis of the course. Hands-on exercises and semester projects introduce the student to all major forms of reference tools, methods of source evaluation and documentation. Provides preparation for independent term-paper research. Pre- and post-testing assess entry skills and student progress.
ENG 109 Pharmacy and Allied Health English Review (3) I
A review of English forms and skills for selected students in the School of Pharmacy and Allied Health.

ENG 120 World Literature I (3) I, II (Same as CNE 120)
A chronological introduction to Western and non-Western literatures from the ancient world through the Renaissance. The course juxtaposes Greek literature, Roman literature, English literature from the Old English, Middle English, and Renaissance periods with contemporaneous literatures from Asia, the Middle East, and other non-Western cultures.
ENG 121 World Literature II (3) I, II
A chronological introduction to Western and non-Western literatures after the Renaissance to the present, with special units on 18th Century, 19th Century, 20th Century, and non-Western literatures. Works by and about women are incorporated throughout the course. The contemporary non-Western component places particular emphasis on African/African-American and Latin-American/Chicano literature.

ENG 122 Honors World Literature I (3) I (Same as CNE 122)
This course is open to first-year students eligible to enroll in honors courses. It requires the consent of the Director of the Honors Program.

ENG 123 Honors World Literature II (3) II
This course is open to first-year students eligible to enroll in honors courses. It requires the consent of the Director of the Honors Program.
ENG 150 Rhetoric and Composition (3) I, II
Emphasis on strategies of composition, including invention, organization and development, sentence and paragraph structuring.
ENG 251 Advanced Composition (3) I, II
Intensive study of the rhetoric of prose composition, including practice in writing the research paper. P: ENG 150.

## ENG 252 Honors Advanced Composition (3) OD

Intensive study of the rhetoric of prose composition for students in the Honors Program. P: Consent of Director of Honors Program.

NOTE: ENG 120 and 121 or equivalent are prerequisites for ENG 254 and all English courses above 254.

## ENG 254 Writing About Literature (3) I, II

Practice in literary research and in writing the critical essay, together with discussion of contemporary literary theories and practices. P: ENG 150, 120, 121.

ENG 295 Special Projects (3) OD
For the non-English major. Usually a CHS course. Requires a university sponsor and written departmental approval.

ENG 300 Introduction to Creative Writing (3) I, II Introductory practice in narrative and poetic writing.
ENG 301 Creative Writing: Narrative Forms (3) I
Theory and practice of narrative fiction. P: ENG 300 or consent of Director of Creative Writing.

ENG 302 Creative Writing: Poetic Forms (3) II Theory and practice of the poem. P: ENG 300 or consent of Director of Creative Writing.

ENG 305 Personal Values in Creative Writing (3) OD
Theoretical and practical exercises in using the writing of poetry, short fiction, short drama, and familiar essays for the development and precise articulation of an organized personal philosophy. P: Jr. stdg.

ENG 310 Writing Strategies for the Organization (3) II (Same as COM 310)
Presentation of written communication used in organizations. Topics include preparation of memos and letters, research skills, and the formal report.

ENG 311 Ethics and the Uses of Rhetoric (3) I (Same as COM 311)
Survey of the major works on rhetoric that treat ethics from the time of Plato to the Moderns. P: Jr. stdg.
ENG 312 Mass Media and Modern Culture (3) I, II (Same as AMS 312, COM 312) Examination of the role of film, television, and print media in American life. P: Jr. stdg.

ENG 313 The Essay: Critical and Developmental Reading (3) OD
Critical reading of nonfictional prose concentrating on the logic, organization, style, and vocabulary of essays. Especially recommended for pre-law students.

ENG 315 Technical and Professional Writing (3) OD
Writing in and with technology; patterns of reports and correspondence; professional style and structure.

ENG 327 Interpretation of Literary Works (3) OD
Analysis of literary form and structure. This course is applicable for credit in the Jesuit Humanities Program (JHP). P: Consent of JHP Director.
ENG 329 American Literature/American Identity (3) OD (Same as AMS 329)
Analysis of the treatment of the American identity as it is represented in American literature of the colonial period to the present.
ENG 330 Introduction to Irish Literature (3) I, SS in Ireland Survey of Irish literature from its beginnings.

ENG 333 Film Interpretation: Archetypal Approaches to Movie Genres (3) II (Same as COM 333)

An introduction to critical film viewing, concentrating on recent American movies from several genres. An overview of the elements of film from the perspectives of archetypal and mythological criticism.
ENG 340 English Literature I: Medieval/Early Renaissance (3) II An historical survey of English literature to 1600.

ENG 341 English Literature II: Late Renaissance/Neo-Classical (3) I An historical survey of English literature between 1600 and 1800.
ENG 342 English Literature III: Romantic/Victorian (3) II An historical survey of English literature between 1800 and 1914.

ENG 371 American Literature: Vision and Reality (3) OD
Values and ideals in American literature from the Seventeenth Century to the present.
ENG 380 History and Criticism of Cinema (3) I (Same as COM 380)
Motion pictures as a distinctive medium of communication and as an art form; film language; film history; film appreciation; critical assimilation of film content. 2R, 3L.
ENG 381 Literature and the Environment (3) OD
Explores English and American nature writing from the neoclassical era to the present. The course investigates the ways in which different authors have seen and have expressed their relationships to their environments and the human relationship to the natural world in general. The course examines nature writing in a variety of genres-poetry, novels, and non-finction prose essays. It also covers relevant work from contemporary ecocriticism of literature.
ENG 389 The Roaring Twenties (3) OD
Representative American authors and works from the 1920's. P: Jr. stdg.
ENG 390 Introduction to African Literature (3) I (Same as AFS/BKS 390)
Contemporary African literature. Relationship between African literature and society, emergence of national and cross-African literatures, issues of cultural conflict, language and oral tradition, and other topics.
ENG 393 African-American Literature (3) II (Same as BKS 393)
A survey of representative African American literature from its inception to the present. The particular representative authors and genres and the historical focus of the course may differ each semester.
ENG 398 Literature of Francophone Africa (3) OD (Same as AFS/BKS 398)
Sample of representative Francophone African literature. Nature and functions of this literature, relation between it and society. Impact of non-Western cultural context on Western literary genres.
ENG 403 Seminar in Creative Writing (3) I, II
Small group or individualized attention and practice in the student's chosen genre(s). Designed to allow the student extensive work on an advanced level, the course may be repeated a maximum of three times. P: ENG 300 or 301 ; consent of the Director of the Creative Writing Program.
ENG 405 The Thirties (3) OD
Intensive study of the literature of the Depression and the New Deal. P: Jr. stdg.
ENG 410 Women in Literature (3) OD
Literary works by and about women. P. Jr. stdg.
ENG 420 Utopian Literature (3) OD
Examination of utopian models and ideals in selected literary classics, including anti-utopian literature. P: Jr. stdg.
ENG 425 Popular Literature (3) OD
Examination of popular literary forms: detective fiction, science fiction, fantasy, best-sellers, gothic/contemporary romance, western, spy-thriller, horror/supernatural.
ENG 435 Literature, Philosophy and Economics: Critical Representations of Commercial Life (3) OD (Same as PHL/SRP 435)

This course will explore how literary, philosophical, and economic texts can reveal basic commercial forms such as the commodity, wage, labor, and capital, whose consequences for social justice we will consider. P: Sr. Stdg.

Students will explore the ways that literacy, technology, and humanity interact. Students will look at the ways that each of these entities affects the others. The course will begin with a historical look at human technological literacy, but the majority of the course will focus on present literacy and technology. P: Sr. Stdg.

## ENG 470 Seminar in Film Studies (3) OD (Same as COM 470)

Topical seminar with topics changing in different semesters. Examination of particular areas of film and popular culture. Topics in different semesters might include detailed examination of a film genre (e.g., the western; science fiction; detective films), or film and cultural studies (e.g., women and film; film and developing nations). May be repeated for credit to a limit of six hours.

ENG 480 Senior Seminar I: History of Literary Criticism (3) OD
A consideration of critical theory and practice from the ancient Greeks to the present. P: ENG major; Sr. stdg.

ENG 481 Senior Seminar II: Special Topics in British Literature (3) OD
A consideration of certain historical, aesthetic, and/or philosophical themes or ideas which serve as a means of forming an integrated view of British literature. P: ENG major; Sr. stdg.
ENG 482 Senior Seminar III: Special Topics in American Literature (3) OD
A consideration of certain historical, aesthetic, and/or philosophical themes or ideas which serve as a means of forming an integrated view of American literature. P: ENG major; Sr . stdg.
ENG 483 Senior Seminar IV: Special Topics in Irish Literature (3) OD
A consideration of certain historical, aesthetic, and/or philosophical themes or ideas which serve as a means of forming an integrated view of Irish literature. P: ENG major; Sr. stdg.
ENG 484 Senior Seminar V: Special Literary Topics (3) OD
A consideration of certain historical, aesthetic, and/or philosophical themes or ideas that cut across or fall outside the categories covered in Senior Seminars I-IV. P: ENG major; Sr. stdg.
ENG 492 Creative Writing: Senior Project (3) I, II
Preparation of a portfolio to be approved by a committee of three faculty members. This project is in lieu of the Senior Seminar for creative writing majors. P: Sr. stdg.; English major.

ENG 493 Directed Independent Readings (1-3) I, II, S
May be repeated for credit to a limit of six hours. P: Sr. stdg.; IC.
ENG 495 Special Literary Problems (3) OD
Study of specialized topics or problems that cut across or do not fit within traditional periods or genres. P: Jr. stdg.

ENG 509 Shakespeare (3) (2 on, 1 off)
Survey of Shakespeare's background; dramatic analysis of Shakespearean plays. P: Jr. stdg. or IC.
ENG 510 Chaucer (3) OD
Artistic accomplishments of Geoffrey Chaucer, with particular emphasis on The Canterbury Tales. P: Jr. stdg. or IC.

ENG 511 Milton (3) OD
The mind, art, and historical significance of Milton as revealed in his major poetry and prose. P: Jr. stdg. or IC.

ENG 512 Studies in Major Authors (3) I, II
A study of a major author or group of authors. The particular authors studied will differ from time to time. The course may be taken more than once. P: Jr. stdg. or IC.

ENG 520 History of the English Language (3) (2 on, 1 off)
Historical approach to the study of the English language from Old English to Modern English. P: Jr. stdg. or IC.
ENG 522 Introduction to Linguistic Studies (3) OD (Same as EDU 522)
Survey of the history of the English language and an examination of the structure of modern English grammars. P: Jr. stdg.

ENG 526 Canadian Literature (3) OD
Study of the fiction and poetry of major Canadian writers. P: Jr. stdg.

## ENG 531 Irish Drama (3) OD

The Irish theatre of the past 100 years, its plays and playwrights: Synge, Shaw, Yeats, O'Casey, Behan, et al. P: Jr. stdg. or IC.
ENG 532 The Irish Renaissance (3) (1 on, 2 off)
Concentrated study of the key figures of the Irish Renaissance: Joyce, Yeats, Synge, O'Casey, especially as these writers treat Irish/Celtic types, themes, and myths. P: Jr. stdg. or IC.
ENG 533 Contemporary Irish Literature (3) (1 on, 2 off)
A study of major Irish writers since the death of Joyce and Yeats, beginning about 1940 and proceeding to the present. Writers discussed may include, e.g., O'Faolain, O'Connor, O'Flaherty, Clarke, Kavanagh, and more recent writers such as Kinsella, Heaney, Hartnett, and Egan. P: Jr. stdg. or IC.
ENG 534 Irish-American Literature (3) (everyother Fall)
A study of 19th and 20th century fiction, poetry, and drama by American writers of Irish birth or descent, emphasizing the Irishness of their voice and/or material. Authors include John Boyle O'Reilly, Finley Peter Dunne, F. Scott Fitzgerald, John O'Hara, James T. Farrell, Edwin O'Connor, J.F. Powers, and others. P: Jr. stdg. or IC.

ENG 535 Studies in Irish Literature (3) SS in Ireland
A study of selected Irish writers and movements presented in historical sequence. Lectures by prominent Irish scholars will be followed by small seminars. P: ENG 330 or equiv.; Jr. stdg.
ENG 536 Studies in Irish Literary History and Culture (3) SS in Ireland
A study of the historical and cultural background to Irish literature. Lectures by prominent Irish scholars will be followed by small seminars and field trips. CO: ENG 330 or 535; P: Jr. stdg.
ENG 542 18th and/or 19th-Century British Novel (3) OD
Study of the British novel from Richardson and Defoe to Thomas Hardy. P: Jr. stdg.

## ENG 543 Modern British Novel (3) OD

A study of the British Novel from the First World War through the post Second World War period. Lawrence, Forster, Bowen, Woolfe, Green, and others will be considered. P: Jr. stdg.

ENG 544 Modern British Poetry (3) OD
A study of British poetry from 1900 to the present. Eliot, Hardy, Housman, Lawrence, and others will be considered. P: Jr. stdg.

ENG 550 Contemporary British Literature (3) OD
A study of post World War II British Literature. P: Jr. stdg.

## ENG 551 Modern Novel (3) OD

Selected studies in modern long fiction. P: Jr. stdg.
ENG 552 Modern Drama (3) OD
Study of modern dramatists and dramatic techniques from Ibsen to Ionesco. P: Jr. stdg.
ENG 553 Modern Poetry (3) OD
Selected studies in modern poetry. P: Jr. stdg.

## ENG 560 Satire (3) OD

A study of various forms and techniques of satire with critical readings in the history and nature of the satirical genre(s); readings in satirical literature from the beginnings to the present; discussion of complex literary theories regarding satiric art. P: Jr. stdg. or IC.

## ENG 561 Comedy (3) OD

Comic theory; varieties of comedy; the comic spirit as an essentially artistic and moral viewpoint. P: Jr. stdg.
ENG 569 Modern American Poetry (3) OD A study of 20th century American poetry. P: Jr. stdg.

ENG 570 Modern American Drama (3) OD
Study of modern American drama. P: Jr. stdg.

## ENG 573 19th-Century American Novel (3) OD

Study of selected American long fiction from Brown to James. P: Jr. stdg.
ENG 574 Modern American Novel (3) OD
A study of the 20th Century American novel. P: Jr. stdg.
ENG 575 Contemporary American Literature (3) OD
Study of principal American writings of the post-World War II era. P: Jr. stdg.
ENG 580 The Elements of Style: Form and Structure in Writing (3) OD Study of the modes and strategies of contemporary prose discourse; includes practice in rhetorical analysis. P: Jr. stdg.
Graduate-level courses (600-700-series courses, open only to graduate students) offered by the Department of English are listed in the Graduate School issue of the Creighton University Bulletin.

## ENVIRONMENTAL SCIENCE (EVS)

Environmental Science is a Bachelor of Science degree program housed in the Department of Environmental and Atmospheric Sciences, College of Arts and Sciences. The program provides multidisciplinary science training to prepare students for graduate and professional school studies and for employment in fields of environmental science. This program is offered through the interdepartmental Creighton Institute of Environmental Science (CIES). The Environmental Science office is located in Rigge Science Room107.
Associate Professor Douglas (Chair of Environmental and Atmospheric Sciences); Professors Burk, Harper, Platz, and Schalles; Associate Professor Michels; Assistant Professors Anderson, Cullum, Penc, Ramsden, Treonis, and Vinton.

## Field of Concentration for the Degree of Bachelor of Science in Environmental Science <br> Core Requirements: <br> EVS 113/114 Introduction to Atmospheric Sciences and Lab - 4 Sem. Hrs. <br> EVS 390 Environmental Science- 3 Sem. Hrs. <br> EVS 491 Senior Seminar-2 Sem. Hrs. <br> EVS 533 Inadvertent Climate Modification - 3 Sem. Hrs. <br> EVS 555 Meteorological Remote Sensing-3 Sem. Hrs. <br> BIO 211/212 General Biology-8 Sem. Hrs. <br> CHM 203/204/205/206 General Chemistry-8 Sem. Hrs. <br> Total Core Requirements- $\mathbf{3 1}$ Sem. Hrs.

## Area of Specialization Requirement

Students must take a minimum of 14 credits from one of the following tracks:
Track I: Global Environmental Systems
Four-credit courses-EVS 341, 435, 440, 443, 481
Three-credit courses-EVS 485, 541, 544, 548, 553, 556, 566, 575
One- or two-credit laboratories-EVS 486 (1), 487 (2)
Track II: Environmental Pollution
Four-credit courses-CHM 315, 321/322, 323/324, 416, EVS 443
Three-credit courses-EVS 523, 541, 544, 548, 552, 556, 575; CHM 506
One-credit laboratories-CHM 322, 324
Track III: Organismal/Population Ecology
Four-credit courses - EVS 335, 341, 435, 440, 443, 481, 561
Three-credit courses - EVS 449, 483, 485, 549, 571, 575, 581
One- or two-credit laboratories - EVS 450 (1), 484 (1), 486 (1), 487 (2), 572 (2)
Track IV: Environmental Policy and Society (at least one course must come from Group B)
Three-credit courses:
GROUP A-EVS 307, 333, 353, 355, 374, 462; ENG 381+, EVS/PHL 354+.
GROUP B—EVS 523,541;CHM 506.

## Support Courses

Fifteen credit hours including *MTH 245, *PHY 211 and *212, and three credit hours selected from EDU 315, EVS 401, MTH 513, EVS 333+, $353^{+}, 355^{+}, 374^{+}, 462^{+}$, EVS/PHL $354^{+}$, ENG $381^{+}$or any other course with advisor consent.

* Required for all students.
+ Cannot be used to fulfill both Track IV and Support Requirements. Note: Track IV students may use any advanced (non-core) natural science course(s) as elective support.
${ }^{++}$Cannot be used to fulfill both Track I or II and Support Requirements.
Special Courses: (These courses are available to all students in the EVS Program as additional electives. They do not substitute for any course requirements for the major.)

Environmental Science Internship (EVS 480) 1-3credits
Directed Independent Readings (EVS 493) 1-3 credits
Directed Independent Study (EVS 495 1-3 credits
Directed Independent Research (EVS 497) 1-3 credits
EVS 113 Introduction to Atmospheric Sciences (3) I, II, S (Same as ATS 113, NSC 113)
Introduction to causes of the weather for science and nonscience majors. Topics covered include cloud identification, factors influencing the development of storm systems; effects of jet streams on storm development; the formation of thunderstorms, tornadoes, and hurricanes; climatic change and man's influence on climate and weather systems.

EVS 114 Introduction to Atmospheric Sciences Laboratory (1) I, II, S (Same as ATS 114, NSC 114)

Laboratory designed to familiarize students with analysis techniques in meteorology. Topics include weather observations; weather symbols and coding; map plotting and analysis; and basic forecasting techniques. Students will become familiar with the PCMcIDAS system. CO: EVS 113.

EVS 307 Demography: World Population Issues (3) II ENY (Same as ANT/SOC 307) Fall 1998 This course will provide a sociological examination of the development and evolution of different models of population dynamics from several contemporary cultures. It will place particular emphasis on the assumptions and logical consequences of each of these models. Includes a survey of historical and contemporary trends in population growth, as well as a review of competing perspectives about natural limits to that growth. P: Jr. stdg.

EVS 333 Environmental Politics and Policy (3) II 1995-96 (Same as PLS 333) Spring 1999 An overview of the world's environmental problems from a political perspective. Particular attention is paid to the political impediments to environmental problem solving in both the domestic and international context. P: PLS 121 of So. stdg.

EVS 335 Zoology (4) II, S(OD) (Same as BIO 335)
Biological concepts and principles exemplified by both invertebrates and vertebrates with emphasis on animal diversity, morphology, evolution, and ecological relationships. 3R, 3L. P: BIO 211 \& 212.

EVS 341 General Botany (4) II (Same as BIO 341)
Modern biological concepts and principles exemplified by the plant kingdom with emphasis on plant diversity, taxonomy, and evolution. 3R, 3L. P: BIO 211 \& 212.

EVS 353 Environmental Economics (3) I or II (Same as ECO 353) Fall 1998
The application of economic analysis to environmental issues. Emphasis on global environmental problems and policies and environmental problems and policies that are common to all nations. This course is not open to students registered in the College of Business Administration. P: Jr. stdg.

EVS 354 Environmental Ethics (3) OD (Same as PHL 354) Fall 1999
Critical study of the anthropocentrism-nonanthropocentrism debate and the individualismholism debate and how they affect each other in the context of the determination of ecological value. If anthropocentrism is in some ways defective, what implications do these defects have for our moral obligations to animals, plants, waters, soil, future generations, species, ecosystems, and the planet? P: Jr. stdg.; PHL 107 or 109, and PHL 250.

EVS 355 Environment and Society (3) II (Same as ANT/SOC 355)
Human societies interact with the natural environments in which they are embedded. An examination of the driving economic, political, cultural, and demographic forces that cause human modification of the natural world, the resulting social and environmental problems and public controversies. A focus on movements and policies related to environmental issues, and the prospects for the emergence of more enviromentally "sustainable" societies. P: Jr. stdg.

EVS 374 Management of Environmental Risk (3) I or II (Same as MGT 374) Spring 2000
Examination of environmental issues relevant to management decision making. Emphasis on risk analysis related to global/regional and workplace environmental issues. P: Jr. stdg.
EVS 390 Environmental Science (3) II (Same as BIO 390)
Course presents a balanced, scientific approach to the study of the environment and stresses the application of ecological concepts within a systems perspective. Topics include ecological concepts, population principles, endangered species and habitats, resources, air and water pollution, environmental health, and global perspectives. P: BIO 211 \& 212 or CHM 205/ 206.

EVS 401 Biometry (4) I, S(OD) (Same as BIO 401)
Introduction to measurement theory as applied to biological studies. Data acquisition, analysis, and display procedures. Introductory statistical methods emphasizing sampling procedures, frequency distributions, measure of central tendency, analysis of regression lines, log doseresponse curves (graded and quantal), bioassay. Lectures supplemented by problem-solving sessions. (Qualifies as laboratory course). 3R, 3L. P: BIO 211 \& 212.
EVS 435 Field Biology in the Southeastern United States (4) S, AY (Same as BIO 435)
Three-week field trip. Exploration of natural communities in the Blue Ridge mountains of North Carolina, the South Carolina Coastal Plain, the Georgia coast and barrier islands, and the tropical environments of southern Florida. Emphasis on organisms and their adaptation to the environment, field collection techniques, and ecological relationships. Students will work from and stay in established biological field stations at Highlands, North Carolina, Sapelo Island, Georgia, Lake Placid, Florida, and Key Largo, Florida. (Qualifies as a laboratory course.) P: One organismal-level or field course in biology or IC.
EVS 438 Natural History of the Caribbean (3) OD (Same as ATS 438) Spring 1994
Study of the natural history of the Caribbean basin in a field setting. Emphasis on the geological history of the islands and the evolution of their endemic biotas. Field trips stressing identification of the local flora and avifauna. Investigation of land use and the resultant effect on the ecology of the region. This course was offered to students in the Semester Abroad Program in the 1994 Spring Semester. Can be taken as independent study by students in future semesters in the Dominican Republic. P: IC and Dean's Office Approval; Jr. or Sr. stdg.

EVS 440 Field Biology of the Desert Southwest (4) PS (OD) (Same as BIO 440)
A field course designed to allow students to study the flora and fauna of the southwest. Participants spend the term out-of-doors examining plant and animal relationships in both alpine and desert habitats. Also involves collecting, identifying and preserving study specimens. Base camps include Portal, Arizona, at the foot of the Chiricahua Mountains on the Sonoran Desert; Red Cliffs State Park, north of St. George, Utah (northern perimeter of the Mohave); and Capitol Reef National Park, Utah. Side trips include the Boyce Thompson Arboretum at Superior, Arizona, the Arizona Sonoran Desert Museum at Tucson, Zion National Park, and Mesa Verde, Colorado. (Qualifies as a laboratory course.). P: Two upper-division biology courses or IC.

EVS 443 Environmental Geology (4) I (Same as ATS 443)
An introduction to physical geology designed for environmental science majors. Topics include an examination of rock types, evolution and geological times, soil development and processes, earthquakes and global tectonics. In-class laboratories will be devoted to identification of rock types, soil analysis, and determination of fossil types.

EVS 449 Animal Physiology (3) I, S(OD) (Same as BIO 449)
A study of the functions of animals from the cellular to the organ-systems level with emphasis on vertebrate systems physiology. 3R, 3L. P: BIO 211 \& 212; Jr. stdg.

Laboratory exercises designed to illustrate several physiological processes in animals, including cellular and whole animal metabolism, heart and muscle function, osmoregulation and responses to thyroxine and cold acclimation. P or CO: EVS 449.

EVS 455 Food, Society and Environment (3) II (Same as ANT/SOC/SRP 455) Spring 2001
Access to food is a universal basic human need. This course considers the social and cultural significance of food, the ecological implications of producing it, and social justice issues that surround its distribution from several disciplinary perspectives. P: Sr. stdg.

EVS 462 The Land in the American Experience (3) OD (Same as AMS, HIS 462) Spring 1998
This course serves as an introduction to American environmental history, whereby students will gain a better appreciation of the problems of modern human interaction with the environment. P: So. stdg.

## EVS 480 Internship in Environmental Sciences (1-3) I, II, S

An internship designed for students interested in working in an environmental setting in the public or private sector. Students may register for three hours credit for 60 hours of work. Before registering for the internship, students should consult with the director of the EVS program. The internship may be taken for a maximum of six hours. Credit does not count toward a specialization area of the Environmental Science degree. P: DC.
EVS 481 Terrestrial Ecology (4) I, S(OD) (Same as BIO 481)
Introduction to the interactions of organisms and the environment, especially the biology of populations, communities, and ecosystems. Individual adaptations, the nature of the environment, population dynamics, and community organization are stressed. Laboratory exercises include field trips to terrestrial habitats. 3R, 3L. P: BIO 211 \& 212.

EVS 483 Vertebrate Natural History Lecture (3) II, S (OD) (Same as BIO 483)
Lecture series designed to provide students with a modern overview of vertebrate diversity. Lectures encompass ancestry, major adaptive shifts between classes of vertebrates, geographic distribution based on physiological limits, specialized feeding and locomotor modes, courtship patterns, reproductive strategies, and conservation issues. P: BIO 211 \& 212. Recommended as useful prior to enrollment in EVS 440 (Field Biology of the Desert Southwest) and for students seeking a general understanding of vertebrate life, or those who are interested in teaching biological sciences.

EVS 484 Vertebrate Natural History Laboratory (1) II S(OD) (Same as BIO 484)
Laboratory exercises that will provide experience in the following areas: dissection of representatives of each major vertebrate class with emphasis on the diagnostic differences between groups; identification and preservation of vertebrate specimens. Field trips are available on a limited basis. P or CO: EVS 483.

EVS 485 Marine and Freshwater Ecology (3) I (Same as BIO 485)
An introduction to the community structure, biological production, and physical and chemical properties of aquatic ecosystems. The major features of water columns, benthic substrates, and lotic zones will be reviewed and compared. P: BIO 211 \& 212.

EVS 486 Freshwater Ecology Laboratory (1) I (Same as BIO 486)
Introduction to methods for analyzing lake, stream, and wetland habitats. Exercises will examine physical and chemical properties, biological production and food chains, and water quality of freshwater ecosystems. P or CO: EVS 485.
EVS 487 Marine Ecology Laboratory (2) I (Same as BIO 487)
Direct observation of marine coastal habitats (reefs, sea grass beds, mangrove forests, rocky intertidal zones, and offshore waters) at Roatan Island, Honduras. Exercises in the field and campus laboratory sessions will examine physical and chemical properties; marine organisms and community structure and productivity of marine ecosystems. CO: EVS 485 or IC; P: BIO 211 \& 212.

EVS 491 Senior Seminar (1) I, II
All Environmental Science majors must take this course both semesters of their senior year, and in one of these semesters must present a seminar on a topic agreed upon by the faculty seminar coordinator and the student's major adviser. Seminars will be presented by faculty and invited outside speakers. P: Sr. stdg.

Assigned readings in the student's area of interest. Course is only an addition to and not a substitution for any portion of the major requirement. May be repeated to a limit of six hours. P: Jr. stdg.; IC.

EVS 495 Directed Independent Study (1-3) I, II, S
A program of independent study with emphasis on activities other than laboratory or field research. (Examples include library research or special course attendance.) Course is only an addition to and not a substitution for any portion of the major requirement. May be repeated to a limit of six hours. P: Jr. stdg.; IC.
EVS 497 Directed Independent Research (1-3) I, II, S
A program of independent study with emphasis on laboratory or field research. Course is only an addition to and not a substitution for any portion of the major requirement. May be repeated to a limit of six hours. P: Jr. stdg.; IC.

EVS 511 Microbiology in the Environment (4) AY (Same as BIO 511)
Explores microbiology within an environmental context. Includes an introduction to physiology of microorganisms, emphasizing activities performed by microbes and microbial responses to environmental factors. The course emphasizes community and ecosystem microbial ecology, including functions integral to healthy ecosystems and impact of resistance to antibiotics. Laboratory exercises include aseptic technique, isolation and enumeration from environmental samples, water and air quality procedures, fermentation processes, and collection trips to local habitats and industrial sites. P: BIO 211, 212.

EVS 523 Environmental Toxicology (3) II 1994-95 (Same as BIO 523)
Principles of environmental tolerance, bioenergetics and nutrition, homeostasis, and toxicology and disease will be developed and related to the organismal and population levels and to comparative responses to environmental disturbance. The course uses a reading/discussion format. 3R. P: BIO 211 \& 212.

## EVS 533 Inadvertent Climate Modification (3) I (Same as ATS 533, NSC 533)

Exploration of the influence of human beings on the atmosphere. Discussion of theories and models of natural climate change and of that induced by human beings. The ethical issues of inadvertent and planned change of climate by humans will be raised. Major topics include effects of $\mathrm{CO}_{2}$ warming (greenhouse effect), ozone depletion; human-induced desertification; cloud seeding; acid rain; urban microclimates; and nuclear winter. Methods of monitoring these systems will be stressed relative to an increased world-wide need to limit or prevent human-induced climate changes.
EVS 541 Atmospheric Diffusion, Air Pollution, and Environmental Impact Analysis (3) II (Same as ATS 541, NSC 541) Spring 1999
Survey of the theoretical and practical aspects of diffusion, dispersion, and turbulent transport of pollutants in an atmospheric boundary layer. Includes observational and instrumentation techniques; plume models; regional pollution transport; and diffusion from point, line and area sources. Chemical and physical transformations of the pollutants, precipitation scavenging, and dry deposition are studied. Reviews Federal environmental laws, air quality standards, environmental impact assessments, ethics, and guidelines for writing environmental impact statements. P: EVS 113 or equiv.

EVS 544 Hydrology (3) I, OD1994-95 (Same as ATS 544, NSC 544) Spring 1999
Study of the waters of the earth, especially with relation to the effects of precipitation and evaporation upon the occurrence and character of water in streams, lakes, and on or below the land surface. In terms of hydrologic cycle, the scope of this course may be defined as that portion of the cycle from precipitation to reevaporation or return of the water to the seas. P: EVS 113 or NSC 231.

EVS 548 Space Weather (3) OD (Same as ATS 548) Pre-Session 1998
Course designed to acquaint the student with the basic phenomenology associated with solar processes and activity, and the impact of these processes upon the earth and its atmosphere. Designed to familiarize the student with the concepts of upper atmospheric energetic processes and their influence upon everyday activities. P: MTH 246 \& PHY 212.
EVS 549 Environmental Physiology (3) II (Same as BIO 549)
Impact of environmental changes and environmental extremes on animals and their physiological mechanisms. Examines primarily vertebrates and their responses to variations in
temperature, pressure, and salinity. Basic physiological principles associated with each adaptive response covered in lecture and reading assignments. P: BIO 333 or EVS 335 or EVS 483 or EVS 449 or IC.

EVS 552 Boundary Layer Meteorology (3) OD (Same as ATS 552) Fall 1998
Structure of the boundary layer, surface energy budget, vertical profiles of temperature, humidity and wind, turbulence, Monin-Obukhov theory. Determination of surface heat and moisture fluxes. Some discussion of applications to diffusion and dispersion of substances in the atmosphere. P: ATS 572 or equiv.

## EVS 553 Tropical Meteorology (3) I (Same as ATS 553)

Characteristics of the tropical atmosphere including convection, boundary layer processes, local and diurnal weather phenomena, meso-scale tropical systems, tropical storm structure, and energetics. This course relies heavily on satellite interpretation of tropical cloud systems. P: EVS 113.

EVS 555 Meteorological Remote Sensing (3) II (Same as ATS 555)
First section of the course is devoted to meteorological interpretations of cloud fields as observed from weather satellites. Second section of the course devoted to examination of general and specific applications of remote sensing of the environment. Includes imagery from satellite, ground based, and airborne systems; data analysis and decision methods multispectral analysis analysis and evaluation of water, terrain, mineral, forest, and soil resources. P: EVS (ATS, NSC) 113 or IC.

EVS 556 Introduction to Physical Oceanography (3) OD (Same as ATS 556, NSC 556)
Geomorphology of the ocean bottom; properties of sea water; salinity and temperature distributions; major ocean currents and circulations; equations of motion, horizontal wind-driven currents; thermohaline circulations; wind waves and swell.

EVS 561 Entomology (4) I (Same as BIO 561) Fall 1999
Introduction to insect biology with emphasis on the major insect groups. Anatomy, physiology, and behavior of insects and their ecological, agricultural, and medical importance. 3R, 3L. P: BIO 211 \& 212.

EVS 566 Climate Theory (3) OD (Same as ATS 566)
Theories of global climate and variability. Examination of climate models, including internal and external parameters and feedback mechanisms P: EVS 113; ATS 561.

EVS 571 Animal Behavior (3) II (Same as BIO 571)
Evolutionary aspects of animal behavior, including physical and physiological bases of behavior, social behavior, behavioral ecology and genetics of behavior. 3R. P: BIO $211 \& 212$.

EVS 572 Animal Behavior Laboratory (2) II (Same as BIO 572)
Introduction to animal behavior research methods using structured observations and experiments in laboratory and field settings. 3L. P or CO: EVS 571.

EVS 575 Environmental Measurements Practicum (3) OD (Same as ATS 575)
This course is designed to provide the students with instruction on the principles and practices associated with environmental measurements of the atmosphere, soil and hydrologic courses. Heavy emphasis will be placed on the theory of sampling ambient and pollutant sources, instruments and measurement techniques, and the consequences of the pollutant. The course will include several exercises as well as field trips to local sites of interest to demonstrate the practical and operational aspects of environmental measurement and monitoring programs. P: EVS/ATS 113, MTH 245 and PHY 212 or IC.

EVS 581 Evolution (4) I, S (OD) (Same as BIO 581)
Lectures and discussion designed to provide junior and senior students with a broad understanding of the science of evolutionary biology. Organized in three parts, each takes a chronological approach: (A) evolutionary theory, (B) mechanisms of evolution, (C) the implications and consequences of theory and mechanism; and as part of both the lecture and laboratory experience in ( C , above) topics in evolutionary medicine will be covered. Laboratory sessions include computer modeling exercises to illustrate the mechanisms of evolutionary changes, an excellent film series, discussion opportunities designated to explore in more depth questions and topics associated with speciation, biodiversity and human evolution as well as a review session prior to each exam. 3R, 3L. P: One upper-division BIO course or Jr. stdg.

## EXERCISE SCIENCE (EXS)

Professor Baechle (Chair); Associate Professor Eckerson and Assistant Professor Bull; Instructors Conway and Moore; Adjunct Instructors Carper, Ochi, Pfeiff
er, and Yee; Lecturers Brace and Deremer.
The Exercise Science major assists in preparing students to enter a multitude of health-related career fields including cardiac and pulmonary rehabilitation, occupational therapy, physical therapy, athletic training, corporate, commercial, and community fitness/wellness, and strength training and conditioning. The Bachelor of Science degree also prepares students who are interested in post-graduate study in Exercise Science and serves as an option for students interested in completing the prerequisites for admission into a variety of professional programs including medicine, dentistry, pharmacy, occupational therapy, and physical therapy. Coursework and experiences gained from the program in Exercise Science are designed to help prepare students planning to pursue certifications offered by the American College of Sports Medicine, the National Athletic Trainers Association, and the National Strength and Conditioning Association.

## Admissions Criteria

The following requirements for acceptance into the Exercise Science Department will apply at the time of application: an overall grade point average of 2.75 in thirty or more hours of coursework at Creighton; and grades of "C" or better in General Chemistry 203/204 or 205/206 AND General Biology 211 or 212.

Enrollment is limited and is based on a number of criteria, including meeting the minimum requirements. Specific application procedures and deadline information can be obtained at the College of Arts and Sciences office or the Exercise Science Department.

Exercise Science Major: The Exercise Science major is designed in consultation and approval with the department chair. Exercise Science majors are required to complete these courses: EXS 101, 103, 106 OR 107; 125, 142, 144, 151 OR 156, 195, 331, 334, 335, 350, 401, 407, 489, 491, 492, and BIO 211 or 212, CHM 203/204 or 205/206 and BMS 303. Courses in which grades of "D" are received must be repeated.

EXS 101 Beginning Swimming (1) I
Lessons in swimming for beginning swimmers. Emphasis on breathing technique, basic strokes, and safety skills.
EXS 103 Intermediate Swimming (1) I
Instruction in swimming for those beyond beginning swimming skills. Emphasis on stroke technique, conditioning, and safety skills. P: EXS 101 or equiv.

## EXS 106 Lifeguard Training (2) II

Includes the analysis and practice of basic swimming strokes particularly as related to lifesaving situations. Physical conditioning provided through warm-ups, practice drills, and swimming outside class time. Presentation of specific physical skills and knowledge related to aquatic safety. General skills and knowledge needed to serve as a lifeguard included. American Red Cross certification in Advanced Lifesaving and Lifeguard Training may be earned. P: Ability to swim 500 yards.

EXS 107 Water Safety Instruction (2) II
Methods of teaching swimming skills, water safety techniques and lifesaving skills. P: Demonstrate knowledge and skill in water skills pretest.
EXS 108 Scuba Diving (1) I, II, S
Instruction in various areas of scuba diving; opportunities to become certified. Students will earn an open-water certificate upon successful completion of the course. Students should expect to pay an additional fee.

EXS 111 Beginning Gymnastics (2) I, II
Beginning skills and techniques in tumbling and on various pieces of gymnastics apparatus.
EXS 112 Intermediate Gymnastics (2) I, II
Principles, techniques and skills of gymnastics. Emphasis on assisting the individual to reach more advanced skill levels. P: EXS 111 or IC. may be earned. Emphasis on medical self-help and emergency medical assistance.

EXS 135 Horseback Riding (2) (1 Sem. Hr. in Summer Session) I, II, S(OD) Instruction in the techniques of riding. Students should expect to pay a riding fee for the semester in addition to tuition. This arrangement will include approximately 16 lessons.

EXS 136 Introduction to Equestrian Sports (2) I, II
Continuation of EXS 135 with basic riding and jumping skills; further development of knowledge of horse sports (i.e., fox hunting, horse showing, etc.); basic veterinary knowledge. Students should expect to pay a riding fee for the semester in addition to tuition. This arrangement will include approximately 16 lessons. P: EXS 135 or IC.

EXS 142 Personalized Weight Training (1) I, II
Principles, techniques, and participation in weight-training activities for both men and women. Emphasis on muscular endurance, strength and flexibility.

EXS 144 Aerobic Dance (1) I, II
Routines consisting of exercises, simple disco movements, ballet, locomotor and non-locomotor skills (swinging, jumping, hopping) designed to increase cardiovascular fitness, flexibility and muscular endurance. Open to men and women.

EXS 151 Beginning Tennis (1) I, II
Instructional techniques, analysis, demonstration, and practice in the basic skills of tennis. Includes rules, selection and care of equipment, strategy on the court.

EXS 152 Intermediate Tennis (1) I, II
Instructional techniques, analysis, demonstration, and practice in the intermediate skills of tennis. Some advanced strategies and skills. P: EXS 151 or IC.
EXS 156 Beginning Racquetball (1) I, II Instruction in basic skills, strategies, and rules.

EXS 157 Intermediate Racquetball (1) OD
Instructional techniques, analysis, demonstration and practice in intermediate skills of racquetball. Some advanced skills and strategies; P: EXS 156 or IC.
EXS 161 Squad Participation (1) I, II
Members of a varsity athletic team in the eight men's, six women's and one coed sports may enroll in this course for one hour of credit for a maximum of four semesters. Graded Satisfactory/Unsatisfactory.

EXS 192 Beginning Karate (1) I, II
Beginning instruction in the martial art of Tae Kwon Do (Karate). Course emphasizes technical execution, discipline, and an insight into the philosophical aspects of Bushido.

EXS 193 Intermediate Karate (1) I, II
An intermediate course of Tae Kwon Do (Karate) designed for men and women who have completed a basic course. Includes advanced blocking, punching, and kicking techniques, combination and breaking techniques, advanced self-defense and sport techniques. P: EXS 192 or IC.

EXS 194 Beginning Hapkido (1) II
Beginning instruction in the martial art of Hapkido. Course emphasizes takedowns, throws, restraint, submission and hold techniques, discipline, and the philosophy of hapkido.

EXS 195 Introduction to Athletic Training (3) I, II
Cognitive and practical experiences designed to introduce basic athletic training principles and skills to the entry-level athletic training students.
EXS 210 Practicum in Athletic Training I (1) I
Practical experience in athletic training techniques and procedures. Skills learned include basic taping, injury evaluation, treatment, and rehabilitation techniques. P: IC.
EXS 211 Practicum in Athletic Training II (1) II Continuation of EXS 210. P: 195, 210.

EXS 240 Designing a Personalized Fitness Program (3) I, II
Assessment of individualized fitness level and the development of a personal fitness program. Lecture topics include physiological testing protocols, the explanation and evaluation of various forms of exercise, training guidelines for aerobic and anaerobic exercise programs and risk factors associated with cardiovascular disease. Two lectures and two activity sessions per week.

## EXS 305 Therapeutic Modalities (3) AY

The purpose of this course is to educate the student pursuing a career in sports medicine in the basic principles of the use of therapeutic modalities as it relates to the athletic setting. An emphasis will be placed upon the practical use on these principles in the athletic training room setting in conjunction with associated program coursework. This course was previously known as "Advanced Athletic Training: Therapeutic Modalities and Rehabilitation." P: EXS 195 or IC.

## EXS 306 Therapeutic Exercise (3) AY

The purpose of this course is to educate the student pursuing a career in Athletic Training in the basic principles of rehabilitation and specific therapeutic exercise techniques as they relate to the care of the physically active. Special emphasis will be placed upon the practical use of these principles and techniques in laboratory settings and in the collegiate athletic training room setting in conjunction with practical experience. This course was previously known as "Advanced Athletic Training: Therapeutic Exercise."

EXS 310 Practicum in Athletic Training III (1)
Continuation of EXS 211. P: EXS 195, 210, 211.

## EXS 311 Practicum in Athletic Training IV (1)

Practical experience in athletic training techniques and procedures. Focus on specific sport responsibility with administrative tasks to be assigned by the head athletic trainer and more advanced athletic training skills in preparation for the NATA Certification examination. P: EXS 195, 210, 211, 310.

EXS 331 Human Anatomy (4) I, II
Provides students with a basic knowledge of the structure and function of the human body. Lecture topics range from anatomical terminology to comprehensive overviews of the individual systems. Dissected cadaver specimens and anatomical models are used as learning aids. P: BIO 211 or 212; CHM 203 or 205; EXS major or IC

EXS 334 Biomechanics (3) I, II
Introduction to the biomechanical analysis of human movement. Study of the skeletal muscular system with special emphasis on the application of laws and principles that govern their movement and ultimately that of the entire body. P: EXS 331, EXS major, or IC.

EXS 335 Exercise Physiology (4) I, II
Study of the major physiological systems in the body and their response to exercise and exercise programs. Includes application of physiological concepts to physical training. P: BIO 211 or 212; CHM 203 or 205 or IC; EXS major.
EXS 350 Nutrition for Health and Sports Performance (3) I, II
Considerable information is provided regarding the six classes of nutrients. Lectures focus on applying knowledge in nutrition into a framework upon which performance and conditioning strategies can be based or from which recommendations can be made for health enhancement. P: BIO 211 or 212, CHM 203 OR 205, EXS major or IC.

## EXS 355 Athletic Training Administration (3) I, ONY

Provides students with an understanding of the management knowledge and skills that entrylevel athletic trainers should master. This course will also enhance the administrative ability of students preparing to enter the field of athletic training. Lectures focus on practical situations and discussion of management strategies. P: EXS 195, or IC.
EXS 395 Lower Body Evaluation (3) I, ONY
The study of the recognition, assessment, and management of athletic injuries involving the lower body. Uses knowledge of regional anatomy to assist with learning specific evaluation techniques. Special emphasis is placed on emergency management. P: EXS 195, EXS 331, or IC.

The study of the recognition, assessment and management of athletic injuries involving the upper body. Uses knowledge of regional anatomy to assist with learning specific evaluation techniques. Special emphasis is placed on emergency management. P: EXS 195, EXS 331, or IC.

## EXS 401 Exercise Prescription (3) I, II

Introduction to physiological testing protocols, preliminary health screening, risk stratification, fitness evaluations, and the design of exercise prescriptions for both general and special populations. Lecture topics include acute and chronic physiological responses to exercise, cardiorespiratory responses, resistance training, weight management, coronary heart disease and an introduction to metabolic equations and caloric expenditure. P: EXS 142, EXS 331, EXS 335, EXS Major or IC.

EXS 407 Basic Statistics and Research Design (3) I, II
Designed to develop skills to read and interpret research reports effectively. P: Jr. standing; EXS Major.

EXS 420 Essentials of Strength and Conditioning (3) II
Theory and practice of designing and administering strength training and conditioning programs for athletes and non-athletes, including special populations. Content from exercise physiology, anatomy, biomechanics, nutrition and exercise prescription . . . classes are drawn upon in the formulation of programs; instruction of strength training exercises is provided. P: EXS 142, EXS 335, EXS major or IC.
EXS 489 Laboratory Methods and Procedures (4) I, II
Course designed to develop practical skills and knowledge in laboratory technique, procedures, protocols and exercise prescription in the areas of cardiorespiratory fitness, body composition, muscular endurance, flexibility and basic EKG interpretation. Additional laboratory testing will be required outside of regular class time. P: EXS 401, EXS major or IC, and current CPR certification.

EXS 491 Exercise Leadership and Program Administration (3) I, II, S
Integrates knowledge and experiences from EXS courses and provides opportunities to critically discuss and analyze career issues and opportunities associated with health/wellness/ fitness-related professions. Emphasis is given to acquainting students to professionals in EXSrelated professions and strategies for being successful. P: EXS 401 or 489, EXS major or IC.

EXS 492 Exercise Science Internship (5) I, II; (3-5) S
Students are to spend at least 20 hours per week for 15 weeks working in one of six areas: cardiac or pulmonary rehabilitation; strength training and conditioning; employee/corporate fitness; physical therapy; or athletic training. Students will assume positions of responsibility and will demonstrate appropriate leadership skills and knowledge. Placement of students will be based upon course-work selection, grade point, and demonstrated leadership, and will be determined by the Chair of the Department. Students register for 3-5 hours during the summer depending on the number or internship hours to which they can commit. P: EXS 491 or IC.
EXS 493 Directed Independent Readings (3) I, II, S May not be repeated. P: Jr. or Sr. stdg.; EXS Major; DC.

EXS 495 Directed Independent Study (3) I, II, S May not be repeated. P: Jr. or Sr. stdg.; EXS major; DC.
EXS 497 Directed Independent Research (3) I, II, S
Designed to assist students in demonstrating the knowledge and skills associated with research techniques and methods, including testing protocols, statistical design, review of literature, and discussion of results. May not be repeated. P: Jr. or Sr. stdg.; EXS 407; DC.

## EXS 552 Aerobic and Anaerobic Exercise Prescription Guidelines for Cardiac Patient and Adult Fitness Programs (3) OD

A presentation of aerobic and anerobic exercise needs including various methods for determining those needs. Physiological testing, protocols for aerobic and anerobic fitness evaluation including flexibility, strength, power and body composition. Explanation of all facets of cardiac rehabilitation and adult fitness programming including exercise prescription guidelines
for the respective programs. Laboratory opportunities provided on an arranged basis. P: EXS 331, 335 or DC.

EXS 554 Clinical Exercise Testing and Electrocardiogram Interpretation (3) II
Course designed to provide the student in exercise sciences, nursing, or other allied health disciplines with a basic comprehension of the indications, methodologies, and interpretation of results of clinical exercise testing. The student will be provided with primary practical application experiences and with significant instruction regarding resting and exercise 12lead ECG application and interpretation and its relevance to clinical decision making. P: EXS 331, 335 or IC.

## FINANCE (FIN)

Professor Wingender (Chair); Associate Professor Gasper; Assistant Professor Jorgensen (Coordinator); Visiting Assistant Professor Garcia.
Requirements for Finance as the Field of Concentration - see page 127.
FIN 301 Managerial Finance (3) I, II, S
Basic principles and techniques of financial management, including investment, financing, and working capital decisions. Emphasis on time value of money. Presentation of current theory and modern techniques. P: ACC 202; ECO 205; BUS 229 or equiv.; Jr. stdg.

## FIN 325 Investment Analysis (3) I, II

Principles of investment; analysis of selected investment alternatives including real estate, precious metals, coins, stamps, art, and commodities; evaluation of risks and rates of return; valuation of stocks, bonds, and options; capital asset pricing model and portfolio considerations. P: ACC 202; ECO 205; Jr. stdg.
FIN 331 Real Estate Principles and Practices (3) I or II
Study of basic real estate principles, including the nature of real estate markets, the financing of real estate investments, real estate law, and real estate management. P: Jr. stdg.
FIN 340 Principles of Insurance (3) I or II
Analysis of insurance as a method of dealing with risk; business and personal risk management; emphasis upon life, health, property, liability, and social insurance contracts. P: Jr. stdg.
FIN 343 Social Insurance and Economic Security (3) I or II
Analysis of fundamental risks and available public and private measures against economic insecurity. Social security, workers' compensation, unemployment compensation, and public assistance will be explored in detail. P: Jr. stdg.
FIN 361 Financial Institutions Management (3) I or II
Analysis of the principles underlying decision-making in the administration of financial institutions, including banks and insurance companies, loan and investment portfolio problems and policies; pricing, underwriting, adjusting, and agency management. P: ECO 205 or DC.
FIN 401 Advanced Managerial Finance (3) I, II
Combines theory and technique to present an integrated view of the finance function. P: FIN 301; Sr. stdg.

FIN 402 Financing Entrepreneurial Ventures (3)
Covers various elements related to financing an entrepreneurial venture. Focuses on attracting seed and growth capital from sources such as individuals, venture capital, investment banking, government, and commercial banks. Other issues include valuing a company, going public, selling out, acquisitions, bankruptcy, different legal forms of organization, partnerships and taxes. P: FIN 301.

FIN 425 Security Analysis and Portfolio Management (3) I or II
Analytical evaluation of the investment process emphasizing modern portfolio theory, equilibrium in the capital markets, option pricing theory and evaluation of portfolio performance. P: FIN 325.

FIN 433 Real Estate Finance (3) I or II
Introduction to the basic practices of real estate finance. Emphasis on mortgage and residential financing along with the analysis of income-producing properties. P: FIN 301 or DC.

A two-semester sequence. Offers practical experience in investments by managing financial assets. Focus on economic and industry analysis and the determination of their effect on investment decisions; money and capital market forecasts; selection of individual securities; and the development of a portfolio strategy. P: FIN 325; Sr. stdg.; DC.
FIN 436 Portfolio Practicum II (3) II
Continuation of FIN 435. P: FIN 435; DC.
FIN 445 Life and Health Insurance and Employee Benefits (3) I or II
Study of the theory and practice of life and health insurance and employee benefits, including underwriting, ratemaking, claims, and investments. Other topics include valuation of human life, careers in life and health insurance and employee benefits, and insurers as financial intermediaries. P: FIN 301 \& FIN 340 or DC.

## FIN 447 Property and Liability Insurance (3) I or II

Analysis of property and liability insurance as a method of handling risk; multiple line, package, and government insurance programs; property and liability, regulation and solvency concerns. Analysis of complex property and liability issues. P: FIN 301 \& FIN 340 or DC.
FIN 449 Risk Management and Insurance (3) I or II
Assessment and control of risk for business and professional organizations. P: FIN 301 \& FIN 340 or DC.

FIN 453 Personal Financial Planning (3) I or II
Personal financial management of budgets, savings, credit, insurance, taxes, and investments. Includes dealing with inflation, rental or home purchases, planning for retirement, and estate distribution. P: FIN 301.

FIN 491 The Financial World: A Campus and Travel Course (1-3) I or II
Course designed to provide students with on-site understanding of financial processes to complement campus-based study of the same topics. Includes up to 20 hours of on-campus study prior to the travel portion of the course which will comprise up to 30 hours of study with experts in the field. Various destinations. P: Sr. stdg.; completion of at least 6 hrs. of Group VI courses required for a finance major.
FIN 493 Directed Independent Readings (1-3) I or II
Directed readings course investigating current developments in theory and problems in the field of finance. Limited to students who want to develop a more in-depth knowledge of a subject beyond the regular course coverage and who have a QPA of 3.0 or better. P: Sr. stdg.; DC and Dean's approval.

FIN 558 International Financial Management (3) I or II
An overview of the financial issues involved in international business. Focus on the environment of international financial management, foreign exchange risk management, multinational working capital management, foreign investment analysis, financing foreign operations and international banking. P: FIN 301.

Graduate-level courses (MBA courses, open only to graduate students) offered by the Department of Economics and Finance are listed in the Graduate School issue of the Creighton University Bulletin under the heading Business Administration (MBA).

## FINE AND PERFORMING ARTS

Associate Professor M. Kielniarz (Chair); Professor Doll and Flecky (Associate Chair, Visual Arts),; Associate Professors Aikin, Alston, Bosco, J. Horning, Hutson, Roche (Coordinator of Dance), Seitz, and Thein; Assistant Professors Hanna (Coordinator of Music), Jurgensmeier, and Klem (Associate Chair, Performing Arts); Adjunct Assistant Professor Bohr.

The Department of Fine and Performing Arts encompasses six subject areas: Art, Dance, Music, Theatre, Arts Management, and Graphic Design.

## ART (ART)

## Visual Arts-Fields of Concentration:

Bachelor of Arts (B.A.) with a Studio Specialization: A degree program consisting of 36 semester hours in Art. Twenty-one semester hours to include ART 105, 219, 321, 331, 153 or 211, ART 271 or 347 , ART 306 or 381 . An additional six semester hours are required in Art History courses, and nine semester hours in Studio Art. Acceptance as a major will be accomplished upon submission of a portfolio, at the end of the Sophomore year.
Bachelor of Fine Arts (B.F.A.) with a Studio Specialization: A degree program consisting of 54 semester hours in Art. Thirty semester hours to include ART 105, 153, 211, 219, 271, 306, 321, 331, 347, and 381. An additional six semester hours are required in Art History courses, fifteen semester hours in Studio Concentration, and Senior Thesis (ART 499). Acceptance as a major will be accomplished upon submission of a portfolio, at the end of the Sophomore year.
Bachelor of Arts (B.A.) with an Art History Specialization: A degree program consisting of 33 semester hours in Art. Fifteen semester hours to include ART 105, 219, 319, one course (3 sem. hours) in two-dimensional studio art, and one course ( 3 sem. hours) in three-dimensional studio art. This program also requires additional eighteen semester hours in other Art History courses and two semesters (or the equivalent) of a foreign language.

## Co-major with Studio Art Specialization

For students who wish to co-major in Studio Art as a specialization while they complete a major in another discipline, the courses required are ART 105, ART 153, ART 219, plus 15 additional hours in Studio Art courses ( 5 different studios). Acceptance as a co-major will be accomplished upon submission of a portfolio, at the end of the Sophomore year. Total hours required in Art are 24.

## Co-major with Art History Specialization

For students who wish to co-major in Art History as a specialization while they complete a major in another discipline, the courses required are ART 105, ART 219, one two-dimensional studio art course, one three-dimensional studio art course, plus 12 additional hours in Art History courses. Total hours required in Art are 24.

## Classification of Art Courses

Art courses fall into three categories: Art History/Theory, Art Education, and Studio Art. Among the Art courses listed below, the Art History/Theory courses are ART 219, 319, 355, $360,361,362,363,364,365,366,367,368,369,381,382,383,465,467,468,493,497$, Except for ART 104, all of the remaining Art courses are Studio courses.

ART 104 Elementary School Art (3) II
Principles underlying the visual arts as exemplified in various forms and media Iaboratory work to develop basic skills required in elementary school art activities P: EDU DC.

ART 105 Art Fundamentals (3) I, II
Basic drawing and basic design. Use of pencil, charcoal, pen and brush. 6 S .
ART 153 Three Dimensional Design (3) II
This course is designed for both the non-art student and the entry level art student. Students design and create artworks in plaster, cardboard, and clay. Each assignment is designed for total creative expression.
ART 211 Introductory Ceramics (3) I, II, S
Handbuilding, throwing, decorating, glazing, and firing of clay. 6S. P or CO: ART 105 for majors; none for others.
ART 219 History of Art (3)
Survey of the artistic heritage of the Western World from ancient Greece to the present, emphasizing the period from the Renaissance to the 20th Century

ART 253 Beginning Sculpture Studio (Human Figure) (3) I, II, S
Presentation of the traditional, classical approach to art by the experience of modeling in clay from live subjects. Opportunity for Art majors to sharpen perceptual, aesthetic, and functional skills and for non-Art majors to experience what art is and how it comes about in a sculpture studio.

ART 271 Photography Studio I (3) I, II, S
Introduction to the process of producing a photograph-both the mechanical/chemical and the aesthetic judgmental processes. Review of the work of great photographers; critique and evaluation of student work. 2R, 1L. P: So. stdg.; P or CO: ART 105 for Art majors. Not open to students enrolling as auditors.
ART 295 Special Projects (1-6) I, II
For the non-Art Major. Requires a University sponsor and written DC and IC. Students may repeat this course up to a total of six semester hours.
ART 306 Acrylic and Chalk Pastel (3) I, II
Basic functions of color and advanced design. Use of watercolor, chalk pastel and various color media. The search for personal themes through color. 6S. P: ART 105.

ART 311 Intermediate Ceramics I (3) I, II, S
Refining of personal technique on the potter's wheel and discovering new uses for clay as an expressive material. 6S. P: ART 211.

ART 312 Intermediate Ceramics II (3) I, II
Continuation of ART 311.6S. P: ART 311.
ART 319 Art International: The Art Culture of the Global Community (3) I, II
A general survey of contemporary international art and aesthetics. Examination of the interaction between artists from various international artistic traditions (Africa, Latin America, and Neolithic North America) and the Western tradition. Identification of diverse influences on these artists' perceptions of their unique cultural experience-images of self, spirituality, the family, physical environment, independence and revolution, colonialism, labor, economic conditions and poverty. Omaha area exhibitions and museum collections used as reference when appropriate.
ART 321 Life Drawing I (3) I, II
Drawing from undraped model in a variety of media; some anatomy theory. 6S. P: ART 105.
ART 322 Life Drawing II (3) I, II
Continuation of ART 321. 6S. P: ART 321.
ART 327 Advertising Design I (3) I, II (Same as JMC 327)
Logos, design, lettering, and photography as related to layouts. Production and related art studio procedures. May be used as elective credit. P: Art majors only.
ART 328 Advertising Design II (3) II
Continuation of ART 327. May be used as elective credit. P: ART 327.

## ART 331 Painting I (3) I, II

Oil paint used on paper, board and canvas. A great variety of aesthetic attitudes and technical approaches. 6S. P: ART 105 for everyone; P or CO: ART 306 for Art majors only.

ART 332 Painting II (3) I, II
Continuation of ART 331 with emphasis on independent research in areas of preference and need. 6S. P: ART 331.
ART 341 Lithography (3) OD
Exploration of lithographic process on stone emphasizing a variety of methods to develop an image. 6S. P: ART 105.
ART 345 Relief Printing: Woodcut and Linoleum (3) I
Exploration of the process of making color relief prints on paper from wood and linoleum. P: ART 105.

## ART 346 Glass Printmaking (3) I

Creating an image on a glass plate which will be printed on paper. P: ART 105.
ART 347 Etching I (3) I, II
Creating an image on a metal plate which will be printed on paper. 6S. P: ART 105.
ART 348 Etching II (3) I, II
Introduction to multiplate color printing. 6S. P: ART 347.

ART 349 Egyptian Art and Archeology (3) OD (Same as CNE/HIS/THL 349)
This course will explore the history, society, culture, and religion of ancient Egypt form the predynastic era through the Ptolemaic period, as revealed through its artistic and material remains. Attention will be given to how sculpture, painting, architecture, and other material remains provide a window on Egyptian life and thought. P: So. stdg.

ART 350 Archaeology of Syria-Palestine (3) OD (Same as CNE/HIS/THL 350)
A chronological survey of the archaeology of Syria-Palestine in which material culture provides a window on the history of society, economy, and religion from the Neolithic to Hellenistic times. Special topics include the emergence of farming and pastoral societies, the formation and dissolution of Bronze Age city-states, and the rise and fall of Iron Age kingdoms such as Israel, Moab, and Edom.

ART 353 Intermediate Sculpture Studio (3) I, II, S
This course is designed to explore bronze casting, mold making, and figure modeling in clay and casting wax. Students cast their finished sculptures in bronze. P: ART 253.
ART 354 Greek Art and Archaeology (campus) (3) II (Same as CNE 354)
Study of the sculpture, painting, architecture, and sites of ancient Greece with emphasis on their archaeological, historical, and geographical aspects.
ART 355 Greek Art and Archaeology (travel course) (3) (Same as CNE 355)
Travel course. Twenty-three days. Mainland tour includes Athens, Eleusis, Corinth, Mycenae, Epidaurus, Sparta, Pylos, Olympia, Delphi, Meteora, Brauron, and Sounion. Island visits include four days on Crete and two days on Santorini. On-site and background lectures.
ART 359 Creativity, Problem Solving, Goal Reaching (3)
Covers the nature of creativity, sources of creativity and keys to developing creativity. Introduces creative habits and disciplines by using problem solving methods. Not applicable toward Art major; may be taken for elective credit. P: Jr. stdg.
ART 360 Art of the Middle Ages (3) AY
Architecture, painting, and sculpture of Europe from the 4th century to the 14th century.
ART 361 Art of the Renaissance in Europe (3) AY
Painting, sculpture, and architecture in Italy and Northern Europe from 1300 to 1600, including such artists as Giotto, Botticelli, Michelangelo, Leonardo da Vinci, Raphael, Campin, Van Eyck, Van der Weyden, and Bosch. Certified Writing Course.

ART 362 Early Christian Art and Archaeology (3) OD (Same as CNE 362)
Study of the development of Early Christian architecture, painting, sculpture and industrial arts; archaeological excavation of early churches and catacombs with emphasis on problems of interpretation; Western and Byzantine iconography.

ART 363 Baroque Art (3) AY
Painting, sculpture and architecture in Europe during the 17th and 18th centuries. Focus on such artists as Rubens, Rembrandt, Velasquez and Bernini.

ART 364 History of Architecture (3) AY
Survey of architectural styles and structures from ancient Egypt to the present. Focus on the function, material, technique, and form of each structure.

ART 365 Greek Art (3) OD (Same as CNE 365)
Sculpture, painting and the minor arts of Greece.
ART 366 Etruscan and Roman Art (3) OD (Same as CNE 366)
Sculpture, painting, and the minor arts of the Etrusco-Roman people.
ART 367 Nineteenth Century Art (3) II, AY
Study of the art of the 19th century, including Romanticism, Neo-Classicism, Realism, Impressionism and Post-Impressionism.
ART 368 Survey of American Art (3) AY
Survey of American painting, sculpture, and architecture from pre-Revolutionary days to the present with focus on the historical forces that shape the American artist.
ART 369 Modern European Art, 1900-1945 (3) I AY
Survey of 20th-century painting, sculpture and architecture in Europe. Focus on Fauvism, Cubism, Expressionism, Dadaism and Surrealism.

ART 371 Photography Studio II (3) II, S
Introduction to the zone system of black and white photography; study of great photographers' work; critique and evaluation of student work. 2R, 1L. P: ART 271 or IC. Not open to students enrolling as auditors.

ART 372 Color Photography (3) II, S
Introduction to color theory and printing; critique sessions of student's work. 2R, 1L. P: ART 271 or IC. Not open to students enrolling as auditors.

ART 373 Photographic Design and Non-Silver Process (3) OD
An extension of conventional photographic techniques using antiquated emulsions applied to papers and fabrics, hand coloring and toning, combination images, and optional mixed-media explorations. P: ART 271.

ART 375 Photojournalism I (3) I, II (Same as JMC 375, NAS 375)
An introduction to photography as a means of reporting news, including the use of film and/ or digital cameras to prepare photographs for print or web publication.
ART 376 The Photo Diary (3) II
Investigation of the diary form of reflection on personal themes such as family roots, displacement, death and loss, personal relationships, transcendence, etc. Students will use photographs along with words to record and communicate regular reflection pieces. Examples from various autobiographical and journal formats will be studied. Students are not expected to have prior knowledge of photography. Simple equipment is sufficient. No darkroom work required. P: Jr. stdg; consent of the Director of the Jesuit Humanities Program.

ART 377 Editorial Illustration (3) II (Same as JMC 377)
A studio-lighting course with classes and assignments structured to the type of assignment a working photojournalist receives at a major metro daily. Includes portrait, fashion, food product, and editorial illustration. P: ART 375 or JMC 375 or DC.

ART 378 Photojournalism II: Picture Editing (3) I, II 1994-95 (Same as JMC 378)
Principles of design for newspapers and magazines with appropriate assignments. Emphasis on the use of photographs. P: ART 375.

ART 379 Publication Design (3) I, II (Same as JMC 379)
Introduction to the design of the printed page using typography, photographs and graphics. Hands-on computer assignments and critiques.

ART 381 Computer Illustration (3) I 1995-96 (Same as JMC 381)
Illustrating editorial and visual ideas using the Macintosh computer and a variety of computer graphic tools. The main program used will be Adobe Photoshop which will enable the students to work with and combine visual elements from photographs and artwork. Color theory, scanning, calibration, halftones, color separating. Photo-CD and the electronic darkroom will be covered with appropriate assignments.
ART 382 Web Publishing (3) I, II, S (Same as JMC 382)
An introduction to the design of online publications, including elements of html language and graphic editing programs to create well designed web sites.

ART 383 History and Aesthetics of Photography (3) I, II
Study of the history of photography: historical, scientific, philosophical foundations; connection with other forms of literary and visual, fine and performing arts; the impact of the photograph on society and media; the ethics of "taking" and "making" a photograph. Survey of the work of acclaimed masters of the medium as well as of the contemporary poets of photographic language.
ART 384 History of American Architecture (3) II (Same as AMS 384)
A survey of the most important works of major American architects from the Colonial period to the present. P: So. stdg.
ART 386 The History and Aesthetics of Latin American Photography (3) I, II
Examination of the history and aesthetics of photography as a medium of visual expression in the culture of Latin America. Study of the evolution of contemporary Latin American photography from its nineteenth century "colonial" roots through periods of twentieth century revolution and independence to the contemporary post-modern idiom of Latin American
image-making. Emphasis on the study of photographic themes that are specific to the Latin American cultural experience: colonialism, revolution and independence, native and tribal society, religion and cult, economic oppression and poverty, politics and self-determination, geography and natural resources, language and architecture.

ART 390 Sculptural Glass Casting (3) S
Class will take the student through the processes of creating sculpture in cast glass. The processes covered will be clay sculpture, mold making, casting of glass and the finishing of the glass sculpture.
ART 391 History and Methods of Art History (3) II
Intensive reading and discussion in selected topics on the history and methods of art history. Recommended for art history majors. P: ART 219.
ART 392 Seminar in Art Criticism (3) OD
Special topics in art criticism. Topics and focus of seminar changes each time the course is offered. P: ART 219.

ART 395 Summer Art Studio (1-3) S
Summer studio concentrating on a specific area of studio art not normally offered during the regular year. Area of concentration varies and is announced in the Summer Bulletin each year. May be repeated for credit to a limit of nine hours. P or CO: ART 105 for Art majors; none for others.

ART 397 Summer Art History Seminar (1-3) S
Summer seminar concentrating on the history and issues of a specific area of art history not normally offered during the regular academic year. The area of concentration varies and is announced in the Summer Bulletin each year. May be repeated for credit to a limit of nine hours. P: ART 219 or IC.

ART 411 Advanced Ceramics I (3) I, II, S
Designed to promote individual development in the use of materials and processes of the ceramic artist. 6S. P: ART 312.

ART 412 Advanced Ceramics II (3) I, II
Continuation of ART 411. 6S. P: ART 411.
ART 421 Life Drawing III (3) I, II
Continuation of ART 322.6S. P: ART 322.
ART 422 Life Drawing IV (3) I, II, S
Continuation of ART 421. P: ART 421.
ART 423 Multimedia Design I (3) II (Same as JMC 423)
An introduction to interactive media aesthetics and concerns. Techniques in designing multimedia for the web and CD-ROM distribution using Macromedia Flash. P: JMC 381, 382, and 379.

ART 430 Selected Topics in Ancient Art and Archaeology (3) OD (Same as CNE 430)
Topical or regional focus in the area of ancient art and/or archaeology. Course will be subtitled in the Schedule of Courses.
ART 431 Painting III (3) I, II, S
Continuation of ART 332. P: ART 332.
ART 432 Painting IV (3) I, II, S
Continuation of ART 431. P: ART 431.
ART 446 Glass Casting in the Kiln (3) OD
Students learn how to cast glass sculptures and relief forms with the aid of an electric kiln.
ART 447 Etching III (3) I, II
Research into new ways of creating and printing. 6S. P: ART 348. May be repeated to a limit of six hours. P: ART 348.

ART 448 Etching IV (3) I, II
Continuation of ART 447. P: ART 447.

ART 453 Advanced Sculpture Studio I (3) I, II, S
This course is designed to expand on ART 353. Students can elect to produce a full figure cast or work on a large scale hypothetical commission. P: ART 353.

ART 454 Advanced Sculpture Studio II (3) OD
This course is designed to expand on ART 453. Students focus on their own ideas either in metal or other materials. Course goal is to produce a series of artworks based on a theme or subject of choice. P: ART 453.

ART 465 Contemporary Art (3) I, AY
Examination of painting and sculpture, since 1945, focusing on Abstract Expressionism, Pop, Op, Minimal, Conceptual, Earth, Photorealism. P: ART 219
ART 466 The Idea of Rome in the Arts (3) OD
The art of "The Eternal City"-architecture, urban planning, painting, sculpture, printmaking, photography, literature, poetry, music, and film-which has as its central theme the City of Rome. Course aims to identify the features that characterize Roman art from antiquity to the present and to examine the significance of this art in the context of Roman politics, religion, and history. P: IC.
ART 467 History of The Art of Spain and Her Colonies (3) I, II
A comprehensive survey of the major monuments of Spanish art from cave painting to the present, with emphasis on major artists (i.e., Montanes, El Greco, Zurburan, Velasquez, Goya, Picasso, Rivera, and etc.).
ART 468 Native American Art (3) OD (Same as NAS 468) Survey of native American art from the 16th Century to the present with a concentration on the art of the continental United States. Includes Northwest, Southwest, and Plains cultures.

ART 480 Management of Arts Organizations (3) I
An overview of management concepts and theories as applied to arts organizations. Developmant of an understanding of the balance between the individual and the organization, the artist and the organization, and the community and the organization.

ART 481 Arts Management Internship (3) II
Placement in area arts organizations on a part-time basis for one semester, witnessing firsthand the nature and business of these organizations. Placement in Omaha area arts organizations such as, the Creighton Art Gallery or Theatre Box Office, Omaha Symphony, Nebraska Shakespeare Festival, or Joslyn Museum. P: ART 480.
ART 493 Directed Independent Readings (1-3) I, II
Subject matter and method to be worked out individually. P: 12 hours upper-division Art History/Theory courses; IC. May be repeated to a limit of six hours.
ART 495 Directed Independent Projects (1-3) I, II
Directed research and study in Art to meet the individual needs of the student. P: IC. May be repeated to a limit of six hours.

ART 497 Directed Independent Research (1-2) I, II
Research work in student's area of concentration. Permission granted following consultation with supervising instructor and consent of department chairperson. Credit dependent on project. May be repeated to a limit of six hours. P: DC; Sr. stdg; written IC.
ART 499 Senior Thesis (1-3) I, II
Open to all seniors. Required of B.F.A. candidates. After choosing a thesis adviser, the student registers for one credit in the first semester of the Senior year and for two credits in the final semester. P: Sr. stdg.; DC; written IC.

## DANCE (DAN)

Dance as a Co-Major: For students who are majoring in another discipline but who wish to co-major in Dance, the Dance concentration requires 21 sem. hrs. including 19 hours in Dance technique courses above the 110 level, including DAN 310 and 311 and 2 hours in performance.

DAN 101 Introduction to the Dance (3) I, II
Development of an appreciation of dance through the active study of three dance techniques at the beginning level: ballet, modern, and jazz. A richer understanding of this performing art presented through lectures and video tapes and attendance at dance performances with written responses to the concerts.

DAN 110 Dance Workshop I (3) I
Exploration of dance styles: modern dance, classical ballet, character dance, jazz and tap. Development of the techniques necessary to enter into more advanced study in the various styles presented. P: A minimum of one year of previous study (within two years prior to enrolling in DAN 110) in classical ballet or modern dance.
DAN 111 Dance Workshop II (3) II Continuation of DAN 110. P: DAN 110 or audition.

DAN 121 Basic Modern Dance I (1) I, II
Fundamentals of movement experienced through qualities of space, time, energy and flow; emphasis on technique and improvisation. $21 / 2 \mathrm{~S}$. P: A minimum of one year of previous study (within two years prior to enrolling in DAN 121) in classical ballet or modern dance.

DAN 131 Classical Ballet Studio, Basic I (1) I, II
For the Non-Dance Major. Basic ballet technique in the recognized classic form. Beginning character dance. 2 1/2 S. P: A minimum of one year of previous study (within two years prior to enrolling in DAN 131) in classical ballet or modern dance.

DAN 151 Production Practicum (1-2) I, II (Same as THR 151)
Course is divided into two segments. Course description for segment one, Technical Crew: Technical crew work in Creighton theatre and dance productions; may include set construction, properties, sound, lighting. Per credit hour, the course requires three hours of shop work weekly (time to be arranged to fit student's schedule) and working one production as a crew member. Course description for segment two, Costume Crew: Costume construction for Creighton theatre and dance productions. Per credit hour, the course requires three hours of costume shop work weekly (time to be arranged to fit student's schedule) and working one production as a wardrobe crew member. This course may be repeated to a limit of eight semester hours.

DAN 153 Stagecraft (3) I (Same as THR 153)
Fundamentals of developing the scenic background for theatrical productions. Introduction to tools and equipment through theory, lecture, and demonstration. $1 \mathrm{R}, 3 \mathrm{~L}$.

DAN 210 Dance Workshop III (1-4) I
A variety of dance styles - classical ballet, modern and theatre dance. P: DAN 111 or audition.

DAN 211 Dance Workshop IV (1-3) II
Continuation of DAN 210. P: DAN 210 or audition.
DAN 217-218 Theatre Dance I and II (1) I, II (Same as THR 217-218)
Study of dance forms for musical theatre, including tap dance, jazz movement, and ensemble arrangements. P: Two semesters ballet and/or modern DAN; P for DAN 218: DAN 217.

DAN 241 Dance Composition and Theory I (2) I
Improvisation and elements of composition in both the classical and modern traditions. P: IC.
DAN 242 Dance Composition and Theory II (2) II
Continuation of DAN 241. Opportunity to practice and develop some skill in the construction of the solo dance. Group improvisation. P: DAN 241 or IC.
DAN 255 Lighting (3) II (Same as THR 255)
Fundamentals of electricity, color in light, tools, equipment and practical application of the elements. P: THR 153 or IC.

## DAN 267 Survey of Music History (3) I

Survey of music historical style from ancient music through the 20th century. Designed for the listener to further enhance musical knowledge and listening skills. Attendance at local rehearsals and performances. No prerequisite required, but it is strongly advised that the student have taken Music Appreciation.
DAN 283 Summer Session Workshop in Intermediate Dance (1-3) S
Classical ballet, pointe, modern dance, jazz and character dance technique classes are supported by music for dance. Special classes in the study of the Royal Academy of Dancing (London) syllabus and/or the Imperial Society of Teachers of Dancing will be offered if there is sufficient demand. Guest faculty and workshop emphasis vary from year to year. P: IC.
DAN 292 Modern Dance Laboratory I (1-2) I, II
Exploration and development of individual technique in basic modern dance. P: IC; DC. Audition. May be repeated to a limit of three hours.

DAN 293 Classical Ballet Laboratory I (1-2) I, II
Exploration and development of individual techniques in basic classical ballet. P: DC; written IC. Audition. May be repeated to a limit of three hours.
DAN 303 Theory of Teaching Dance to Children I (2) I, II
Approached through pre-ballet techniques and progressing through the first six grades of the Imperial Society of Teachers of Dancing (London) children's syllabus. P: DAN 211.

DAN 304 Theory of Teaching Dancing to Children II (2) I, II
Continuation of DAN 303. Completing the Imperial Society of Teachers of Dancing (London) children's syllabus. P: DAN 303 or IC.

DAN 310 Dance Workshop V (2-4) I
Intermediate level study; classical ballet, pointe, modern dance and character dance. P: DAN 211; audition; IC.

DAN 311 Dance Workshop VI (2-4) II Continuation of DAN 310. P: DAN 310 or audition.

DAN 342 Individual Choreographic Project (2) I, II
Students are expected to exhibit a high degree of initiative and independence in developing their unique methods, forms, and style of choreography. Project culminates in performance.

DAN 383 Summer Session Workshop in Advanced Dance I (1-3) S
Classical ballet, pointe, modern dance, jazz, and character dance technique classes are supported by music for dance. Special classes in the study of the Royal Academy of Dancing (London) syllabus and/or the Imperial Society of Teachers of Dancing will be offered if there is sufficient demand. Guest faculty and workshop emphasis vary from year to year. P: IC or audition.

DAN 392 Modern Dance Laboratory II (1-2) I, II
Exploration and development of individual techniques in intermediate modern dance. P: DC; written IC or audition. May be repeated to a limit of four hours.
DAN 393 Classical Ballet Laboratory II (1-2) I, II
Exploration and development of individual techniques in intermediate classical ballet. P: DC; written IC or audition. May be repeated to a limit of four hours.

DAN 395 Directed Independent Study (1-3) I, II
Course designed to allow the individual student with a particular interest in dance to pursue that interest under faculty direction. P: Jr. stdg.; IC. May be repeated to a limit of 6 hours.

DAN 398 Performance-Third Year (1) II, S
(Required of Dance Majors). Student to perform dancing roles during the semester or year, one role to be a solo. One credit represents two semesters of work. Application must be made to the department during the first two weeks of the preceding semester. P: DC.

DAN 403 Teaching Dance to Children - Practicum I (2) OD
Supervised teaching to selected children's ballet classes and assigned observation of teaching techniques. P: DAN 303 and 304 or IC.

Supervised teaching of selected dance classes and assigned observation of teaching techniques. P: DAN 303.

DAN 410 Dance Workshop VII (2-4) I
Continuation of DAN 311. P: DAN 311; IC or audition.
DAN 411 Dance Workshop VIII (2-4) II Continuation of DAN 410. P: DAN 410 or audition.
DAN 483 Summer Session Workshop in Advanced Dance II (1-3) S
Classical ballet, pointe, modern dance, jazz, and character dance technique classes are supported by music for dance. Special classes in the study of the Royal Academy of Dancing (London) syllabus will be offered if there is sufficient demand. Guest faculty and workshop emphasis vary from year to year. P: IC.
DAN 492 Modern Dance Laboratory III (1-2) I, II
Exploration and development of individual techniques in advanced modern dance. P: Audition and IC. May be repeated to a limit of four hours.
DAN 493 Classical Ballet Laboratory III (1-2) I, II
Exploration and development of the individual techniques in advanced classical ballet. P: Audition and IC. May be repeated to a limit of four hours.

DAN 498 Performance - Fourth Year (1) II, S
(Required of Dance Majors). Student required to perform dancing roles in two public dance performances, one dancing role to be a solo. Required of Dance majors. One credit represents two semesters of work. Application must be made to the department during the first two weeks of the preceding semester. P: DC.

## MUSIC (MUS)

## Bachelor of Arts (B.A.) with a Specialization in Music

A degree program consisting of 43 semester hours in Music. Nineteen semester hours to include MUS 204, 206, 221, 222, 305, 306, 321, 415, 498. Applied Music instruction, all in the same section, to be taken as follows: four semester hours of MUS 235, two semester hours of MUS 335, and two semester hours of MUS 435. Eight semester hours of participation in a performance ensemble are required. An additional four semester hours in each skill area of piano and voice are required, unless competency is established through examination.

## Music as a Co-Major

For students who are majoring in another discipline but wish to co-major in Music, the Music concentration requires 21 semester hours of Music courses including MUS 204/206, or 305/ 306; MUS 221; two semester hours of ensemble participation, and three semester hours each of applied voice and applied piano. The six remaining hours are music electives.

## MUS 104 Elementary School Music (3) I

Principles of theory, history and appreciation of music essential to a basic understanding of elementary-school music practices and procedures for classroom teachers. P: EDU DC.

MUS 135 Beginning Class Piano (1) I, II
Beginning piano lessons in a group setting. The piano lab is equipped with four electronic pianos with full sized keyboards No prerequisite is necessary. There is a special fee of $\$ 120$ for this class.
MUS 136 Beginning Class Guitar (1) I, II
Beginning lessons on guitar in a small group setting. No prerequisites. Weekly 1 hour lessons. Special fee is charged. Student must have own guitar. There is a special fee of $\$ 120$ for this class.
MUS 204 Comprehensive Musicianship: Baroque (3) I
An integrated approach to the development of musical skills and knowledge through theory and history. Foundation for study provided by music of the 17th and 18 th centuries.

An integrated approach to the development of musical skills and knowledge through theory and history. Foundation for study provided by music of the 18th and early 19th centuries. P: MUS 204.

MUS 208 Jazz Ensemble I (1) I, II
An ensemble dedicated to study and performance in the jazz idiom. Auditions with director by appointment. May be repeated to a limit of three hours for credit.
MUS 209 Gospel Choir I (1) I, II
An exploration into the genre of gospel music, one which is filled with personal testimony and rich traditions. The non-auditioned choir is open to anyone interested in developing their musical skills through this medium. May be repeated to a limit of three hours for credit.
MUS 212 University Chorus I (1) I, II
Major choral performing organization singing public performances of the best of major choral works as well as all types of choral literature. No prerequisite. No audition necessary. May be repeated to a limit of three hours for credit.

MUS 218 Wind Ensemble I (1) I, II
A symphonic wind ensemble, dedicated to study and performance of the finest concert music for winds and percussion. No prerequisite. Audition with director by appointment. May be repeated to a limit of three hours for credit.
MUS 219 Javanese Gamelan I (1) I, II
Exploration of Indonesian music and culture through the genre of Javanese court gamelan: an ensemble primarily comprised of pitched percussion instruments. May be repeated to a limit of 3 hours for credit. P: IC.

MUS 220 University Orchestra I (1) I, II
A string orchestra dedicated to study and performance of the finest concert literature. Audition with director by appointment. Wind and percussion instruments audition as needed. May be repeated to a limit of 3 hours for credit.

MUS 221 Ear Training and Sight Singing I (1) II
Development of the student's proficiency in fundamental skills of musicianship, including melodic and rhythmic dictation, the singing of melodies at sight, and basic eurhythmic techniques. Provides the music student with the tools to identify, both aurally and cognitively, the basic tonal and rhythmic elements of music. P: IC.

MUS 222 Ear Training and Sight Singing II (1) I
Second course in the three semester sequence. P: MUS 221.
MUS 235 Applied Music I (1) I, II
Individual lessons in strings (violin, viola, cello, bass), winds (flute/piccolo, oboe, clarinet, bassoon, saxophone, horn, trumpet, trombone, euphonium, tuba), percussion, guitar, harp, piano, pipe organ and voice. May be repeated to a limit of four hours. No prerequisite. Special fee is charged. Juried examination at the end of each semester.

MUS 271 Voice Class (3) I, II, S (Same as THR 271)
The techniques of singing, including voice placement, tone production, breathing, and English diction. Individual attainment in a class setting will be emphasized. No prerequisite required. May be repeated for credit to a limit of six hours.

MUS 273 Music Appreciation (3) I, II
Designed to give the student a background in the language of music and listening skills for the perception of music. Class attendance at local performances and rehearsals.
MUS 305 Comprehensive Musicianship: 19th and 20th Centuries (3) I
An integrated approach to the development of musical skills and knowledge through theory and history. Foundation for study provided by music of the 19th and 20th centuries.
MUS 306 Comprehensive Musicianship: Antiquity, Middle Ages and Renaissance (3) II An integrated approach to the development of musical skills and knowledge through theory and history. Foundation for study provided by music from antiquity through the Renaissance. P: MUS 305.

MUS 308 Jazz Ensemble II (1) I, II
Continuation of MUS 208. May be repeated to a limit of five hours for credit. P: Three credit hours of MUS 208.

MUS 309 Gospel Choir II (1) I, II
Continuation of MUS 209. May be repeated to a limit of five hours for credit. P: Three credit hours of MUS 209.

MUS 312 University Chorus II (1) I, II,
Continuation of MUS 212. May be repeated to a limit of five (5) hours for credit. P: Three credit hours of MUS 212.

MUS 313 Chamber Choir (1) I, II
An ensemble of advanced singers performing works written especially for the smaller choir. Performance of music of all historical periods suitable for this type of choir. By audition only. May be repeated to a limit of eight hours.
MUS 318 Wind Ensemble II (1) I, II
May be repeated to a limit of five semester hours for credit. Continuation of MUS 218. P: 3 credit hours of MUS 218.

MUS 319 Javanese Gamelan II (1) I, II
Continuation of MUS 219. May be repeated to a limit of five hours for credit. P: 3 credit hours of MUS 219.

MUS 320 University Orchestra II (1) I, II
Continuation of MUS 220. May be repeated to a limit of five hours for credit. P: 3 credit hours of MUS 320.

MUS 321 Ear Training and Sight Singing III (1) II
Third course in the three semester sequence. P: MUS 222.
MUS 335 Applied Music II (1) I, II
Continuation of MUS 235. May be repeated to a limit of two hours. P: 4 semesters of MUS 235.

MUS 375 Music of the World's Peoples (3) I, II
A global survey of various music-cultures outside the tradition of Western European Art Music. Exploration of music functions within different societies through various activities, including music performance.
MUS 381 Accompanying (3) I
Introduction to the principles of keyboard accompanying. Includes, under faculty supervision, accompanying for appropriate departmental ensembles and applied instruction.
MUS 415 Conducting (3)
Basic rudiments, posture, stance, conducting patterns, attacks and releases, musical styles, and rehearsal/score preparation for both instrumental and choral conducting. P: MUS 221, 222, 321

MUS 435 Applied Music III (1) I, II
Continuation of MUS 335. P: 2 semesters of MUS 335.
MUS 495 Independent Research Project (1-3) I, II
Directed research and study in music to meet the individual needs of the student. May be repeated to a limit of 6 hours. P: 1C, DC.
MUS 498 Senior Recital (1) I, II
Preparation and presentation of solo literature in the music major's area of performance concentration. Taken one semester, concurrently with MUS 435. P: Sr. stdg.; Music Majors only, IC. CO: MUS 435.

## THEATRE (THR)

## Fields of Concentration

Bachelor of Arts (B.A.) with a Specialization in Theatre: A degree program consisting of 39 semester hours in Theatre and related performing arts. Twelve semester hours of basic Performing Arts to include four semester hours in dance technique courses (placement level determined by Dance faculty),( four semester hours in Music or eight semester hours of Art), three semester hours in Theatre (THR 151). Twenty-one semester hours of Theatre Core to include THR 121, $131,153,231,255$ or THR $254,341,465,466$. An additional six semester hours to be taken in Theatre courses, 300 level or above, as approved by Theatre Advisor.

Bachelor of Fine Arts (B.F.A.) with a Specialization in Theatre: A degree program consisting of 60 semester hours in Theatre and related performing arts. Twelve semester hours of basic Performing Arts to include four semester hours in dance technique courses (placement level determined by Dance faculty), (four semester hours in Music or eight semester hours of Art), three semester hours in Theatre (non-specific) plus THR 151. Twenty-one semester hours of Theatre Core to include THR 121, 131, 153, 231, 255 or 254, 341, 465, 466. Twenty-seven hours remain: THR 214, 331, 332 or 333, 499; eleven elective semester hours in THR, DAN and/or MUS, 300 level or above, as approved by Theatre Advisor; two additional semester hour each in DAN and MUS.

## Theatre as a Co-Major

For students who are majoring in another discipline but who wish to co-major in Theatre, the Theatre concentration requires 21 sem. hrs. of Theatre courses including Theatre 131, 153, 231, or 254,341 , and 465 or 466 . The two remaining courses are elective, 300 -level or above.

THR 121 Oral Interpretation of Literature (3) I, AY
Study of prose, poetry and drama, including analysis and preparation for performance before an audience. Selections are to be acted, interpreted, and produced.
THR 131 Beginning Acting (3) I, II
Stage deportment, pantomime, voice, and methods of character development. Includes performance of scenes in laboratory sessions. Students encouraged to try out for roles in University Theatre productions. No previous acting experience required. Required of all THR majors.
THR 151 Production Practicum (1-2) I, II (Same as DAN 151)
Course is divided into two segments. Course description for segment one, Technical Crew: Technical crew work in Creighton theatre and dance productions; may include set construction, properties, sound, lighting. Per credit hour, course requires three hours of shop work weekly (time to be arranged to fit student's schedule) and working one production as a crew member. Course description for segment two, Costume Crew: Costume construction for Creighton theatre and dance productions. Per credit hour, the course requires three hours of costume shop work weekly (time to be arranged to fit student's schedule) and working one production as a wardrobe crew member. This course may be repeated to a limit of eight semester hours.
THR 153 Stagecraft (3) I (Same as DAN 153)
Fundamentals of developing the scenic background for theatrical productions. Introduction to tools and equipment through theory, lecture, and demonstration. 1 R, 3 L . Required of all Theatre majors.
THR 161 Theatre Appreciation (3) I or II, AY
Investigation of the nature of the theatrical experience and the ways in which the other arts contribute to the composite art of theatre. Includes attendance at theatrical productions.
THR 214 Performing Arts Workshops (3) II
Special studies in the performing arts; content varies from semester to semester and could include such areas as make-up, introduction to costuming, business techniques for the performer (resumes, contracts, agents, tax law), special movement techniques, etc. Topics to be announced each semester in the Schedule of Courses. May be repeated to a limit of six hours.
THR 217-218 Theatre Dance I and II (1) I, II (Same as DAN 217-218)
Study of dance forms for musical theatre, including tap dance, jazz movement, and ensemble arrangements. P: Two semesters ballet or modern DAN.

## THR 223 Basic Television Studio Producing and Directing (3) I

Concentration on the basic directing and producing process involved in creating a television production. "Live" studio experiences will be used to develop these skills and knowledge.

## THR 231 Intermediate Acting (3) I

Emphasis on ensemble acting. Physical exercise and scene study. P: THR 131 or IC. Required of all theatre majors.

THR 254 Introduction to Design for Performing Arts (3) OD
Materials and methods course. Practical applications. Principles and elements of design, visual communication, rendering techniques with application to scenic, lighting, and costume design.

THR 255 Lighting (3) II (Same as DAN 255)
Fundamentals of electricity, color in light, tools, equipment and practical application of the elements. Lecture and laboratory. Required of all theatre majors.
THR 271 Voice Class (3) I, II, S (Same as MUS 271)
The techniques of singing, including voice placement, tone production, breathing, and English diction. Individual attainment in a class setting will be emphasized. No prerequisite required. May be repeated for credit to a limit of six hours.
THR 295 Special Projects (1-6) I, II
For the non-Theatre major. Requires a University sponsor and written DC and IC.
THR 323 Classical Greek Drama (3) I 1994-95 (Same as CNE 323)
Selected works of Greek Tragedians. The influence of Greek drama on English literature and on modern drama.

THR 331 Acting Styles (3) II, AY
Study of styles of acting from historical periods, Greek to modern, including individual projects in characterization. P: THR 131 and 231 or IC.

THR 332 Actors' Lab (3) II, AY
Special studies in acting technique. Content varies from semester to semester and could include pantomime, or voice and dialects, or Shakespearean acting, or acting for children's theatre. Topics to be announced in the Schedule of Courses. This course may be repeated to a limit of nine semester hours. P: THR 131 \& 231 or IC.

THR 333 Improvisational Theatre (3) I or II AY
Training to develop the student's creativity and spontaneity. Ensemble creation of theatre performance pieces. P: THR 131 or IC.

THR 341 Play Direction (3) I
Theory and practice of play direction utilizing lecture, outside reading, discussion and experimentation with production of scenes in class. Course necessary for any production of plays in the one-act festival; also recommended for secondary teachers who may be required to produce plays. Required of all Theatre majors. P: THR 131, 153 or IC.

THR 342 The Art of Television Directing (3) II
It is no easy task to pay equal attention to both the creative and the technical sides of television production. The person that must accomplish this task is the TV director. This course will help students learn to think, plan and evaluate the TV directing process. Scenarios will focus on "live" directing experiences, which will develop this knowledge.
THR 350 Advanced Stagecraft (3) OD
Introduction and uses of new materials in stagecraft, mechanical and perspective drawing, scene painting, special effects and problems in advanced technical application. Lecture and laboratory. P: THR 153.
THR 351 Scene Design (3) OD
Principles of scenic art through practical application of the elements. Required of Theatre majors with a concentration in Technical Theatre. P: THR 153 or 254 or IC.

## THR 353 Advanced Stage Lighting and Design (3) OD

Study of advanced lighting techniques including dimmers, projections, special effects, planning, analysis and development of a light plot. P: THR 255 or IC.

Principles of costume design, color, rendering techniques and dramatic analysis. P: IC.
THR 434 Workshop in Shakespearean Production (3) S(OD)
Practical experience in various aspects of Shakespearean production in conjunction with the Nebraska Shakespeare Festival. Casting by open audition. Students not in the cast will be given an assignment in stagecraft, publicity, or house management. P: IC.
THR 441 Advanced Play Direction (3) I, AY
Advanced problems in play direction and comparative study of the methods and achievements of major modern directors. Students will direct a one-act play or comparable project for public performance. P: THR 341 or IC.
THR 461 American Theatre History (3) OD
Development of theatre in the United States from the colonial period to the present. Consideration of all aspects of theatre, playwriting, architecture, set design, acting and directing. Readings assigned in plays representative of professional theatre in each era.
THR 465 Theatre History (5th Century, B.C.-1700) (3) I 1994-95 AY
Introduction to the study of theatre history aits application for theatre artists. Includes awareness of patterns of history and the relationship between theatre and society. Origins of theatre: Greek and Roman theatre; theatre in the Middle Ages; the Italian, English, Spanish, and French theatre up to 1700. Required of Theatre Majors. P: THR 131 or IC.

THR 466 World Theatre History (1700-Present) (3) II, AY
Continuation of THR 465. Required of Theatre majors. P: THR 465 or IC.
THR 495 Directed Independent Study (1-3) I, II
Directed study in theatre to meet the individual needs of the student. No more than six hours of Theatre 495 may be taken for credit toward a degree. P: Jr. stdg.; 6 hours 200-level theatre courses; IC. May be repeated to a limit of six hours.
THR 499 Senior Thesis (3) I, II
Students are expected to initiate and develop a project in one of the following areas: acting, directing, design or research. Application must be made to the thesis adviser and the department within the first two weeks of preceding semester. Required for B.F.A. with theatre concentration. P: Sr. stdg.; written IC; DC.

## ARTS MANAGEMENT (AMG)

Advisors: Associate Professor Aikin and Assistant Professor Klem (Fine and Performing Arts); Wirth (Journalism);Wells (Marketing/Management)

A degree program consisting of 42 hours of inter-college curricula. The Business Core consists of twelve hours include ACC 201, MGT 301, MGT 363, and MKT 319. The Communication Studies and Journalism Core includes COM 360, and JMC 323. The Arts Core requires eighteen hours including ART 219, 480, 481, and nine hours of ART, MUS, or THR electives.

## GRAPHIC DESIGN (GDE)

The Field of Concentration for the Degree of Bachelor of Arts (B.A.) Major in Graphic Design: (See Graphic Design - page 251)

The Field of Concentration for the Degree of Bachelor of Fine Arts (B.F.A.) Major in Graphic Design: Fifty-four hours of courses consisting of:

Graphic Design Core (24 hours): ART 105, ART 219, ART 153, ART 271 or ART/ JMC 375, JMC/ART 379, JMC/ART 381, JMC/ART 382, and JMC/ART 423.
Writing/Theory/History (15 hours): JMC 361, two 300 level or higher Art History courses (such as ART 319), JMC 313, and 327.
Upper Level Visual Arts (9 hours): Two additional art studio courses in a support area, plus one elective studio course.
Independent Study or Internship (3 hours): JMC 455, JMC 479, JMC 487, or ART 497.
Senior Thesis (3hours): ART 499.
Students will be required to complete the Sophomore and Junior Portfolio Reviews as outlined by the current Visual Arts Information Sheet (available from the Department). This
interdisciplinary curriculum fulfills both major and "support" requirements of the College of Arts and Sciences.

## FRENCH See Department of Modern Languages and Literatures

## FRESHMAN SEMINAR (FRS) See page 93 for further details.

Directors: Assistant Dean Walsh—College of Arts and Sciences; Associate Dean Phillips,College of Business Administration; Assistant Professor Nilsson-School of Nursing.

FRS 111 Freshman Seminar For Arts and Sciences Students (1) I
FRS 112 Freshman Seminar For Business Administration Students (0) I
Freshman Seminar is a semester-long course which meets at least once a week to explore the nature of life in the University setting, specific areas within each school or college, and survival skills for the academic arena. It facilitates student/faculty interaction and involves in-depth personal and academic advising, as well as an introduction to the variety of Creighton curricular and extracurricular opportunities.

FRS 120 Becoming a Master Student (2) II
Open to all Freshmen. Designed to provide comprehensive college level study skills that apply to academic and career success. Strategies and techniques presented and integrated with the exploration of motivation and goal setting. P: Dean's Office placement.
Nursing Students-see NUR 115, Seminar in Professional Nursing on page 291.

## FRS 211 Freshman Seminar Leadership for Arts and Sciences Students (1) I

FRS 212 Freshman Seminar Leadership for Business Administration Students (1) I
Following a month of training in the prior spring semester, the student Freshman Seminar leader assists a faculty adviser in the direction of a Freshman Seminar Section. The student leader joins with the faculty adviser in socializing new freshmen to the academic environment through mentoring, modeling, and problem-solving. P: Approval of Program Director.

## GERMAN See Department of Modern Languages and Literatures

## GRAPHIC DESIGN (GDE)

Advisors and Contacts: Associate Professor Aikin., Assistant Professor Davies. Faculty in Art: Professor Doll; Associate Professors Aikin, Alston, Bosco, Flecky, J. Horning, and Thein. Faculty in Journalism and Mass Communication: Associate Professor Wirth (Chair of Journalism), Assistant Professors Davies, Maciejewski and Zuegner.

Graphic Design is an interdisciplinary major for students interested in a unified and comprehensive program of study in the graphic arts which combines traditional hands-on art media (drawing, painting, printmaking, sculpture, and photography), electronic media (computer illustration, publication design, and web design), writing and visualization of texts, and history and theory of art. Students who undertake this major may intend to pursue careers in electronic media design such as graphic designer, webmaster, or digital artist, but will also learn to communicate in the other visual media. Prospective majors should meet as soon as possible with the head of the program, who will assign an appropriate advisor from either Journalism or Fine Arts. This interdisciplinary curriculum fulfills both major and "support" requirements of the College of Arts and Sciences.
The Field of Concentration for the Degree of Bachelor of Arts (B.A.)
Major in Graphic Design: An inter-disciplinary major offered by the Department of Fine and Performing Arts and the Department of Journalism and Mass Communication. The major requires forty-two semester hours of courses consisting of:

Graphic Design Core (24 hours): ART 105, ART 219, ART 153, ART 271 or ART/ JMC 375, JMC/ART 379, JMC/ART 381, JMC/ART 382, and JMC/ART 423.
Writing/Theory/History (9 hours): JMC 361, one 300 level or higher Art History courses (such as ART 319 or PHL 340), and JMC 313, 323, or 327.

Upper Level Visual Arts (6 hours): Any additional art studio courses (painting, sculpture, printmaking, etc.)
Independent Study or Internship (3 hours): JMC 455, JMC 479, JMC 487, or ART 497.

Co-Major in Graphic Design: Students who have been accepted as majors in other departments may earn a co-major by completing 24 credit hours consisting of ART 105, ART 219, ART 153, ART 271 or ART/JMC 375, ART/JMC 379, ART/JMC 381, ART/JMC 382, and ART/JMC 423.
The Field of Concentration for the Degree of Bachelor of Fine Arts (B.F.A.) Major in Graphic Design - (See Fine and Performing Arts )

## GREEK See Department of Classical and Near Eastern Studies

## HEALTH ADMINISTRATION AND POLICY (НАР)

An interdisciplinary program. Acting Coordinator: Assistant Professor Crawford.

## Concentration Major in Health Administration and Policy

Completion of all of the following: HAP 200, HAP/SOC 215, HAP 310, HAP 315, HAP/PLS 334, ACC 201, MGT 301 or COM 314, PLS 331, SOC 212, HAP 485

Two courses covering distinctly different management topics from among the following: COM 320, 360, 370, COM/HAP 390, COM 464; MGT 351, MIS 353. Other courses may be acceptable with the consent of the program director.

Two HAP Courses numbered between 400 and 440.
One ethics course from: HAP/PHL/THL/SRP 457 or HPE 311.
Supporting Electives: Because of the interdisciplinary nature of the program, no additional supporting course credits are required. Students may consult with the program director to identify other electives that may support their educational goals. ECO 203 and COM 152 are recommended as a portion of the student's general education program.

Co-Major in Health Administration and Policy: Students majoring in another department may complete a co-major in Health Administration and Policy by completing 24 credit hours including HAP 200, HAP/SOC 215, HAP/COM390, HAP/PLS 334 Public Policy of Health Care; and a choice of MGT 301, COM 314 or PLS 331; and a choice of HAP 310 or HAP 315; as well as six hours of credit from courses that count toward the HAP major.

HAP 200 Introduction to Health Care Administration (3) I, II
An introduction to managerial and administrative issues in health care. Administrative components of the health care system and an overview of major topics such as human resource administration, information management, budgeting and financing, planning and health organization strategy, government regulation, and insurance issues.

HAP 215 Sociology of Health Care (3) I (Same as SOC 215)
Study of the relationship between society and health-care systems. The sociology of health care organization, including patient-practioner relationships, concepts of health and disease, heath-care personnel, and systems of delivery. P: So. stdg.
HAP 310 Health Finance and Budgeting (3) II
Financial and budgetary concepts as applied in the management of health care organizations. Topics include sources of funding, cost and rate setting, third party payment issues, general questions of internal control, financial planning, and use of various financial instruments. P: HAP 200

HAP 315 Law and Health Systems (3) I
Legal aspects of health care in the administration of health organizations. Among topics considered are legal liability and standards of care, malpractice, regulation of health care professions, informed consent, policies regarding medical records, legal responsibilities for personnel. P: HAP 200
HAP 317 Global Health Issues (3) II (Same as ANT 317, SOC 317)
This course will examine the social production of health and disease from a global perspective. Related to these issues, is the topic of health and well being in developing countries. P: So. stdg.

HAP 334 Public Policy and Health Care (3) II (Same as PLS 334)
Review of government policies and programs as they affect health care in the United States and other countries. Various systems of health insurance, the private medical market, government provision of health services, development and evolution of managed care systems, current U.S. national programs and of reform possibilities. Comparative analysis of non-US systems (Canada, U.K. Germany). Issues of cost, equity and quality are themes throughout. P: PLS 121 or So. stdg.

HAP 390 Health Communications (3) AY (Same as COM 390)
This course investigates research theories and permits students to demonstrate practical applications of communication within health care situations. The course emphasizes understanding communication variables such as verbal, non-verbal, conflict, listening, and self disclosures in health care contexts. The course also examines issues of ethics and relationships between health care providers, patients, and families.

## HAP 410 Seminar in Health Administration (3) I

Selected advanced topics in health administration. May be repeated as long as the topic differs.

HAP 420 Seminar in Health Policy (3) II, AY
Selected advanced topics in health policy. May be repeated as long as topic differs.
HAP 433 Public Policy Analysis (3) II, AY (Same as PLS 433)
Examination of approaches to bovernmental problem solving and public policy analysis. Discussion of theories of public policy, political strategy, and tools for policy analysis. Emphasis on health policy and selected other policy topics. P: PLS 121 or HAP 334.

HAP457 Biomedical Ethics: Philosophical and Theological Approaches (3) OD (Same as PHL/ SRP/THL 457)
An exploration of relations between philosophical and theological conceptions of ethics and moral methodologies, together with an application of the latter to select issues in biomedicine and health care policy. P: THL 250 or PHL 250, Sr. stdg.

HAP 485 Internship in Health Administration and Policy (1-6) I, II, S
Students works as entry-level administrative professionals in organizations involved in health care delivery, administration, or policy-making. May be repeated to a maximum of six hours of credit. P: Jr. stdg., 2.5 QPA; consent of internship director.

HAP 493 Directed Independent Readings (1-3) I, II, S
A student initiated program of readings undertaken with a faculty member in the Health Administration and Policy Program. May be repeated to a maximum of six hours. P: DC.

HAP 497 Directed Independent Research (3-6) I, II, S
A student initiated research project undertaken with the supervision of a faculty member in the Health Administration and Policy Program. May be repeated to a maximum of six hours. P: DC.

## CREIGHTON CENTER FOR HEALTH POLICY

AND ETHICS (HPE)
Professor Purtilo (Chair); Professors Haddad, O'Brien, and Pinch; Associate Professor Welie; Assistant Professor Kissell.

## HPE 311 Health Care Ethics (3) II

Inquiry and exploration into the problems of modern health care using ethical theories and reflection to articulate a range of possible solutions. P: Jr. stdg.

## HEBREW See Department of Classical and Near Eastern Studies

## HISTORY (HIS)

Professors LeBeau (Chair) and R. Horning; Associate Professors Dugan, Elliot-Meisel, Hoffman, Mihelich, Super, and Welch; Assistant Professors Calvert and Otsubo; Instructors Sherrard and Louissa.

## History Requirements

Arts and Sciences students will follow the requirements of the CORE curriculum described on page 100. Specific requirements for Nursing are listed on pages 131-138. Specific requirements for Business Administration are listed on pages 117-130.

## The Fields of Concentration

A. History Major: History 101 and one other 100-level history course. Thirty semester hours of 300 -level courses or above in history, including History 300, 311, 312, 400 and 500. While the student may concentrate in any area of history, he/she is encouraged to take a minimum of six hours of non-United States history. The total number of lower-division and upper-division courses required for a major is 36 hours.
Supporting Courses: A program of at least 12 semester hours of course work arranged with and approved by the student's advisor must be taken in one or more of the other departments of the College of Arts and Sciences.
B. History Major with Specialization in International Relations: History 101 and one other 100-level history course. Thirty hours of upper-division history courses including History $300,311,312,400,500$, and a minimum of 15 hours selected from History $319,347,351,371,375,388,417,484,489,540,547,548,562,563$, 565,566 , and 577 . The total of lower-division and upper-division history courses is 36 hours.
Supporting Courses: Twelve hours of upper-division course work selected from a prescribed list of courses from other related departments worked out in consultation with the student's advisor.
C. History as a Co-major: For students majoring in another discipline who wish to co-major in history, the history requirements are History 101 and one other 100level history course, and 18 hours of 200 -level to 500 -level history courses. The total of lower-division and upper-division history courses for a co-major is 24 hours. The history co-major should work with a faculty member of the Department of History in planning a program of history electives.
Note: Knowledge of a modern foreign language is strongly recommended for all history majors. Those majors specializing in International Relations or preparing for graduate school should go beyond the Creighton College requirement for graduation in their principal foreign language and/or begin a second language.

## Criteria for acceptance into the major or co-major:

Successful completion of HIS 101.

## HIS 101 The Modern Western World (3) I, II, S

A survey of the evolution of the Western societies of Europe and North America from the 15th century to the present.

HIS 102 Honors The Modern Western World (3) (Same as HRS 102)
Open to students eligible to enroll in honors courses. Requires the consent of the Director of the Honors Program.
HIS 103 The Asian World (3) I, II
A survey of developments in Asian societies from the 15 th century to the present, emphasizing in particular East Asia, South Asia, and Southeast Asia. P: HIS 101 or HIS 105.

## HIS 104 The Latin American World (3) I, II

A survey of the development of Latin America, its culture and society, its politics and economics, from the first permanent contact with Europe in the 15th century through the entrenchment of Spanish colonial rule, the struggle for independence and viable nation-states, to the present problems and potential of a Third World existence. P: HIS 101 or HIS 105.

HIS 106 The African World (3) I, II (Same as AFS 106, BKS 106)
A survey of developments in Africa from the 15th century to the present emphasizing the decline and reemergence of African independence, the creation of the African diaspora, and developments in the post-colonial period. P: HIS 101 or HIS 105.

HIS 107 The Middle Eastern World (3) I, II
A survey of developments in the Middle East from the rise of Islam to the present through an examination of the region's peoples and religious, social, and political institutions. Special attention is devoted to the encounter of the Middle East with the West. P: HIS 101 or HIS 105.

HIS 300 Historiography (3) I
Study of the history of writing history - the concepts, contributions, and controversies of outstandiung historians of the past and present who have developed this central branch of knowledge. Concentration on a specific field within history, as selected by the instructor. Required of all history majors. P: So. stdg.
HIS 302 American Studies Seminar: The American Character (3) AY (Same as AMS 302, ANT 302)
Comprehensive study of the values, attitudes, and characteristic behaviors of the American people. How and why are Americans different from others? What is the national character? What historical forces have formed this character? P: So. stdg.
HIS 303 American Studies Seminar: The American People (3) II AY (Same as AMS 303)
Comprehensive study of the various ethnic and social groups that compose the American people. Study of Native American groups and the various immigrants, and how they have interacted culturally and biologically to produce a new people. P: So. stdg.
HIS 304 History of Greece and Rome (3) I (Same as CNE 304)
Historical survey of the Mediterranean region in the Hellenic and Roman periods. The Greek city-state, Hellenistic kingdoms, the Roman Republic and Empire. Political, economic, and cultural institutions.
HIS 311 United States History to 1877 (3) I
Surveys the growth and development of institutions from their European origins through the end of Reconstruction. Emphasis is placed on the ideas and processes that created those institutions, as well as on the degree to which they were uniquely American. Serves as the basis for advanced work in United States history. P: So. stdg.
HIS 312 United States History Since 1877 (3) II
Survey of the growth and development of United States institutions from the end of Reconstruction to the present day. Emphasis is placed on ideas, processes, and causation, and the emergence of the United States as a world power. Serves as the basis for advanced work in United States history. P: So. stdg.

HIS 316 In Search of God and Self: Renaissance and Reformation Thought (3) AY
A study of ideas, views, and values of the Renaissance and Reformation eras. Topics for examination include the doctrine of Renaissance humanism, the origins of Realpolitik, the role of scientific thought in culture and society, religious questions in the face of schism and their resolutions, and the "modernity" of the fourteenth century. P: So. stdg.
HIS 317 Inside Hitler's Germany - A Study of Nazi Tyranny (3) AY
Study of the rise and consolidation of tyranny in a modern Western society. Readings, discussions, and lectures on the conditions that led to Hitler's rise to power; the personalities and policies that characterized the Nazi regime; the public and private choices required of people living in Nazi Germany; and the impact of Nazi terror and war on individuals and groups of people. P: So. stdg.
HIS 319 Eastern Europe 1918-1989: Revolutions in Historical Perspective (3) I, AY
A study of historical trends and events that have shaped contemporary Eastern Europe. The course will focus on developments in the region since 1918 with emphasis on Poland, Czechoslovakia, Hungary, and Yugoslavia. Impact of rivalries among European powers before 1938 and the Soviet Union and the Western powers since 1945, as well as nationalism and ethnic conflicts. Major issues explored include the creation of ethnic states, the failure of democracy, Communist rule and Soviet domination, "the lure of the West," and recent "democratic" revolutions. P: So. stdg.

HIS 320 World War II in Europe: Triumph over Tyranny (3) II 1994-95
An examination of the personalities, policies and events involved in the defeat of Hitler's Reich. The course will focus on the major phases of the Second World War in Europe, from the early victories of Hitler's forces to the Anglo-American landings in Normandy and the final surrender of the German Army. Examination of such issues as the political goals and military strategies of the combatant governments; conflicts and rivalries among leading personalities; the conduct of the fighting forces; the role of air power, of military intelligence, of material and human resources; and the contribution of the "home front" to Allied victory and Nazi defeat. P: So. stdg.

HIS 321 Tudor and Stuart England (3) I, AY
Political, economic, religious, and intellectual developments in England, 1485-1714. Topics include Henry VIII and the English Reformation; the Elizabethan Age; Exploration and Imperial Expansion; the rise of Puritanism; the English Civil War; the Restoration Era; and the "Glorious Revolution". P: So. stdg.

HIS 341 Introduction to Jewish History (3) AY
Presentation and examination of Jewish history from biblical to modern times with emphasis on social, political, cultural, and religious contexts and interactions.

HIS 345 Change and Revolution in the Modern Middle East (3) I 1995-96
An examinaiton of social, economic, and political change in the Arab Middle East in the twentieth century. Topics include Arab nationalism and the struggle against Western domination, the rise of authoritarian regimes in Egypt, Iraq, and Syria, the challenge of Islamic fundamentalism, and the prospects for democratic reform in the region. P: So. stdg.
HIS 347 The Arab-Israeli Conflict: Struggle for the Holy Land (3) II 1994-95
An examination of the Arab-Israeli conflict from the emergence of political Zionism in the late 19th century to the peace efforts of the 1990s and beyond. Topics will include the origins and consequences of the British mandate for Palestine; the development of Israeli social and political institutions; the rise of Palestinain national consciousness; the impact of outside powers on the conflict; and prospects for a lasting resolution. P: So. stdg.

HIS 348 Muhammad and the Rise of Islam (3) OD (Same as CNE 348)
The course examines the emergence and flowering of Islamic civilization from the time of the Prophet, Muhammad, until the sack of Baghdad by the Mongols in 1258. Topics include Muhammand's prophetic mission, the Arab Kingdom of Damascus, the rise of the Abbasids and the classical civilization of the High Caliphate. P: So. stdg.

HIS 349 Egyptian Art and Archeology (3) OD (Same as ART/CNE/THL 349)
This course will explore the history, society, culture, and religion of ancient Egypt form the predynastic era through the Ptolemaic period, as revealed through its artistic and material remains. Attention will be given to how sculpture, painting, architecture, and other material remains provide a window on Egyptian life and thought. P: So. stdg.
HIS 350 Archaeology of Syria-Palestine (3) OD (Same as ART/CNE/THL 350)
A chronological survey of the archaeology of Syria-Palestine in which material culture provides a window on the history of society, economy, and religion from the Neolithic to Hellenistic times. Special topics include the emergence of farming and pastoral societies, the formation and dissolution of Bronze Age city-states, and the rise and fall Iron Age kingdoms such as Israel, Moab, and Edom. P: So. Stdg.

HIS 351 Comparative American Character (3) AY (Same as AMS 351)
Study of political and social values projected by contemporary societies of the United States, Canada, and Latin America; how and why they differ from each other; is there a common "American" value system? P: So. stdg.
HIS 352 Hollywood and American History (3) OD
Oliver Stone's films on the Vietnam War and on American presidents are only the latest in a long line of motion pictures in which "Hollywood" combined mass entertainment with controversial historical interpretation. This seminar will compare historical events to their fictionalized film versions. P: So. stdg.

Analyzes the impact of historical events on the theory, writing, and evolution of the Constitution. Colonial and Revolutionary background; the Constitutional Convention; development and interpretation of the Constitution from the Federalist era through the Civil War and Reconstruction. P: So. stdg.
HIS 355 Constitutional History of the United States Since 1877 (3) II
Continuation of HIS 354. HIS 354 is not a prerequisite to HIS 355. Analysis of the impact of historical events on the Constitution. Constitutional interpretation in late 19th century; the Progressive era; World War I, the 1920's; the New Deal; World War II and the Cold War; civil liberties and civil rights; the Warren, Burger, and Rehnquist Courts; the Presidency since World War II; contemporary Constitutional issues. P: So. stdg.

HIS 357 Religion in American Society to 1865 (3) I, AY
The influence of religion on American cultural, intellectual, social, and institutional development. The role of religion in the discovery, exploration, and settlement of the continent as well as the birth and growth of the nation. Includes colonial attitudes toward and practices of religious freedom; denominationalism; the American sense of errand and mission; 18th century revivalism and its role in the American Revolution; 19th century revivalism and the settlement of the frontier; pietism; millenialism; and the impact of the Civil War on major American churches. P: So. stdg.
HIS 358 Religion in American Society from 1865 to the Present (3) II
Continuation of HIS 357. HIS 357 is not a prerequisite to HIS 358. The influence of religion on American cultural, intellectual, special, and political development. The responses to urban growth and industrialization; the development of the Social Gospel; nativism and its impact on American religion; crusading Protestants-or the role of missionaries; the rise of NeoOrthodoxy; revivalism in modern America; religion in American life in economic depression, in war, in prosperity, in social turmoil; unbelief in America; and the new religions in America. P: So. stdg.
HIS 359 The City in United States History (3) OD (Same as AMS 359)
This course examines the development of urban areas in the United States during the 19th and 20th centuries. Of particular concern are the elements of urban architecture, economics, politics, demographics, and violence. To go beyond the generalizations of the assigned readings, the city of Omaha will be used as a laboratory for investigating these themes in a specific setting. P: So. stdg.
HIS 367 The Afro-American Experience (3) AY (Same as BKS 367) Slavery, emancipation, "separate but equal", and the drive for full equality. P: So. stdg.
HIS 371 Mexico and the Mexican Revolution (3) AY
The first true social revolution in Latin America considered in its historical background, its violent eruption, its sweeping changes and its contemporary direction. P: So. stdg.
HIS 372 Equality, Minorities, and Public Policy (3) II AY (Same as AMS 372, BKS 372, PLS 372)

Incorporates continuing discourses between a historian and a political scientist. Exploration of the political processes whereby minorities have influenced the formulation and implementation of policy and governmental responses to demands for equal treatment. P: So. stdg.
HIS 375 The United States and Latin America (3) I AY
The "special relationship" between the United States and the nations of Latin America, from the foundations of the Monroe Doctrine and Manifest Destiny to U.S. hemispheric hegemony, the Alliance for Progress, and benign neglect. Special emphasis on current inter-American issues and developments. P: So. stdg.

HIS 384 Black History Through Literature (3) OD (Same as BKS 384)
History of Americans of African descent as found in journals, novels, and "studies." P: So. stdg.

HIS 388 Origins of Modern Africa (3) AY (Same as AFS/BKS 388)
Examination of the European impact on Africans and their institutions. P: So. stdg.

Biography as History (3) I OD
Studies of the lives of individuals who made significant impacts on their age and the world. Course will be subtitled in the Schedule of Courses. P: So. stdg.

HIS 393 War and Society in the Modern World (3) II
Survey of twentieth century American military history. Examination of the relationships among the military establishments, the wars and the societies that fostered them in order to understand the nature of war, how it has changed through time, and its impact on historical development. P: So. stdg.

HIS 395 Selected Topics (3) OD
Topical approach to select problems in history as chosen by the department. Course will be subtitled in the Schedule of Courses. P: So. stdg.

HIS 400 Research Methods in History (3) I
A seminar aimed at introducing the student to the skills involved in researching historical topics. Emphasis on the process of historical writing, including research methods and tools, the use of historical evidence, and the technical aspects of paper writing. Required of all history majors. P: So. stdg.
HIS 407 The Early Middle Ages (3) I, II
Western Europe, A.D. 300-1050. Topics include the barbarian migrations, the christianization of Europe, Charlemagne and the "First Europe," fragmentation of the Carolingian empire, western relations with Byzantium and Islam, the origins of feudalism and manorialism, and the rise of the Normans. P: So. stdg.
HIS 408 The High and Late Middle Ages (3) II
Includes the origins of the nation-state, the Church, conflicts between the Church and secular states, medieval heresies, chivalric society and culture, universities and scholasticism, the Black Death, the commercial revolution, and the Hundred Years War. P: So. stdg.
HIS 409 The Crusades: A Mirror of Medieval Society (3) I
A study of the Crusading movement and its impact upon medieval society. Topics will include the political and religious background of the First Crusade; establishment of the Crusader States; popular participation in the Crusades; and economic results of the conflicts between Christians and Moslems. P: So. stdg.

HIS 411 Europe 1350-1500: The Dawn of a New Age (3) I
The late 14th and early 15th centuries was a time of decay in Western Europe. Depression, war, rebellion, political anarchy, religious heresy, and epidemic disease - all seemed to spell doom for Western society. Out of it came an unparalleled rebirth of European cultural, economic, and political systems known to historians as the "Renaissance." This course follows Europe's 14th century disasters and its 15th century recovery. P: So. stdg.
HIS 412 European Society, Religion, and Statecraft, 1500-1648 (3) II
Europe during the years of the Protestant Reformation, the Catholic Counter-Reformation, and the Thirty Years War. A period of the emergence and growth of new religions and the reform of Catholicism, violent social upheaval, enormous economic expansion, international dynastic rivalry, and internal competition for sovereignty in Europe and the British Isles. P: So. stdg.
HIS 413 Absolutism, Reason, and Revolt, 1648-1789 (3) AY
Examination of the growing bureaucracy, intense political rivalry, rapid socio-economic change, and revolutionary cultural developments in Britain and the European states in the century and a half between the end of the Thirty Years War and the beginning of the French Revolution. P: So. stdg.

## HIS 415 19th Century Europe (3) II

The theme of this course is the transformation of Europe from the old regimes-torn by revolution-to modern, urban-industrial societies of the contemporary age. The focus will be on general trends and significant particulars in politics, in economic and social developments, and in cultural and intellectual life. The course will examine topics like: the postrevolutionary triumph of reaction and the rise of modern conservatism: the economic and social consequences of the first and second industrial revolutions; the spread of the culture of materialism; the triumph of political liberalism; and Europe's fin de siecle. P: So. stdg.

Europe in the throes of change. A civilization caught up in a rapid succession of wars, revolutions, economic and social crises - and ultimate renewal under radically altered domestic and world conditions. Along with high politics and diplomacy, world wars, Communist and Fascist revolutions, the course focuses on everyday preoccupations of ordinary people and the increasing significance of their aspirations and values in Europe since 1945. P: So. stdg.
HIS 420 Selected Topics in Ancient History (3) OD (Same as CNE 420)
Topical approach to select problems or special periods in ancient history. Course will be subtitled in the Schedule of Courses. P: So. stdg.
HIS 431 Mathematical History, Philosophy and Ethics (3) AY (Same as MTH 431, SRP 431)
An examination of mathematics and mathematical ideas and their relation to philosophical and ethical views from the ancient Babylonians and Pythagoreans to the present. Special attention will be given to non-Western mathematics, ethnomathematics, twentieth-century game theory, encryption, and ethical issues facing the mathematician and society in the past and today. The course assumes no mathematical background beyond the Core E requirements. P: Sr. Stdg.

HIS 432 Russia to Alexander I (3) I
The Kievan State. Christianity. The Mongols. Rise of Moscow. Serfdom. Ivan The Great and Ivan The Terrible. Time of Troubles. First Romanovs. Razin Rebellion. Peter The Great. From Peter to Catherine The Great. Catherine The Great. Seven Years War. Pugachev Rebellion. Russian Literature. Alexander I, 1801-1825. The Napoleonic Invasion. The Decembrist Revolution. P: So. stdg.
HIS 449 The Formative Years of the United States (3) AY
Considers the Age of Exploration and the European discovery and America; the European colonization of North America; and the cultural, economic, political, and social development of the thirteen colonies which became the United States of America up to 1763. Emphasis on the transformation of Europeans into provincial Americans.

HIS 450 The Birth of a Nation: The Era of the American Revolution (3) AY
Considers the movement for independence and the struggle to establish and secure the new nation between 1763-1789. Emphasis is placed on factors which drove the colonists toward independence, the representation of their grievances and political philosophy in the Declaration of Independence, and the events surrounding the writing and adoption of the Constitution. P: So. stdg.
HIS 451 The Rise of Nationalism and Sectionalism in the United States (3) AY
Explores implementation of the Constitution, creation of the Bill of Rights, formation of the first political parties, and roles of key figures such as George Washington, John Adams, Thomas Jefferson, and Andrew Jackson in the period between 1789 and 1850. Also considered are the democratization process, reform movements, nationalism, slavery, and that sectionalism which led to the Civil War. P: So. stdg.

HIS 452 Civil War and Reconstruction (3) AY
Development of the controversies resulting in the Civil War. The War. Political and economic reconstruction after the war. P: So. stdg.
HIS 453 The Gilded Age in the United States (3) AY
An examination into the transformation of the United States, 1877-1901. Course uses the "politics of dead center" as an organizing principle. Emphasis is placed on urbanization, industrialization, and immigration. P: So. stdg.
HIS 454 The Progressive Era in the United States, 1901-1920 (3) AY
The United States at the beginning of its imperial age. Topics include the Age of Big Business; protest and reform; the United States and the First World War; the Red Scare. P: So. stdg.
HIS 455 The Republican Ascendancy: The United States 1920-1933 (3) I, AY
The cultural, economic, political, and social dimensions of the "Roaring Twenties"; the rise of isolationism; the stock market crash of 1929; the coming of the Great Depression. P: So. stdg.
HIS 456 The Era of Franklin D. Roosevelt (3) OD
The economic, social, and political impacts of the Great Depression; reforms of the New Deal; from isolationism to participation in World War II. P: So. stdg.

A course on the social, economic, cultural, and political developments of the postwar era that will place in historical perspective the interpretation provided by the popular television program. Topics include the emergence of the Cold War, Truman and the Fair Deal, McCarthyism, the Eisenhower era, and the civil rights crusade. P: So. stdg.

## HIS 458 The Sixties (3) OD

A course on the social, economic, cultural, and political developments in the United States between 1960-1974. Topics include JFK and the New Frontier, LBJ and the Great Society, the Nixon presidency and Watergate, the war in Vietnam and the Movement, and the counterculture. P: So. stdg.
HIS 459 Contemporary United States History (3) OD
A course on recent social, economic, cultural, and political events in the United States, 1974present. Topics include the malaise of the 70s, the Reagan Revolutions, the end of the Cold War, and issues of the 90 s in historical perspective. P: So. stdg.
HIS 460 The History of Women in the United States (3) OD (Same as AMS 460)
The economic, social, and political status of women in the United States from colonial times to the present. Concentration on four major topics: the family, the work place, the community, and the feminists movements. An integral part is the examination of the traditional roles of women in society as well as changes in those roles. P: So. stdg.

HIS 462 The Land in the American Experience (3) (Same as AMS, EVS, 462)
This course serves as an introduction to American environmental hIstory, whereby students will gain a better appreciation of the problems of modern human interaction with the environment. P: So. stdg.

HIS 464 Women, Marriage, and Family in East Asian Society (3) II
Focus on the role and status of women in China and Japan since the 16th century, emphasizing how, why and by whom womanhood has been defined and redefined over time. P: So. stdg.

HIS 466 Popular Culture in Traditional China and Japan (3) I 1994-95
Survey of religions, philosophies, arts, theatres and sciences of both China and Japan. Course designed to provide students with an understanding of the traditional customs, assessing their unique thoughts and systems of values. Specific emphasis placed on how these customs have been practiced in both societies. Films, slides, discussions and collateral readings will provide the particular interest of the class. P: So. stdg.
HIS 467 Modern China (3) I 1995-96
Course investigates how China has attempted to build a modern state in the face of its decline as the leading nation in East Asia during the nineteenth century. Central themes are the impact of Western civilization on China and the Chinese response to it as well as the search for a new identity in both the PRC and the ROC. P. So. stdg.

HIS 468 Modern Japan (3) AY
Few topics captivate historians more than Japan's remarkably rapid and "successful" transformation from an isolated agrarian society to a modern world power. In the past 130 years, that small archipelago on Asia's eastern fringe experienced political, economic, diplomatic, socio-cultural as well as intellectual change on a scale unprecedented in human history. This course pays particular attention to the ways in which ordinary people's lives were affected (or unaffected) by the forces that underlay national change. P: Soph. stdg.
HIS 474 Heroes in Latin American History (3) OD
From Cortes to Castro, the development of government, society, and economy in Latin America as seen through the lives of its heroes and villains, its reformers and revolutionaries - the men and women who exemplified the cult of the personality as a primary force in shaping Latin American history. P: So. stdg.

HIS 478 Jerusalem in History (3)
Analyzes the Jewish, Christian, and Islamic histories of Jerusalem from biblical times until the present. Examines the ways each faith has made its claim upon the holy city. Topics include the Davidic city and the Temple of Solomon, the Byzantine interlude, the coming of Islam and the Dome of the Rock, the Crusades, and the place of Jerusalem in modern Jewish and Palestinian nationalisms. P: So. stdg.

This course focuses upon the political, social, and cultural history of modern Egypt from the early 19th century to the consolidation of the Nasser revolution in the 1960s. Topics include Napoleonic expedition; Mohammad Ali dynasty and the British occupation; Islamic reform; the "liberal era"; the Muslim Brotherhood; and free officers. P: So. stdg.

## HIS 482 Race in America: Idea and Reality (3) OD (Same as AMS/BKS/PLS/SRP 482)

An examination of the idea and reality of race during key phases of U.S. history, with an emphasis on the contemporary situation. To understand the multiple meanings and experiences of race, the course draws on sources from science, literature, law, and philosophy. P: Sr. Stdg.
HIS 484 Nationalist Movements in Colonial Africa (3) II (Same as AFS/BKS 484)
Case studies of the development and course of selected nationalist movements in Europeanruled Africa. P: So. stdg.
HIS 485 Society and Belief Systems in Africa (3) II (Same as AFS/BKS 485)
Examination of the social institutions of black Africa; the roles and meaning of the "tribe", ethnicity and the family. P: So. stdg.
HIS 487 History of West Africa (3) OD (Same as AFS/BKS 487)
History of Africa south of the Sahara and west of the Cameroons Highlands, African cultural traditions, contact with Islam and the West, the State building, the European invasions, the colonial period, and reemergent states. P: So. stdg.
HIS 489 Southern Africa: The Politics of Race (3) OD (Same as AFS/BKS 489)
Examination of the historical development of the social and political structures of modern Southern Africa. Primary focus on South Africa, Rhodesia-Zimbabwe, and Namibia. Analysis of the place of "race" in national policies. Includes apartheid, black nationalism, decolonization, guided democracy, and the interrelationship between economic developments and the social and political systems. P: So. stdg.

HIS 493 Directed Independent Readings (1-3) I, II, S
May be repeated to a limit of six hours. P: DC.
HIS 494 Tutorial in History (1) OD
Research paper demonstrating the ability for historical inquiry and writing on a topic of student and faculty agreement. Resulting paper to be presented to a gathering of students and the history faculty or at a historical conference. P: Sr. HIS major; DC.
HIS 497 Directed Independent Research (1-3) OD
May be repeated to a limit of six hours. P: DC.
HIS 500 Senior Seminar (3) II
An integrative consideration of a major historical theme. Required of all senior history majors. P: Sr. HIS major.

HIS 524 History of Ancient Israel (3) OD (Same as CNE/THL 524)
An examination and reconstruction of the history of ancient Israel from biblical and other ancient near eastern literary texts, and from archaeological and epigraphic materials.
HIS 533 Late Tsarist Russia (3) AY
Autocracy and serfdom; political, social, and literary movements of 19th century from Catherine the Great to the revolutions of 1917. Topics include Napoleon's invasion of Russia; Decembrist Revolution; Era of Nicholas I; Crimean War; Russian intelligentsia; Alexander II and the Great Reforms; Revolution of 1905; World War I; and the Revolutions of 1917. P: So. stdg.

HIS 535 Russian History Through Literature and Art (3) OD
History of Russia, its society and thought, as found in the chronicles, journals, novels, dramas, film, and music of Russian authors and artists. P: So. stdg.
HIS 540 Contemporary International Relations (3) II
The historical foundations of contemporary international relations: includes international politics, international law, and case studies drawn from the Russia, India, China, Japan, Canada, Ireland, Bosnia, Kosova, the Middle East, and Korea. P: So. stdg.

History of Scotland (3) OD
"The Creator surely never made anything so odd, difficult, contrary, intriguing and unlikely as the Scot, ever to let it fizzle out." (Nigel Trantor). The course takes Scottish history from the mists of antiquity to the Romans, Tacitus, Hadrian's Wall, the Picts, Christianity, Saint Columba, The Norseman, clan rivalries within the haunting Highlands, relations with the English, Irish, and French. Along the way, we encounter MacBeth, the Black Douglas, William Wallace (Braveheart), Robert the Bruce, Battle of Bannockburn, John Knox, Mary, Queen of Scots, James VI \& I, Charles I, Oliver Cromwell, Bonnie Prince Charles, "Charlie's Year," Rob Roy, Battle of Culloden, Robert Burns, Sir Walter Scott, Adam Smith, Scottish pipers, and contemporary Scotland. P: So. stdg.
HIS 544 Seek the Fair Land: The History of Ireland (3) AY
Course in the historical evolution of the Irish people and nation. Topics include the pre-Christian period, migrations and settlements of peoples into Ireland and abroad from Ireland to create the Irish diaspora, the Elizabethan Wars, and the Great Famine. Irish nationalism, the emergence of the Irish Republic, and recent developments in the Irish Republic and Northern Ireland. P: So. stdg.

HIS 545 Modern France (3) OD
France during the Restoration; modernization under the July Monarchy and Second Empire; the problems and instability of the Third Republic; the era of the two World Wars; DeGaulle and contemporary France. P: So. stdg.

HIS 546 Modern Germany (3) OD
Rise of Prussia and Austria; the impact of revolution and reaction; the Austro-Prussian dualism; Bismarck and the new nation-state; the Wilhelmian era and its crises; the republican experiment; Germany's rise and fall under Hitler; postwar division and reunification as Federal Republic. P: So. stdg.
HIS 547 Contemporary Europe Since 1945 (3) OD
Examination of Europe since 1945; the partition and reorganization of Europe under American and Russian auspices; political and economic reconstruction in East and West; the quest for unity in the West; social and cultural changes; successes and failures of the new society. Emphasis on Western Europe. P: So. stdg.
HIS 548 Russian History: 1905 to the Present (3) I, AY
Revolution of 1905; World War I; Revolutions of 1917; Allied intervention; Civil War; NEP; Stalin-Trotsky rivalry; Stalin and the Second Revolution; World War II; relations with Eastern Europe, Asia, and the United States; internal political, economic, and literary movements from Khrushchev and Brezhnev through Gorbachev, Yeltsin, and Putin. P: So. stdg.
HIS 562 Foreign Relations of the United States, 1898-1945 (3) I, AY
Analysis of the domestic and international forces that confronted the United States between 1898 and 1945, and how these forces shaped American foreign policy from the SpanishAmerican War through World War II. P: So. stdg.
HIS 563 Foreign Relations of the United States Since 1945 (3) II, AY
Continuation of HIS 562. HIS 562 is not prerequisite for HIS 563. Analysis of the origins of the Cold War; development of the "containment" policy and the alliance system of the United States under Truman and Eisenhower; foreign policies of the Kennedy-Johnson administrations; the Nixon-Kissinger policy of "detente"; the Ford, Carter, Reagan, Bush, and Clinton administrations. P: So. stdg.
HIS 565 The United States and Canada: The Siamese Twins of North America (3) I 1994-95
A phrase coined in the 1940s, are Canada and the United States still "the Siamese Twins of North America who cannot separate and live"? The U.S. and Canada are each other's greatest trading partner, are jointly responsible for continental security, and are fiercely committed to their own independence. But the U.S.A. invaded Canada three times, called itself the "Army of Occupation" during World War II, and "lost" draft-dodgers to Canada during the Vietnam War. In an age of regional trading blocs and continental integration, explore the relationship between these neighbors that share the world's longest undefended border. P: So. stdg.
HIS 566 United States and the Middle East Since World War II (3) AY
Survey of American foreign policy in the Middle East from World War II to the present. Topics include Truman's Containment Policy in the Middle East; Truman and Israel; the Baghdad Pact; the Suez Crisis; the Eisenhower Doctrine; the Six-Day War of 1967; the ef-
fects of the Arab-Israeli War of 1973 and the oil embargo; Camp David Accords; the Carter Doctrine; Reagan and the Middle East. P: So. stdg.
HIS 570 History of Canada (3) OD
Founding of New France; Anglo-French rivalry; Canada and the American Revolution; War of 1812; evolutionary process to independence; Canadian Confederation, 1867; World War I; Statutes of Westminster, 1931; World War II; Canadian-American relations, 1775 to the present; Trudeau Era; relationship of contemporary Quebec to the Confederation. P: So. stdg.

HIS 577 Cuba Under Castro (3) OD
The roots of the revolution from the earliest days of Cuban independence through the frustrated movement of 1933. The emergence of Fidel Castro and his M-26 rebellion in the overthrow of Batista. Castro's revolutionary domestic and international programs and the continuing controversies surrounding them. P: So. stdg.
HIS 583 Introduction to Historic Preservation (3) II, AY
An introduction to the theory and practice of historic preservation. The reasons for preservation; the history of the preservation movement; Federal, state, local, public and private preservation programs; case studies of preservation projects; a brief overview of American historical architecture. P: So. stdg.
HIS 585 Public History Internship (3-6) I, II, S
A supervised on-the-job experience at government or private agencies in applying historical knowledge and methods to cultural resources management, museum and/or archival work, historic preservation, and other areas of public and applied history. HIS 585 may be taken twice for a total of 6 credit hours, but only 3 of those hours may be used toward the history major. P: HIS major; Jr. stdg.; DC.

HIS 593 History of India: The Land of Bharata (3) AY
A comprehensive analysis of India from pre-Aryan times to the present. Topics include Indian religions; Mogul Empire, Emperor Asoka; the Sikhs; Westerners to India and British colonization; the Carnatic and the Anglo-Afghan Wars; 1857 Mutiny; Indian nationalism, Rabindranath Tagore, Congress party, Motilal and Pandit Nehru, and Mohandas Gandhi; Muslim League and Muhammad Ali Jinnah; the dilemma of Kashmir; relations with Pakistan and the United States, Indira Gandhi and the Sikhs. Rajiv Gandhi, contemporary politics. P: So. stdg.

HIS 595 Special Problems in History (3) I, II, S
Course will be subtitled in the Schedule of Courses. May be repeated to a limit of six hours.
Graduate-level courses (600-700-series courses, open only to graduate students) offered by the Department of History are listed in the Graduate School issue of the Creighton University Bulletin.

## HONORS PROGRAM (HRS)

Barry Chair and Associate Professor Welch (Director).
The Honors Program is open to students in the Creighton College of Arts and Sciences, College of Business Administration, School of Nursing, and School of Pharmacy and Allied Health Professions. It is designed to provide highly motivated students with opportunities to broaden and enrich their academic program. The curriculum of the program is oriented toward the classics, and the central issues, themes, and questions in the humanities. Qualified students are invited to apply prior to coming to Creighton; those accepted into the program may register for honors sections of the core curriculum during their first two years, for specially designed honors seminars during their junior and senior year, and work on honors projects in their major fields during their senior year. Entrance into the Program is also available to students with a year of collegiate experience. To graduate in the Honors Program a student must accumulate a minimum of twenty-four credits in honors courses, including at least two honors seminars, and complete a senior honors research project. Successful completion of the Honors Program is noted on the student's permanent academic record and transcripts.
HRS 101 Honors Christianity in Context (3) (See THL 101)
HRS 102 Honors The Modern Western World (3) (Same as HIS 102) (See HIS 101)
HRS 103 Honors Introduction to Politics (3) (Same as PLS 103)
HRS 109 Honors Critical and Historical Introduction to Philosophy (3) (Same as PHL 109)

HRS 122 Honors World Literature I (3) (Same as CNE/ENG 122)
HRS 123 Honors World Literature II (3) (Same as ENG 123)
HRS 153 Honors Principles of Communication Competence (3) (Same as COM 153)
HRS 206 Honors Sickness, Disability, and Healing in the Bible (3) (Same as THL 206) (See THL 205)

HRS 211H Honors General Physics I (4) (Same as PHY 211H)
HRS 212H Honors General Physics II (4) (Same as PHY 212H)
HRS 215 Honors Reading the Old Testament (3) (Same as THL 215)
HRS 219 Honors Synoptic Gospels (3) (Same as THL 219)
HRS 252 Honors Advanced Composition (3) (Same as ENG 252)
HRS 253 Honors Philosophical Foundations for Ethical Understanding (3) (Same as PHL 253)
HRS 285 Honors Chemistry (3) (Same as CHM 285)
HRS 286 Honors Chemistry Laboratory (2) (Same as CHM 286)
HRS 323 Honors God and Persons: Philosophical Reflections (3) (Same as PHL 323)
HRS 331 Honors Seminar in Social Science (3) OD
HRS 401 Honors Thematic Seminar (3) I 1997 and OD Interdisciplinary study of selected topic. Course will be subtitled in the Schedule of Courses.

HRS 402 Honors History Seminar (3) II 1998 and OD Topical approach to select problems in history. Course will be subtitled in the Schedule of Courses.

HRS 403 Honors Philosophy Seminar I (3) OD (Same as PHL 403) Topical approach to select problems in philosophy. Course will be subtitled in the Schedule of Courses.

HRS 404 Honors Fine Arts Seminar (3) I 1996 and OD
Study of a selected topic relating to the Fine and Performing Arts. Course will be subtitled in the Schedule of Courses.

HRS 405 Honors Political Science Seminar (3) II 1997 and OD
Topical approach to select problems in Political Science. Course will be subtitled in the Schedule of Courses.

HRS 410 Honors Seminar in the Natural Sciences (3) OD Selected advanced topic in the Natural Sciences. Courses will be subtitled in the Schedule of Courses.

HRS 420 Honors Political Science Seminar II (3) (Same as PLS 420 Seminar on American Government and Politics)

HRS 463 Game Theory and Social Choice (3) OD (Same as PLS 463)
HRS 493 Directed Independent Study (3) OD
A course of study in a particular area of interest with a faculty member cooperating with the Honors Program. Limit of three hours. May not be undertaken in the same semester as HRS 497.

HRS 497 Directed Independent Research (3) I, II
Course undertaken in the department of one's major. Students may not register for this course until research has been approved by the departmental research director. Students may enroll in this course in the spring semester of the senior year.

## INTERDISCIPLINARY COURSES (IDC)

## IDC 461 Third World Culture and Health Care (2 or 4) S

Eight-week course offered in the Dominican Republic, running mid-June through the first week of August, in the study and practice of interdisciplinary assessment, planning, implementation, and evaluation of health-care delivery in the Institute for Latin American Concern (ILAC) Summer Program. Major focus is on the team approach to episodic health-care problems. This unique experience affords the student the opportunity to actively participate in the triage of health-care problems, health assessment, collaboration and diagnosis, explanation of treatment, and education in a Third World country under the direction of faculty. Students in the School of Pharmacy and Allied Health Professions register for four semester hours. Stu-
dents in the School of Nursing register for two semester hours. Students apply and interview with ILAC before November 1 prior to that Summer Program.
IDC 491 Women in Science (1) II
Course designed to provide an historical overview of women in science while focusing on current practices. Discussion will emphasize barriers that women have faced in the past and strategies for coping, presently, in what is no longer a "man's field." Class meets once a week.

## INTERNATIONAL RELATIONS (INR) See Department of History or

 Political Science.
## JAPANESE See Department of Modern Languages and Literatures

## JOURNALISM AND MASS COMMUNICATION (JMC)

Associate Professor Wirth (Chair); Assistant Professors Davies, Hough, Maciejewski, and Zuegner.

## Field of Concentration: Journalism and Mass Communication

JMC Core Requirements (Required for all majors): JMC 111, 219, 335, 379, 382, 438, 529.

## Concentration major: Journalism

Advertising Sequence: JMC 313, 331, 347, 433 and any other JMC elective at the 300 level except internships or independent studies.

Digital Video Sequence: JMC 325, 328, 333, 477.
News Sequence: JMC 321 or 322 or 326, 331, 375, 477.
Public Relations Sequence: JMC 323, 331, 339, 341, and choice of any 300 level JMC class except JMC Core, PR Sequence, Internships or Independent Study.

Visual Communications Sequence: JMC 375, 381, and 423.
Major in Graphic Design: (See the full descripton for Graphic Design on page 251) An interdisciplinary major offered by the Department of Fine and Performing Arts and the Department of Journalism and Mass Communication. The major requires forty-two semester hours of courses consisting of:

Writing/Theory/History (9 hours): JMC 361, one 300 level or higher Art History courses (such as ART 319 or PHL 340), and JMC 313, 323, or 327.
Upper Level Visual Arts (6 hours): Any additional art studio courses (painting, sculpture, printmaking, etc.)
Independent Study or Internship (3 hours): JMC 455, JMC 479, JMC 487, or ART 497.

Public Relations Certificate for University College: Minimum of twenty-four semester hours including JMC 219, 323, 331, 339, 341, 379; and JMC 483 (six hours).
Note: In each sequence, the 300-level courses and above are to be selected according to the aims of the student after consultation with his or her major adviser.

Supporting courses: Twelve semester hours (300-level or above) in courses (approved by the major adviser) in one or more departments.

## Concentration major: Graphic Design (See Graphic Design-page 251)

## JMC 111 Introduction to Mass Communication (2) I, II

Survey of the broad aspects of modern mass communication; examination of the role of the mass media-newspapers, magazines, broadcasting, cable, cinema, public relations, advertising.
JMC 219 News Reporting (3) I, II, S
The nature of news; news values and forms; gathering and writing news; newspaper techniques and their adaptation to other media; problems and issues in news reporting. $2 \mathrm{R}, 2 \mathrm{~L} . \mathrm{P}$ : JMC 111.

JMC 313 Principles of Advertising (3) I
Principles and media of advertising. Evaluation of advertising in society and in business.

Covering government agencies, with special emphasis on documents, data collection and analysis. Researching and writing in-depth articles. 2R, 2L. P: JMC 219.

JMC 322 Feature Writing (3) I
An in-depth course in the art of writing numerous types of features for newspapers and magazines including personality profiles, in-depth examinations of issues and problems, reviews, columns, editorials and humor. Course will stress research, writing and analytical skill development. P: JMC 219 or IC.

JMC 323 Principles of Public Relations (3) I, S
The function of public relations in contemporary communications and business; methods of disseminating information and persuasion by businesses and social organizations. P: So. stdg.

JMC 325 Video Photography (3) I
An introduction to video photography as a means of developing visual "stories" or messages for mass media including TV news, public relations and online media. Basic steps and techniques in using video cameras with an emphasis on the use of video images to convey message content.

JMC 326 Sportswriting (3) II
This is an in-depth course in the art of sportswriting. During the semester, you will gain experience in learning about how to cover sports events, how to obtain and report on sports statistics and how to write a variety of sports features. Activities will include attending and writing about sports events and learning to interview coaches and players. P: JMC 219.
JMC 327 Advertising Design (3) (Same as ART 327)
Computerized design of advertising materials. P: JMC 313.
JMC 328 Video Editing (3) I
This course will consist of an in-depth introduction to editing video including extensive handson instruction in acquiring the skills of a video editor. P: JMC 325.

JMC 331 Editing (3) I, II
Fundamentals of copy editing and headline writing. P: JMC 219.
JMC 333 News Writing for the Electronic Media (3) II
An examination of the elements of radio and television news, including the methods by which news is assembled, written and reported in broadcasting and cable, with a focus on differences in writing style between the electronic and print media. 2R, 2L. P: JMC 219.
JMC 335 History of American Mass Media (3) I, II
An historical survey of the mass media in America; the forerunners of the newspaper; the partisan press; the penny press; contemporary newspapers; development of broadcasting and cable; current trends in the electronic and print media.
JMC 337 Public Opinion and Propaganda (3)
The nature and measurement of public opinion; techniques for influencing public opinion; propaganda, its nature and techniques.
JMC 339 Case Studies in Public Relations (3) II
Study of how problems in public relations have been handled by business, government and social welfare groups, and how attempted solutions to such problems have succeeded or failed. P: JMC 323.
JMC 341 Public Relations Writing (3) II, S
An in-depth examination of media relations, including press releases, sight and sound, photos, professional journals, press conferences and press briefings, special events and crisis situations. P: JMC 323, or IC.
JMC 347 Advertising Campaigns (3) II
This course provides integrated and comprehensive experiences in advertising decision making. Experience gained in advertising principles, advertising design and advertising media writing is culminated in planning, executing and proposing a comprehensive advertising campaign. Working in teams, students will approach and solve advertising problems as an agency would for a client. P: JMC 313, 323 or IC.

Approaches to writing about science and technology for general audiences. Instruction in the principal forms that professionals are customarily expected to master. P: JMC 219 or IC.
JMC 365 International Mass Communications (3) II
An examination of the operation of the mass media throughout the world-what they are like, how they operate, what impact they have on people and what policies are and could be used by the various countries to develop or regulate them. The countries studied will reflect areas of special contemporary interest.

JMC 375 Photojournalism I (3) I, II (Same as ART 375 and NAS 375)
An introduction to photography as a means of reporting news, including the use of film and/ or digital cameras to prepare photographs for print or web publication.

JMC 377 Editorial Illustration (3) (Same as ART 377)
A studio-lighting course with classes and assignments structured to the type of assignment a working photojournalist receives at a major metro daily. Includes portrait, fashion, food product, and editorial illustration. P: JMC 375.

JMC 378 Photojournalism II: Picture Editing (3) (Same as ART 378)
Principles of design for newspapers and magazines with appropriate assignments. Emphasis on the use of photographs. P: JMC 375.

JMC 379 Print Design (3) I, II, S (Same as ART 379)
Introduction to the design of the printed page using typography, photographs and graphics. Hands-on computer assignments and critiques.
JMC 381 Computer Illustration (3) I, II (Same as ART 381) Illustrating editorial and visual ideas using the Macintosh computer and a variety of computer graphic tools. The main program used will be Adobe Photoshop which will enable the students to work with and combine visual elements from photographs and artwork. P: JMC 379.

JMC 382 Web Design (3) I, II, S (Same as ART 382)
An introduction to the design of online publications, including elements of html language and graphic editing programs to create well designed web sites.
JMC 423 Interactive Multimedia Design (3) II (Same as ART 423)
An introduction to interactive media aesthetics and concerns. Techniques in designing multimedia for the web and CD-ROM distribution using Macromedia Flash. P: JMC 381, 382, and 379.
JMC 433 Advertising Copy Writing (3) II
Techniques in writing advertising copy for all media. Practical media writing assignments. P: JMC 313 or 323.

JMC 438 Media Ethics (3) I, II, S
This course explores the theoretical and practical ethical questions of mass communication as judged through the application of moral principles. Discussion of issues via case studies and simulation. P: JMC major, Sr. stdg.

JMC 455 Projects in Communication (1-3) I, II, S
Approved projects in any of the mass media. May be repeated until a maximum of six credit hours have been accrued. No more than 12 semester hours of credit may be accrued in any combination of JMC 455, 479, 481, 483, 485, 487, and 493. P: IC.

JMC 477 Advanced News Production (1-3) I, II
Production of stories, photos and advertisements for The Creightonian, Web Radio, and Yearbook. May be repeated for up to six credit hours. P: JMC 219.

JMC 479 Visual Communications Internship (1-3) I, II, S
Students will gain professional experience in graphic design through working in supervised graphic design jobs. P: JMC 379 and IC.

JMC 481 Broadcast Internship (1-3) I, II, S
Placement in a radio, television or cable facility on a part-time basis for one semester (or in a comparable period during the summer or interterm periods on either a full- or part-time basis) to learn particular problems and functions of broadcasting or cable and how they are dealt with by the sponsoring organization. If taken for less than three credit hours, may be repeated until a maximum of three credit hours have been accrued. No more than 12 semester hours of credit may be accrued in any combination of JMC 455, 481, 483 and 493. P: JMC 219; IC.

JMC 483 Public Relations Internship (3) I, II, S
Placement in a public relations department or agency on a part-time basis for one semester or during an interterm period on a full-time basis, to learn how particular problems in public relations are handled and the methods used by that department or agency to communicate with its various publics. May be repeated. No more than 12 semester hours of credit may be accrued in any combination of JMC 455, 481, 483, 485, 487 and 493. IC. P: JMC 323.
JMC 485 News Internship (1-3) I, II, S
Placement in news medium or agency on a part-time basis for one semester (or appropriate period during summer or interterm periods on either a full- or part-time basis) to gain practical experience in the procedures and functions of news gathering and editing and how they are conducted by the sponsor. No more than 12 semester hours of credit may be accrued in any combination of JMC 455, 481, 483, 485, 487 and 493. P: JMC 219; IC.

JMC 487 Advertising Internship (1-3) I, II, S
Placement in a communications medium or agency on a part-time basis for one semester to gain practical experience in the procedures and functions of planning, preparing, placing and selling advertising messages and materials. May be repeated. No more than 12 semester hours of credit may be accrued in any combination of JMC 455, 481, 483, 485, 487 and 493. P: JMC 313; IC.
JMC 493 Directed Independent Readings (1-3) S (OD)
May be repeated until a maximum of six credit hours has been accrued. No more than 12 credit hours may be accrued in any combination of JMC 455, 481, 483, 485, 487, and 493. P: IC.

JMC 529 Law of Mass Communication (3) I, II
Legal limitations and privileges affecting publishing and broadcasting; libel, copyright; constitutional guarantees and restrictions on freedom of the press; the FCC, FTC, etc. P: Jr. stdg.

## JUSTICE AND PEACE STUDIES (JPS)

Lecturer Bergman (Program Director).
The Justice and Peace Studies Program in the College of Arts and Sciences offers a 24-credithour multidisciplinary co-major and, with the Department of Sociology and Anthropology, a 43-credit-hour major in Justice and Society (JAS; see the description following). Students must first declare a major before enrolling as a JPS co-major. The co-major requires the following courses: JPS/THL 250 (satisfies the Core A ethics requirement), JPS/THL 360 (or the participation in Semestre Dominicano or JPS/THL 335 (satisfies the Core A Christian theology requirement) and JPS 395), JPS/THL 365, JPS/THL 565, a Senior Perspective (also a Core A requirement; JPS/SRP 444 is recommended), two 200 level courses teaching skills of social analysis (consult the director), and a final elective or independent study integrating the student's major with JPS issues and perspectives or investigating a single topic in depth. All JPS courses are open to all students (with the necessary prerequisites or the instructor's consent) whether or not they are JPS co-majors or JAS majors..

JPS 250 Theological Foundations for Ethical Understanding (3) I, II (See THL 250)
Study of traditional and contemporary frameworks for determining moral values and making moral decisions in a Christian context. The application of moral understandings to contemporary moral and social problems. First required course in the JPS co-major and JAS major but open to all students. P: One 100-level THL course; So. stdg. or IC.
JPS 335 Jesus Christ: Yesterday and Today (3) OD (Same as THL 335)
An historical and critical analysis of the meaning of the man Jesus of Nazareth as developed in the New Testament and in later Christian traditions. Special emphasis on contemporary theological attempts to answer the perennial question: "Who is this man?" P: One 200-level THL/PHL/JPS course and Jr. stdg. CO: JPS 395.
JPS 360 Social Justice in Theory and Practice (3) PS (Same as THL 360)
Experiential and academic inquiry into the sources of social injustices and remedies to them as seen from a Christian perspective. A service/immersion course offered in various locations. P: JPS/THL 250 or PHL 250 and IC; Jr. stdg.

JPS 365 Faith and Moral Development (1; may be repeated for a maximum of 3 credits) I, II (Same as THL 365)
A series of three one-credit-hour mini-seminars taken over three consecutive semesters. Each seminar will examine a theory of faith or moral development and a biography of a social activist such as Dorothy Day or Martin Luther King, Jr. Required of JPS co-majors; each semester is open to other students as space permits. P: JPS/PHL/THL 250 and Jr. stdg.
JPS 395 Community Service (1) OD
With the guidance of the instructor students select service sites in the Omaha community where they will volunteer 3-4 hours per week during the semester for a total of 40 hours. Students journal about their experiences each week and integrate those reflections into their theological study. P: IC. CO: JPS/THL 335.

JPS 444 Non-Violence and Peaceful Resolution of Conflict: Cross-Cultural and Political Perspectives (3) OD (Same as ANT/PLS/SRP 444)
Peace is more than the absence of war and both peace and war (or violence, in general) are socio-political constructs. This Senior Perspective seeks to understand how peoples differ in how they envision and enact peace, violence, war, non-violence, and peaceful resolution of conflict. Students will assess their own views on alternatives to violence and modes of conflict resolution by comparing different cultures, political practices, and times. P: Sr. stdg.; JPS/THL 250 or PHL 250.

JPS 495 Directed Independent Study (1-4) OD
Offered especially for JPS co-majors and JAS majors but open to any interested student. P: IC. May be repeated to a limit of 6 hours.
JPS 565 Catholic Social Teaching (3) II (Same as THL 565)
Historical development of Catholic social teaching from the 1891 publication of "The Condition of Labor" to the present. Students are encouraged to apply the core insights of the tradition to contemporary issues. Required of JPS co-majors and JAS majors. P: Two previous THL courses; Jr. stdg.

## JUSTICE AND SOCIETY (JAS)

Lecturer Bergman (Coordinator)

## Major in Justice and Society

The major in Justice and Society combines requirements for the co-majors in Sociology and Anthropology and in Justice and Peace Studies with support from other departments. All JAS courses are cross-listed from other departments and programs. Consult those listings for course descriptions. The JAS major, which may be completed with an Anthropology specialization, requires forty-three credit hours to include 9 credit hours of Core requirements; a minimum of 19 credit hours of SOC/ANT; a minimum of 9 credit hours of JPS; and a minimum of 6 credit hours outside of ANT/SOC and JPS.
Core Requirements ( 9 credit hours): SOC 101 or ANT 111; JPS/THL 250 or PHL 250; and one of the following SRP courses: SRP/SWK 422; ENG/PHL/SRP 435; ANT/JPS/PLS/SRP 444; EVS/SOC/SRP 455; SRP/PLS/THL 465; or AMS/BKS/HIS/PHL/PLS/SRP 482.
Sociology: 10 credit hours to include SOC 301, SOC 212, SOC 214.
Justice Studies: 9 or 10 credit hours to include JPS/THL 360, JPS/THL 365, and JPS/THL 565.
Elective and support courses: 15 credit hours to include at least two SOC/ANT courses (6-9 hours) and at least two courses (6-9 hours) from the following: ECO 408, PHL 348, PHL 354, PHL 358, PHL 401, PHL 451, PHL 453, PHL 455, PLS 319, PLS 327, PLS 333, PLS 334, PLS 338, PLS 372, PLS 435, PSY 344, PSY 478, SWK 261, SWK 300, SWK 365, SWK 366 and SWK 401.
Integrative elective: One SOC/ANT course allowing the integration of justice studies concerns and perspectives and for which the JPS Director serves as a consultant (SOC/ANT 457, 493, or 495); or an independent study course (JPS 495) for which a SOC/ANT professor serves as a consultant.

## LINGUISTICS See Department of Modern Languages and Literatures

## MANAGEMENT (MGT)

Associate Professor Wells (Chair); Professor Tan; Associate Professors Hoh and Moorman.

## MGT 301 Managerial Process and Organizational Behavior (3) I, II, S

An integrated approach to organization processes and behavior focusing on both individual and organization variables. Covers the behavioral science and the managerial perspective. Micro-oriented individual variables/concepts include personality, stress, perception, motivation, and learning. Interpersonal and group behavior variables/concepts include communication, power, politics, leadership processes and styles. Macro variables deal with organization structure, decision-making, control, and development/change. P: Jr. stdg.
MGT 341 Advanced Organizational Behavior (3) OD
Development of an in-depth understanding of behavioral concepts, methods, and skills which underlie managerial competence in preventing and solving problems within and between individuals and groups. Theoretical review of motivation, group dynamics, leadership behaviors, and organizational change. Various laboratory exercises and cases are used to highlight the concepts and furnish practice in applying them to management problems. P: MGT 301.

## MGT 351 Personne//Human Resources Management (3) S

Management's approach to and the principles for handling the human factor in an enterprise to maximize the productive efficiency of the firm through sound procurement, development, utilization, and maintenance of its human resources. Emphasis placed on personnel theory. Findings of the behavioral and social sciences as they relate to work are integrated with personnel philosophy, policy, and practice. P: MGT 301; Jr. stdg.

MGT 373 International Management (3) II
A global perspective of the practice of management. Topics include issues of social responsibility, corporate strategy, communication, and human resource management. P: MGT 301.
MGT 374 Management of Environmental Risk (3) OD
Examination of environmental issues relevant to management decision making. Emphasis on risk analysis related to global/regional and workplace environmental issues. P: Jr. stdg.
MGT 385 Production and Operations Management (3) I, II, S
Course treats production and operations as a major function area of business and stresses the management of the production and operations function. Where appropriate, quantitative topics are presented and solution techniques introduced to achieve a balanced view. P: BUS 229; Jr. stdg.
MGT 475 Consulting in an Entrepreneurial Environment (3) I and II
(Class meets $11 / 2$ hours per week over 2 semesters) Many skills associated with entrepreneurship cannot be learned in the classroom. Instead, they must be cultivated through experience. This course provides the opportunity for senior-level entrepreneur students to extend their classroom learning by completing consulting projects for entrepreneurial organizations, including start-ups, small and medium-sized businesses and not-for-profit organizations. P: Sr. stdg.; MGT major; BUS 311; MKT 325; and FIN 402.

## MGT 476 Business Consulting (3)

Many skills associated with entrepreneurship cannot be learned in the classroom. Instead, they must be cultivated through experience. This course provides the opportunity for seniorlevel entrepreneurship students to extend their classroom learning by completing consulting projects for entrepreneurial organizations, including start-ups, small and medium-sized businesses and not-for-profit organizations. P: Sr. stdg, ENT majors only, BUS 311, MKT 325, FIN 402.
MGT 479 Seminar in Management (3) I, II, S
Exploration and analysis of selected problems and issues in today's business environment. Course content necessarily changes each semester as selected issues are discussed. P: MGT 301 or equiv.; Sr. stdg.

## MGT 493 Directed Independent Readings (1-3) OD

Limited to students who want to develop a more in-depth knowledge of a management subject beyond the regular course coverage and who have a QPA of 3.0 or better. Sr. stdg. and Dean's approval.
Graduate-level courses (MBA courses open only to graduate students) offered by the Department of Marketing and Management are listed in the Graduate School issue of the Creighton University Bulletin under the heading Business Administration (MBA).

## MANAGEMENT INFORMATION SYSTEMS (MIS)

Professor Nath (Chair); Professor Gleason; Associate Professor Corritore and Marble; Assistant Professor Tan.

Requirements for Management Information Systems as the field of concentration-see page 128.

## MIS 353 Management Information Systems (3) I, II

Advanced management information systems concepts. Introduction to data structures and access methods, database models, decision support and knowledge work-support systems; management information systems for operations, control, and strategic planning. Life-cycle development and prototyping methodologies. P: Jr. stdg.

MIS 354 Data Base Management (3) I
Course develops both skill and knowledge relative to data base design and management. P: CSC 221; MIS 353; Jr. stdg.

## MIS 459 Information Systems Analysis and Design (3) I or II

An applied study of the process of information systems deveopment. Lectures, discussions, readings and exercises will address the areas of information analysis, requirements determination, detailed logical design, physical design, implementation planning, computer technology and organizational behavior. Through regular deliverables associated with the cumulative project file of a running case, students will follow a widely used structured development methodology (the data flow diagramming approach) in conducting team-oriented systems analysis and design projects. P: MIS 353; Jr. stdg.

MIS 464 Decision Support and Expert Systems (3) I or II
Concepts needed to develop skills in designing and using decision support systems and expert systems in the context of business decision making. P: MIS 353; Sr. stdg.

MIS 470 Data Communications and Networks (3)
This course provides an introduction to the concepts and terminology in data communication, networks, network design, and distributed information systems. These topics include equipment, protocols and architectures, transmission alternatives, the communication environment, regulatory issues, and network pricing and management. A combination of lectures, discussions, presentations, and student projects will be used to understand the dynamic field of data communications and issues surrounding it. P: MIS 354 or IC.

MIS 479 Seminar in Decision and Information Technology (3) I or II
The integration and application of current topics in management science, systems analysis and design, or computer and communication technology with a focus on improving decisionmaking effectiveness in a real-world environment. P: MIS 353; Sr. stdg.

MIS 493 Directed Independent Readings (1-3) OD
This is a directed readings course that investigates current developments in management information systems. The course permits individual students to pursue areas of interest within the field of management information systems in greater depth than is covered in the normal curriculum. It also permits a student to do independent research on a specialized topic not ordinarily treated in regular course offerings P: QPA of 3.0 or better; Sr. stdg.; DC and Dean's approval.

## MARKETING (MKT)

Associate Professor Wells (Chair); Professors Brannen and Pitts; Associate Professor Workman; Assistant Professors Adkins, Curran, and Payan.

Requirements for Marketing as the Field of Concentration - see page 128.
MKT 319 Principles of Marketing (3) I, II, S
Managerial approach to the study of the fundamental concepts and principles of marketing with emphasis on understanding the marketing concept and appropriate marketing strategy. P: ECO 203 or 301; Jr. stdg.

MKT 325 Franchising and Small Business Marketing (3) I
Application of the marketing concept with specific strategies and tactics to the small business enterprise. P: MKT 319; Jr. stdg.

## MKT 333 Consumer and Market Behavior (3) I

Study of acts of individuals involved in obtaining and using economic goods and services, including the decision processes that precede and determine those acts: consideration of the sociological, psychological, and economic aspects of purchase behavior. P: MKT 319; Jr. stdg.

MKT 335 Sales Management (3) OD
Role of the sales administrator as a professional marketing executive. Problems of organization, planning and control of sales; formulation of sales policies and management of the sales force. P: MKT 319; Jr. stdg.

MKT 343 Marketing Research (3) II
Basic research concepts and techniques; application of research findings to the formulation of marketing policies. P: MKT 319; BUS 229; Jr. stdg.
MKT 345 Direct Marketing (3) OD
A grounding in all major direct marketing media: direct mail, broadcast, print advertising, catalogs, co-ops, telemarketing, inserts and videocassettes. Emphasis on the measurability and accountability of direct marketing and its relationship to the total marketing mix. P: MKT 319, Jr. stdg.

MKT 353 Advertising and Promotion (3) I, II
The formulation and implementation of marketing communication policies and strategies relative to the total internal and external communication systems. Includes advertising, personal selling, sales promotion, and other marketing communications. P: MKT 319; Jr. stdg.

MKT 355 Services Marketing (3) I or II
Strategies for marketing services. Emphasis on the distinctive challenges and approaches that make marketing of services different from marketing of manufactured goods. P: MKT 319; Jr. stdg.

MKT 363 Global Marketing (3) I
Strategic management of international marketing activities of the firm. Planning, organizing, and implementing international marketing programs for industrial and consumer goods. Emphasis on the influence of environmental differences on marketing decisions in various countries. Lecture and case method utilized. P: MKT 319; Jr. stdg.

## MKT 473 Marketing Management: Policy and Strategy (3) II

Formulation and application of marketing strategies and policies by the analysis and solution of industrial and consumer goods cases dealing with the market, product, channels, selling, legislation, and the total marketing program. P: MKT 319; MGT 301; FIN 301; Sr. stdg.; marketing majors only.
MKT 479 Seminar in Marketing (3) I or II
Exploration and analysis of selected problems and issues in the marketing area of today's business environment. Course content changes from semester to semester. P: MKT 319.
MKT 493 Directed Independent Readings (1-3) OD
Limited to students who want to develop in-depth knowledge of a marketing subject beyond regular course coverage or to investigate current developments in marketing theory and practice. Participants must have a QPA of 3.0 or better and senior standing. Permission of the department chair and dean required. P: CoBA students only, 3.0 QPA, Sr.stdg, DC and Dean's approval.

Graduate-level courses (MBA courses open only to graduate students) offered by the Department of Marketing and Management are listed in the Graduate School issue of the Creighton University Bulletin under the heading Business Administration (MBA).

## MATHEMATICS (MTH)

Professors Cheng (Chair), Mordeson, and Malik; Associate Professors J. Carlson, and Fong; Assistant Professors Buman, Crist, and Nielsen; Instructor Wade; Adjunct Assistant Professor Mallenby.
Note: Students desiring to major in mathematics should apply to the Department and be assigned a major adviser before completing Mathematics 347.

## The Field of Concentration for the Degree of Bachelor of Science

Concentration major: Mathematics 347 and a minimum of eighteen semester hours in 500level courses, arranged with the approval of the Department and including Mathematics 529, 545, 581, and 591.

Supporting courses: Twelve semester hours in 300-, 400-, or 500-level courses (approved by the major adviser) in one or more other departments.

## The Field of Concentration for the Degree of Bachelor of Science in Mathematics-Concentration Major:

Mathematics-Mathematics 347 and thirty semester hours in 400- or 500-level mathematics courses including Mathematics $529,545,581,591$, and either 582 or 592 . Up to six hours of 300 -, 400-, or 500-level computer science or statistics courses may be substituted for 500-level mathematics courses. No supporting courses required.
Medical Mathematics-Mathematics 347 and eighteen semester hours in 400- or 500-level courses including MTH 513, 529, 545, 547, 583, and either 581 or 591.

Supporting courses: Twelve semester hours of 300-, 400-, or 500-level courses (approved by the major advisor) in one or more departments. In particular, the courses BIO 317, CHM 341 and 443 are highly recommended.
Applied Mathematics-Mathematics 347 and eighteen semester hours in 400- or 500-level mathematics courses, including Mathematics 529, 543, 545, 571, and either 581 or 591. Six semester hours in 400- or 500-level statistics courses, and six semester hours of 400- or 500level computer science courses are required. Cross-listed courses may not be used to satisfy both mathematics and computer science requirements (same with mathematics and statistics requirements). No supporting courses are required.
Mathematics/Computer Science-Mathematics 347 and fifteen semester hours in 400- or 500level courses lincluding MTH 529, 545, and either 581 or 591 . Fifteen semester hours of 400- or 500 -level computer science courses are required. Cross-listed courses may not be used to satisfy both mathematics and computer science requirements. No supporting courses are required.

## The Major for the Associate in Science Degree

Open only to students enrolled in University College. Students completing this degree must complete 64 semester hours including MTH 135, 137, 245, 246, 347, 529, 581, and 591. See the Core requirements (see page 145), and 10 hours of electives.

The Certificate Program in Mathematics - See requirements on page 146.
MTH 101 Basic Algebra (3) I, II, S
Review of our number system; topics from first year algebra such as signed numbers, linear equations, exponents, polynomials, and word problems, to form an introduction to Intermediate Algebra. Strongly recommended for the individual who has not had algebra for one or more years.
MTH 103 Intermediate Algebra (3) I, II, S
Topics from second-year algebra to form an introduction to college algebra.

## MTH 131 Earth Algebra (3) I

College Algebra material; environmental issues; functions; atmospheric carbon dioxide concentration; composite functions and inverses; global temperature and ocean level; quadratic functions; systems of linear equations and matrices; carbon dioxide emission. P: Four semesters of high school algebra.

MTH 135 College Algebra (3) I, II, S
Topics covered include linear and quadratic functions and inequalities, systems of linear equations and inequalities, exponential and logarithmic functions, polynomials and rational functions, and equations of second degree and their graphs. P: Four semesters of high school algebra.

## MTH 137 Trigonometry (3) I, II

Course covers both analytic and right triangle trigonometry. Topics covered include circular functions, trigonometric functions, rotations and angles, trigonometric identities and equations, inverse functions, triangles, vectors, and applications.

## MTH 141 Applied Calculus (3) I, II, S

Main topic is differential and integral calculus and applications. Includes sections on partial derivatives. Course designed primarily for students in the College of Business Administration but also open to students in other colleges who have sophomore standing. P: MTH 135 or DC.
MTH 201 Applied Mathematics (3) I, II, S
Foundations of quantitative reasoning, applications of systems of equations, optimization techniques, probability, and statistics.
MTH 245 Calculus I (4) I, II, S
The usual topics in plane analytic geometry integrated with the differential and integral calculus of algebraic functions.

MTH 246 Calculus II (4) I, II, S
Calculus of transcendental functions, techniques of integration, indeterminate forms, infinite series. P: MTH 245.

MTH 347 Calculus III (4) I, II
This course covers vector algebra and calculus in two- and three-dimensional space. P: MTH 246.

MTH 431 Mathematical History, Philosophy, and Ethics (3) OD (Same as HIS/SRP 431).
An examination of mathematics and mathematical ideas and their relation to philosophical and ethical views from the ancient Babylonians and Pythagoreans to the present. Special attentions will be given to non-Western mathematics, ethnomathematics, twentieth-century game theory, encryption, and ethical issues facing the mathematician and society in the past and today. The course assumes no mathematical background beyond the Core E requirements. P: Sr. stdg; PHL 250 or JPS/THL 250.
MTH 493 Directed Independent Readings (1-3) I, II
May be repeated to a limit of six hours. P: DC.
MTH 495 Directed Independent Study (1-3) I, II May be repeated to a limit of six hours. P: DC.
MTH 497 Directed Independent Research (1-3) I, II May be repeated to a limit of six hours. P: DC.
MTH 509 Discrete Structures (3) I (Same as CSC 509) Logic; Boolean algebra; switching circuits; graphs; groups; semi-groups; finite state machines; coding theory; grammars; algorithms. P: CSC 221; 6 hrs. college MTH.

MTH 513 Probability and Statistics in the Health Sciences (3) I (Same as STA 513)
This course covers topics in probability and statistics considered useful to those students planning on a career in the health sciences. The topics covered include probability principles and distributions in health sciences, types of epidemiologic study designs, estimation of medical parameters in defined patient populations, test of hypothesis, measures and analysis of treatment of the sick, analysis of variance, methods of medical outcome prediction, and prospective, retrospective and cross-sectional studies of disease occurrence. P: MTH 246.
MTH 521 Euclidean and Non-Euclidean Geometry (3) II Basic geometric concepts and applications. P: MTH 246.
MTH 525 Automata, Computability, and Formal Languages (3) OD (Same as CSC 525) Finite state concepts; acceptors; formal grammars; computability; Turing machines. P: MTH 509.

Vector spaces and subspaces; linear transformations; matrixes; eigenvalues and eigenvectors. P: MTH 246.

MTH 543 Numerical Analysis (3) OD
Numerical differentiation and integration; solutions of equations and systems of equations; polynomial approximation; error analysis and eigenvectors; applications to digital computers. P: MTH 246.

MTH 545 Differential Equations (3) I, S
This course examines qualitative, analytic, and numerical techniques for studying differential equations. Course begins with single differential equations, then covers systems of equations, $n$-th order linear differential equations, forcing, nonlinear differential equations, difference equations, and Laplace transforms. P: MTH 347.

## MTH 547 Mathematics in Medicine and the Life Sciences (3) II

This course is intended to be an overview of a variety of mathematical topics considered usefull to those students intending to pursue a career in medicine or the life sciences. The topics covered include mathematics of populations, growth of bacterial cultures, inheritance, bacterial genetics, plasmids, theory of epidemics, biography, the growth of bacteria on plates, heart and circulation, gas exchange in the lungs, electrical properties of cell membranes, and muscle mechanics. P: MTH 246.

MTH 559 Topology (3) OD
Set theory; metric spaces; topological spaces; connectedness; compactness. P: MTH 246.
MTH 561 Mathematical Statistics I (3) I, S (Same as STA 561)
Introduction to probability and probability distributions including techniques for finding expected values and variance of discrete and continuous variables. These distributions and their properties are examined to establish their application to applied statistical methods. P: MTH 246.

MTH 562 Mathematical Statistics II (3) II (Same as STA 562)
Using probability distributions as a foundation and random sampling, methods for estimating distribution parameters are developed with applications to hypothesis testing. The course also includes an introduction to linear models, regression analysis, analysis of variance and design of experiments. P: MTH 561.

MTH 563 Mathematical Statistics III (3) OD (Same as STA 563)
Optimal decision procedures, further normal distribution theory, noncentral chi-square and F distributions, introduction to the theoretical basis for analysis of variance, nonparametric methods. P: MTH 562.

MTH 567 Fuzzy Mathematics in Computer Science (3) I
Fuzzy Set Theory; fuzzy automata theory; fuzzy languages; applications to learning systems; patern recognition; fault tolerance. P: MTH 246.

MTH 571 Linear Programming (3) OD (Same as STA 571)
Introductory course in operations research. Linear models and solutions using the simplex method, duality theory and sensitivity analysis. P: MTH 529.

MTH 573 Probabilistic Models (3) OD (Same as STA 573)
Queuing theory, inventory theory, Markov processes, simulation, and nonlinear programming. P: MTH 561.
MTH 575 Introductory Stochastic Processes (3) OD (Same as STA 575)
Random walk, normal processes and covariance stationary processes, counting processes and Poisson processes, renewal counting processes, discrete and continuous parameter Markov chains. P: MTH 561.

## MTH 581 Modern Algebra I (3) I

Groups; rings; fields; applications to coding theory. P: MTH 246.
MTH 582 Modern Algebra II (3) II
Rings; ideals; field extensions; Galois theory; applications to coding theory. P: MTH 581.

Crisp sets; fuzzy sets; classical logic; fuzzy logic; fuzzy complement; fuzzy union; fuzzy intersection; crisp and fuzzy relations; similarity relations; compatibility relations; orderings; morphisms; fuzzy relational equations applications to the health sciences. P: MTH 246.

## MTH 585 Control Theory (3) OD.

Introduction to the mathematical aspects of control theory; classical control theory; linear systems; controllability; observability; stability. P: IC.

## MTH 591 Analysis I (3) I

Properties of Euclidean spaces and their applications to functions. P: MTH 246.

## MTH 592 Analysis II (3) II

Continuation of MTH 591; functions in metric spaces. P: MTH 591.
MTH 593 Complex Analysis (3) OD
Complex arithmetic, polar representations, functions of a complex variable, analyticity and the Cauchy-Riemann equations, complex integration, Cauchy Integral Formula, series, poles and residues, applications to real integration, conformal mappings. P: MTH 347.

## MTH 599 Seminar (1-3) OD

Graduate-level courses (600-700-series courses, open only to graduate students) offered by the Department of Mathematics are listed in the Graduate School issue of the Creighton University Bulletin.

## MEDICAL MICROBIOLOGY AND IMMUNOLOGY (MIC)

Offered by the Department of Medical Microbiology and Immunology of the School of Medicine.

## MIC 141 Microbiology (4) I

Introductory course, consisting of lectures, study groups, and computerized self-instruction, designed to provide nursing students with a basic knowledge of medical microbiology and immunology.

MIC 541 Medical Microbiology and Immunology (4) I
Introduction to the field of medical microbiology, focusing on the importance of immunological defenses, bacterial genetics and physiology, bacterial infections, antibacterial chemotherapy, virology, mycology, parasitology, and other related topics associated with infectious diseases in humans. R, L. P: Second year Pharm.D. student or degree seeking graduate student. Upper level undergraduate or other students require approval from course director.

## MIC 543 Essentials of Immunology (3) II

Lecture course covering the major areas of contemporary immunology including host resistance to infection, the chemistry of antigens and physiology of the immune system, immunogenetics and transplantation immunology, immunological techniques, tumor immunology, and immunopathology. P: MIC 141, 541, or IC.


## ARMY ROTC

## MILITARY SCIENCE (MIL)

Professor Werthman (Chair); Assistant Professors DeBolt, Hardwick, Preister, and Herrboldt.
For a general description of the Military Science Program refer to pages 93-96.
Program Requirements - Students enrolled in Military Science for eventual commissioning as a 2nd Lieutenant must complete the Basic Course (MIL 101, 102, 211, 212 plus MIL 100) and the Advanced Course (MIL 301, 302, 351, 401, 402, plus MIL 100). Credit for all or a portion of the Basic Course may be awarded for active or reserve military service, MIL 205, or for high school Junior ROTC. Students interested in Army ROTC can stop by the Military Science Building or call (402) 280-2828.

MIL 100 Leadership Laboratory (0) I, II
Leadership Laboratory provides initial and advanced military leadership instruction in military courtesy, first aid, and practical field training exercises. Functions and responsibilities of leadership positions are developed through cadet command and staff positions.

MIL 101 Introduction to Officer Professionalism I (1) I, II
Examination of the role of the commissioned officer in the United States Army. Discussion focuses upon officer career opportunities, role of the officer, responsibilities of and basis for the armed forces, and sources of officer commissioning.

MIL 102 Introduction to Officer Professionalism II (1) II
Continuation of MIL 101. Further examines the role of the commissioned officer in the U.S. Army. Focuses on customs of the service; role of the Army, Army Reserve, and Army National Guard; organization of the Army; branches of the Army; and leadership principles for the junior officer.
MIL 200 Leadership Laboratory II (0) I, II
This second-year leadership laboratory parallels MIL 211/212 classroom instruction, reinforcing concepts learned in class with practical hands-on training exercises and activities. Training is focused on more advanced individual and collective small unit skills such as small unit leadership and tactics doctrine, land navigation, basic rifle marksmanship, and drill and ceremonies. Required with enrollment in MIL 211 and MIL 212. May be repeated one time.

MIL 202 United States Military History (3) I, II, S
A study of the theory and practice of war beginning in colonial times through the military engagements and peace keeping operations of the 1990's. Emphasis is on United States participation in these military operations.

MIL 203 Military Art of the Modern Army (3) II
A study and application of U.S. Army doctrine based on the Army's keystone field manual FM-100-5 Operations. Students learn doctrinal definitions and the fundamentals that are common to all Army, joint and combined Operations. Special emphasis is on learning the staff functions and the introduction to the military decision-making process.
MIL 205 ROTC Basic Camp (3) S
Six weeks of preparatory training at Fort Knox, Kentucky. Travel pay and salary stipend provided through the Military Science Department. The student is not obligated to any military service as a result of attending Basic Camp. Camp graduates are eligible to enroll in Advanced Military Science courses. Students are also eligible to compete for full-tuition twoyear scholarships. P: DC.
MIL 207 Fundamentals of Army Ranger Training (2) I
Course designed to challenge the individual in leadership, physical endurance, special operations and small-unit tactics. Competitive area success would lead to regional championship participation at Fort Lewis, Washington.

MIL 208 Advanced Army Ranger Training (2) II
Continuation of MIL 207.

Course designed to develop student leadership and critical individual skills. Training is basic in nature and includes leadership techniques, written and oral communication, rifle marksmanship, fundamentals of land navigation, and physical fitness. P: MIL 101, 102 or DC.

MIL 212 Advanced Individual Leadership Techniques (1) II
Continues the development of student leadership and critical individual military skills. Training focuses on advanced military skills and includes orienteering, field survival skills, operation and training. P: MIL 211.

MIL 300 Leadership Laboratory III (0) I, II
This laboratory parallels MIL 301/302 classroom instruction and places the student in leadership positions within the cadet corps, providing greater challenges in order to build confidence and enhance mastery of individual skills. Activities focus on honing military skills and mastery of small unit leadership and tactics in preparation for MIL 351, ROTC Advanced Camp in Fort Lewis, Washington. Required with enrollment in MIL 301 and MIL 302. May be repeated one time.

MIL 301 Fundamentals of Small Unit Tactics and Leadership (3) I
Course designed to introduce the Advanced Course military science student to the technical skills required to become an effective small unit leader. Includes fundamentals of terrain navigation, oral and written communication skills, basic troop leading procedures, and an introduction to opposing forces capabilities, organization and equipment. Includes field training exercise. P: MIL 211, 212 or DC.

MIL 302 Advanced Small Unit Leadership and Tactics (3) II
Course involves the study and application of small unit tactics with emphasis on planning and organizing principles learned in MIL 301. Designed to develop the self-confidence and leadership abilities as well as the technical competence needed by the Advanced Course student to complete Advanced Camp Training conducted at Ft. Lewis, Washington. Includes field training exercises. P: MIL 301.

MIL 351 ROTC Advanced Camp Training (3) S
The ROTC cadet attends five weeks of intensive leadership and management training. The training is conducted during the summer months between the junior and senior years at Fort Lewis, Washington. The student's ability to lead his or her unit and to plan and conduct military small unit operations is thoroughly evaluated. Travel pay and salary stipend provided through the Department of Military Science. P: DC.

## MIL 400 Leadership Laboratory IV (0) I, II

Laboratory designed to allow senior cadets to demonstrate mastery of leadership and tactical skills developed throughout their cadet career in preparation for becoming commissioned Army officers. The cadet battalion staff plans, resources, and executes training for the MIL 100, 200 and 300 labs. Additionally charged with the leadership development and assessment of the underclassman, with focus on the junior class in preparation for Advanced Camp at Fort Lewis, Washington in the summer. Required with enrollment in MIL 401 and MIL 402. May be repeated one time.
MIL 401 Military Professionalism and Ethics (2) I
Seminar on contemporary problems facing junior officers dealing with ethics and military professionalism. Standards of conduct are explained and applied to practical simulations utilizing the ethical decision-making process. P: MIL $301 \& 302$ or DC.
MIL 402 Military Management Seminar (2) II
Leadership and management problems involved in the operation of a small unit including personal affairs, military justice, moral and social duties and obligations of a military officer. P: MIL 401.

MIL 493 Directed Independent Readings (2) I, II
Directed readings course designed to consider an issue or field of interest to society in general and the military in particular. P: DC.

MIL 494 Directed Independent Study and Seminar I (2) I
Directed study course designed to consider an issue or field of interest to society in general and the military in particular. P: DC.

## AIR FORCE ROTC

## AEROSPACE STUDIES (AES)

Air Force Reserve Officers Training Corps (AFROTC) training leading to a commission as a second lieutenant in the United States Air Force is available to qualified Creighton students (male or female) through the AFROTC Program at the University of Nebraska at Omaha (UNO). Creighton students register for the courses at Creighton but attend Aerospace Studies Classes at UNO while pursuing their degree at Creighton. This opportunity results from an agreement between Creighton and UNO that permits Creighton students to participate in the AFROTC Program at the University of Nebraska at Omaha. Creighton students interested in the program should contact the AFROTC Detachment 470, Room 260, Arts and Science (ASH) Building, telephone 402-554-2318, at the University of Nebraska at Omaha to obtain further information.

Following are the Aerospace Studies courses of the four-year program:


#### Abstract

AES 001 Leadership Laboratory (0) I, II The AS 100 and AS 200 Leadership Laboratory courses (LLABs) include a study of Air Force customs and courtesies, drill and ceremonies, and military commands. The LLAB also includes studying the environment of an Air Force officer and learning about areas of opportunity available to commissioned officers. The AS 300 and AS 400 LLABs consist of activities classified as leadership and management experiences. They involve the planning and controlling of military activities of the cadet corps, and the preparation and presentation of briefings and other oral and written communications. LLABs also include interviews, guidance, and information that will increase the understanding, motivation, and performance of other cadets.


AES 131-132 The Foundations of the United States Air Force, I \&II (1)
Survey courses designed to introduce students to the United States Air Force and Air Force Reserve Officer Training Corps. Featured topics include: mission and organization of the Air Force, officership and professionalism, military customs and courtesies, Air Force officer opportunities, and an introduction to communication skills, Leadership Laboratory is mandatory for AFROTC cadets and complements this course by providing cadets with followership experiences.

AES 231-232 The Evolution of USAF Air and Space Power, I \& II (1)
The courses are designed to examine general aspects of air and space power through a historical perspective. Utilizing this perspective, the course covers a time period from the first balloons and dirigibles in the space-age global positioning systems of the Persian Gulf War. Historical examples are provided to extrapolate the development of air Force capabilities (competencies), and missions (functions) to demonstrate the evolution of what has become today's USAF air and space power. Furthermore, the course examines several fundamental truths associated with war in the third dimension: e.g.. Principles of War and Tenets of Air and Space Power. As a whole, this course provides the students with a knowledge level understanding for the general element and employment of air and space power, from an institutional doctrinal and historical perspective. In addition, the students will continue to discuss the importance of the Air Force Core Values with the use of operational examples and historical Air Force leaders and will continue to develop their communication skills. Leadership Laboratory is mandatory for AFROTC cadets and complements this course by providing cadets with followership experience.

AES 311-312 Air Force Leadership Studies, I \& II (3)
A study of leadership , management fundamentals, professional knowledge, Air Force personnel and evaluation systems, leadership ethics, and communication skills required of an Air Force junior officer. Case studies are used to examine Air Force leadership and management situations as a means of demonstrating and exercising practical application of the concepts being studies. A mandatory Leader ship Laboratory complements this course by providing
advanced leadership experiences in officer-type activities, giving students the opportunity to apply leadership and management principles of this course.

## AES 411-412 National Security Affairs/Preparation for Active Duty, I \& II (3)

These courses examine the national security process, regional studies, advanced leadership ethics, and Air Force doctrine. Special topics of interest focus on the military as a profession, officership, military justice, civilian control of the military, preparation for active duty, and current issues affecting military professionalism. Within this structure, continued emphasis is given to refining communication skills. A mandatory Leadership Laboratory complements this course by providing advanced leadership experiences, giving students the opportunity to apply the leadership and management principles of this course.
AES 490 Advanced Air Force Leadership and Planning Seminar (1-3)
This course instructs Air Force officer candidates on advanced leadership principles and planning/organizational skills through a series of group and individual projects. Special emphasis is placed on communication skills., In addition, topics on performance feedback/reporting, drill and ceremonies, and ethics are discussed. This course is intended for cadets in key leadership positions within the 470th Cadet Wing. P: Students must be enrolled in the Professional Officer Course (Junior and Senior-level AFROTC cadets) and hold one of the key positions in the Cadet Wing. Written permission by the instructor is required for students to enroll in the course.

## MODERN LANGUAGES AND LITERATURES

Associate Professor Coffey (Chair); Associate Professors Recio, Rodrigo, and Romero-Downing; Assistant Professors Böhlke, Evers, Gibbs, Rempel Hoy, Santiago-Stommes, Vanchena, and Vanderboegh; Instructor Unno; Adjunct Instructors Mena-Böhlke, Phillips, and Watts; Lecturer McCormack.

## Fields of Concentration

Major in French, Co-major in German and Spanish: Eighteen semester hours in 300-level courses and above in the respective languages. Primary major in German and Spanish: Twentyone hours in 300-level courses and above. Certificate in German: Fifteen semester hours in 300 -level courses and above. Selection of upper-division courses must be approved by the major advisor in the respective language.

Supporting courses: Twelve semester hours of 200-500-level course work in one or more departments arranged with the department and approved by the major advisor.

Teacher certification: Students who intend to teach languages should consult with the Education Department and with the appropriate agency in the state in which they intend to teach.

Core Language Requirement: For more information about the Core language requirement, please consult the departmental website at www.creighton.edu $/ \mathrm{ml}$ or the College of Arts and Sciences website at www.puffin.cu.edu/ccas/students/language.html.

## FRENCH (FRN)

FRN 111 Beginning French I (3) I, II
Course designed to focus on the essential elements of basic communication and develop all four language skills (listening, speaking, reading, and writing), as well as provide insight into the life and culture of French speaking countries.

## FRN 112 Beginning French II (3) I, II <br> Continuation of FRN 111. P: FRN 111 or equivalent.

FRN 115 Intensive Beginning French (6) S
Course designed to focus on the essential elements of basic communication and develop all four language skills (listening, speaking, reading, and writing), as well as provide insight into the life and culture of French speaking countries. Students who have already taken college French must consult with the department before registering for this course.
FRN 211 Intermediate French I (3) I, II
Course designed to help students make the transition to natural communication and to develop further all four language skills (listening, speaking, reading, and writing) by using literary/ cultural readings and grammatical exercises. P: FRN 112 or FRN 115 or equivalent.

FRN 212 Intermediate French II (3) I, II
Development of a more advanced ability in reading, speaking, listening, and writing in French. P: FRN 211 or equivalent.

FRN 311-312 Advanced French $(3,3)$ OD
Development of refined accurate expression in speaking and writing. P: FRN 212 or equivalent.

FRN 314 Business French Communication (3) OD
Course focuses on the study of the language and the cultural context specific to business communication in French. P: FRN 212 or or equivalent.
FRN 327 French Literature Before the French Revolution (3) OD
A study of representative authors, literary works, and literary movements before 1789. P: FRN 311 or FRN 312 or IC.
FRN 328 French Literature After the French Revolution (3) OD
A study of representative authors, literary works and literary movements after 1789. P: FRN 311 or FRN 312 or IC.

## FRN 411 Advanced Spoken French (3) OD

Review of practical structures; building of a practical vocabulary; exercises designed to develop the ability to understand and express oneself orally. P: FRN 311and FRN 312 or IC.

FRN 412 Advanced Written French (3) II 2001-2002
Review of structures used in written French, vocabulary enhancement, translation techniques, introduction to practical stylistics; exercises designed to develop clear expression in written French. P: FRN 311 and FRN 312 or IC.

FRN 493 Directed Independent Readings (1-3) OD
Designed to meet the special needs of majors in French. P: IC only. Limit of three semester hours.

FRN 522 French Civilization Before the French Revolution (3) OD
Study of the history, philosophical movements, and general cultural developments in France from the earliest times until 1789. P: One 300-level FRN course or IC.

FRN 524 French Civilization After the French Revolution (3) OD
Study of the history, philosophical movements, and general cultural developments in France from 1789 to the present time. P: One 300-level FRN course or IC.
FRN 525 Paris, Ville du Monde (Paris City of the World) (3) S
A travel course designed to offer the novice a comprehensive introduction to the city of Paris. More advanced students will have the opportunity to concentrate on a particular topic of interest while building upon prior knowledge. P: One 200-level FRN course or IC.
FRN 540 French Literature: Middle Ages (3) OD
Study of the texts and literary movements of the Medieval period. Introduction to some of the older works in the original language. P: One 300-level FRN course or IC.
FRN 542 French Literature: Renaissance (3) OD
Study of the texts and literary movements of the 16th century. Readings from Rabelais, Montaigne, Ronsard, DuBellay and others. P: One 300-level FRN course or IC.

FRN 543 French Literature: 17th Century (3) OD
Study of the texts and literary movements of 17th century France. Readings from Malherbe, Corneille, Descartes, Pascal, Racine, La Fontaine, La Rochefoucauld and others. P: One 300level FRN course or IC.

FRN 544 French Literature: 18th Century (3) II 2001-2002
A study of the texts and literary movements of 18th century France. Readings from Montesquieu, Voltaire, Diderot, Chénier, Rousseau and others. P: One 300-level FRN course or IC.
FRN 548 French Literature: 19th Century (3) OD
From "La Genie du Christianisme" to Naturalism; the most important literary movements; Romanticism, Parnasse and Symbolism (poetry). History, the Critics, Realism and Naturalism. From Hugo to Loti and France. P: One 300-level FRN course or IC.

Study of texts and literary movements from the turn of this century to the present with texts chosen to give both a depth and breadth of understanding for this period. P: One 300-level FRN course or IC.
FRN 557 French Poetry (3) OD
Close examination and study of selected works from the Middle Ages to the present. P: One 300 -level FRN course or IC.

FRN 564 History of the French Language (3) OD
The development of the French language; general linguistic principles, the Celtic substrata, the Latin base, the various superstrata, from the earliest to modern times. P: One 300-level FRN course or IC.

## GERMAN (GER)

GER 111 Beginning German I (3) I, II
Course designed to focus on the essential elements of basic communication and develop all four language skills (listening, speaking, reading, and writing), as well as provide insight into the life and culture of German speaking countries.
GER 112 Beginning German II (3) I, II
Continuation of Ger 111. P: GER 111 or equivalent.
GER 115 Intensive Beginning German (6) S
Course designed to focus on the essential elements of basic communication and develop all four language skills (listening, speaking, reading, and writing), as well as provide insight into the life and culture of German speaking countries. Students who have already taken college German must consult with the department before registering for this course.
GER 211 Intermediate German I (3) I, II
Course designed to help students make the transition to natural communication and to develop further all four language skills (listening, speaking, reading, and writing) by using literary/cultural readings and grammatical exercises. P: GER 112 or GER 115 or equivalent.
GER 212 Intermediate German II (3) II
Development of a more advanced ability in reading, speaking, listening, and writing in German. P: GER 211 or equivalent.
GER 311 Advanced German: Conversation Oriented (3) OD
Study of all aspects of refined and accurate German with emphasis on speaking based on literary and non-literary texts. P: GER 212 or equivalent.
GER 313 Advanced German: Composition Oriented (3) OD
Development of all aspects of refined and accurate German with emphasis on written expression based on selected texts and topics. P: Ger 212 or equivalent.
GER 321 German for Business and Economics I (3) OD
Designed for students who wish to develop specialized language competence in business German and to understand economical and administrative aspects of business practice. P: GER 212 or equivalent.
GER 411 Introduction to German Literature (3) OD
Reading and discussion of major authors and their works as well as German literary movements/periods from the Middle Ages to the present. P: One 300-level GER course or IC.
GER 493 Directed Independent Study (1-3) OD
Studies in literature, civilization, or linguistics. For majors in German only. Limit of three hours. P: IC.
GER 511 German Civilization and Culture of the Middle Ages (3) OD
Development in language, social structure, religion, philosophy, education, art, architecture from the Germanic Era to the Renaissance. P: One 300-level GER course or IC.

GER 513 German Civilization and Culture from the Reformation to German Romanticism (3) OD
Developments in art, architecture, music, literature, religion, language, education, social structures during the Reformation, Baroque, Enlightenment and Classic Periods. P: One 300-level GER course or IC.

GER 515 German Civilization and Culture from the Creation of the Second German Empire to the Foundings of the Federal and Democratic Republics (1848-1948) (3) OD
Investigation of the interdependence between the historical development and cultural phenomena prior to the foundation of the "Kaiserreich" up to the establishment of the two German Republics. Particular attention devoted to the relationship of history and selected topics in literature, art, architecture, and music. P: One 300-level GER course or IC.
GER 521 German Literature from Middle Ages to the Reformation (3) OD
Reading and discussion of representative authors and selections of their works (Hildebrandslied, Niebelungenlied, Parzival, Tristan und Isolde, The Plowman from Bohemia, Martin Luther). P: One 300-level GER course or IC.

GER 525 The New Berlin (3) S
Students will explore the culture, history and politics of Berlin, a city undergoing radical transformation since the fall of the Berlin Wall in 1989 and German unification in 1990. Through walking tours and visits to sites such as the museum at Checkpoint Charlie, the Reichstag and Alexanderplatz, students will learn how the history and culture of the past continue to shape the future of Berlin, the new capital of the Federal Republic of Germany. P: One 200-level GER course or IC.
GER 527 German Literature of the 19th Century (3) OD
Reading and discussion of representative movements (Classicism, Romanticism, Realism, and Naturalism), their major authors and works. P: One 300-level GER course or IC.

GER 529 Contemporary German Literature (3) OD
Discussion of 20th century German literary movements with special emphasis on literature after 1945. P: One 300-level GER course or IC.

GER 531 German Romanticism: Literature, Art, and Music (3) OD
Study of authors and literary masterworks of German Romanticism and examination of the relationship of romantic literature, art, and music. P: One 300-level GER course or IC.

GER 541 German Narrative Prose (3) OD
Reading and discussion of various literary forms of major German works written in prose. P: One 300-level GER course or IC.

GER 543 German Drama (3) OD
Development of the German drama from the 18th century to the present: Lessing, Goethe, Schiller, Kleist, Hebbel, Hauptmann, Kaiser, Brecht, Dürrenmatt and others. P: One 300level GER course or IC.

GER 545 German "Novelle": 19th and 20th Centuries (3) OD
Study of the development and tendencies of the German short novels in the nineteenth and twentieth centuries. P: One 300-level GER course or IC.
GER 568 The Multiplicity of German Culture: Cultural Differences and Marginality (3) I 2002-2003 Students will explore the voices of marginalized groups in Germany. A variety of ethical views will be employed to evaluate those strategies used to marginalize and those used to break down marginalization in social contexts. Students will discover how these groups find expression in German society and what strategies these groups employ for their survival Students will also study German language, literatures, and film while gaining a deeper understanding of the existing relationships between Germany's main culture and the cultures of marginalized groups. P: One 300-level GER course or IC.
GER 572 Reading German Films (3) II 2001-2002
This course offers an introduction to film analysis and eighty years of filmmaking in Germany. Films from the Weimar Republic to the 21st century are screened and discussed within the context of cultural and political history. The selected films, which range from silent movies to recent works by some of the world's most influential directors, present a broad spectrum of aesthetic and political perspectives that include Expressionism, Nazi propaganda, and postunification social criticism. P: One 300-level GER course or IC.

## JAPANESE (JPN)

## JPN 111 Beginning Japanese I (3) I

Pronunciation, fundamentals of conversation, listening comprehension, basic features of sentence structure, reading, oral and written exercises.

JPN 112 Beginning Japanese II (3) II Continuation of JPN 111. P: JPN 111 or equivalent.
JPN 211 Intermediate Japanese I (3) I
Continuation of JPN 112. P: JPN 112 or equivalent.
JPN 212 Intermediate Japanese II (3) II
Development of a more advanced ability in reading, speaking, listening and writing in Japanese. P: JPN 211 or equivalent.
JPN 311 Advanced Japaneese I (3) I
This course develops a refine and accurate expression of spoken and written Japanese. P: JPN 212 or equivalent.

## LINGUISTICS (LNG)

## LNG 511 General Linguistics (3) OD

The nature of language, sound and symbol, dialect and language, the languages of the world, methods and disciplines of modern linguistics, phonetics; morphology, syntax, lexicology, the comparative method and related topics.

## RUSSIAN (RUS)

## RUS 111 Beginning Russian I (3) I

Fundamentals of the pronunciation and structure of the Russian language; practice in speaking, listening, reading and writing at a basic level. Designed particularly for those enrolled in Creighton's Lithuanian programs but open to all.

## RUS 112 Beginning Russian II (3) II

Continuation of RUS 111. Fundamentals of the pronunciation and structure of the Russian language; practice in speaking, listening, reading and writing at a basic level. Designed particularly for those enrolled in Creighton's Lithuanian programs but open to all. P: RUS 111 or equivalent.
RUS 211 Intermediate Russian I (3) I
Continuation of the study of Russian begun in RUS 111 and RUS 112. Course designed to make the transition to natural communication and to develop further all four language skills (reading, writing, speaking, listening). Designed for those enrolled in Creighton's Lithuanian programs but open to all. P: RUS 112 or equivalent.

## SPANISH (SPN)

## SPN 111 Beginning Spanish I (3) I, II

Course designed to focus on the essential elements of basic communication (listening, speaking, reading, and writing), as well as provide insight into the life and culture of Spanish speaking countries.

SPN 112 Beginning Spanish II (3) I, II
Continuation of SPN 111. P: SPN 111 or equivalent.
SPN 113 Beginning Spanish for the Medical Professions I (3) I OD
Fundamentals of the pronunciation and structure of Spanish; practice in speaking, listening, reading, and writing with emphasis on vocabulary related to medical situations. Designed for students planning careers in medicine, dentistry, nursing, and pharmacy and allied health but open to all. NOTE: This is an alternative beginning level course to SPN 111. It is not open to those who have already taken SPN 111 and/or 112, and it is open only to nonnative speakers of the language.

## SPN 114 Beginning Spanish for the Medical Professions II (3) OD

Continuation of Spanish 113. Expansion to more complex sentence structure in speaking, listening, reading and writing with emphasis on vocabulary related to medical situations. Designed for students planning careers in medicine, dentistry, nursing, and pharmacy and allied health but open to all. NOTE: This is an alternative course to SPN 112. It is not open to those who have taken SPN 112, and it is open only to nonnative speakers of the language. P: SPN 111 or SPN 113 or equivalent.

SPN 115 Intensive Beginning Spanish (6) S
Course designed to focus on the essential elements of basic communication and develop all four language skills (listening, speaking, reading, and writing), as well as provide insight into the life and culture of Spanish speaking countries. Students who have already taken college Spanish must consult with the department before registering for this course.

SPN 150 First Year Spanish in the Dominican Republic (3) I, II
Taught in the Dominican Republic, the First Year Spanish course has, essentially, a communicative focus. The course develops the four skills of language: speaking, listening, reading and writing. Within the course, pronunciation, vocabulary and grammar are practiced. There will be lectures and discussion over selected themes. P: SPN 111 or equivalent.
SPN 211 Intermediate Spanish I (3) I,II
Course designed to help students make the transition to natural communication and to develop further all four language skills (listening, speaking, reading, writing) by using literary/ cultural readings and grammatical exercises. P: SPN 112 or SPN 115 or SPN 150 or equivalent.

SPN 212 Intermediate Spanish II (3) I, II
Development of a more advanced ability in reading, speaking, listening, and writing in Spanish. P: SPN 211 or SPN 250 or equivalent.
SPN 213 Intermediate Spanish for the Medical Professions I (3) II 2001-2002
This course is designed to help students make the transition to natural communication in the context of medical situations and to develop further all four language skills (listening, speaking, reading, writing) through the study of vocabulary, dialogues, readings and grammatical exercises pertaining to health-related professions. P: SPN 112 or SPN 114 or SPN 115 or SPN 150 or equivalent.

SPN 250 Second Year Spanish in the Dominican Republic (3) I, II
Taught in the Dominican Republic, this intermediate-level Spanish course has a communicative orientation. Its principal objective is to develop the student's ability in reading, writing, speaking and understanding Spanish. P: SPN 112 or SPN 115 or SPN 150, or equivalent.

SPN 301 Spanish for Spanish Speakers (3) OD
Spanish for Spanish Speakers is a course designed for native speakers of Spanish who have an ability to understand and converse in Spanish, who lack formal study of the language and who wish to refine their knowledge and capabilities in this area. This course is intended to develop and/or enhance all four language skills: reading, writing, speaking and understanding, taking into account the particular problems encountered by native speakers of Spanish. In addition to language-specific materials, the course will utilize cultural readings from Spanish-speaking authors from the United States and Latin America. P: Spanish comprehension and speaking ability.

SPN 311-312 Advanced Spanish I-II (3, 3) I, II
Development of refined accurate expression in speaking and writing; selected readings. P: SPN 212 or SPN 250 or equivalent.

SPN 313 Advanced Spanish Conversation (3) I, II
Development of oral communication skills through extensive vocabulary building and its practical application. P: SPN 212 or SPN 250 or equivalent.
SPN 314 Communicating in Business (3) OD
Oral and written practice in business communication; developing a business vocabulary; reading of documents and essays relating to business situations; interviewing; translating (English to Spanish/Spanish to English). P: SPN 212 or SPN 250 or equivalent.

SPN 321 Civilization and Culture of Spain (3) OD
The history and culture of Spain from its origins to the present. P: SPN 311 or SPN 312 or IC.

A study of the Latin-American culture from Pre-Columbian times to the present, through its history, art, architecture, music, philosophy, and education. P: SPN 311 or SPN 312 or IC.

SPN 323 Survey of Latin American Literature (3) OD
Latin American literature is studied from the Colonial Period to the present incorporating some of the most influential writers in Spanish America and giving women authors the representation they merit. Readings include texts from Cristóbal Colón, Sor Juana Inés de la Cruz, Esteban Echeverría, Rubén Darío, Gabriela Mistral, Octavio Paz, García Márquez, Rosario Ferré, Jorge Luis Borges and Luisa Valenzuela. P: SPN 311 or SPN 312 or IC.
SPN 325 Introduction to Literary Analysis (3) OD
An introduction to literary analysis with readings from Spanish and Latin-American literature. P: SPN 311 or SPN 312 or IC.

SPN 327 Survey of Peninsular Literature (3) OD
Through the reading of selections from Spain's major literary works, this course introduces some of the most important issues in Peninsular social history and analyzes the different perspectives that have evolved with every new literary movement. P: SPN 311 or SPN 312 or IC.
SPN 423 Latin American Feminine Voices (3) OD
The principal objective of this course is to help the student to improve comprehension of Latin American literature texts and the ability to express this understanding in writing. The course will emphasize vocabulary, linguistic structures, as well as latin American cultural aspects and general characterizations. P: SPN 311 or SPN 312 or IC.
SPN 493 Directed Independent Readings (1-3) OD
For majors in Spanish. P: IC. Limit of three hours.
SPN 541 Medieval Spanish Literature (3) OD
This course provides an insight to the most important writings of the Spanish Middle Ages and focuses on the three masterpieces of the period (Mio Cid, Libro de Buen Amor and La Celestina), but also emphasizes other poetic genres such as ballads and cancioneros. P: SPN 311 or SPN 312 or IC.

SPN 542 Golden Age Literature (3) OD
A study of the major literary figures of the Spanish Golden Age (16th and 17th centuries) such as Garcilaso, Quevedo, Cervantes and others. P: SPN 311 or SPN 312 or IC.
SPN 544 Spanish Peninsular Narrative (3) OD
A study of representative narrative texts from the late nineteenth and the twentieth centuries. P: SPN 311 or SPN 312 or IC.
SPN 545 15th Century Sentimental Novel (3) OD
Analysis of this late medieval genre based on the relationship between lovers who have never had any physical contact. Among various works, Siervo Libre de Amor and La Carcel de Amor will be examined. P: SPN 311 or SPN 312 or IC.
SPN 549 Twentieth Century Spanish Drama (3) OD
Reading and analysis of plays by the following dramatists: García Lorca, Casona, Buero Vallejo and others. P: SPN 311 or SPN 312 or IC.

SPN 550 Literature of the Colonial Period (3) II 2001-2002
Study of the major works from Columbus to Juana Inés de la Cruz. P: SPN 311 or SPN 312 or IC.

SPN 551 Latin-American Novel (3) II 2001-2002
An introduction to the Latin-American novel, literary movements and techniques focusing on major writers such as García Márquez, Vargas Llosa, Luisa Valenzuela, Isabel Allende, etc. P: SPN 311 or SPN 312 or IC.

SPN 552 The Latin-American Short Story (3) OD
Study of the Latin-American short narrative from the nineteenth century to the present. Selected stories by Echeverría, García Márquez, Rosario Ferré, Elena Poniatowska, Julio Cortázar, Jorge Luis Borges, and others. P: SPN 311 or SPN 312 or IC.

Analysis of works by contemporary authors of Hispanic descent born or residing in the United States. It will include but will not be limited to the following authors: Richard Rodriguez, Julia Alvarez, Cristina Garcia, Sandra Cisneros, Roberto Fernandez, Sandra Benitez and Esmeralda Santiago. P: SPN 311 or SPN 312 or IC.
SPN 554 Twentieth Century Latin-American Poetry (3) OD
A study of Latin-American poetry from the Vanguardista period to the contemporary scene. P: SPN 311 or SPN 312 or IC.

SPN 555 Twentieth Century Latin-American Theater (3) OD
A study of Latin-American theater from the end of the nineteenth century to the present. P: SPN 311 or SPN 312 or IC.

SPN 557 Contemporary Spanish Poetry (3) OD
A selection of works and styles of the nineteenth and twentieth centuries. P: SPN 311 or SPN 312 or IC.

SPN 561 The Generation of 1898 (3) OD
Reading and analysis of the major works of the following novelists and nonfiction writers: Unamuno, Valle-Inclán, Baroja, and Azorín. P: SPN 311 or SPN 312 or IC.

## MUSIC See Department of Fine and Performing Arts.

## NATIVE AMERICAN STUDIES PROGRAM (NAS)

An interdisciplinary program leading to a degree in Native American Studies.
Associate Professor Grandbois, (Interim Director, SWK)
Program goals are 1) Promote awareness, and appreciation for cultural diversity, principally Native American (Native) peoples, through the academic, research and service functions of the University and College of Arts and Sciences, 2) Link with area Native organizations and peoples to assist in identifying and alleviating social problems and issues, 3) Promote cross-cultural understanding and reconciliation/healing between American and Native communities, 4) Support and encourage scholarship/research about, with and for Native communities.
Admissions Criteria
A. Any student may apply for a major in the Native American Studies program. Requirements include

1. Successful completion of NAS 101 Introduction to Native American Studies
2. Students intending to enter the major must take above course for a letter grade and receive a minimum of "C" in the course and possess a 2.0 GPA .
B. To enter the major, a student must file a declaration of major form in the College of Arts and Sciences.
C. All courses applied toward the major must be enrolled for/completed for a letter grade and have a minimum of " C ".
D. An overall GPA of 2.0 is required to remain in the program.

Students declaring a major in Native American Studies will be assigned a faculty advisor from the Native American Studies program or relevant departments (e.g. Sociology, Anthropology, Fine Arts, Social Work).

## Major

The major in Native American Studies consists of 30 credit hours: 18 cr . hrs foundation (NAS/ SOC 101, NAS/SOC 108, NAS/ANT 209, NAS/ANT 320, NAS/ANT 343, NAS/SWK 365). Students must complete a 3 cr . hr course from each of the Groups-A, B, C and D. Twelve (12) credit hours of support courses are required and approved in conjunction with a faculty advisor.
Foundation-Basic/required courses 18 cr. hrs (All courses in this category are required)

NAS/SOC 101 Introduction to Native American Studies (3)
NAS/SOC 108 Native American History: Pre-contact to present (3)
NAS/ANT 209 Qualitative Methods for the Social Sciences (3)

# NAS/ANT 320 Native American World View, Culture \& Values (3) P: NAS 101 <br> NAS/ANT 343 Native Cultures of North America (3) <br> NAS/SWK 365 Issues of the Native American Experience (3) <br> Group A: Native American Art. Literature, Leisure. Culture 3 cr. hrs NAS/ART 468 Native American Art (3) * <br> Group B: Tribal Institutions, Policy and Governmental Relations 3 cr. hrs NAS 333 Federal Indian Policy \& Law (3) 

Group C: Native American Experience, Ideologies and Popular Culture 3 cr . hrs NAS/JMC/ART 375 Photojournalism
Group D: Electives 3 cr . hrs
NAS/ANT 369 Ethno/history of Native American Peoples (3) (Certified writing)
Support courses: 12 cr. Hrs.
Approved in conjunction with faculty advisor. This allows students to transfer credits from their respective colleges/majors and disciplines into the Native American Studies program.

NAS 101 Introduction to Native American Studies (3) I, II (Same as SOC 101)
This course examines the unique aspects of tribalism and provides an introduction and foundation for understanding the social, geographic and linguistic differences among indigenous populations in North America. An exploration of the traditional and contemporary American Indian cultures, the historical development of the unique relationship between the federal government and Indian Nations and current issues among Indian people. This is a multidisciplinary course that provides the student with a sample of all the different approaches of investigation Native peoples: Sociology, Anthropology, History, and Philosophy.
NAS 108 Native American History (3) II (Same as SOC 108)
A survey of the development of Native American society and culture from their appearance on the continent to the present emphasizing the evolution of cultural, political, and social systems and the consequences of contact with Euro-American cultures.
NAS 209 Qualitative Methods for the Social Sciences (3) II (Same as SOC 209)
Introduction to research methods with Native Americans including research design, strategies for collecting cultural information and ethical issues involved in research.
NAS 320 Native American World View, Culture \& Values (3) II (Same as ANT 320)
This course takes a multidisciplinary approach to formulating the varieties of worldviews among Native groups with an emphasis on commonalities and uniqueness among different groups during different historical eras. The course begins by critically looking at reconstructions of Native worldviews in the pre European contact era as constructed by later Natives, anthropologists and ethno historians based on a variety of sources. The course focus on the many media through which Native cosmologies are expressed as well as the historical circumstances that has and continues to transform Native cosmologies.

NAS 333 Federal Indian Policy and Law (3) II (Same as AMS/SWK 333)
Investigates the relationships between Native Americans and the Euro-American in terms of how the Natives were perceived and the impact this has had on Colonial and Federal policies relating to Native populations. Emphasis is on the historical, political and cultural aspects of the relationship
NAS 343 Native Cultures of North America (3) I (Same as ANT 343)
Historic and ethnographic survey of the Native cultures of North America. Includes an analysis of the ecological, social, and ideological adaptations and cultural changes brought by contact with Euro-American populations.
NAS 365 Issues of the Native American Experience (3) I (Same as SWK 365)
Examination of Native American culture and values, social institutions and social systems. Presentation of issues emanating from being Native American. Consideration is given to understanding the Native American experience from an historical perspective as well as the contemporary viewpoint. P: So. stdg.
NAS 375 Photojournalism (3) I (Same as ART 375, JMC 375)
An introduction to photography as a means of reporting news, including the use of film and/ or digital cameras to prepare photographs for print or web publications. art of the continental United Includes Northwest, Southwest, and Plains cultures.

NAS 469 Ethnohistory of Native American Peoples (3) II (Same as AMS/ANT 469)
This course's approach is ethno/historical, combining the disciplines of history and anthropology to obtain multiple perspectives on the historical interactions between native and non-Native peoples. We will research historical and cultural topics concerning both Native and Euro-American groups from the time of European incursion into North America to the present. The result of this course will be a final research paper on some theme in the history and culture of Native peoples. P: So. stdg.

## NATURAL SCIENCE (NSC)

Administered by the Department of Physics.
NSC 107 Introductory Astronomy (3) I, II, S (Same as PHY 107)
Information about the solar system, stars, galaxies, and the universe; main methods by which this information has been acquired; how basic laws of physics have led to theories about cosmic processes, structure, and history. Some history of astronomy for better understanding modern views and demonstrating cultural impact of astronomical ideas. No formal science or mathematics prerequisites.

NSC 108 Astronomy Laboratory (1) I, II, S (Same as PHY 108)
Laboratory sessions to acquaint the student with basic phenomena, methods, and instrumentation important in astronomy.

NSC 113 Introduction to Atmospheric Sciences (3) I, II, S (Same as ATS 113, EVS 113)
Introduction to causes of the weather for science and nonscience majors. Topics covered include cloud identification; factors influencing the development of storm systems; effects of jet streams on storm development; the formation of thunderstorms, tornadoes, and hurricanes; climatic change; and man's influence on climate and weather systems.

NSC 114 Introduction to Atmospheric Sciences Laboratory (1) I, II, S (Same as ATS 114, EVS 114) Laboratory designed to familiarize students with analysis techniques in meteorology. Topics include weather observations; weather symbols and coding; map plotting and analysis; and basic forecasting techniques. Students will become familiar with the PCMcIDAS system. CO: NSC 113

NSC 127 Sound and Music (3) II (Same as PHY 127)
Basic course on the nature of sound, covering the generation, propagation and detection of sound, with particular applications to music. P: MTH 135 or 137 or IC.

NSC 137 Light, Color, and Lasers (3) I, S (Same as PHY 137)
A basic course on the nature of light and its applications; sources of light; wave-particle duality; lasers and holography; images and illusions; special effects; color variables and color vision. The subject of light is used as a basis to explore a wide range of physical phenomena and to examine the goals, methods and limitations of science. Since its essential characteristics are embodied in the postulates of relativity and quantum theory, light is seen to lie at the foundation of modern scientific thought. Course features many classroom demonstrations. No formal science or mathematics prerequisites.
NSC 147 Einstein and Modern Physics (3) I, PS (Same as PHY 147)
Historical and philosophical study of the reciprocal influences between Albert Einstein and the social and scientific communities of his time, including his changing attitude toward pacifism, his relationship to the Zionist movement, his philosophy of knowledge, his relationship with other scientists, and his basic contributions to science. No formal science or mathematics prerequisites.

NSC187 Introduction to Physics (3) I
Basic physics concepts and principles in areas of motion, force and energy, liquids and gases, thermodynamics, electricity and magnetism, light, sound, and x-ray and nuclear radiations, with examples from daily life as illustrations. Includes practice in numerical solution of simple physics problems. P: MTH 135 or 137 or IC. No formal science prerequisites.

NSC 188 Physics in the Everyday World (1) II (Same as PHY 188)
Experimental investigation of physical concepts as applied to geology, astronomy, motion, fluids, electricity, magnetism, waves, and quantum physics. This course may be taken by itself or in combination with NSC 127, 137, or 147. No formal science or mathematics prerequisites.
NSC 205-206 Natural Sciences I, II (4) I, II
Examination of fundamental concepts from the natural sciences with primary emphasis on conceptual understanding. Simple algebraic and arithmetic manipulations. Accompanying laboratory involving basic investigations. Course designed to meet the needs of nonscience students, especially elementary education majors. Certified Writing Course. P: EDU major or EDU DC.

NSC 231 Severe and Unusual Weather (3) I, II (Same as ATS 231)
Discussion of the development and occurrence of severe and unusual atmospheric phenomena. Topics include severe thunderstorms, tornadoes, hurricanes, blizzards, droughts, and heat waves.

NSC 533 Inadvertent Climate Modification (3) AY (Same as ATS 533, EVS 533) (Last offered Spring 1998)
Exploration of the influence of human beings on the atmosphere. Discussion of theories and models of natural climate change and of that induced by human beings. The ethical issues of inadvertent and planned change of climate by humans will be raised. Major topics include effects of $\mathrm{CO}_{2}$ warming (greenhouse effect), ozone depletion; human-induced desertification; cloud seeding; acid rain; urban microclimates; and nuclear winter. Methods of monitoring these systems will be stressed relative to an increased world-wide need to limit or prevent human-induced climate changes.

NSC 541 Atmospheric Diffusion, Air Pollution, and Environmental Impact Analysis (3) OD (Same as ATS 541, EVS 541)
Survey of the theoretical and practical aspects of diffusion, dispersion, and turbulent transport of pollutants in an atmospheric boundary layer. Includes observational and instrumentation techniques; plume models; regional pollution transport; and diffusion from point, line, and area sources. Chemical and physical transformations of the pollutants, precipitation scavenging, and dry deposition are studied. Reviews Federal environmental laws, air quality standards, environmental impact assessments, ethics, and guidelines for writing environmental impact statements. P: NSC 113 or equiv.

NSC 544 Hydrology (3) OD (Same as ATS 544, EVS 544)
Study of the waters of the earth, especially with relation to the effects of precipitation and evaporation upon the occurrence and character of water in streams, lakes, and on orbelow the land surface. In terms of hydrologic cycle, the scope of this course may be defined as that portion of the cycle from precipitation to reevaporation or return of the water to the seas. P: NSC 113 or 231.

NSC 556 Introduction to Physical Oceanography (3) OD (Same as ATS 556, EVS 556)
Geomorphology of the ocean bottom; properties of sea water; salinity and temperature distributions; major ocean currents and circulations; equations of motion, horizontal wind-driven currents; thermohaline circulations; wind waves and swell.

## NURSING (NUR)

Professors Kitchens (Dean), Lappe, Norris and Pinch; Associate Professors Bergman-Evans, Furlong, Howell, Kunes-Connell, and Lazure; Assistant Professors Abbott, Abel-Zieg, Andrews, Buttner, Currier, Damewood, Foyt, Furlong, Graves, Hellman, Hercinger, Hinders, Laguzza, Lypaczewski, Meagher, Miller, Moxness, Nilsson, O’Keefe, Parks, Parsons, Schilke, Spelic, Tourek, Travers-Gustafson, White, Whittaker, Wilken, and Wydeven; Instructors Aufdenkemp, Brady, Coffey, Costello, Goines, Gound, Howard, Laughlin, Mink, Synowiecki, Threlkeld, and Wackel.

## Traditional Program-Prerequisites and Corequisites

Biomedical Sciences 111, Chemistry 111, Chemistry 112/113, Biomedical Sciences 303, Psychology 111, and Sociology 101 or Anthropology 111 or Sociology 223 are prerequisite to admission to the sophomore level. The supporting course Microbiology 141 is prerequisite to junior level courses.

A practicum course is taken in conjunction with the companion theory course (e.g. NUR 352 is corequisite for NUR 351). Unsatisfactory performance is any practicum course prohibits advancement into the next level of practicum courses.

NUR 115 Seminar in Professional Nursing (1) I
A semester-long course which meets at least once a week to explore the nature of life in the University setting, specific areas within each school or college, and survival skills for the academic arena. It facilitates student/faculty interaction and involves in-depth personal and academic advising as well as an introduction to the variety of Creighton curricular and extracurricular opportunities.
NUR 223 Nutrition (2) II
Principles of normal nutrition applied to growth and maintenance of health at all ages with consideration of adequate individual and family diets.
NUR 224 Health Assessment Across the Lifespan (2) I
Focuses on application of knowledge gained in previous courses to the physical, psychosocial and functional assessment of persons at various stages of lifespan development. Emphasizes the nurse's role in identifying and describing normal assessment findings using a cephalocaudal approach. P: BMS 111, BMS 303. CO: NUR 225.
NUR 225 Health Assessment Practicum (1) I
Provides opportunities for students to apply knowledge gained in previous courses to the process of physical, psychosocial and functional assessment of persons at various stages of lifespan development. A hands-on approach is used to enable students to acquire the knowledge and skills necessary to perform a comprehensive health assessment and to describe normal findings. CO: NUR 224.

NUR 228 Lifespan Development (3) I
This course is a broad overview of normal human development from the prenatal stage through older adulthood. Emphasis will be placed on understanding the individual in the context of the psychological, social, behavioral, cultural and spiritual environment. P: SOC 101, PSY 111.

NUR 252 Human Pathophysiology (3) II
Provides an overview of pathophysiological concepts across the lifespan. The course will address basic principles, processes, and concepts associated with common pathologies as well as the pathophysiological alterations related to body systems. P: BMS 111, BMS 303, NUR 224, NUR 225. CO: 253.
NUR 253 Human Pathophysiology Lab (1) II
Provides the opportunity for application of pathophysiological concepts to individuals across the lifespan. Settings may vary to provide this experience. CO: NUR 252.
NUR 341 Nursing Management of Pharmacotherapy (3) I
Provides students with a sound basis for clinical application of pharmacology. It addresses pharmacodynamic and pharmacokinetic properties, therapeutic uses, adverse effects and nursing implications for selected drug classifications used in various health care settings. Case management studies to incorporate theoretical knowledge with clinical situations are used to stimulate critical thinking. P: Junior standing or permission of faculty.

This course is an introduction to care management involving health promotion, maintenance, and restoration. Content includes transcultural concepts across the lifespan and with diverse populations. P: NUR 223, Jr. stdg.; CO: NUR 352, 377. CO or P: NUR 341, 361, 362. P: NUR 223, 224, 225, 228, 252, 253.

NUR 352 Care Management Practicum I (4) I
Provides opportunities for application of concepts from NUR 351 and previous courses. Learning experiences will take place in the lab as well as a variety of acute and community-based settings. The experiences provide an opportunity for students to apply principles advancing understanding of health promotion, maintenance, and restoration with diverse populations. Proficiency with fundamental care management skills and technologies is acquired at this level. P: Jr. stdg. CO: NUR 351.

NUR 353 Principles of Population-Based Health Care (3) II
This course is designed to provide the student with theoretical perspectives in public health, and skills and knowledge associated with the primary functions of public health. Students will use basic principles of epidemiology and the demographic measurement of populations and groups to examine the distributive factors of health and disease needs in populations. Students will acquire tools for assessing a group or population, and planning, implementing, and evaluating health promotion and prevention interventions in collaboration with community representatives and other health care providers. Evaluation of population health programs will consider the effects on health outcomes. P: NUR 361, 362, 351, 352.

NUR 354 Power, Politics, and Policy in Health Care (2) II
Focuses on the understanding of the interplay and synthesis of power, politics, and policy in health care. It emphasizes the importance of nursing participation in the many spheres of political influence, including the workplace, government, professional organizations, and the community. P: Junior standing or permission of faculty.

NUR 361 Informatics in Health Care (2) I
Introductory course that examines the historical, current, and anticipated future status of health care informatics. Emphasis is placed on current advances in computer technology and application to education, communication, research, and clinical practice. CO: NUR 362.

NUR 362 Informatics in Health Care Practicum (1) I
Provides practice in using a variety of computer applications in education, communication, research and clinical practice. CO: NUR 361

NUR 371 Care Management Processes for Episodic and Chronic Health Alterations I (5) II
Builds on the concepts introduced in Care Management NUR 351 as they apply to selected episodic and chronic health alterations. Emphasis is placed on the nurse's utilization of care management and disease management models as bases for achieving optimal outcomes through health promotion, maintenance, and restoration of altered health states for diverse populations. P: NUR 341, 351, 352, 354, 361, 362, 377, Jr. stdg; CO: NUR 372.
NUR 372 Care Management Practicum II (5) II
Provides opportunities to apply concepts introduced in NUR 371. Learning experiences in care management will focus on diverse populations with selected episodic and chronic alterations in health states. The practicum experience will emphasize outcome improvement and multidisciplinary collaboration. Learning experiences will take place in a variety of acute care and community-based settings. P: Junior stdg; CO: NUR 371

NUR 377 Research for Health Professionals (3) I
Addresses the development of beginning level skills in research utilization and critiquing for purposes of quality and quality improvement. Students are introduced to ways of knowing and critical thinking as frameworks for understanding and contributing to the practice-oriented discipline of nursing. P: Jr. stdg. P or CO: NUR 361, 362. CO: NUR 351, 352.
NUR 471 Care Management Processes for Episodic and Chronic Health Alterations II (5) I
This course builds on the concepts introduced in NUR 371 as they apply to selected complex episodic and chronic health alterations. The focus is on the complex, collaborative nursing care management of diverse populations in various settings. Emphasis will be placed on outcomes improvement for complex health alterations. CO: NUR 472, P: NUR: 353, 354, 371, 372.

This course provides the opportunity to care manage a variety of complex populations in acute care and community-based settings. Experiences seen as complex in nature will include individuals with complex co-morbidities and populations with multiple, complex health care needs. Proficiency with advanced skills and technologies is acquired at this level. CO: NUR 471.
NUR 473 Leadership for Care Management (2) I
Focuses on the investigation, analysis and application of the principles and practices of leadership and management in health care delivery systems. It emphasizes concepts foundational to resource allocation and utilization in managing the delivery of care, and integrates these concepts in the context of leadership roles in care management, clinical outcome improvement, and multidisciplinary teamwork. P: Senior stdg. or permission of faculty.

NUR 481 Senior Seminar in Professional Nursing (3) II
This course focuses on the transition from the student role to the professional practice role. A seminar approach will be used to address professional issues related to beginning practice and foster the on-going professional and personal development of the individual. P: NUR 471, 472, 473. CO: NUR 482.

## NUR 482 Senior Preceptorship (10) II

This course provides students with a concentrated experience in collaborative nursing care management under the supervision of a nurse-preceptor. The clinical experience is structured to foster the refinement of care management skills as a basis for achieving optimal outcomes. The course emphasizes the ability to work effectively with the multidisciplinary team. CO: NUR 481. P: NUR 471, 472, 473, applied ethics course.

## Accelerated Curriculum

## NUR 252 Pathophysiology (3)

This course provides an overview of pathophysiological concepts across the lifespan. The course will address basic concepts, principles, and processes associated with common pathologies. It is designed for the student with limited or no clinical experience. P: Admission into the accelerated program.

## NUR 288 Health Assessment (2)

This course focuses on application of knowledge gained in previous courses to the physical, psychosocial and functional assessment of persons at various stages of lifespan development. Emphasis is placed on the nurse's role in identifying and describing normal assessment findings using a cephalocaudal approach. CO: 289.

NUR 289 Health Assessment Lab (1)
This course provides opportunities for students to apply knowledge gained in previous courses to the process of physical, psychosocial and functional assessment of persons at various stages of lifespan development. A hands-on approach is used to enable students to acquire the knowledge and skills necessary to perform a comprehensive health assessment on individuals at various stages of lifespan development and to describe normal findings. CO: 288.
NUR 290 Care Management Concepts for Health Promotion and Outcomes Improvement (5)
Acquaints the student with health concepts, health changes, and fundamental interventions for health maintenance. The course focuses on health promotion and wellness, chronicity and quality of life, basic human needs, and care management and outcomes improvement for diverse populations. Clinical practicum designed to enhance didactic instruction. P: Admission into the accelerated program. CO: NUR 291, 288, 289, 252, 293, 294.

NUR 291 Care Management for Health Promotion and Outcomes Improvement Practicum (5) This course provides opportunities for application of concepts introduced in NUR 290. Care management experiences take place in acute care and community-based settings. The clients provide the variety of experiences necessary for students to apply the concepts and principles of human development, culture, ethnicity and socioeconomic status in their understanding of health promotion for clients across the lifespan. Opportunities for health assessment and goaldirected communication are provided so that students increase their competence in the use of these skills. Proficiency with fundamental technologies/skills is acquired at this level. CO: NUR 290.

NUR 293 Research and Scientific Inquiry I (2)
This course introduces students to the ways of knowing and critical thinking as frameworks for understanding and contributing to the practice-oriented discipline of nursing. This course provides a basic overview of the research process. Current advances in computer technology and application to education, communication, research and clinical practice are introduced. Emphasis is placed on research utilization. P: Admission into the accelerated program. CO: 252, 288, 289, 290, 291, 294.

## NUR 294 Introduction to Professional Nursing (2)

This course introduces students to various roles assumed by nurses in the nursing profession and health care system, and to concepts that underlie professional nursing practice and implementation of the roles of designer, manager, and coordinator of care. Opportunities are provided to explore issues related to nursing practice and health care. P: Admission into the accelerated program. CO: NUR 252, 288, 289, 290, 291, 293.

NUR 341 Nursing Management of Pharmacotherapy (3) I
Provides students with a sound basis for clinical application of pharmacology. It addresses pharmacodynamic and pharmacokinetic properties, therapeutic uses, adverse effects and nursing implications for selected drug classifications used in various health care settings. Case management studies to incorporate theoretical knowledge with clinical situations are used to stimulate critical thinking. P: Junior standing or permission of faculty. P: 252, 288, 289, 290, 291, 293, 294. CO: NUR 390, 391, 393, 394.

NUR 390 Care Management and Outcomes Improvement for Altered Health States (5)
This course introduces the concepts of disease management and outcomes improvement for the major episodic and acute illnesses that occur in diverse populations. The focus is on the management of those diseases that are highly prevalent; have a significant effect on morbidity, mortality, and quality of life in the general population; are highly preventable; and/or create a financial burden for the individual, the health care system, and society as a whole. Students will study in depth and share information with their peers about a variety of selected disorders. Clinical practicum designed to enhance didactic instruction. P: NUR 252, 288, 289, 290, 291, 293, 294. CO: NUR 341, 391, 393, 394.

NUR 391 Care Management and Outcomes Improvement for Altered Health States Practium (7)
This course provides opportunities for application of concepts and didactic content in NUR 390. CO: NUR 390.

NUR 393 Research and Scientific Inquiry II (2)
Nursing theories, research designs and ethical issues related to research are discussed. The steps of the research utilization process are applied to a clinical problem. Students critique the professional literature and write a review. Emphasis is placed on the use of research in total quality improvement. P: NUR 252, 288, 289, 290, 291, 293, 294. CO: NUR 341, 390, 391, 394.

## NUR 394 Health Care Management and Leadership (2)

This course focuses on the investigation, analysis, and application of the principles and practices of leadership and management in health care delivery systems. It emphasizes concepts foundational to resource allocation and utilization in managing the delivery of care and integrates these concepts in the context of leadership and management roles in care management, clinical outcome improvements and interdisciplinary teamwork along the continuum of care. P: NUR 252, 288, 289, 290, 291, 293, 294. CO: NUR 341, 390, 391, 393.

NUR 493 Research and Scientific Inquiry III (1)
In this course, students synthesize the concepts of the research process by applying the research utilization model. Students design a quality improvement proposal utilizing work done in NUR 393. P: NUR 341, 390, 391, 393, 394. CO: 494, 496, 497, 498.

## NUR 494 Seminar in Professional Nursing (3)

This seminar is designed to facilitate transition from the student role to the professional nursing role. The content focuses on the reciprocal relationships among society, health care organizations, and the nursing profession. This course provides opportunities for students to explore trends and issues related to nursing, care management, and health care, and to build skills essential to shaping care environments and health policy. P: NUR 341, 390, 391, 393, 394. CO: NUR 493, 496, 497, 498.

NUR 496 Care Management and Outcomes Improvement for Complex Altered Health States (5)
This course concentrates on the care of clients (individual, family, aggregate, or community) with complex and/or multiple health problems. Students apply their knowledge of systems, dysfunction, pathophysiology, laboratory data, pharmacology, and treatment protocols in the process of providing, analyzing, and evaluating the care given to complex, multiple-problem and diverse populations. Emphasis is placed on the promotion, maintenance, and restoration of health and the prevention of complications in altered health states. Principles of leadership and change theory are integrated within the care management framework to plan a change project for improving an outcome or outcomes for a selected client. Clinical practicum designed to enhance didactic instruction. P: NUR 341, 390, 391, 393, 394. CO: NUR 493, 494, 497.

NUR 497 Care Management and Outcomes Improvement for Complex Altered Health States (5)
This course provides the opportunity to care manage a variety of complex clients in acute care and community health settings. Experiences seen as complex in nature include: caring for clients with unstable/life threatening disease(s) or trauma, caring for at-risk populations, caring for communities with diverse needs, and caring for multiple clients. Proficiency with advanced skills/technologies is acquired at this level. CO: NUR 496.

## NUR 498 Senior Preceptorship (5)

The preceptorship provides an opportunity for students to manage care for clients in a selected clinical environment under the supervision of a baccalaureate-prepared registered nurse. This clinical experience is structured to foster the synthesis of professional nursing concepts, the refinement of clinical skills, the organization of client care activities, the development of sound clinical decision-making skills, and the ability to work effectively as a team member. P: NUR 496, 497. CO: NUR 493, 494.

## LEAP Curriculum

NUR 108 RN Seminar (1) PS, I, II
The focus of this course is career development and linking career goals with strategies for achieving career success.
NUR 224 Health Assessment (2) S
Focuses on application of knowledge gained in previous courses to the physical, psychosocial and functional assessment of persons at various stages of lifespan development. Emphasizes the nurse's role in identifying and describing normal assessment findings using a cephalocaudal approach. P: BMS 111, BMS 303. CO: NUR 225.
NUR 225 Health Assessment Lab (1) S
Provides opportunities for students to apply knowledge gained in previous courses to the process of physical, psychosocial and functional assessment of persons at various stages of lifespan development. A hands-on approach is used to enable students to acquire the knowledge and skills necessary to perform a comprehensive health assessment and to describe normal findings. CO: NUR 224.

NUR 252 Pathophysiology (3)
Provides an overview of pathophysiological concepts across the lifespan. The course will address basic principles, processes, and concepts associated with common pathologies as well as the pathophysiological alterations related to body systems. P: BMS 111, BMS 303. P or CO: NUR 224, NUR 225.

## NUR 317 Professional Nursing Transition (2) S

Designed to validate prior learning and facilitate socialization into the baccalaureate-nursing role. Focuses on concepts and theoretical formulations basic to care management and outcome improvement in a variety of health care settings. Emphasizes the nurse's role in health promotion, maintenance and restoration throughout the lifespan. P: or Co: Admission to the LEAP Program, NUR 224, 225, 252, 320, 321. Co: NUR 318.

NUR 318 Professional Practice Lab (2) S
Provides opportunities for students to validate clinical knowledge and skills acquired in associate degree or diploma nursing programs and from work experience. Facilitates socialization into the baccalaureate-nursing role. Focuses on concepts and theoretical formulations basic to care management and outcome improvement in a variety of health care settings. Emphasizes the nurse's role in health promotion, maintenance and restoration throughout the lifespan. CO: NUR 317

NUR 320 Informatics in Health Care (1) S
Examines the historical, current, and anticipated future status of health care informatics. Emphasis is placed on current advances in computer technology and applications to education, communication, research and clinical practice. CO: NUR 321

NUR 321 Informatics in Health Care Lab (1) S
Provides practice in using a variety of computer applications in education, communication, research and clinical practice. CO: NUR 320

NUR 353 Principles of Population-Based Health Care (3) I
This course is designed to provide the student with theoretical perspectives in public health, and skills and knowledge associated with the primary functions of public health. Students will use basic principles of epidemiology and the demographic measurement of populations and groups to examine the distributive factors of health and disease needs in populations. Students will acquire tools for assessing a group or population, and planning, implementing, and evaluating health promotion and prevention interventions in collaboration with community representatives and other health care providers. Evaluation of population health programs will consider the effects on health outcomes. P: NUR 108.

NUR 354 Power, Politics, and Policy in Health Care (3) II
Focuses on the understanding of the interplay and synthesis of power, politics, and policy in health care. It emphasizes the importance of nursing participation in the many spheres of political influence, including the workplace, government, professional organizations, and the community.
NUR 377 Research for Health Professionals (3) I
Addresses the development of beginning level skills in research utilization and critiquing. A variety of research studies taken from the professional and popular literature are examined.

## NUR 441 Nursing Care Management and Outcomes Improvement I (3) I

Focuses on episodic health alternations throughout the lifespan and analysis of nursing's role in care management, clinical outcome improvement, resource utilization and interdisciplinary teamwork along the continuum of care. Emphasizes critical thinking and research as a foundation for clinical decision making. P: NUR 108, 224, 225, 252, 317, 318, 320, 321. CO: NUR 442. P or CO: NUR 353, 377.

NUR 442 Care Management Lab I (4) I
Provides clinical learning opportunities for students to apply concepts and principles of care management and outcome improvement to clients experiencing episodic health alterations throughout the lifespan. Emphasizes critical thinking and research as a foundation for clinical decision making. CO: NUR 441.

NUR 461 Nursing Care Management \& Outcomes Improvement II (3) II
Focuses on health care management of high risk and chronically ill populations across the lifespan. Includes nursing's role in planning, implementing and evaluating therapeutic interventions to achieve optimal health outcomes for these target populations. Emphasizes critical thinking and research as a foundation for clinical decision making. P: NUR 353, 377, 441, 442. CO: NUR 462. P or CO: NUR 354, 478, 490.

## NUR 462 Care Management Lab II (4) II

Provides clinical learning opportunities for students to apply concepts and principles of care management and outcome improvement to high risk and chronically ill populations across the lifespan. Emphasizes critical thinking and research as a foundation for clinical decision making. CO: NUR 461
NUR 478 Leadership for Care Management (2) II
Focuses on the investigation, analysis and application of the principles and practices of leadership and management in health care delivery systems. It emphasizes concepts foundational to resource allocation and utilization in managing the delivery of care, and integrates these concepts in the context of leadership roles in care management, clinical outcome improvement, and multidisciplinary teamwork.

## NUR 490 Data Management Lab (1) II

Application of information technology to analyze and improve care management outcomes. P: NUR 320, 321

Graduate-level courses (600-700-series courses, open only to graduate students) offered by the Department of Nursing are listed in the Graduate School issue of the Creighton University Bulletin.

## OCCUPATIONAL THERAPY (OTH)

A description of this program is found in the School of Pharmacy and Allied Health Professions Bulletin.

## PHARMACOLOGY (PHR)

Offered by the Department of Pharmacology of the School of Medicine

## PHR 241 Pharmacology I (5)

A comprehensive coverage of the major drug groups and their mechanisms. The emphasis is on human pharmacology and the rational basis for therapeutics. Specific drug classes will be discussed with emphasis on mechanism of action, organ systems affected by the drugs, their pharmacokinetics, therapeutic indications, untoward effects, contraindications and drug-drug interactions. P: DC.

PHR 242 Pharmacology II (5)
Continuation of PHR 241. P: PHR 241.
PHR 531 Chemical Basis of Drug Action I (3) I
The chemical basis for drug action in vivo and in vitro. General chemical principles, physiochemical properties and drug-receptor interactions are used to derive structure-activity relationships for important drug classes permitting the understanding of the pharmacological and biopharmaceutical profiles of currently available drug products. Provides a basis for predicting biological properties and activities of future products. P: DC.
PHR 532 Chemical Basis of Drug Action II (3) II
Continuation of PHR 531. P: DC.
PHR 537 Rational Drug Design and Discovery (2) I, OD
Scientific basis for the rational design and development of new drug molecules. Discussion of drug-receptor theory, structure activity relationships, and specific examples of the design of new drugs. P: DC.

PHR 595 Directed Independent Study (1-5) I, II, S(OD)
Supervised independent projects that may include laboratory work, assigned readings, research papers, etc. Available in autonomic pharmacology, cardiovascular pharmacology, exocrine pharmacology, and neuropharmacology. P: Undergraduate or Gr. stdg. \& DC.

PHR 597 Directed Independent Research (1-4) I, II, S(OD)
Supervised independent research for motivated students to become involved in ongoing original research projects of the pharmacology faculty. P: Undergraduate or Gr. stdg. \& DC.

## PHILOSOPHY (PHL)

Professors Murray (Chair); John Carlson, and Feezell; Associate Professors P. Fleming (Associate Dean, Arts and Sciences), Schuler, Selk, W. Stephens, and R. White; Assistant Professors Abrams, Brown, Cooke, K. Graham, Haley, Montag, and Yuan; Adjunct Instructor Hendrickson; Lecturers Conces and Mohr.

## Philosophy Requirements

Arts and Sciences students will follow the requirements of the CORE Curriculum described on page 100. Specific requirements for students in Nursing are listed on pages 134-140. Specific requirements for students in Business Administration are listed on pages 120-133.

## Prerequisites

There are no prerequisites for PHL 107 or 201. The introductory philosophy course (PHL 107 or 109) is a prerequisite for all other philosophy courses at the 200 -level and above with the exception of PHL 201.

## The Field of Concentration

Concentration major: The requirements are thirty-six semester hours in philosophy, which may be satisfied in one of two ways: the history track or the problems track.

History Track: Philosophy 107 or 109; 250 or 253; 201 (or a more advanced logic course); Philosophy 320 or 323 ; Philosophy $370 ; 372 ; 373$; one of the following three courses: Philosophy 321, 331, or 342; Philosophy 492; one of the following courses in the history of philosophy: PHL 311, 359, 366, 367, 371, 374, 410, 459, 461, 462, 463, 465, 467, 469, 480, 481; two additional upper-level courses. No more than one course that is cross-listed as an SRP course may be used as a philosophy elective.

Problems Track: PHL 107 or 109; 250 or 253; 201 (or a more advanced logic course); Philosophy 320 or 323 ; Philosophy $321 ; 331 ; 342$; one of the following three courses: Philosophy 370, 372, or 373; Philosophy 492; one of the following courses in the problems of philosophy: PHL 309, 317, 328, 333, 334, 340, 343, 348, 354, 355, 356, 357, 358, 424, 430, 440, 450, 451, 453, 455, 479; two additional upper-level courses. No more than one course that is cross-listed as an SRP course may be used as a philosophy elective.

Total hours for a major in philosophy: specified hours-27; elective hours-9; total hours-36.

Supporting courses: A program of at least 12 semester hours of course work arranged with and approved by the student's advisor must be taken in one or more of the other departments of the College of Arts and Sciences. It is recommended that this program include 6 hours of course work in a foreign language.

Philosophy as a co-major: For students who wish to co-major in philosophy as they major in another discipline, the concentration in philosophy requires 24 hours: Philosophy 107 or 109; 250 or 253; Philosophy 201 (or a more advanced logic course); Philosophy 320 or 323; Philosophy 370 or 372 or 373 ; and Philosophy 321 or 342 or 331 , plus six additional hours of philosophy courses, chosen to complement the student's total program. No more than one course that is cross-listed as an SRP course may be used as a philosophy elective.

Total hours for a co-major in philosophy: specifed hours-18; elective hours-6; total hours-24.

## PHL 107 Critical and Historical Introduction to Philosophy (3) I, II, S

Introduction to Western Philosophy through reading and critical discussion of classic texts selected from each of Ancient, Medieval, Modern, and Contemporary periods of philosophy, and relation of problems raised by these texts to the current human condition. Study of the nature of philosophy, the nature of knowledge, and the nature of reality. Introduction to basic principles of logic and concepts of critical thinking, including recognition of fallacies and construction and evaluation of arguments. Required of all students in Arts and Sciences, Business Administration, and Nursing under the new curriculum, beginning with the freshman class in the 1993 Fall Semester.

PHL 109 Honors Critical and Historical Introduction to Philosophy (3) I or II
Same as PHL 107 except the course will use more advanced readings and require more writing. P: Acceptance into the Honors Program.
PHL 147 Introduction to Critical Thinking (3) I, II
An encounter with logic as an eminently practical and down-to-earth discipline meant to be used in everyday social and business interaction, intended to introduce business students to the basic and indispensable skills of deliberative thinking, with an eye toward application in speaking and writing. Required of all students in business administration under the new curriculum, beginning with the Freshman class in the 1993 Fall Semester. P: Enrollment in the College of Business Administration.

PHL 201 Introduction to Logic (3) OD
A formal study of reasoning and argument encountered in writing. Topics include: schematization of arguments, categorical logic, Venn diagrams, propositional logic, truth tables, inductive logic, validity, soundness, and forms of inference.

PHL 202 Informal Logic (3) OD
A practical study of argument and critical thinking, including an examination of how to recognize and evaluate arguments encountered in everyday media, and how to construct one's own arguments. Topics include: deduction, induction, validity, soundness, criticizing prem-
ises, clarifying meaning, uses of language, definition, conceptual theories, informal fallacies, conceptual analysis, causal arguments, analogical arguments, and normative arguments.

PHL 250 Philosophical Foundations for Ethical Understanding (3) I, II, S
Consideration of the foundations of morality; theories of virtue and of moral obligation; principles and rules; application of theories to specific contemporary moral problems, including issues of domestic diversity. This course is in the new curriculum. The new curriculum is designated for freshman students who enrolled in Fall 1993 or later. P: PHL 107 or PHL 109.

PHL 253 Honors Philosophical Foundations for Ethical Understanding (3) I or II
Same as PHL 250 except the course will use more advanced readings and require more writing. P: PHL 107 or 109, acceptance into the Honors Program.
PHL 309 Meaning in America (3) OD
Examination of alternative sources of values in contemporary America. Emphasis will be placed on understanding both the value pluralism of American society and the person's need to articulate and embrace a life's meaning. Strategies for criticism of various contemporary lifestyles will be examined and central dimensions of making intelligent personal choices will be explored. P: PHL 107 or 109, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.

## PHL 311 Utopian Thought (3) OD

Examination of some of the classical and contemporary utopian authors: Plato, More, Bellamy, Orwell, and Wright. Some attention to the history of American communal experiments, especially the Hutterite Society. Examination of the philosophical underpinnings of utopianism: questions of class structure, liberty, property, labor, privacy, and implications for a theory of the person and society. P: PHL 107 or 109, Jr. stdg., and one of the following: (a) any 200level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.
PHL 312 Symbolic Logic (3) OD
Study of the historical development of logic; the nature of formal systems; truth tables; the method of deduction; propositional calculus; monadic and polyadic predicate logic and first order general predicate logic; axiomatics; introduction to set theory; metalogical problems. P: PHL 107 or 109, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.

## PHL 313 Philosophy and Literature (3) OD

Examination of philosophical concepts and issues crucial to understanding and appreciating works of great literature. Examination of philosophical themes within great literary works and/or literary aspects of important philosophical works. P: PHL 107 or 109, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.
PHL 317 Philosophy of Sport (3) OD (Same as AMS 317)
Philosophical examination of the nature, meaning, and significance of sport, with special emphasis on the relationships among sport, play, and game. Investigation of ethical issues in sport, including sportsmanship, cheating, drug-testing, sexual equality, competition, and winning. Treatment of the relation of sport to social-political and aesthetic issues. P: PHL 107 or 109, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.

PHL 320 God and Persons: Philosophical Reflections (3) I, II, S
This course examines, from the viewpoint of rational inquiry, questions concerning God (classic and contemporary arguments on the existence of God and contemporary atheism and agnosticism, the nature of God, approaches toward God, the problem of evil in the light of belief in God) and human personhood (freedom and determinism, human destiny, the meaning of human life). P: PHL 107 or 109; So. stdg.
PHL 321 Epistemology (3) I or II
Advanced study of human knowledge. Examination of the sources of knowing in reason and sense, grounds for establishing the validity of claims to know, the relationships between various sciences and other methods and ways of knowing. P: PHL 107 or 109, Jr. stdg., and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.

Same as PHL 320 except the course will use more advanced readings and require more writing. P: PHL 107 or 109; So. stdg.; acceptance into the Honors Program.

## PHL 325 The Ostracism of God and Modern Atheism (3) OD

An examination of the historical origins, theoretical foundations, and internal logic of modern atheism. P: PHL 107 or 109, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.

PHL 328 Philosophy of History (3) OD
Examination of some speculative theories about the direction of history from Plato to contemporary authors. Examination of the critical philosophy of history which considers the nature and status of historical knowledge and methods. P: PHL 107 or 109, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.

## PHL 331 Moral Philosophy (3) OD

Advanced study of contemporary ethical theories, significant features of the moral life, and applications of both to contemporary moral problems. P: PHL 107 or 109, Jr. stdg., and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.

PHL 333 Philosophy of the Human Sciences (3) OD
Examination of the methodology of the human sciences (e.g., psychology, sociology, political science) and comparison of this methodology with that of the natural sciences. Examination of Continental and Anglo-American criticisms, phenomenological social sciences, hermeneutics, and critical theory. P: PHL 107 or 109 , and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.

PHL 334 Philosophy of the Natural Sciences (3) OD
Investigation of basic concepts in natural science and of the elements of scientific inquiry law, theory, causality, probability, confirmation and disconfirmation, proof, and scientific change. The history of the natural sciences, especially of the scientific revolution of the 16th and 17 th centuries, is used as the context for analyzing these concepts. P: PHL 107 or 109, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323 .

PHL 340 (217) Aesthetics (3) OD
Examination of fundamental questions concerning art: The origins of art; the aims and purposes of art; the evaluation of art; the notion of beauty; truth in art; censorship, pornography, and art; the value of art. P: PHL 107 or 109, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323. Students who have taken PHL 217 cannot receive credit for PHL 340.
PHL 342 Metaphysics (3) I or II
Advanced study of the philosophy of being, the most general study of reality and its constitutive parts; examination of traditional and contemporary positions on the existence and nature of God, the ultimate character of matter and mind, the nature of being and becoming. P: PHL 107 or 109, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.

PHL 343 Ethics and the Professions (3) OD
Examination of the moral dimensions of the role of the professional in contemporary society with emphasis on the professional-client relationship and the professional's social obligations. Specific moral problems in the various professions will be covered, especially in medicine and law. P: PHL 107 or 109, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.
PHL 348 Philosophy of Feminism (3) OD
An examination of a number of philosophical approaches, such as those rooted in existentialism, liberalism, and Marxism, to issues concerning gender. Topics from fields such as ethics, politics, philosophy of law, epistemology, and philosophy of science will be addressed. P: PHL 107 or 109, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.

Origin and development of Buddhism's basic doctrines and beliefs. The different schools of Buddhist traditions, and the changes as Buddhism spread from India through China and Japan to the West. How Buddhist teachings are practiced in daily life. P: PHL 107 or 109, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.
PHL 354 Environmental Ethics (3) OD (Same as EVS 354)
Critical study of the anthropocentrism-nonanthropocentrism debate and the individualismholism debate and how they affect each other in the context of the determination of ecological value. If anthropocentrism is in some ways defective, what implications do these defects have for our moral obligations to animals, plants, waters, soil, future generations, species, ecosystems, and the planet? P: Jr. stdg.; PHL 107 or 109, and PHL 250 or 253.

PHL 355 Science, Technology, and Values (3) OD
Investigation of ethical issues raised by science and technology in such areas as change of the environment, governmental control of population, restrictions on scientific research, technology assessment, work in a technological society, and genetic manipulation. Also, consideration of science and technology themselves as values, their dominance in our culture and some of the effects of that dominance on other values. P: PHL 107 or 109, Jr. stdg., and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.

PHL 356 Philosophy of Peace and War (3) OD
Examination of philosophical issues related to peace and war. Emphasis on an analysis of the traditional just war theory and on the more extreme alternatives of pacificism and the "war is hell" doctrine. P: PHL 107 or 109, Jr. stdg., and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.
PHL 357 Bioethics (3) I or II
An examination of various moral problems raised by new scientific and medical knowledge and power. Emphasis is placed on developing an ethical framework to help resolve moral issues related to the doctor-patient relationship, research with human subjects, suicide, euthanasia, abortion, new genetic technologies, allocation of scarce medical resources, etc. P: PHL 107 or 109, Jr. stdg., and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.

PHL 358 Social and Political Philosophy (3) OD
Critical study of classical and contemporary theories concerning the nature and value of social and political institutions such as the state, the family, and civil society. Examination of the nature and application of political ideals such as justice, freedom, equality, and community. P: PHL 107 or 109 , and either (a) PHL 250 or 253 or (b) THL 250. Students who have taken PHL 258 cannot receive credit for PHL 358.

PHL 359 History of Ethics (3) OD
Examination of the history of Western ethical theory from ancients to contemporary philosophers. Emphasis on primary sources. P: PHL 107 or 109, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.
PHL 366 St. Thomas and Thomism (3) OD
Study of the philosophy of St. Thomas Aquinas and the subsequent history of Thomistic philosophy, especially in twentieth-century scholarship. Special emphasis on Thomistic metaphysics, anthropology, ethics, and political thought. P: PHL 107 or 109, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.

PHL 367 American Philosophy (3) OD
Surveys some of the works of significant figures in philosophy in America, both past and present. Includes classical American philosophy as well as important individuals outside that tradition. Focuses primarily on metaphysical and epistemological themes. P: PHL 107 or 109, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250 , or (c) PHL 320 or 323.

PHL 370 History of Classical Greek Philosophy (3) I or II (Same as CNE 370)
Examination of the origins and development of Western philosophy during the Classical period in ancient Greece; the pre-Socratics; Socrates and the Sophists; substantial study of the
works of Plato and Aristotle. P: PHL 107 or 109, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.
PHL 371 History of Hellenistic Philosophy (3) OD (Same as CNE 371)
Examination of the development of Western philosophy after Aristotle during the Hellenistic period in ancient Greece and imperial Rome. The study of Epicureanism (pleasure is the highest good), Stoicism (living in agreement with nature is the highest good), Skepticism (peace of mind is gained by suspending one's judgment on all dogmatic claims to truth), and Neo-Platonism. P: PHL 107 or 109, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.

## PHL 372 History of Medieval Philosophy (3) I or II

Study of St. Augustine and the development of Scholasticism; the Arab commentators; the achievements of St. Thomas Aquinas; Duns Scotus; William of Ockham and the rise of nominalism. P: PHL 107 or 109, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.
PHL 373 History of Modern Philosophy (3) I or II
Study of the development of Western philosophy from Descartes through Kant (1600-1800); examination of the central figures of Continental rationalism and British Empiricism, and the critical philosophy of Kant. P: PHL 107 or 109, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.
PHL 374 History of 19th-Century Philosophy (3) II
Study of important nineteenth-century philosophers such as Hegel, Feuerbach, Marx, Comte, Kierkegaard, Nietzsche, and Mill; themes include idealism, existentialism, Marxism, and utilitarianism. P: PHL 107 or 109, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.

PHL 401 Themes in Contemporary Philosophy (3) OD
Examination of topics in philosophy as selected by the professor. Themes are chosen to highlight new developments in philosophy, contemporary expressions of traditional philosophical movements, or recent trends in specific philosophical traditions. Course will be subtitled in the Schedule of Courses. May be repeated to a limit of six hours. P: PHL 107 or 109, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.

PHL 403 Honors Philosophy Seminar (OD) (Same as HRS 403)
Topical approach to select problems in philosophy. Course will be subtitled in the Schedule of Courses. May be repeated to a limit of six hours.

PHL 410 Stoicism (3) OD (Same as CNE 410)
Study of the philosophy originated by Zeno of Citium in the Stoa Poikile in Athens around 300 BCE and the influence of Stoicism in the history of Western philosophy. Investigation of the Stoic system of physics, logic, and ethics; the doctrines of naturalism, rationalism, fatalism, providence, cosmopolitanism, autarky, apatheia, and suicide. Possible topics include philosophy of mind, philosophy of language, freedom and determinism, and political philosophy.
PHL 420 Science and Religion (3) OD (Same as SRP/THL 420)
This course explores the relationship between science and religion from three perspectives: philosophy of science, scientific theories, and theology. Issues to be studied include: reductionism vs. emergentism, the relationship between God and world (including creation and evolution), the Galileo affair, and Darwin and design. P: Sr. Stdg.
PHL 424 Philosophy of Mind (3) OD
Advanced study of philosophical writings on the relation between mental states and concomitant brain states. Examination of this problem in terms of its history and cultural significance, the metaphysical and methodological assumptions of proposed solutions, and attempts to adjudicate meta-theoretic conflict among said proposals. P: PHL 107 or 109, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.

## PHL 430 Rationality and Religious Belief (3) OD

An advanced study of central issues in the philosophy of religion, with special emphasis on contemporary discussions of traditional issues, including extended treatment of the faith-
reason controversy in light of recent developments in epistemology. P: PHL 107 or 109, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323 .

PHL 435 Literature, Philosophy, and Economics: Critical Representations of Commercial Life (3) OD (Same as ENG/SRP 435)

This course will explore how literary, philosophical, and economic texts can reveal basic commercial forms such as the commodity, wage, labor, and capital, whose consequences for social justice we will consider. P: Sr. Stdg.

PHL 440 Legal Philosophy (3) OD
Examination of classical and contemporary views on the nature of law. Examination of the functions of law, ways it is created and changed by emerging social conditions, and concepts of justice and punishment. P: PHL 107 or 109, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.
PHL 450 Philosophy and Commercial Societies (3) OD
Course historically and evaluatively studies philosophers' views on the social impact of labor, money, and trade. Consideration of whether commerce shapes philosophy. P: PHL 107 or 109, Jr. stdg., and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.

PHL 451 Social Justice: Theory and Practice (3) OD
Examination of various principles of social justice in conjunction with direct social involvement through community services. P: PHL 107 or 109, written IC, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.

PHL 453 Ethics and Public Policy (3) OD
Examination of value-laden issues which underlie the formation and implementation of public policy. Exploration of the relationship between abstract ethical principles and concrete public policy problems in the context of currently troubled environmental, biomedical, education, and social policies. P: PHL 107 or 109, Jr. stdg., and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.

## PHL 455 Health Care, Society and Values (3) OD

Philosophical examination of moral issues in medicine with emphasis on the social dimensions of health care and its delivery. Consideration of questions of justice, rights to health care, the social nature of health and disease, etc. P: PHL 107 or 109, Jr. stdg., and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.

PHL457 Biomedical Ethics: Philosophical and Theological Approaches (3) OD (Same as HAP/SRP/THL 457) An exploration of relations between philosophical and theological conceptions of ethics and moral methodologies, together with an application of the latter to select issues in biomedicine and health care policy. P: PHL or THL 250 and Sr. stdg.

PHL 459 Marxism (3) OD (Same as PLS 459)
Marx provided some of our most important intellectual tools for understanding the society we live in while at the same time providing one of the most compelling challenges to our traditional ways of understanding ourselves, our society, and the future. This course examines the philosophy of Karl Marx, the historical evolution of Marxism, and its impact on contemporary thought. P: PHL 107 or 109, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.
PHL 460 Selected Topics in Ancient Philosophy (3) OD (Same as CNE 460)
Topical approach to selected problems or themes in ancient philosophy, or focus on an individual philosopher or school of philosophy. Course will be subtitled in the Schedule of Courses. May be repeated to a limit of six hours.
PHL 461 The Role of Philosophy in Theology (3) OD (Same as THL 461)
Examination of the relation between philosophy and theology; their different ways of thinking about God and Revelation; the role that philosophy has played and can play in the development of theological thought; the impact that theological ideas have had on philosophical thought; and the interplay between faith and reason. P: PHL 107 or 109, Jr. stdg., two 100-299 level THL courses, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.

Intensive study of the thought of Karol Wojtyla/Pope John Paul II; focus on themes adumbrated in the pre-papal, philosophical writings and developed in papal encyclicals: dignity of the human person; relation between freedom and truth; proper relationship between individual and community; responsibility in sexual love. P: Jr. stdg.; PHL 320; PHL or THL 250.

## PHL 463 Phenomenology (3) OD

Examination of the central themes of phenomenology as a method and a movement, including the ideal of a presuppositionless philosophy, the thesis of the natural standpoint and phenomenological reduction, the method of imaginative or eidetic variation, the intuition of essences, the concepts of intentionality, constitution, and the life-world. Emphasis on the major figures of phenomenology, including Husserl, Heidegger, Sartre, and Merleau-Ponty. P: PHL 107 or 109 , and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.

PHL 465 American Pragmatism (3) OD
Examination and critical evaluation of the major works and themes of the American pragmatists: C. S. Peirce, William James, and John Dewey. Includes an examination of their relation to other philosophers. P: PHL 107 or 109, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.
PHL 467 Existentialism (3) OD
Examination of major existentialist philosophies and themes including the works of Kierkegaard and Nietzsche; the development of twentieth-century existentialism; examination of the works of authors such as Heidegger, Jaspers, Marcel, Sartre, Buber, Camus, Unamuno. P: PHL 107 or 109, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.

PHL 469 Contemporary Analytic Philosophy (3) OD
Survey of the 20th century analytic movement including the thought of Russell, Moore, and Wittgenstein; logical positivism and logical atomism; recent Anglo-American philosophical analysis. P: PHL 107 or 109, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.

PHL 479 The Philosophy of Love and Sex (3) OD
A philosophical investigation of the nature of love, the different kinds of love, the relationship between love and beauty, and between love and sex. P: PHL 107 or 109, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.
PHL 480 Philosophical Classics (3) OD
An intensive examination and comparison of two major texts in the history of philosophyfor example, Aristotle's Nicomachean Ethics and Spinoza's Ethics; or Plato's Republic and Rousseau's political writings. May be repeated to a limit of six hours. P: PHL 107 or 109, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323 .

PHL 481 A Major Philosopher (3) OD
An intensive examination of the work of one major philosopher. Examples might include Aristotle, Hume, Spinoza, or Kant. May be repeated to a limit of six hours. P: PHL 107 or 109, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323.

PHL 492 Senior Seminar for Majors (3) II
Required seminar for all graduating philosophy majors. A review of the history and problems of philosophy and a final integrating philosophical experience for seniors. P: Senior PHL major or IC.

PHL 493 Directed Independent Readings (1-4) OD
Subject matter and method to be worked out individually. P: PHL 107 or 109, IC, and one of the following: (a) any 200-level philosophy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323. May be repeated to a limit of six hours.

PHL 495 Directed Independent Study (1-4) OD
Projects on philosophical issues or problems which are not primarily carried out through directed readings. P: PHL 107 or 109, IC, and one of the following: (a) any 200-level philoso-
phy course (except PHL 201), (b) THL 250, or (c) PHL 320 or 323. May be repeated to a limit of six hours.

PHL 593 Advanced Readings in Philosophy (1-4) OD
Independent readings course worked out individually for the student. May be repeated to a limit of six hours. P: PHL major or co-major.

## PHYSICAL THERAPY (PDT)

A description of this program is found in the School of Pharmacy and Allied Health Professions Bulletin.

## PHYSICS (PHY)

Associate Professor Kennedy (Chair); Professors Cipolla and Zepf; Associate Professors Cherney and Seger; Assistant Professors Horner, Loucks, McShane, and Nichols; Adjunct Instructors Kriegler and Stuva.

## The Physics Core

All physics majors, double-majors, and co-majors are required to include the following physics core courses in their programs: PHY 211, 212, 301, 302, 331, 332, 471 and 481. They are also required to complete the following support courses in mathematics: MTH 245, 246 and 347.

## The Field of Concentration for the Degree of Bachelor of Science (B.S.)

## Physics Major-Regular Program:

This program provides the necessary preparation for entry-level work as a physicist in government or industry. It also prepares students for entry-level work or graduate study in a wide variety of interdisciplinary science and engineering fields including astronomy, astrophysics, computational physics, geophysics, planetary science, electrical engineering, nuclear engineering, etc. Also, the program is highly recommended for any career in which a liberal arts degree with a concentration in physics may be desirable-scientific writing and reporting, criminology, patent law, scientific equipment sales, high-school physics teaching (when combined with the required education courses)-to name just a few. Students should work closely with their advisors in choosing electives to prepare for specific career goals.

Concentration Major: Thirty-two semester hours of courses consisting of the Physics Core (PHY 211, 212, 301, 302, 331, 332, 471, 481) plus Physics 531, 541, and at least four semester hours selected from Physics 491 or 497 (one semester hour), 521, 561, 562, 571, and 572.

Supporting Courses: Mathematics 245, 246, and 347. Additional course work in physics, mathematics, computer science, chemistry, biology, or other sciences is recommended. Choices will depend on the specific career plans and interests of the student.

## Physics Major - Health Sciences Program:

This program is intended for students desiring to major in physics as undergraduate preparation for a career in medicine or other health-care profession. The program requires a broad foundation in the sciences including biology, chemistry, mathematics, and physics as well as the breadth of knowledge and experience provided by the Creighton liberal arts core. The program includes the courses required for admission to medical school as well as for graduate study and research in medical physics and a growing number of related fields.

Concentration Major: Thirty-two semester hours of courses consisting of the Physics Core (PHY 211, 212, 301, 302, 331, 332, 471, 481) plus Physics 351, 491, 497, 562, and at least three additional semester hours of physics at the 500 level approved by the major advisor.

Supporting Courses: Mathematics 245, 246, 347; Chemistry 203/204, 205/206, 321, 322, 323,324 ; Biology 211, 212 and at least one additional course in biology at the 300 level or above approved by the major advisor.

## Physics as a Co-Major

For students majoring in another discipline who wish to have a co-major in physics, the physics concentration requires twenty-five semester hours of courses consisting of the Physics Core (PHY 211, 212, 301, 302, 331, 332, 471, 481), and three additional hours at the 400 or 500 level.

## The Field of Concentration for the Degree of Bachelor of Science in Physics (B.S.PHY)

This degree program provides a strong foundation for careers in the rapidly developing hightechnology industries. It is highly recommended as preparation for graduate work in physics. It also prepares students for graduate study in most engineering fields without requiring the early specialization, typical of undergraduate engineering programs, that can greatly reduce career options.

Concentration Major: Forty-two semester hours of courses consisting of the Physics Core (PHY 211, 212, 301, 302, 331, 332, 471, 481) plus Physics 491, 497, 521, 531, 541, 561, 562, 571, and 572. Physics 551 is highly recommended.

Supporting Courses: Mathematics 245, 246, 347, and either Chemistry 203/204 and 205/206 or six semester hours selected from Mathematics 529, 543, 545, and 561. Additional course work in mathematics, computer science, chemistry, or other sciences is recommended. Courses selected will depend on specific career goals.

## PHY 107 Introductory Astronomy (3) I, II, S (Same as NSC 107)

Information about the solar system, stars, galaxies, and the universe; main methods by which this information has been acquired; how basic laws of physics have led to theories about cosmic processes, structure, and history. Some history of astronomy for better understanding modern views and demonstrating cultural impact of astronomical ideas. No formal science or mathematics prerequisites.

PHY 108 Astronomy Laboratory (1) I, II, S (Same as NSC 108)
Laboratory sessions to acquaint the student with basic phenomena, methods, and instrumentation important in astronomy.

PHY 127 Sound and Music (3) II (Same as NSC 127)
Basic course on the nature of sound, covering the generation, propagation and detection of sound, with particular applications to music. P: MTH 135 or 137 or IC.

PHY 137 Light, Color, and Lasers (3) I, S (Same as NSC 137)
A basic course on the nature of light and its applications; sources of light; wave-particle duality; lasers and holography; images and illusions; special effects; color variables and color vision. The subject of light is used as a basis to explore a wide range of physical phenomena and to examine the goals, methods and limitations of science. Since its essential characteristics are embodied in the postulates of relativity and quantum theory, light is seen to lie at the foundation of modern scientific thought. Course features many classroom demonstrations. No formal science or mathematics prerequisites.

PHY 147 Einstein and Modern Physics (3) I, PS (Same as NSC 147)
Historical and philosophical study of the reciprocal influences between Albert Einstein and the social and scientific communities of his time, including his changing attitude toward pacifism, his relationship to the Zionist movement, his philosophy of knowledge, his relationship with other scientists, and his basic contributions to science. No formal science or mathematics prerequisites.

PHY 187 Introduction to Physics (3) I (Same as NSC 187)
Basic physics concepts and principles in areas of motion, force and energy, liquids and gases, thermodynamics, electricity and magnetism, light, sound, and x-ray and nuclear radiations, with examples from daily life as illustrations. Includes practice in numerical solution of simple physics problems. P: MTH 135 or 137 or IC. No formal science prerequisites.

## PHY 188 Physics in the Everyday World (1) II (Same as NSC 188)

Experimental investigation of physical concepts as applied to geology, astronomy, motion, fluids, electricity, magnetism, waves, and quantum physics. This course may be taken by itself or in combination with PHY 127, 137, 147, or 187. No formal science or mathematics prerequisites.

## PHY 195 Selected Topics in Physics (1-6) OD

A physics project or special study in physics outside the normal curricular boundaries.

## PHY 211 General Physics I (4) I, II, S

First semester of the general physics sequence. Lecture, discussion, laboratory. Topics include kinematics, Newton's laws of motion, conservation of momentum and energy, rotational
dynamics, thermodynamics, and fluids. Basic calculus used. Background of HS Physics or PHY 187 strongly recommended. CO: MTH 245 or 141 or IC.
PHY 212 General Physics II (4) I, II, S
Continuation of PHY 211. Topics include oscillations, waves, optics, electricity and magnetism, DC and AC circuits, modern physics. Basic calculus used. P: PHY 211; MTH 245 or 141 or IC.

PHY 301 Modern Physics (3) I
An introduction to relativity and quantum physics. Special theory of relativity; quantization of electrical charge, energy and light; Bohr model of the atom; wave aspect of particles; wave-particle duality; Schroedinger equation in one dimension; applications of relativity and quantum theory in atomic, nuclear, and elementary particle physics. P: PHY 212; MTH 246.

PHY 302 Modern Physics Laboratory (1) I
Laboratory work designed to acquaint the student with the quantization of electrical charge, energy and light, and the wave aspect of particles. 3L. CO: PHY 301.
PHY 331 Physical Optics (3) II
Mathematical representation of waves; interference, diffraction and polarization; coherence and incoherence; lasers; Fourier analysis and synthesis. P: PHY 212; MTH 246.
PHY 332 Optics Laboratory (1) II
Experiments in geometrical and physical optics: interferometry; lasers and holography; analytical methods based on optical principles. 3L. CO: PHY 331.
PHY 351 Physics in Medicine (3) I
A review of basic physics as it applies to radiation and the human body followed by an overview of major topics in the field of medical physics: x-rays and their uses in medical imaging, physics of nuclear medicine imaging, ultrasound imaging, magnetic resonance imaging, radiation therapy for cancer, and radiation biology. P: PHY 212 or IC.
PHY 471 Classical Mechanics (3) I
Review of particle dynamics, the harmonic oscillator, rigid body mechanics, generalized coordinates; introduction to Lagrange's and Hamilton's equations. P: PHY 212; CO: MTH 347 or IC.

PHY 481 Electricity and Magnetism (3) I
Development of Maxwell's equations; Laplace's and Poisson's equations and boundary value problems; electromagnetic waves. P: PHY 212; MTH 347.
PHY 491 Seminar (1) I, II
Undergraduate seminar. Training in the organization and presentation of papers on advanced topics in physics. P: DC. May be repeated to a limit of three hours.
PHY 493 Directed Independent Readings (1-3) I, II, S
A readings project under the guidance of a member of the faculty. Credit by arrangement. P: IC. May be repeated to a limit of six hours.
PHY 495 Directed Independent Study (1-3) I, II, S
A study project under the guidance of a member of the faculty. Credit by arrangement. P: IC. May be repeated to a limit of six hours.
PHY 497 Directed Independent Research (1-3) I, II, S
A research project under the guidance of a member of the faculty. Credit by arrangement. P: IC. May be repeated to a limit of six hours.
PHY 521 Electronics for Scientists (3) I
Basic course in electronics. Laboratory experiments include an introduction to measuring instruments, solid state components, and digital and logic circuits. Lecture closely follows the experiments. 1R, 5L. P: PHY 212.
PHY 531 Quantum Mechanics (3) II
Development of the formalism of non-reletivistic quantum mechanics; applications to the harmonic oscillator, the hydrogen atom, square-well potential, and scattering. P: PHY 301 \& 471.

Laws of thermodynamics, thermodynamic variables, thermodynamic potentials; kinetic theory, distribution functions, classical and quantum statistics. P: PHY 212 or CHM 341; MTH 246.

## PHY 547 Albert Einstein: Foundation of 20th Century Physics (3) OD

A study of the scientific ideas of Albert Einstein and their influence on twentieth-century physics. Treatment of the evolution of these ideas along with his involvement in movements such as pacifism and Zionism.

PHY 551 Mathematical Physics (3) II
Mathematical methods for the representation of physical processes in space and time. Fourier and other complete representations; vector calculus; tensors and matrices. Selection and emphasis on topics keyed to needs of students enrolled. P: PHY 212; MTH 347.

PHY 557 Scientific Works of Einstein (3) OD
The scientific ideas of Albert Einstein and their role in the revolution of scientific thought in the early twentieth century. Topics covered include the basics of quantum mechanics, special theory of relativity, and general theory of relativity.

PHY 558 Relativity: The Special and General Theories (3) S (OD)
Review of classical relativity (frames of reference); Einstein's special theory of relativity (length contraction, time dilation, mass dependence on speed, $\mathrm{E}=\mathrm{mc}^{2}$; Einstein's general theory of relativity (gravity, equivalence of gravitation and acceleration, deflection of light, time effects). P: PHY 212; MTH 246.

## PHY 561 Nuclear Physics (3) I

Application of elementary quantum mechanical theory and relativity to the study of nuclear structure, radioactive decay and nuclear models. P: PHY 531.

## PHY 562 Nuclear Instruments and Methods (2) I

Laboratory work in nuclear physics designed to teach the methods and procedures of experimental nuclear physics at an advanced level and to familiarize the student with modern research equipment and its use. 3L. P: PHY 301 and 302.

PHY 563 High Energy Nuclear Physics (1) OD
Students will read and discuss original journal articles related to the historical development of high energy physics. P: PHY 212; MTH 246; or IC.

PHY 571 Solid State Physics (3) II
Introduction to the theory of the solid state based on quantum mechanics. Crystal structure and symmetry, lattice dynamics, free electron model, and band theory of solids. P: PHY 531.
PHY 572 Solid State Laboratory (1) II
Laboratory work in solid state physics including x-ray crystallography. 3L. CO: PHY 571 or IC.

PHY 595 Special Topics (3) OD
A course treating physics topics of special interest. This course will be subtitled in the Schedule of Courses and may be repeated under different subtitles. P: IC.
Graduate-level courses offered by the Department of Physics are listed in the Graduate School issue of the Creighton University Bulletin.

## POLITICAL SCIENCE AND INTERNATIONAL STUDIES (PLS)

Professor Wunsch (Chair); Associate Professors Evans, Meeks, Wise and T. Clark; Assistant Professors Crawford and Ramsden.

## Prerequisites

Political Science 121 or 215 are normally prerequisites for other political science courses for a department major. PLS 310 must be completed by the end of the junior year.

## The Fields of Concentration

## Concentration Major in Political Science:

PLS 121, 215, 310, 491 and a minimum of twenty-one semester hours of additional political science courses at the 200-level and above as approved by the major adviser. At least one course
must be taken in each of the subfields of the discipline-American government and politics, comparative politics, international relations, public policy and law, and political philosophy and theory; PLS 491—Senior Research Seminar is normally offered only in the fall semester, and may not be taken on an independent study basis.

Supporting courses: Each major must complete a departmentally-approved sequence of twelve hours at the 200 level or above in one department or topic area. Courses must be approved by the student's academic adviser, must be clearly related to the study of politics, and may not include courses used to fulfill general education requirements. Common support departments for political science are area studies (African or Latin American Studies, etc.) economics, sociology, history, journalism-mass communications, philosophy, management, and modern language.

Co-Major in Political Science: Students majoring in another department may complete a political science co-major by completing PLS $121 ; 215 ; 310$; and 15 hours of course work 200level and above. PLS 101 may be substituted for one of the upper level courses if taken during the freshman year.

## Concentration Major in International Studies

PLS 105, 121, 215, 310, 491; PLS 340; two courses from PLS 345, 347, or 472; one course from PLS 341, 342, 343, 440, 451, or 537; one course from PLS 319, 405, 410, 435; two comparative/area studies politics courses at the 300 level or above (PLS 301-317, 401, 410, 415); and a support area of four courses on an approved focus or theme. Support courses must be approved by the department advisor and may include credits earned as part of study abroad and in certain cases may include internship and senior capstone courses. Courses in the focus group may not include courses used to meet Core requirements and are ordinarily at the 300 level or higher. An upper-level course should be substituted for PLS 105 for students beginning the major in their sophomore year.

Mastery of a modern foreign language is strongly urged for International Studies students. Students interested in the International Studies major should indicate this when applying to the department.

Co-Major in International Studies: PLS 105, 215, six courses at the 200 level or higher: three in International Politics and three in Comparative Politics from the Department of Political Science and International Studies. Credits earned in study abroad and appropriate internship experience may be included. Note: Courses in International Politics include: PLS 340-347, 440-451, 537; Courses in Comparative Politics include PLS 301-319, 401-415, 435.

## Political Science major with Specialization in Public Policy

Specialization in public policy provides students with a strong grounding in political science as a discipline and prepares them in the interdisciplinary area of public policy. The training has a strong emphasis on methodology and either economics or social policies and programs in its supporting requirements. Requirements: PLS 121, 215, 310, 491 or 492 (political science core); PLS 331, 433 (public policy core); three hours selected from PLS 332-337, 372, 435, 436, 438 (public policy electives); three hours selected from PLS 320, 322, 324, 325, 326; (American institutions electives); three hours of advanced work in comparative politics (300-400); three hours of advanced work in international relations (300-400); three hours of advanced work in political philosophy and theory (300-400); PLS 483 (Public Affairs Internship) is recommended.

Supporting Courses: Students will select one option as a support sequence. Economic Policy Option: ECO 203, 205; SOC 101; nine hours selected from ECO 303, 305, 315, 318, 353, 408, $413,423,433,443,518,528,538$; FIN 343 and 361 and ACC 301. Social Policy Option: SOC 101; ECO 203, 205; nine hours selected from SOC 215, 223, 225, 235, 301, 307, 309, 317, 320, 321, 331, 341, 355, 411; SWK 261, 371, 401, 473; FIN 343. Students interested in the public policy concentration should indicate so when applying to the department.

## Political Science Major with Specialization in Legal Studies

This specialization provides fundamental preparation in the discipline of political science and an understanding of law as a component of government and human social life as well as an examination of legal institutions. Based in a liberal arts tradition, this course sequence is appropriate preparation for students planning to attend law school or for students who may wish to pursue careers in other law-related positions such as court administration, legal investigation, public policy analysis or who wish to seek graduate education in criminal justice, dispute resolution, or legal system administration.

Requirements: PLS 121, 215, 310 and 491 or 492 (Political Science Core); PLS 320, 337, 367 (Legal Studies core); three hours selected from among PLS 438, AMS/BKS/HIS/PLS 372, PSY 363, SOC 321, SOC 323; three hours of advanced work (300-500 level) in each of three fields: Comparative Politics; International Relations; Public Policy or American Politics. Supporting courses: With the assistance of the department adviser, students will select 12 hours of supporting courses at the 200 level or higher that clearly advance their legal studies interests. Supporting courses should be in a single relevant department such as history, economics, sociology or philosophy, or in a well defined topical area such as social welfare, environmental policy, urban studies, business, etc.

Supporting courses: With approval of the department adviser, students will select 12 hours of supporting courses at the 200 level or higher that clearly advance their legal studies interests. Supporting courses should be in a single relevant department such as history, economics, sociology or philosophy, or in a well defined topical area such as social welfare, environmental policy urban studies, business, etc.

Students interested in the legal studies concentration should indicate this when applying to major in the department.

## Graduation with Departmental Distinction

Students may apply to the department to graduate with "Departmental Distinction" if they maintain a 3.5 overall quality-point average and prepare a senior research thesis unanimously approved as worthy of "distinction" by a committee of three department faculty members. Students interested in this honor must present their theses for consideration by February 15 of the year they plan to graduate (November 15 for December graduation).

## PLS 101 Introduction to Politics (3) I, II, S

Politics is the way humans choose and pursue goals in society. Political science is the study of this process. Course considers fundamental and recurring problems of politics and public life, exploring ideas and questions in both topical and theoretical ways to improve the student's ability to understand, analyze, and synthesize political values and public policy. P: Fr. or So. stdg. only.
PLS 103 Honors Introduction to Politics (3) I, II
Students who have already received credit for PLS 101 may not take PLS 103 for credit. P: Consent of the Director of the Honors Program.
PLS 105 Introduction to World Politics (3)
Wide-ranging survey of world politics including an overview of the international system, problems of conflict and war, political geography, major forms of government, cultural and economic sources of politics and policy. Case studies based on contemporary events and an introduction to relevant political concepts.

PLS 121 American Government and Politics (3) I, II, S
Analysis and evaluation of American political institutions and processes. Cultural and intellectual foundations of the American Constitution. Exploration of effectiveness of popular political activity, role of the media, elections and public opinion; review of such issues as congressional fragmentation, presidential power, bureaucratization and judicial activism. Selected case studies.
PLS 215 Comparative Political Systems (3) I, II
Introduction to the concepts, techniques, and theories used by political scientists in understanding foreign political systems. Comparative exploration of major processes, problems and institutions found in contemporary political systems. Decision-making; the centralization, distribution and control of political power; policy implementation; political instability and violence. Selected case studies of Western and non-Western states. P: PLS 105 or PLS 121 or So. stdg.

PLS 235 Interest Group Politics (3) I, AY
Examination of political organizations in the United States. Special attention given to the functions of interest groups, their origins, structures and purpose in democratic politics. P: PLS 101 or 121 or So. stdg.

PLS 301 Western European Political Systems (3) I, AY
Introduction to political cultures, party and parliamentary systems, and policy-making processes in major West European nations. Special emphasis on the United Kingdom, France,

Germany, and Italy. Contemporary policy issues such as European integration, financing of social services, economic growth and environmental regulation are considered. P: PLS 121 or So. stdg.
PLS 303 Politics of Russia and the USSR Successor States (3) II
Exploration of the emerging Russian Federation. Origins of the collapse of the Soviet Union. Problems of reform and reorganization. Relationships with other former Soviet Republics. P: PLS 215 or So. stdg.

PLS 305 Eastern European Political Systems (3) I AY
Survey of post-communist, east European political systems, including Poland, Czechoslovakia, Hungary, Romania and the former Yugoslavia. Review of such topics as the collapse of communist regimes, economic and political reform, democratization, ethnic conflict, political institutions and East-West relations. P: PLS 215 or So. stdg.

## PLS 310 Political Science Research Methods (4) I

Introduction to the methods and techniques of the systematic analysis of political phenomena. Emphasis on the rationale for quantitative and qualitative approaches, research design, measurement, strategies, data collection, computer usage and data analysis, and ethical implications of the investigation of political life. 3R, 1L. P: PLS 215 and So. stdg.
PLS 311 Politics of Africa (3) I (Same as AFS/BKS 311)
A broad introduction to politics of sub-Saharan Africa. Covers traditional African cultures, societies and polities, independence movements, and post-colonial politics. Discusses contemporary problems of political parties, military interventionism, ethnic conflict, development policy and recent efforts at democratic reform. P: So. stdg.
PLS 313 Politics of the Middle East (3) OD
A comparative analysis of the various political systems in the Middle East. Attention focused on the process of political development and the transformation from traditional to modern political entities. Analysis of such issues as the Arab-Israeli conflict, rise of Islamic fundamentalism, and the Iran-Iraq War. Exploration of geopolitical considerations and the importance of the Middle East in the global East-West confrontation. P: So. stdg.

## PLS 314 Politics of Post-Communist South Eurasia (3) OD

The region form the Adriatic Sea to the Aral Sea is aflame in ethnic conflict. A historic transition belt between western and eastern cultures, the region has been a major path for migrations between the two. Dominated in recent centuries by Islam, the region contains representatives for every major world religion. As a consequence, it has become a focal point of a clash of civilizations. P: PLS 215.

PLS 315 Politics of Asia (3) I, AY
Introduction to the political life of selected Asian countries from a comparative perspective. Topics include political change and development; conflict resolution; domestic and regional problems; economic development; authority; nonalignment. P: So. stdg.

PLS 317 Latin American Government and Politics (3) II, AY
Overview of the political systems of Latin America with special emphasis on the impact of major social institutions on political process and culture. Review of colonial legacies, governmental systems, political parties and interest groups, and issues of socio-economic development. Major countries and country groups treated in depth. P: So. stdg.

PLS 319 Politics of the Developing Areas (3) S
Introduction to political and social issues underlying and forming developing areas politics. General theories of political development, the military, patron-client systems of politics, ethnic conflict, democracy and institutional development, statism and economic underdevelopment, paradigms of economic growth, cultural factors. Cases selected from Africa, Asia, Latin America, and the Middle East. P: So. stdg.
PLS 320 Judicial Process (3) II AY
Organization, functioning and political role of the courts and the legal process in the United States. Detailed attention given to theories of adjudication, staffing, judicial decision-making, and judicial review. P: PLS 121 or So. stdg.

Exploration of the office and role of the Presidency in contemporary America, including its evolution in authority, power, and style. Influences of the Constitution, personality, domestic pressures, and world events on the Presidency. Particular attention will be paid to the domestic and foreign policies of the Bush and Clinton administrations. P: PLS 121 or So. stdg.

PLS 323 Campaign Management (3)
Examines the practical side of running for political office. Topics include campaign strategy, campaign organization, issue development, door-to-door campaigning, fund-raising, media strategy, voter registration drives, polling, and volunteer recruitment. Students are required to work at least 50 hours on a political campaign. P: PLS 121 or So. stdg.
PLS 324 Congress and The Legislative Process (3) I AY
Analysis of the role of Congress and the state legislatures in the American political system. Specific attention given to theories of representation, the character of legislative institutions, the participants and processes of lawmaking, and legislative decision-making. P: PLS 121 or So. stdg.

PLS 325 American States and Regions (3) OD
Description and evaluation of American state governments and regional organizations. Examination of the theory of federalism and its current status; comparative analysis of state-level political actors and institutions. Special attention given to Nebraska and Iowa state politics. P: PLS 121 or So. stdg.

PLS 326 Governing Metropolitan Areas (3) I, AY
Course examines politics and policy questions involving the governance of complex urban areas. Course evaluates the impact of progressivism and municipal reform on urban government and explores such issues as metropolitan government structure and leadership, planning, finance, economic development, the professionalism of urban bureaucracies, black political organization, Federal involvement in the city, urban services. P: PLS 121 or So. stdg.
PLS 327 Minority Politics in America (3) OD (Same as AMS 327)
Explores the political experience of American racial and ethnic minorities with particular attention to the experience of black Americans. Includes review of roots and patterns of unequal treatment of minorities, tactics and strategies used to attack these patterns, and contemporary situation. Particular attention will be paid to the tension between integrationist and self-determination strategies. P: So. stdg.

PLS 328 Mass Media in American Politics (3) AY (Same as AMS 328)
Examination of the inter-relationships among the media, the mass public and government. The role of the media as a channel between citizens and government is considered both in political campaign settings and in day-to-day government. P: PLS 121 or So. stdg.
PLS 329 Gender and Politics (3) OD
Examination of issues of gender and politics from political theory, political behavior, and public policy perspectives. Issues include place of gender in liberal political theory and political theory alternatives; history of the women's movement; gender patterns in political behavior; gender consequences of various public policies in the United States; and debate and analysis of policy changes to address these issues in public policies. P: PLS 121 or So. stdg.
PLS 331 Managing the Public and Non-profit Sectors (3) II AY
Description and evaluation of administrative processes and politics in public non-profit settings. Introduction to theories of bureaucracy giving special attention to questions of political responsiveness, organizational structure and performance, personnel recruitment, budgeting and decision-making. P: PLS 121 or So. stdg.

PLS 332 Public Policy and Education (3) AY
Review of government policies and programs as they affect education in the United States and in other advanced democratic societies. Role of public policy in development of public, private and parochial systems. Current policy issues including financial equity, state funding of alternate schools, voucher systems, and government reform mandates. Studies of the complex system for governing education including local school boards, state and federal regulation and assistance, and governance of higher education. Educational interest group politics. P: PLS 101 or 121 or So. stdg.

An overview of the world's environmental problems from a political perspective. Particular attention is paid to the political impediments to environmental problem solving in both the domestic and international context. P: PLS 121 or So. stdg.

PLS 334 Public Policy and Health Care (3) II 1994-95 (Same as HAP 334)
Review of government policies and programs as they affect health care in the United States and other countries. Various systems of health insurance, the private medical market, governmental provision development and evolution of managed care systems, current U.S. federal programs. Comparative analysis of non-U.S. systems (Canada, U.K., Germany), and of prospective reforms of the U.S. system. Issues of cost, equity and quality are themes throughout the course. P: PLS 121 or So. stdg.

PLS 336 Politics of the American Economy (3) AY
Review of government policies and programs as they affect the U.S. political economy. Role of federal, state, and local governments in regulation and promotion of business. Comparative analysis of alternative governmental roles in the economy, and examination of various institutional devices for managing the political economy such as taxation, union legislation, public investment, litigation, monetary policy, and governmental mandates. Means by which private interests influence government and alternative philosophies are examined. P: PLS 121 or So. stdg.

PLS 337 Constitutional Law (3) I
The Supreme Court as a branch of government actively engaged in the public decision-making process. Constitutional interpretation is one of the important ways in which the Supreme Court exercises political power. Using major Supreme Court decisions and supplemental materials, this course examines the role of the Court in the governmental process, and the Court's interpretation of American federalism. P: PLS 121 or Jr. stdg.
PLS 339 Public Policy and Poverty in the United States (3) AY (Same as AMS/SWK 339) Government policies and programs affecting the poor in the United States. Issues include various elements of welfare programs and policies, entitlement programs such as Medicare and Social Security, problems of intergovernmental activity in administrating social welfare. Examination of various critiques of social welfare policy and a review of reform proposals. Role of organized interests and public support relative to programs affecting the poor. Skill development includes policy formulation and analysis. P: PLS 121 or So. stdg.

PLS 340 International Politics (3) I
Understanding the patterns of global conflict and cooperation requires investigating assumptions, purposes, and preferred actions of state and non-state actors. Course also examines global issues such as power, political morality, interdependence, geopolitics, political economy, war, terrorism, diplomacy, international law, and peacemaking. P: PLS 215 or So. stdg.

PLS 341 Issues and Challenges in American Foreign Policy (3) II, AY
Reviews key problems of contemporary American foreign policy. Terrorism, nuclear proliferation, economic and political reconstruction of Russia, economic crisis in Asia, China and human rights, U.S. trade, U.S.-Middle-East relations, and others are typical of the topics the course will pursue. Course will also briefly review major institutions and actors in the American foreign policy process.

PLS 342 Foreign Policy and Diplomacy of Major Powers (3) I 1996-97
Foreign policy is rarely derived from ideology. It grows from cultural, institutional, and political factors as well as from competing of "national interest." Course explores and analyzes comparatively the formulation and substance of the foreign policies of selected major powers: the United States, Russia, People's Republic of China and Japan. May be repeated if country of emphasis differs. P: PLS 101 or Jr. stdg.

PLS 343 National Security Studies (3) AY
Every state pursues "security" on a global stage. Course examines domestic and international roots of security policies; the evolution and impact of concepts such as military threat, nuclear deterrence, and strategic goals; and issues such as arms control, crisis management, nuclear proliferation, military alliances, access to food, global environment, and peace forces. P: PLS 253 or PLS 340 or Jr. stdg.

An overview of political problems and issues associated with world economic relationships and development. Political aspects of international trade, monetary and debt relations, aid relationships, technology transfers, and migration. An introduction to important national and multinational actors and a review of various ideological perspectives. P: PLS 101 or 121 or 215 or Jr. stdg.
PLS 347 International Regimes (3)
Many think of the world as a hostile environment in which nation-states struggle for power. In fact, on any given day the number peaceful, cooperative acts occurring across international boundaries is infinitely greater than the number of conflictual events. As the number of these cooperative events continues to multiply at a phenomenal rate, a growing web of international organizations and informal understandings is emerging which seriously limits the choices which nation-states can make. The course considers the possibilities which these relational webs (regimes) hold for the global community. P: PLS 105, 215, 340, or IC.
PLS 355 Classics of Political Thought (3) II
Every political problem is unique; yet, certain kinds of problems continually recur. What makes certain writings "classics" is that they are sufficiently rich to speak to people of vastly different ages and situations and have influenced the thought and action of our political world. Thus, we are living partly in a world constituted by these ideas. The course presumes no prerequisites other than an interest in social and political issues, and a willingness to think philosophically about them. P: PLS 101 or 121; So. stdg.

## PLS 357 Alternative Political Futures (3) S (OD)

The relationship among humans and the natural and social environment is explored using science fiction literature. Writings of a variety of authors illustrate problems of human organization, leadership, individual freedom, social cohesion, and conflicts of values. Readings and discussion concerning issues such as population, ecology, outer space, and economics. Writers selected from among Asimov, Heinlein, LeGuin, Simak, Ellison, van Vogt, Dickson, Niven, Pohl and others.

PLS 360 Liberal Democracy and Its Critics (3) I 1994-95
Course surveys the development of classical liberalism from its sources in 17th century England through the serpentine paths whereby it produced both laissez faire economics and the welfare state. Focus is not primarily on the history of an idea but on the critical appraisal of our own political heritage. The responses to the dominant liberalism from traditional conservatives on the right and the socialist critics on the left. Focus on the relationship between liberal political ideas and the political practices they engender. P: Jr. stdg.
PLS 362 Conservative Political Thought (3) I, OD
Major works by Burke, deTocqueville and other major classical conservative authors. Twentieth Century conservatism and its diverse philosophical currents. P: PLS 121, So. stdg.
PLS 367 Theory of Law (3) II AY
Examination of some of the major concepts involved in the law, beginning with an exploration of what "law" is, and the significance of our understanding of "law" for political practice. Consideration of such topics as liberty, rights, punishment, and responsibility and the ways in which the conceptualization of these ideas affects our notion of justice within the legal system. P: PLS 121 or So. stdg.

PLS 372 Equality, Minorities, and Public Policy (3) II, AY (Same as AMS 372, BKS 372, HIS 372) Incorporates continuing discourses between a historian and a political scientist. Exploration of the political processes whereby minorities have influenced the formulation and implementation of policy and governmental responses to demands for equal treatment. P: Jr. stdg.

PLS 401 The European Union (3) II, OD
Review of European co-operation and integration from Treaty of Rome in 1951 to the establishment of the European Union by the Treaty of Maastricht. Institutions and politics of the European Union. Consideration of issues such as currency integration, international trade, environmental and social regulation, admission of new members and movements of peoples. P: Jr. stdg.
PLS 405 Ethnicity, Nationalism and Democracy (3)
Recent history has brought a "wave" of democratization, along with intensifying ethnic awareness, nationalism and (at times) conflict. What are the major interpretations of the courses and
prospects for these phenomena? How do ethnicity and nationalism affect democracy, human rights and the international system? Can multi-nation states such as Russia survive as democracies? How? This course considers trends in major regions and uses several case studies: Russia, Israel/Palestine, Nigeria, South Africa, India, and others. P: PLS 215 or So. stdg.
PLS 410 Seminar on Comparative Politics (1-3) OD
Each semester will focus on one problem or issue such as reforms in Eastern Europe, rebellion and repression in China, the future of Israel, etc. May be repeated under different subtitles. P: PLS 101 or 121 or Jr. stdg.

## PLS 415 Government and Politics of the People's Republic of China (3) II, AY

China has undergone intense and rapid change in recent decades, reconstructing itself after a century of Western interference. The nature of its political culture, how political participation occurs, how decisions are made, and how people are mobilized for collective purposes. China's contemporary experiments in modernization. P: PLS 101 or Jr. stdg.
PLS 420 Seminar on American Government and Politics (3) OD
Each seminar will focus on one problem or issue such as women in politics; minority politics; corruption in government; environmental politics; restructuring and reforming American government; poverty in America, and public policy. May be repeated under different subtitles. P: PLS 101 or 121 or Jr. stdg.
PLS 421 Public Opinion and Survey Research (3) I, AY
This course explores how public attitudes and opinions about contemporary issues are formed and how they evolve. Examined are opinion trends in issues like abortion, the death penalty, trust in government, party allegiances, ideological orientations, and perceptions of candidates and governing institutions. Students will also learn the techniques used to research these topics. These include questionnaire construction, sampling, and PC-based statistical analysis using SPSS. P: PLS 310, or SOC 214.
PLS 432 Democratic Theory (3) I OD (Same as AMS 432)
Major themes and thinkers on the role of government and the nature of a democratic political culture. Using both historical and contemporary materials, the course explores issues such as popular control, public participation, local autonomy, individualism, political liberty, and variations in democratic political ideology. P: PLS 101 or 121 or Jr. stdg.

PLS 433 Public Policy Analysis (3) II AY (Same as HAP 433)
Examination of approaches to governmental problem solving and public policy analysis. Discussion of types of public policy, the nature of policy-making processes, theories of decision making, and logic and strategies of public action. Selected examples from major United States policy areas. P: PLS 121 or Jr. stdg.

PLS 435 Global Poverty and Development (3) II AY
Exploration of theories and strategies of political, social and economic development of the "third world." Topics include: alternative models of development, problems of rural poverty, the roles of international organizations, political-economy of underdevelopment, and multinational corporations. Examination of "Dependency" and "Neo-classical" theories of poverty and growth, U.S. policy, institutions, and aid practices. P: Jr. stdg.
PLS 436 Politics and Ethics of Science and Technology (3) II AY (Same as SRP 436)
This course involves the study of the interrelationship of politics, ethics and science in contemporary societies. It examines the role of government in encouraging and regulating science and technological development in American and international settings. Analyses include the impact of government and politics on science and technological development, including technology transfer, diffusion of innovation, weapons technologies, bio-technologies, aerospace and marine technologies, etc. Students are challenged to analyze and reflect upon the ethical and moral implications of value tradeoffs between and within the realms of science and government/politics. Actual cases will be presented by Creighton faculty with science backgrounds to illustrate real world dilemmas that students may face in their future professional careers. T P: PHL or THL 250 and Sr. stdg.

PLS 437 Religion and Public Life in the United States (3) (Same as AMS 437)
This course transcends the designation "church and state" because it considers the non-institutional behavior of religious individuals in groups, and their impact on our public life far beyond that of government. P: PLS 121 or IC.

PLS 438 Contemporary Issues in Civil Liberties (3) II AY
Course goes beyond the simple model of "man versus government" in understanding individual liberties in the United States; it considers the protection of liberties in a political system with multiple governments and plural centers of power. In that context, the course surveys major cases concerning the freedom of expression, privacy and autonomy of individuals, the rights of the accused, and the equal protection of law for minorities. P: PLS 337 or HIS 458 or IC.

PLS 440 Seminar on International Studies (1-3) OD
Each seminar will focus on one problem or issue such as disarmament, the future of the Atlantic Alliance, Third World debt, Soviet-American relations, etc. May be repeated under different subtitles. P: PLS 101 or 121 or Jr. stdg.

PLS 444 Non-Violence and Peaceful Resolution of Conflict: Cross-Cultural and Political Perspectives (3) OD (Same as ANT/JPS/SRP 444)
Peace is more than the absence of war and both peace and war (or violence, in general) are socio-political constructs. This Senior Perspective seeks to understand how peoples differ in how they envision and enact peace, violence, war, non-violence, and peaceful resolution of conflict. Students will assess their own views on alternatives to violence and modes of conflict resolution by comparing different cultures, political practices, and times. P: Sr. stdg.; JPS/THL 250 or PHL 250.

PLS 451 Theories of Peace and World Order (3) OD
Investigation of attempts to define, describe, prescribe, and implement plans for political order on regional and global scales. P: Jr. stdg.
PLS 459 Marxism (3) OD (Same as PHL 459)
Marx provided some of our most important intellectual tools for understanding the society we live in while at the same time providing one of the most compelling challenges to our traditional ways of understanding ourselves, our society, and the future. This course examines the philosophy of Karl Marx, the historical evolution of Marxism, and its impact on contemporary thought. P: PLS 101 or 121 or Jr. stdg.

PLS 461 Contemporary Political Theory (3) OD
How political scientists and selected social scientists from related disciplines conceptualize and interpret key issues of contemporary political life. Emphasis on such issues as the expansion and centralization of legitimate power, the logic of organizational behavior, rational-choice theories of group and party behavior, the health of the "liberal" state, the prerequisites of "political order," and others. Authors include Dahl, Lowi, Huntington, Downs, Lindblom, Olson, Simon, and others. P: Jr. stdg.

PLS 463 Game Theory and Social Choice (3) OD (Same as HRS 463)
Introduction to the economic modeling of political interactions and social choice processes. Covers a set of analytic tools that are used to explain and predict political and economic behavior and collective choices under a variety of political settings. Game theory uses rationality assumptions and economic tools to predict and explain exonomic and political behavior. Social choice theory is concerned with the effects of collective choice rules on olitical and economic outcomes. P: Jr. stdg.
PLS 465 Faith and Political Action (3) OD (Same as SRP/THL 465)
Faith in Political Action, a Senior Perspective course, challenges students to understand theological and political science perspectives on social policy issues, public policy analysis, and advocacy strategies, and allows the students to practice these new skills/understandings in a service-learning project for a local agency. In addition to class time, the course requires twenty hours of volunteer service for the agency during the semest PHL 250 or JPS/THL 250 and Sr . stdg.
PLS 472 International Conflict (3) I AY
Course explores the patterns and causes of international political conflict, including terrorism, ethnic conflict, and interstate war. The impact of such phenomena as political culture, social context, economic interest, and institutional context. Major bodies of contemporary theory on this subject, including realism, neo-realism, and bargaining, and game theory. P: PLS 340 or Jr. stdg.

The course explores in an international and comparative way the multi-dimensional nature of poverty, including such factors as political powerlessness, physical and social isolation, racial and gender discrimination, and economic systems. It analyzes the effects of governments institutions and policies, and considers the ethical dilemmas associated with choosing among imperfect responses to these problems, as well as the very issues of what duty we have to the poor.

PLS 482 Race in America: Idea and Reality (3) OD (Same as AMS/BKS/HIS/SRP 482)
An examination of the idea and reality of race during key phases of U.S. history, with an emphasis on the contemporary situation. To understand the multiple meanings and experiences of race, the course draws on sources from science, literature, law, and philosophy. P: Sr. Stdg. Certified Writing Course.

PLS 483 Public Affairs Internship (3) I, II, S
Students work as entry-level professionals in selected offices of government or governmentrelated agencies and organizations. Tasks vary but may include researching and drafting staff papers and reports, developing public-relations positions, assisting constituents, supporting implementation of policies and programs, and other responsibilities. P: IC. May normally be repeated to a limit of six hours. Normally, junior standing and a 2.5 grade-point average are required for internship placement.
PLS 485 Practicum in the United Nations (3) II
Research and supervised simulation of the diplomatic roles of actors in the United Nations System. P: IC.
PLS 487 Practicum in Selected National Policy Issues (3) W, S
Students participate in seminars, workshops, and projects on selected policy issues at the Washington Center in Washington, D.C. P: DC.
PLS 488 Senior Colloquium in Political Science (3)
Intensive survey of selected seminal authors in political science. P: Sr. Stdg and PLS 310 or DC.

PLS 490 Advanced Research Practicum (3) II, AY
The course will be organized as a research seminar. Students will engage in all phases of a research project to include the development of the research question, compilation of the literature review, explication of the hypothesis(es) and theory, acquisition and testing of the data, and formation of conclusions and implications. The goal of the project is to produce an article of publication quality. P: PLS 251 or IC.
PLS 491 Senior Research Seminar in Political Science (3) I
Students work in seminar environment on original research project and prepare individual senior theses required for graduation. P: Sr. stdg. and PLS 310 or DC.
PLS 493 Directed Independent Readings (3) I, II, S
Program of readings arranged by the student in cooperation with a consenting instructor in the department. P: IC. May be repeated to a limit of six hours unless departmental waiver granted.
PLS 497 Directed Independent Research (3) I, II, S
Individual research and writing under the direction of a consenting instructor in the department. P: IC. May be repeated to a limit of six hours.

## PLS 537 International Law (3) II, AY

Contemporary states are creations of international law. Course engages the many controversies over who is subject to this law, who creates and enforces it, and how international law and international politics interact. Didactic and case-study approach, including case briefs and research presentations. P: PLS 340 or Jr. stdg.

Washington Internships offered through the Washington Center in Washington, D.C. College students can combine a work and learning experience for credit. Participants can intern in Congressional offices, executive agencies, and with groups in many other areas such as the environment, consumer affairs, journalism, communications, legal affairs, labor relations, health policy, arts, education, science, public relations, urban affairs and women's issues. Students also attend seminars taught by representatives of Washington D.C.'s major governmental agencies, interest groups, and corporations. Contact the Department of Political Science for further information.

## PSYCHOLOGY (PSY)

Professors Ware (Chair) and Agresti; Associate Professors Budesheim, Leak, Lupo, and Stone; Assistant Professors Badura, Cherney, Cooney, Finken, Gibson, and Huss; Professor Emeritus Gardner, Associate Professor Emeritus Dahl.

## Admissions Criteria

Successful completion of Psychology 111 and a cumulative quality-point average of 2.00 for 24 hours of undergraduate work, including a 2.00 average in completed psychology courses, are necessary for admission to the department as a major.

## Departmental Objectives

The Psychology Department attempts to fulfill a variety of needs by designing its courses and programs to provide:

1) One facet of the multidisciplinary study of humans;
2) A personal and scientific understanding of behavior;
3) Preparation for employment in a business, a social agency, or in secondary education; and
4) Preparation for continued study in a graduate school of psychology or in one of the professional schools.

## Categories of Courses in Psychology

Group A (course number with a middle digit of 1)
Group B (course number with a middle digit of 2)
Group C (course number with a middle digit of 3 )
Group D (course number with a middle digit of 4)
Group E (course number with a middle digit of 5)

PSY 111, 211, 311, 312
PSY 423, 424
PSY 431, 434, 436, 437
PSY 341 or $342,343,344$
PSY 351, 352, 353

## The Fields of Concentration

Psychology Major: A total of 34 hours, including (a) all courses in Group A, (b) at least one course from each of Groups B-E, (c) one additional course from Groups B-E, and (d) nine additional hours from among all psychology courses.

Note: Students are strongly encouraged to consult with their major advisers in selecting courses that are consistent with their post-college objectives.

Psychology Major with secondary teaching preparation: A total of 34 hours distributed as follows: PSY 111, 211, 271(231), 311, 312, 343(322), 344(323), 351(321), 431(421), and three additional courses that fulfill requirements for the major. In addition, at least six hours in a social science area outside of psychology. Note: Education courses leading to secondary certification must also be completed. See Education Department for details.

Supporting courses: At least twelve semester hours of 200-level or higher course work as determined by the student in consultation with his/her major adviser. Students may obtain detailed information about the following support themes from their advisers or the departmental administrative assistant.

The department has developed six supporting themes, including a General Support, that encourage students to mold their supporting course work to best fit their post-graduate career plans or personal aspirations. Students, especially those planning graduate study in psychology, are strongly advised to consult with their major advisers concerning the importance of course work in biology, mathematics, and analysis of data using computers.

The Human Services and Business Supports provide focus for students who are planning to enter the world of work immediately following graduation and who may attend graduate or professional school in the future. The Forensic Support provides preparation for students in criminal justice-related careers, as well as the practice of law. Students choosing this support may seek employment immediately after graduation or may pursue the study of law in professional school. The Psychobiology and Pre-Health Supports give direction for students planning graduate education in psychobiology, cognitive sciences, biology, and/or health-related fields, such as medicine and dentistry.

Honors Certification: Majors who meet the following criteria are eligible for honors certification in psychology: (a) Have a minimum psychology GPA of 3.5 and a minimum overall GPA of 3.25; (b) Complete six (6) Group B-E psychology courses with no more than two (2) from any one category counting for honors certification; (c) Complete two (2) of the following five
(5) options: PSY 465 (435), PSY 491, PSY 497 with a minimum of 3 credits, oral or poster presentation at a regional or national psychology convention, or submission of a manuscript for publication in a scholarly psychology journal.

## PSY 111 Introductory Psychology (3) I, II, S

Introduction to the methodologies and basic concepts in the study of behavior. Intended to give the nonmajor an overview of the science of psychology and to serve as a foundation for further study in psychology for the major.

PSY 211 Introductory Statistics (3) I, II, S
Introduction to descriptive and inferential statistics. Descriptive statistics include frequency distributions, measures of central tendency and variability, correlation and regression. Inferential statistics include $z$-test, $t$-test for independent and correlated samples, analysis of variance, and nonparametric tests.

PSY 270 (235) Personal Growth and Development (3) OD
Encourages students to explore, expand, and deepen their understanding of themselves. Activities are structured to provide opportunities for self-discovery, either working alone or with others in pairs or small groups.

PSY 271 (231) Developmental Psychology (3) OD
An overview of psychological, emotional, social, and physical patterns of behavior related to the following stages: prenatal, infancy, and early childhood; late childhood; adolescence; early adult years; middle adult years; and late adulthood. P: PSY 111. Not open to Psychology majors.

PSY 272 (331) The Psychology of Separation and Loss (3) OD
Discussion of the insights and scholarly research on the ramifications of separation and loss, as well as strategies for coping with these events. Areas of concern include death and dying, the loss of relationships, the loss of physical and cognitive abilities, employment loss, and loss of self-esteem. P: PSY 111.

PSY 311 Experimental Psychology (3) I, II
Basic principles of experimental design, types of research, confounding, strategies of control, procedures of data collection and analysis, and ethics in the conduct of research. 3R. P: PSY 111, 211. CO: PSY 312.

PSY 312 Experimental Psychology Laboratory (1) I, II
Practical experience in the design, execution, and reporting of psychological research. 2L. P: PSY 111, 211. CO: PSY 311.

PSY 341 (223) Infant and Child Development (3) I, II
Development of the child from conception through late childhood. Covers such topics as emotional, physical, motor, cognitive, and social development, as well as issues encountered in child-rearing. P: PSY 111.

PSY 342 Adolescent and Adult Development (3) II
Examines the second part of the lifespan. Human development in adolescence, young adulthood, midlife, and late adulthood is explored through discussion of various topics including: physical changes, cognitive development, social and personality development, the transition to adulthood, sexuality and relationships, marriage, parenthood, work and retirement, stress and coping, and death and dying. P: PSY 111.
PSY 343 (322) Psychology of Personality (3) I
Principles and theories of personality with emphasis on their scientific study. P: PSY 111.
PSY 344 (323) Social Psychology (3) I, II
Exploration of the social factors that influence individual behavior. Areas of social influence covered include attitude change and persuasion, conformity, aggression, altruism, and attribution. P: PSY 111.

PSY 351 (321) Abnormal Psychology (3) I, II
Survey of psychological disorders of adulthood with emphasis on the clinical description of each disorder, explanatory theories, research on etiology and treatment, and issues in prevention. P: PSY 111.

Explores the psychological factors involved in health and illness. Topics include stress, disease and personality, patient compliance, health transactions, medical decision-making, and training of health professionals. P: PSY 111.

## PSY 353 (338) Industrial Psychology (3) I

An overview of industrial (personnel) and engineering (human factors) psychology. Topics include methodology, employee selection, testing validation procedures, performance appraisal, training, legal issues, and selected human factors topics. P: PSY 111.

## PSY 360 (330) Career Development in Psychology (3) OD

Designed to assist psychology majors in the process of achieving an employment, graduate school or professional school placement. Involves students in realistic planning through the exploration of occupational information and in the development of application and interview skills. P: PSY Major; Jr. stdg.

## PSY 361 Neuropsychology (3) I

An introduction to how the neurological organization of the brain influences the way people think and act. Discussion focuses primarily on dysfunctional systems. Topics include motor disorders, agnosias, attention, memory, and developmental disorders. P: PSY 111.

## PSY 363 (333) Psychology and the Law (3) I

Examination of the interface between psychology and the law in criminal and civil issues. Topics include juvenile justice, civil commitment, the duty to warn, rights of victims and the accused, competency to stand trial, the insanity defense, use of confessions, eyewitness reliability, and use of expert witnesses. P: PSY 111.

PSY 366 (336) Undergraduate Internship in Psychology (3-4) I, II
Provides advanced students with opportunities for field experience in clinical/counseling and human services. Carried out in cooperation with Omaha-area agencies that can provide adequate professional supervision of students. Experiences vary depending upon the characteristics of the student and the agency. In addition to placement time, there is a required discussion session on campus. P: PSY major; Jr. stdg.; IC. May be repeated to a limit of eight hours.

## PSY 367 (337) Contemporary Trends in Psychology (3) OD

Our dynamic society gives rise to psychological issues of current importance. The flexibility of this course will permit exploration of current topics. P: See prereq. listed in the Schedule of Courses. May be repeated to a limit of six hours.
PSY 369 (339) Organizational Psychology (3) II
An overview of organizational psychology. Topics include motivation, leadership, group processes, organizational stress, job satisfaction, communication processes, decision theory, power, and organizational effectiveness, development, change, and theory. P: PSY 111.
PSY 374 (334) Human Sexuality (3) I
An empirical basis for understanding human sexuality; examination of personal sexual values and standards of the physiological, psychological, and socio-cultural components of human sexuality. Not open to students enrolling as auditors.
PSY 375 (335) Marriage and Family Relationships (3) II
A scholarly consideration of the many factors involved in the development and maintenance of marital and family relationships. Areas of study include love, dating and courtship, mate selection, marital evolution, work roles, finances, and parenting. P: PSY 111.
PSY 376 School Psychology (3) OD
This course is designed to be an introduction to the application of psychology in the school systems. School-related issues, including those applying to systems and individuals, will be discussed.

PSY 377 Psychology and AIDS (3) OD
A study of the psychological aspects of HIV/AIDS, its impact on our health care systems, and society in general.
PSY 423 Tests and Measurements (3) I, II
Designed to introduce the foundations of measurement theory and practice (reliability and validity) upon which all psychological tests rest. In addition, students will become acquainted
with the history and current status of popular tests of mental ability and personality. P: PSY 111, 211.

PSY 424 History and Systems of Psychology (3) I, II
Survey of some historical antecedents of modern psychology and a review of major contributors to psychology and their particular historical contexts. P: PSY 111.

## PSY 431 (421) Cognitive Psychology (3) I

Survey of current psychological views of human information processing including such topics as attention, perception, short-term memory, long-term memory, reasoning, and problem solving. P: PSY 111.
PSY 434 (324) Learning: Basic Processes (3) I
Explores experimental paradigms of learning. Topics include classical and operant conditioning, discrimination, generalization, and extinction of learned responses. P: PSY 111.
PSY 436 (425) Sensation and Perception (3) II
Focuses on the psychological impact of physical stimulation. The processes whereby humans derive meaning from visual, auditory, tactual, olfactory and gustatory stimulation are discussed. P: PSY 111.
PSY 437 (422) Physiological Psychology (3) II Examines biological bases of behavior with emphasis on mechanisms of neuron function and general neuroanatomy. Sensory function, motor control, and current information regarding the physiology of learning and memory are also discussed. P: PSY111.
PSY 462 (232) Special Issues in Adolesence (3) OD
Study of the characteristics of the adolescent and the issues related to the adolescent within the family, school, and community. P: PSY 111.
PSY 463 Forensic Psychology (3) II
Surveys the intersection of mental health practice and the law. Focuses on what clinical forensic psychology has to offer legal processes and how the law may dictate the interests of and research conducted by practicing psychologists. P: PSY111, 351.

## PSY 464 (432) Developmental Psychopathology (3) OD

 Introduction to the variety of psychopathological disorders that occur during infancy, childhood, and adolescence. Conditions studied include attachment disorder, autistic disorder, conduct disorder, schizophrenia, eating disorders, and dissociative identity disorder. P: PSY 111, 341, 351; Jr. stdg.PSY 465 (435) Advanced Behavioral Research (3) OD
A comprehensive research course that directs students to integrate classroom research concepts with hands-on experience through existing research programs. Students can address issues that are unique to the application of research principles. Especially recommended for majors planning graduate study. P: 311,312 ; IC.

PSY 467 (340) Human Factors (3) OD
An overview of human factors and ergonomics. Discussion of various areas of psychology and engineering in relation to designing objects and the environment to meet the limits and capabilities of human processing. Topics include information input, human output and control, workplace design, environmental conditions, and human factors applications. P: PSY 111.

PSY 471 Crisis Intervention (3) OD
Offers an introduction to the front-line interventions and basic therapeutic techniques used in crisis management. Skills are taught through their applications to specific crises including battering, sexual assault, substance addiction, suicide, and bereavement.

## PSY 472 Group Dynamics (3) OD

An exploration of the social psychological aspects of group dynamics as they apply to all types of small groups. Topics covered include group goals, team development, group cohesion, leadership, decision-making, and dealing with diversity. P: PSY 111.

## PSY 478 (438) Multicultural Issues in Psychology (3) OD

Explores gender, ethnic, and cultural factors that influence the beliefs, values, behaviors, and experiences of individuals. Provides a fundamental understanding of one's own culture and behavior through exploration of a variety of cultures. P: PSY 111.

Honors Seminar (3) I
Selected senior students, under the direction of the faculty member, will address some aspect of a topic that has current prominence in the field of psychology. Students will do an extensive reading of the literature, discuss their findings with the group, and then produce a quality paper on the topic. Participants will be selected by the faculty of the Department of Psychology. P: IC; Sr. stdg.
PSY 495 Directed Independent Study (1-3) I, II, S
Provides the student an opportunity to design a course of study in a particular area of interest in psychology. The content may be applied or academic in nature, and the student is required to work with a faculty member in the design and implementation of this course of study. P: PSY major; Jr. stdg.; IC. May be repeated to a limit of six hours.
PSY 497 Directed Independent Research (1-3) I, II, S
Provides the student an opportunity to explore a particular area of interest. This exploration might be in the form of empirical research or library research. The content will be agreed upon by the student and a faculty member in the Department of Psychology. P: PSY major; Jr. stdg.; IC. May be repeated to a limit of six hours.

PSY 540 Professional Orientation and Ethics in Counseling (3) I, II, S (Same as COU 540)
A survey of the counseling process including the role of the counselor, characteristics of clients, helping and referral skills, and theories of counseling. P: Sr. stdg.

## SENIOR PERSPECTIVE (SRP)

Associate Professor Selk (Director).
Prerequisites: Senior Standing and Completion of "Foundations for Ethical Understanding" (PHL 250 or THL 250)

SRP 401 Science and uncertainty in a Pluralistic World (3) OD
This course examines how scientific knowledge is obtained and understood. The social impact of the formulation and acceptance of scientific models will be discussed. Topics to be considered include uncertainty in measurement, the impact of the observer on the phenomenon observed, and the effect of our need for certainty in our beliefs, judgements and relationships. The course will provide the opportunity for reflection on the Creighton undergraduate experience and the commitment required after graduation.
SRP 409 Race and Gender Relations: Moral and Ethical Dilemmas (3) OD (Same as ANT/SWK 409)

This course explores the multiple-faceted experience of being a person of color, a specific gender, and immigrants in the United States. Institutional forces (economic, educational, familial, political and social welfare) are examined that influence the structure and status of persons of color, immigrants, and women and men. Emphasis is placed on understanding the diversity of the United States and the connections between and among race, gender, and class in their complexity. Ways to better understand and interact are presented, in addition to ways to foster social change.
SRP 412 Sickness, Disability, and Healing in the Biblical and Modern Worlds (3) OD
This course studies biblical texts dealing with sickness, disability, and healing in order to surface and then critically reflect on health care issues. Topics are addressed under broad headings: The Body, Sickness and Health: Cultural Definitions and Social Meanings; The Illness Experience; Health Care System, Ancient and Modern; Access and Quality Care; The Experience of Disability; Ritual and Health Care. Readings include both biblical and modern texts and incorporate the methods and perspectives of various disciplines: biblical studies, anthropology, sociology, literature, and ancient history.
SRP 415 Stories that Shape Lives (3) OD (Same as THL 415)
This course examines both classic stories and the implicit stories embedded in contemporary cultures. By "classic stories" is meant fables, biblical parables, and stories of holy people. By "implicit stories embedded in contemporary culture" is meant the "lived stories" embodied in the cultures from which our students come and in which they live. We address story (as human activity) and stories (as concrete cultural artifacts) from a variety of perspectivesespecially those of literary criticism, biblical exegesis, and the cross-cultural and historical study of spirituality.

An examination of the Society of Jesus from its founding by Ignatius of Loyola during the pivotal 16th century, through suppression and recovery to the challenges of the modern, PostVatican II era, this course seeks to understand the Jesuits on two levels: through their controversial history, set within the context of their times and as represented by the lives of selected individuals; and through the development of their particular spirituality, Ignatian methods of prayer and discernment of spirits, as originated in the Spiritual Exercises and enhanced over time. Students will have an opportunity both to analyze Jesuit history and to experience Ignatian spirituality in their own interior lives.
SRP 418 Jesus Through the Ages: ideas and Images Toward a Coherent Christian Identity and Ethic (3) (Same as THL 418)
Employing methods of the fine and performing arts and theology (historical and sytematic), this course will seek the "real" Jesus admidst a plethora of images and ideas used by Christians throughout the ages to depict Jesus Christ. It will critique the historical-cultural dependencies of these images and ideas to discern which of them, if any, remain normative for Christianity, which are time-bound, which still speak powerfully, which do not--and why. In the process this course will not only inform students about the single most significant figure in human history but engage them in a personal search for an authentic Christian identity and ethic.

SRP 420 Science and Religion (3) OD (Same as PHL/THL 420)
This course explores the relationship between science and religion from three perspectives: philosophy of science, scientific theories, and theology. Issues to be studied include: reductionism vs. emergentism, the relationship between God and world (including creation and evolution), the Galileo affair, and Darwin and design.

SRP 422 Children of Poverty: An Interdisciplinary Perspective (3) OD (Same as SWK 422)
An interdisciplinary course addressing a variety of issues concerning children of poverty in American including policy, justice, and ethical issues related to economics, health, law, mental health, family, housing, and education.

SRP 424 Can the Christian Life Be Heroic? (3) OD
The course will explore the relationship between salvation, morality, and human excellence. Does the drama of salvation run counter to the pursuit of excellence? The class will examine the classical hero, the Christian saint, the medieval knight, and modern models of discipleship and heroism, as well as criticisms, especially that of Nietzsche, that Christianity exalts human mediocrity and debases the classical ideal of human excellence.
SRP 426 The West of the Imagination: Art, History, and Myth of the American West (3) OD (Same as AMS 426)
This is an interdisciplinary course that compares the West of American history to the West of popular culture. It will examine the history of the frontier and the West and study their impact on American culture. The course begins with the mixing of European, African, Mexican, Asian and Indian cultures in the late 19th century in the trans-Missouri West and culminates with an analysis of the current state of affairs in that geographic area.
SRP 430 Ethics and Market Reforms in the Post-Communist Countries (3) OD
This senior capstone seminar considers ethical problems that have emerged during the course of the market reforms and democratization in the post-Communist countries of Eastern Europe. Conducted abroad, the seminar gives students an opportunity to reflect on these moral and ethical dilemmas in the actual environment.

SRP 431 Mathematical History, Philosophy, and Ethics (3) OD (Same as HIS/MTH 431)
An examination of mathematics and mathematical ideas and their relation to philosophical and ethical views from the ancient Babylonians and Pythagoreans to the present. Special attentions will be given to non-Western mathematics, ethnomathematics, twentieth-century game theory, encryption, and ethical issues facing the mathematician and society in the past and today. The course assumes no mathematical background beyond the Core E requirements.

SRP 433 The Mobile Heart: Permanence and Change in Modern British and American Culture (3) OD (Same as ENG 433)
Interdisciplinary study of literature, architecture, social ethics, economics, environmental design and material culture, focused on the themes of permanence and change in 19th- and 20thcentury British and American literature and in American cultural studies. Mobility and change are contrasted with stability and permanence as personal and societal choices which involve ethical questions of consequence to individuals and groups.

SRP 435 Literature, Philosophy and Economics: Critical Representations of Commercial Life (3) OD (Same as ENG/PHL 435)

Drawing on contemporary work in critical theory, literary criticism, aesthetics, and rhetoric, this course examines the relations of philosophy, economics, and literature through an assessment of the representation of economic phenomena in selected literary and philosophical texts. The course will explore 1) how an analysis of such texts can reveal underlying social forms such as private property, the commodity, wage labor, and capital; and 2) how these ethically consequential forms tie in with problems of poverty, unequal distributions of income and wealth, overconsumption and depletion of natural resources, competition and conflict, and social instability.
SRP 436 Politics and Ethics of Science and Technology (3) OD (Same as PLS 436)
This course involves the study of the interrelationship of politics, ethics and science in contemporary societies. It examines the role of government in encouraging and regulating science and technological development in American and international settings. Analyses include the impact of government and politics on science and technological development, including technology transfer, diffusion of innovation, weapons technologies, bio-technologies, aerospace and marine technologies, etc. Students are challenged to analyze and reflect upon the ethical and moral implications of value tradeoffs between and within the realms of science and government/politics. Actual cases will be presented by Creighton faculty with science backgrounds to illustrate real world dilemmas that students may face in their future professional careers.
SRP 437 The Environment and Race, Class, and Gender (3) OD
This course investigates whether and to what extent human interaction with the natural environment has a bearing upon ethical interactions among individuals of different races, classes, and genders within the increasingly globalized social environment. The course will draw from a variety of disciplines, including philosophy, literature, science and public policy to explore questions of environmental justice.

SRP 439 Literacy and Technology: How Technology Shapes Cultural Literacy (3) OD (Same as ENG 439)
Students will explore the ways that literacy, technology, and humanity interact. Students will look at the ways that each of these entities affects the others. The course will begin with a historical look at human technological literacy, but the majority of the course will focus on present literacy and technology.
SRP 440 Liturgy, Music, and the Transformed Life (3) OD (Same as THL 440, MUS 440) A study of the historical development of the relationship between the Eucharist and liturgical music. The class will study how the liturgy (Eucharist, scripture reading, music, and architecture) intends the transformation of the assembly into a moral, virtuous, and just community.
SRP 444 Non-Violence \& Peaceful Resolution of Conflict: Cross-Cultural and Political Perspectives (3) OD (Same as ANT/JPS/PLS 444)
Peace is more than the absence of war and both peace and war (or violence, in general) are socio-political constructs. This course seeks to understand how peoples differ in how they envision and enact peace, violence, war, non-violence, and peaceful resolutions of conflict. Students will assess their own views on alternatives to violence and modes of conflict resolution by comparing different cultures, political practices, and times.
SRP 455 Food, Society, and Environment (3) OD (Same as ANT/EVS/SOC 455)
Access to food is a universal, basic human need. This course considers the social and cultural significance of food, the ecological implications of producing it, and the social justice issues that surround its distribution from several disciplinary perspectives.

An exploration of relations between philosophical and theological conceptions of ethics and moral methodologies, together with an application of the latter to select issues in biomedicine and health care policy.
SRP 465 Faith and Political Action (3) OD (Same as PLS/THL 465)
Faith in Political Action, a Senior Perspective course, challenges students to understand theological and political science perspectives on social policy issues, public policy analysis, and advocacy strategies, and allows the students to practice these new skills/understandings in a service-learning project for a local agency. In addition to class time, the course requires twenty hours of volunteer service for the agency during the semester.

SRP 481 Poverty, Development and Public Policy (3) AY (Same as PLS 481)
The course explores in an international and comparative way the multi-dimensional nature of poverty, including such factors as political powerlessness, physical and social isolation, racial and gender discrimination, and economic systems. It analyzes the effects of governments institutions and policies, and considers the ethical dilemmas associated with choosing among imperfect responses to these problems, as well as the very issues of what duty we have to the poor.
SRP 482 Race in America: Idea and Reality (3) OD (Same as AMS/BKS/HIS/PLS 482)
An examination of the idea and reality of race during key phases of U.S. history, with an emphasis on the contemporary situation. To understand the multiple meanings and experiences of race, the course draws on sources form science, literature, law, and philosophy.
SRP 488 Personal and Spiritual Dimensions of Leadership (3) OD (Same as COM/EDU/THL 488)

The purpose of the course is to give students the opportunity to engage in introspection and examination of their personal belief and value systems as it relates to leadership. The course begins from the assumption that leadership is "a journey that begins within" and examines the relationship between leadership theory and Christian spirituality. Biographical examples will be analyzed; biographies will be drawn from diverse fields such as health, science, business, government, sports and education.
SRP 489 Social Images of Cultural Minorities (3) (Same as JMC/SOC 489)
This course examines media images of various cultural minority groups and contrasts them with the images presented to students on field trips. Students are required to do independent field work and write about their observations.

## SOCIAL WORK (SWK)

Associate Professor Grandbois (Chair); Assistant Professor Harris and Anderson.
The goals of the undergraduate social work program are: 1) prepare students for beginning level generalist practice with individuals, families, small groups, organizations and communities; 2) prepare students to practice with diverse populations; 3) promote professional student identies incorporating social work ethics and values; 4) prepare students for continued professional growth and development; 5) understand and apply the knowledge, and skills for professional social work practice.

## Admissions Criteria

Students should apply to the Department of Social Work in their sophomore year after having completed SWK 261 Introduction to Social Welfare; PSY 111, SOC 101. If, however, the student takes these courses later than the first semester of the sophomore year, application should be made immediately during this semester. Courses in social work methods and practicum placements are taken in a required sequence.

Admission to the department is selective and is based upon an application process that includes: the declaration of the major; a written application; a short (3-5 pages) biography; three references; and a minimum grade-point average of 2.25 at the time of application. A personal interview may be required. Applications are acted upon by the Department of Social Work.

## Major

Major: 39 hours of course work as follows: SWK 261, 275, 276, 345, 377, 401*, 429, 473, 460-461 and 480-481. In addition, the following related courses must be completed: CSC $107^{* *}$;

BIO 149; ANT 341***; PSY 111; SOC 101; PSY 211 or SOC 214; SOC 212; SWK 300 or select one course PLS 101, PLS 121, PLS 331, and one course. ECO 203, ECO 301.

* Students may substitute PLS 339 - when offered.
** CSC 107 may be waived - students have the option of fulfilling this requirement by passing a computer exam.
*** SWK 365 may be substituted for ANT 341.
It is recommended that the previously listed lower division requirements should be taken prior to the junior year. Students who have questions should consult with a social work faculty member for possible options.

In order to be eligible for field placement, a student must have achieved a minimum of 2.25 GPA in previously required social work courses. If a student received a final grade of below a "C" in a required social work course, he or she may be dropped from the program. A "D" in a required course does not fulfill the prerequisite for any subsequent required social work course.

Writing Courses: SWK 275, SWK 339, and SWK 422 are certified writing courses.
Note: The Creighton University Social Work program is accredited by the Council on Social Work Education.

SWK 160 Introduction to Human Services/Helping Professions (1) I, II
This course introduces students to the fields of social work and human services in order to 1) assist them in their career selection; and 2) incorporate human service knowledge into their academic major and/or career. Students are provided the opportunity to explore social service agencies/programs in areas and facilities such as child welfare, hospitals, schools, mental health, nursing homes, and court systems.
SWK 261 Introduction to Social Welfare (3) I, II
This course is designed for students interested in the helping professions as it examines societies response to problems such as poverty, diversity, and child welfare. Students not only explore the profession of social work but its interface with other disciplines such as health care, psychology and education. Restricted to freshmen, sophomores, and juniors.

SWK 274 Introduction to Working with Children (3) I
Definition and description of child welfare as a field of practice. Child welfare problems are examined from the perspective of remedial services. P: SWK 261.

SWK 275 Human Behavior and the Social Environment (3) I
Examination of the relationships among human biological, social, psychological, and cultural systems as they affect and are affected by human behavior as it relates to social work practice: focus on individuals, families, small groups, formal organizations and communities. P: PSY 111; SOC 101 or IC. CO: SWK 261; BIO 149.

SWK 276 Human Behavior and Social Environment II (3) II
Overview of course: This course is the second in a two-semester sequence in which students examine the dynamic interaction between individuals and their environments, focusing on small groups, organizations, and communities. The course utilizes a critical perspective to assess the application of social systems theory, theories of social interaction, and other theories used in macro social work practice. Infused throughout the course is an appreciation of human diversity. P: SWK 261, SWK 275.
SWK 300 Economics, Politics and Social Welfare (3) I
This course examines the structure, function and interaction of economics, politics and social welfare. Fundamental study into the nature and scope of U.S. economics and political systems as they affect the theory and practice of social welfare. P: SWK 261.
SWK 333 Federal Indian Policy and Law (Same as NAS/AMS 333)
This course investigates the relationships between Native Americans and the Euro-American in terms of how the Natives were perceived and the impact this has had on Colonial and Federal policies relating to Native populations. Emphasis is on the historical, political and cultural aspects of the relationship.

SWK 339 Public Policy and Poverty in the United States (3) AY (Same as AMS/PLS 339)
Government policies and programs affecting the poor in the United States. Issues include various elements of welfare programs and policies, entitlement programs such as Medicare and Social Security, problems of intergovernmental activity in administrating social welfare. Examination of various critiques of social welfare policy and a review of reform proposals.

Role of organized interests and public support relative to programs affecting the poor. Skill development includes policy formulation and analysis. P: PLS 121 or So. stdg.
SWK 345 Basic Social Work Skills for Generalist Practice (4) I
Introduction to the ethical and theoretical base from which generalist social workers practice. Brief overview of the methods employed by social workers providing services. P: SWK 275; or IC; SWK Major.
SWK 365 Issues of Native American Experience (3) I, S (Same as NAS 365)
Examination of Native American culture and values, social institutions and social systems. Presentation of issues emanating from being Native American. Consideration given to understanding the Native American experience from an historical perspective as well as the contemporary viewpoint. P: So. stdg.

SWK 366 The Status of Women: Progress and Process (3) II
Examines the historical, social, economic and political content of women's issues. Explores concepts of feminism and sexism in contemporary society. Current social issues will be examined in relation to present and future generations of women. P: Jr. stdg.

SWK 369 Insurance Coverage for the Health/Human Services (3)
Course is intended to survey the range of public and private insurance opportunities specifically focusing on insurance for the poor. Emphasis is on implementation of insurance and policy guidelines, eligibly, requirements, and application processes. The course is intended for health and human service professionals including social workers, nurses, and other mental health professionals. P: SWK 261.
SWK 371 Social Work Issues (3) I
Social work issues are examined in terms of both their historical development and their implications for current social work practice. Topics vary from semester to semester.
SWK 375 Working With the Elderly (3) II
Presentation of information concerning the theory and practice of social services to the aged. Study of both institutional and community settings.

SWK 376 Family Violence (3) II
An exploration of the problem of family violence in American society. Issues raised by violence on the family examined from the legal, social welfare and criminal justice perspectives. P: SWK 261.
SWK 377 Social Work with Individuals and Families (3) II
Provides basic knowledge of theory and practice skills for intervention by social workers with individuals, families, and small groups. P: SWK 345 or IC; SWK Major.

SWK 401 Social Welfare Policy (3) II ${ }^{* *}$
Examines the process of social policy development with a focus on the more vulnerable populations. Social policy will be placed in a historical and a social context. Includes skills needed for policy formulation and analysis. P: SWK 261, SWK major.
SWK 409 Race and Gender Relations: Moral and Ethical Dilemmas (3) S (Same as ANT/SRP 409)
This course explores the multiple faceted experience of being a person of color, a specific gender and immigrants in the United States. Institutional forces (economic, educational, familial, political and social welfare) are examined that influence the structure and status of persons of color, immigrants and women and men. Emphasis is understanding the diversity of the United States and the connections between and among race, gender an class and their complexity. Ways to better understand and interact are presented in addition to ways to foster social change. P: Sr. stdg.

SWK 422 Children of Poverty: An Interdisciplinary Perspective (3) S (Same as SRP 422)
An interdisciplinary course addressing a variety of issues concerning children of poverty in America including policy, justice, and ethical issues related to economics, health, law, mental health, family, housing, and education. P: Sr. Stdg.

SWK 429 Social Work with Groups (3) I
Introduces students to the theory, concepts and experience in the development of group dynamics and effective group skills. Stresses development of practice skills and strategies to achieve effective group facilitaion. P: SWK 345 or SWK major.

SWK 430 The Value of Children (3) II (Same as EDU 430)
Interdisciplinary, integrative course designed to help students explore and evaluate personal, community, institutional, and global values as they pertain to the needs and rights of children. It is intended to promote interdisciplinary understanding as well as interdisciplinary cooperation. P: Jr. stdg.

## SWK 433 Introduction to Working With Adolescents

This course is designed to offer students a basic understanding of the adolescent stage of development. The course examines changes during adolescence, how these changes impact the individual, the family, and the broader social context in which adolescence occurs. Exploration of cultural and gender differences as it relates to this life stage, and how these variables impact our understanding of adolescence. Selected clinical approaches and therapeutic modalities are presented. P: SWK 261.

SWK 460 Field Practicum Seminar I (3) I, II
Seminar designed to integrate theories and skills learned in the classroom with their application in field experience. P: SWK 345; Sr. stdg. CO: SWK 429, 461; SWK Major.

SWK 461 Field Practicum I (4) I, II
Students are placed in community agencies delivering social welfare services for practical application of the theory and skills acquired in the classroom. On-site supervision provided by the agency and group supervision provided on campus. P: SWK 345, Sr. stdg. CO: SWK, 429, 460; SWK Major.
SWK 473 Social Work with Organizations and Communities (3) II
Provides basic knowledge of social work intervention at the organizational community level. Study of procedures and skills in community organizing and developing and implementing programs. P: SWK 345 or IC; SWK Major.
SWK 480 Field Practicum Seminar II (3) I, II
Seminar designed to integrate theories and skills learned in the classroom with their application in field experience. P: SWK 460, 461; Sr. stdg. CO: SWK 481; SWK Major.

SWK 481 Field Practicum II (4) I, II
Students are placed in agencies delivering social welfare services for practical application of the theory acquired in the classroom. On-site supervision provided by the agency and group supervision provided on campus. P: SWK 460, 461; Sr. stdg. CO: SWK 480; SWK Major.

SWK 493 Directed Independent Readings (1-6) I, II, S
Survey of literature related to a topic in social work not covered in student's course work. Undertaken in close cooperation with a supervising faculty member. May be repeated to a limit of six hours. P: Sr. stdg.; SWK Major; DC.

SWK 495 Directed Independent Study (1-6) I, II, S
Student-initiated project on a focused topic in social work, utilizing library materials and involving close cooperation with a supervising faculty member. May be repeated to a limit of six hours. P: Sr. stdg.; SWK Major; DC.

SWK 497 Directed Independent Research (1-6) I, II, S
Student-initiated empirical project on a focused topic in social work, involving close coordination with a supervising faculty member. May be repeated to a limit of six hours. P: Sr. stdg.; SWK Major; SOC 212; DC.
SWK 501 Conducting Needs Assessments and Social Programs (1) OD
The purpose of this course is to provide beginning skills in planning and conducting needs assessments to determine whether there is sufficient need to justify the funding of a new human service program. The course is designed to guide students step-by step through the needs assessment process, from understanding the purpose and goals of the needs assessment to collecting, analyzing, and disseminating information so that decisions can be made about developing and/or funding programs.

SWK 505 Methods and Strategies for Working with Families and Support Personnel for Exceptional Children and Youth (3) I, II, S (Same as EDU 505)
Course designed to address the needs of families of exceptional children and youth and train the support personnel who work with exceptional children. P: Jr. stdg.

## SWK 511 Grant Writing (1) OD

The course focuses on teaching beginning skills in grant writing. Students will have an opportunity to apply problem solving knowledge to the development of a social service grant. Students may bring grants they are working on or they may complete a "training" grant during the course.

## SWK 521 Program Evaluation for Non-profit Organizations (1) OD

Evaluating the success of a program or policy is important to non-profit and public social service agencies. The purpose of this course is to help students create a program evaluation plan for a social welfare program or policy. Students will use the problem-solving process to evaluate whether a program or policy is meeting its goals or needs modification in order to accomplish its objectives.

## SWK 541 Introduction to School Social Work

The course introduces students to the concepts, theories, and practice of school social work in the elementary, middle, and high school levels. An overview of the history and development of school social work is presented in lecture and interactive group discussions. Additionally, a field experience with a practicing school social worker is required and arranged by the instructor. P: SWK 261.

SWK 571 Working With Troubled Families (3) S (Same as COU 571, EDU 571)
Designed to give participants an understanding of family dynamics; why troubled families remain troubled; how intervention can help a family overcome its difficulties. Theoretical presentations and exercises relating to these presentations with opportunities for class discussion of both. P: Jr. stdg.
SWK 573 Mediation and Conflict Resolution for Health and Human Service Professionals (3) S Inevitably in the practice of health and human services professionals are called upon to address conflict. However, for many professional conflict produces both personal and professional challenges. This course is designed to identify the elements of social conflict focusing on a variety of theoretical approaches for conflict resolution and to develop skills appropriate in a variety of professional settings. In addition, participants explore their own dominant mode of handling conflict and discuss discipline specific opportunities for application of a model. This course also explores cultural and gender aspects of resolving conflicts. Finally, participants are introduced to advances and innovations in conflict resolution. P: Jr. stdg.

## SOCIOLOGY (SOC) AND ANTHROPOLOGY (ANT)

Associate Professor Clark (Chair), Professor Harper; Associate Professor Ault, Bucko, and Riley; Assistant Professors Cook and Dilly.

## Admissions Criteria

All applications to major in the department must give evidence of having completed SOC 101 (or ANT 111 for the major in Anthropology) with a grade of "C" or better, one additional course in the department with a grade of "C" or better, and a cumulative grade-point average of 2.00 .

## Fields of Concentration for Degree of Bachelor of Arts

Major in Anthropology: Thirty-seven semester hours of course work within the department including: ANT 111, ANT 209, ANT 212, ANT 214, ANT 301 and two culture area courses (Africa, Asia, Latin America or Native North America) and twelve additional hours of anthropology.

Supporting courses: Twelve credits at the 200 level or higher from other departments to be determined in consultation with the student's major adviser.

Major in Sociology: Thirty-seven semester hours of course work within the department, including 13 of which must be the following: SOC 101, 209, 212, 214, and 301 and a minimum of 21 additional sociology hours, 15 of which must be at the 300 -level or higher.

Supporting courses: With the approval of the Major Adviser, twelve semester hours of 200level or higher course work are to be taken from other departments.

Major in Sociology with a Specialization in Criminal Justice System Policy: Thirty-seven semester hours of course work within the department, including 25 of which must be the follow-
ing: SOC 101, 209, 212, 214, 301, 320, 321, 323 and a minimum of 12 additional sociology hours. In addition the following courses must be taken: PLS 320 and 337.

## Major in Justice and Society: (see Justice and Society).

Co-Major in Anthropology: Students majoring in other department may earn a co-major by successfully completing 24 credit hours in anthropology, including ANT 111, ANT 209, ANT 301, ANT 349 and two culture area courses and nine additional hours.

Co-Major in Sociology: Students who have been accepted as majors in other departments may earn a co-major by successfully completing 25 credit hours in Sociology, including SOC $101,212,214$, and 301.

## The Field of Concentration for Degree of Bachelor of Science in Sociology

Major in Sociology: Thirty-seven semester hours of course work within the department, including the following: SOC 101, 209, 212, 214, 301, 333, 411, 497 ( 6 hrs .), plus a minimum of nine additional hours, six of which must be at the 300 -level or higher.
Supporting courses: With the approval of the Major Adviser, twelve semester hours of 200-level or higher course work, the majority of which should be 300 or higher, are to be taken from other departments.

## SOC 101 Self and Society (3) I, II, S

Human beings live out their lives in a multitude of social relationshipsranging from personal relationships to citizenship in the global community. In a very real sense, persons are fully human only within the context of their connectedness to others. This course explores the meaning of this connectedness by considering four basic questions: (1) How is social life organized? (2) What consequences does this social organization produce? (3) How does this social organization change over time? (4) What does this organization, its consequences and changing nature, have to do with the lives of individuals?

SOC 200 Special Issues (3) OD
Topics of special interest. Course will be subtitled in the Schedule of Courses. Course may be repeated under different subtitles. P: So. stdg.

SOC 205 American Family Issues (3) I
Systematic examination of the history of American families and contemporary changes affecting and taking place within today's families. Attention is directed to in-depth consideration of four or five major issues, such as divorce, single-parent families, family violence, reproductive dilemmas, dual-worker families, etc.

SOC 209 Qualitative Methods (3) I ENY (Same as ANT 209)
Introduction to anthropological research methods. Includes research design, strategies for collecting ethnographic data with a particular focus on participant observation and field work, comparative research, theory building, and ethical issues involved with human research.
SOC 212 Research Methods in the Social Sciences (3) I (Same as ANT 212)
Introduction to the nature of research within the social sciences. Attention is directed to the basic logic and research techniques involved in studying the social world scientifically. Specific topics considered include research design, measurement, alternative data collection procedures, and ethical concerns involved in studying social life.
SOC 214 Statistics for the Social Sciences (4) II (Same as ANT 214)
Broad introduction to the statistical techniques used by social scientists to analyze their data, including computer usage. Attention is directed to the basic procedures for organizing and describing data, for assessing relationships among social variables, and for using that information to make inferences about the population. 3R, 1L. P: SOC 212.

SOC 215 Sociology of Health Care (3) I (Same as HAP 215)
Study of the relationship between society and health-care systems. The sociology of healthcare organization, including patient-practitioner relationships, concepts of health and disease, health-care personnel, and systems of delivery.

SOC 223 Social Problems: Values, Issues and Public Policy (3) I
Social problems in contemporary American society. Focus on public issues, controversies, and policy alternatives.

An introduction to gerontology, the study of human aging. Physical, psychological, and social policy aspects of aging and historical, cross-cultural, and social policy aspects of aging populations are examined. Aging is viewed both as a personal experience and as a social process. Opportunities provided for pursuing personal interests.
SOC 235 Technology and Human Values (3) II ONY
We often fail to recognize how the unanticipated (and often unintended) consequences of technologies change our social systems, including the way we relate to each other. This course will examine how different social systems attempt to control and manage the development of technology, the differential impact of emerging technologies on identifiable segments of society, and the ethical and values-issues involved in technological and social change. Includes an exploration of the impact of complicated technologies on less developed cultures.

SOC 295 Special Projects (3) I, II, S
Subject matter and method to be worked out individually. P: So. stdg.; DC.
SOC 301 Social and Cultural Theory (3) I (Same as ANT 301)
An exploration of the ideas central to sociology and anthropology from the perspective of their historical and contemporary theories. Special attention is given to the implications of these ideas for understanding human social values. P: So. stdg.
SOC 307 Demography: World Population Issues (3) I ONY (Same as ANT/EVS 307)
This course will provide a sociological examination of the development and evolution of different models of population dynamics from several contemporary cultures. It will place particular emphasis on the assumptions and logical consequences of each of these models. Includes a survey of historical and contemporary trends in population growth, as well as a review of competing perspectives about natural limits to that growth. P: So. stdg.

SOC 309 The Urban Social System (3) OD (Same as BKS 309)
Examination of the process of urbanization as it affects the lives and institutions of local populations and incorporates them into much larger national and international systems. P: So. stdg.

SOC 310 Religion and Contemporary American Society (3) II ONY (Same as AMS 310)
An examination of religious beliefs, behaviors, and structures as they relate to contemporary America. In addition to studying established religious forms, attention is also given to the public controversies connected with religion and to new religious movements and trends. P: So. stdg.
SOC 311 Sociology of the Family (3) II
How the structure and dynamics of families affect the life experiences of individuals and how the family itself interacts with forces in the larger social environment. Emphasis on contemporary families with cross-cultural comparisons. P: So. stdg.
SOC 317 Global Health Issues (3) II, AY (Same as ANT/HAP 317)
This course will examine the social production of health and disease from a global perspective. Related to these issues, is the topic of health and well being in developing countries. P: So. stdg.
SOC 318 Gender in American Society (3) I (Same as AMS 318)
Comprehensive examination of the forces shaping the position and behavior of women and men in modern American society. How and why do these positions and behavior differ? What are the consequences of these differences? Emphasis on gender as enacted across the spectrum of multicultural diversity in American society, with some comparison to other societies. P: So. stdg.

SOC 320 Sociology of Deviant Behavior (3) I
A sociological examination of the conditions under which societal definitions of deviance emerge, develop, and change over time. Special attention will be paid to the process of societal reaction to deviant behavior. P: So. stdg.

SOC 321 Sociology of the Criminal Justice System (3) II
A survey of the development, modification, and enforcement of criminal law. Special attention will be given to the courts, corrections, and enforcement agencies, and the role of competing values in the decision-making process. In addition to the western legal heritage that has been
the principle influence in U.S. criminal law, the perspective of nonwestern traditions of criminal justice will be addressed. P: So. stdg.

## SOC 331 Industry and Society (3) I ENY

Sociological study of the economic components of society as they relate to the other social institutions. Special attention given to the effects on behavior of specific forms of economic organization, especially those associated with industrialization. P: So. stdg.

## SOC 333 Social Psychology (3) I

Drawing upon sociological, psychological, and anthropological data, we attempt to better understand how individuals, through the interaction process, influence and are influenced by the social settings in which they function. P: So. stdg.

SOC 341 American Cultural Minorities (3) I (Same as AMS/ANT/BKS 341)
Determinants and consequences of prejudice and discrimination; race, ethnocentrism, religious conflict, class structure. Consideration also given to proposed strategies for reducing inter-group tension. P: Jr. stdg.

SOC 350 Social Change (3) AY (Same as ANT 350)
Major social trends in America and the world.; social change processes and social movements. Special focus on the emergence of a global system of economic, political, and environmental relationships. P: So. stdg.

SOC 355 Environment and Society: Sociological Perspectives (3) II (Same as ANT/EVS 355)
Human societies interact with the natural environments in which they are embedded. An examination of the driving economic, political, cultural, and demographic forces that cause human modification of the natural world, the resulting social and environmental problems and public controversies. A focus on movements and policies related to environmental issues, and the prospects for the emergence of more enviromentally "sustainable" societies. P: Jr. stdg. or IC.
SOC 360 Gender, Society and Culture (3) II (Same as ANT/WGS 360)
Examines gender from anthropological perspectives, including linguistics, biological anthropology, culture history, and socio-cultural anthropology. The course will examine gender in a wide variety of cultures. P: So. stdg.
SOC 385 Community Internship I, II (3)
Omaha city government departments and other private and public agencies provide opportunities for semester-long participation in their regular operations. Academic coordination provided by a department faculty member. May be repeated for up to 6 hrs . 1C, 12L. P: Jr. stdg.; SOC major; IC; 2.5 QPA

SOC 400 Topical Seminar in Sociology (3) OD
Seminars offered on special topics related to sociology. Topics vary from semester to semester. May be repeated under different subtitles. P: Jr. stdg.
SOC 411 Social Inequality and Stratification (3) II AY
Nature, causes, and consequences of social inequality and stratification, with particular attention directed to the interaction among class, race and ethnicity, and gender. P: Jr. stdg.
SOC 423 Law and Society (3) II ENY
A sociological examination of the development and evolution of models of legal systems from several contemporary cultures, with particular emphasis on the way each of the different models functions, either as a mechanism of social stability or as a mechanism of social change. This will include a survey of civil, criminal, administrative, and commercial issues, and their relationship to other social institutions, as well as a review of efforts to develop legal systems that transcend competing cultures, either by treaty, or by international organizations. P: Jr. stdg.
SOC 440 Gender Communication (3) I I 1993-94 (Same as COM 440)
Focuses on the similarities and differences in the communicative behaviors of women and men. Lectures, in-class experiential exercises, role-playing, and group discussions devoted to such topics as female-male roles and stereotypes; differences in verbal and nonverbal codes; partnership styles and alternatives; specific communication skills aimed at female-male relationships in a variety of settings (e.g., education, the workplace, the media, etc.); and special problem areas of female-male communication.

SOC 455 Food, Society, and Environment (3) (Same as ANT/EVS/SRP 455)
Access to food is a universal, basic human need. This course considers the social and cultural significance of food, the ecological implications of producing it, and the social justice issues that surround its distribution from several disciplinary perspectives. P: Sr. Stdg.

SOC 463 Organizational Assessment (3) AY (Same as COM 463, EDU 463)
Workshop evaluating characteristics of organizations (including schools and service organizations). Practical training in assessing the effectiveness of such interventions as curriculum, training and development, and personnel. Special emphasis on planning, conducting, and interpreting surveys; developing questionnaires, interpreting results, and writing final reports.
SOC 470 Introduction to Geographic Information Systems (4) II AY
An introduction to the design, development, and application of geographic information systems (GIS) and related technologies to conduct spatial analysis in applied research settings that require the integration of data from diverse sources. Students will complete individual projects focusing on a topical area of their choice in order to develop an understanding of the basic technologies, and to demonstrate their skill in using these technologies to analyze a research topic. Research topics may be drawn from any subject field for which data sets with geographic variables are available. These may include anthropology, criminal justice, demography, economics, environmental science, health care, marketing, political science, sociology and social work. P: SOC 212 or IC.

SOC 485 Sociology of the Caribbean: The Dominican Republic and Haiti. (3) I, II
Focuses on the sociopolitical and economic process that shape the Caribbean region, particularly the Dominican Republic and Haiti, emphasizing the interplay between social structures and cultural practices. P: IC

SOC 486 Modern American Society (3) I, II, S
A study of the political sociology of the American system through an examination of the ways in which significant issues of public policy at the national level are addressed by our political institutions. Conducted at the Institute for Experiential Learning in Washington, D.C. CO: SOC 487, 488; P: Jr. stdg.; SOC major; DC; 2.5 QPA.

SOC 487 Internship in Washington, D.C. (6) I, II, S
Students spend four days per week (approximately 32 hours per week) in government agencies, businesses, law firms, for-profit, or nonprofit organizations. A learning plan, reflecting the student's goals and objectives is developed in collaboration with the organization, and supervision is provided by faculty from the Institute for Experiential Learning, Washington, D.C. CO: SOC 486, 488; P: Jr. stdg.; SOC major; DC; 2.5 QPA.

SOC 488 Experiential Education Seminar (3) I, II, S
Examines the role of the individual in complex organizations by applying theories of experiential education, cognitive and social development, and organizations development to the experience gained by the student in the Washington, D.C. internship. CO: SOC 486, 487; P: Jr. stdg.; SOC major; DC. 2.5 QPA.

SOC 489 Social Images of Cultural Minorities (3) II (Same as JMC/SRP 489)
This course examines media images of various cultural minority groups and contrasts them with the images presented to students on field trips. Students are required to do independent field work and write about their observations. P: Sr. stdg.

SOC 493 Directed Independent Readings (1-6) I, II, S
Survey of the literature related to a topic in sociology not covered in the student's course work. Undertaken in close cooperation with the supervising faculty member. May be repeated to a limit of six hours. P: Sr. SOC major; DC.

SOC 495 Directed Independent Study (1-6) I, II, S
Student-initiated project on a focused topic in sociology, utilizing library materials and involving close coordination with a supervising faculty member. May be repeated to a limit of six hours. P: Sr. SOC major; DC.

SOC 497 Directed Independent Research (1-6) I, II, S
Student-initiated empirical project on a focused topic in sociology, involving close coordination with a supervising faculty member. May be repeated to a limit of six hours. P: SOC 212, 314; Sr. SOC major; DC.

## ANTHROPOLOGY (ANT)

## ANT 111 Human Variation (3) I, II

This course examines human biological and cultural variation both temporally and spatially. It takes a holistic perspective which looks at humankind as biological, spiritual, and social beings. Human variation will be explored in terms of biological and cultural adaptations human groups have made to their unique environments.

ANT 209 Qualitative Methods (3) I ENY
Introduction to anthropological research methods. Includes research design, strategies for collecting ethnographic data with a particular focus on participant observation and field work, comparative research, theory building, and ethical issues involved with human research.

ANT 212 Research Methods in the Social Sciences (3) I (Same as SOC 212)
Introduction to the nature of research within the social sciences. Attention is directed to the basic logic and research techniques involved in studying the social world scientifically. Specific topics considered include research design, measurement, alternative data collection procedures, and ethical concerns involved in studying social life.
ANT 214 Statistics for the Social Sciences (4) II (Same as SOC 214)
Broad introduction to the statistical techniques used by social scientists to analyze their data, including computer usage. Attention is directed to the basic procedures for organizing and describing data, for assessing relationships among social variables, and for using that information to make inferences about the population. 3R, 1L. P: SOC 212.

ANT 222 Museums and Social Science (3) II
This course examines the interrelationship of how social scientists have theoretically understood society and culture and how they have structured and utilized museums. Students will study the history of both anthropological theory and museums as well as ethical and aesthetic issues and demonstrate their knowledge by creating an ethically responsible public virtual museum on the World Wide Web for a final project. P: So. stdg.

## ANT 244 Cross-Cultural Communication (3) II ENY (Same as COM 244)

Course combines attention to sociolinguistic theory and analysis with practical strategies for maximizing communication between people from varying national, ethnic, professional, religious, and regional backgrounds. P: So. stdg.
ANT 301 Social and Cultural Theory (3) I (Same as SOC 301)
An exploration of the ideas central to sociology and anthropology from the perspective of their historical and contemporary theories. Special attention is given to the implications of these ideas for understanding human social values. P: So. stdg.
ANT 302 American Studies Seminar: The American Character (3) AY (Same as AMS 302, HIS 3O2) Comprehensive study of the values, attitudes, and characteristic behaviors of the American people. How and why are Americans different from others? What is the national character? What historical forces have formed this character? P: So. stdg.
ANT 307 Demography: World Population Issues (3) I ONY (Same as EVS/SOC 307)
This course will provide a sociological examination of the development and evolution of different models of population dynamics from several contemporary cultures. It will place particular emphasis on the assumptions and logical consequences of each of these models. Includes a survey of historical and contemporary trends in population growth, as well as a review of competing perspectives about natural limits to that growth. P: So. stdg.
ANT 317 Global Health Issues (3) II, AY (Same as HAP/SOC 317) AY
This course will examine the social production of health and disease from a global perspective. Related to these issues, is the topic of health and well-being in developing countries. P: So. stdg.

ANT 319 Language, Culture, and the Individual (3) I (Same as COM 319)
The anthropological approach to the study of language examines the biological source and manner of human communication as well as the cultural processes that structure languages, their meanings, means of acquisition, and transformations. The course examines the interrelationship of individuals, groups, and the wider culture through language. P: So. stdg.

Determinants and consequences of prejudice and discrimination; race, ethnocentrism, religious conflict, class structure. Consideration also given to proposed strategies for reducing inter-group tension. P: Jr. stdg.

ANT 342 Peoples and Cultures of Sub-Saharan Africa (3) I (Same as AFS/BKS 342)
An exploration of the people and places of Africa south of the Sahara from a variety of anthropological perspectives. It is an introduction to the cultures of Africa and a history of how those cultures have been perceived and interpreted. P: So. stdg.

ANT 343 Native Cultures of North America (3) II AY
Historic and ethnographic survey of the Native cultures of North America. Includes an analysis of the ecological, social, and ideological adaptations and cultural changes brought by contact with Euro-American populations. P: So. stdg.

ANT 345 Sports in American Culture (3) I ENY (Same as AMS 345)
How American cultural norms, values, and beliefs are reflected in and are influenced by sport. Included will be issues of basic cultural values and ideology, racial and ethnic groups, gender, and the role sport plays in American culture. P: Jr. stdg.

ANT 346 People and Cultures of Latin America (3) II ENY
A study of the cultures of Latin America. Includes an analysis of the culture history, ecological adaptations, social adaptations, and ideological adaptations, and explores the nature of culture change in these Spanish and Portuguese speaking regions of the Americas. P: So. stdg.

ANT 347 Peoples and Cultures of Africa and the Middle East (3) I AY (Same as AFS/BKS 347)
A study of the cultures of North Africa and the Middle East. Includes an analysis of the culture history, environmental, social and ideological adaptations, and explores the cultural changes of these predominantly Islamic cultures. P: So. stdg.

ANT 348 People and Cultures of Asia (3) II AY
A study of the cultures of South, East, and Southeast Asia. Includes an analysis of the culture history, environment, social, and ideological adaptations, and explores the changes in these cultures. P: So. stdg.

ANT 350 Social Change (3) AY (Same as SOC 350)
Major social trends in America and the world.; social change processes and social movements. Special focus on the emergence of a global system of economic, political, and environmental relationships. P: So. stdg.

ANT 352 Witchcraft, Oracles and Magic: Anthropological Study of Religion (3) (Same as THL 352) This course studies the variety of ways in which anthropology describes and interprets religious phenomena. Its focus is on the phenomenon of religion within the context of specific human social groups. P: So. stdg.
ANT 355 Environment and Society: Sociological Perspectives (3) AY (Same as EVS/SOC 355)
Human societies interact with the natural environments in which they are embedded. An examination of the driving economic, political, cultural, and demographic forces that cause human modification of the natural world, the resulting social and environmental problems and public controversies. A focus on movements and policies related to environmental issues, and the prospects for the emergence of more enviromentally "sustainable" societies. P: Jr. stdg. or IC.

ANT 360 Gender, Society and Culture II (Same as SOC/WGS 360)
Examines gender from anthropological perspectives, including linguistics, biological anthropology, culture history, and socio-cultural anthropology. The course will examine gender in a wide variety of cultures. P: So. stdg.

ANT 362 Applied Anthropology (3) II
Will examine anthropology's role, as a profession, in dealing with contemporary human problems. This course will introduce students to key anthropological concepts, theories and research methods, and demonstrate the usefulness of these tools in identifying, assessing, and solving problems by using case studies. P: So. stdg.
ANT 363 Socio-Cultural Construction of Health, Illness, and Healing (3) AY
This course explores the socio-cultural construction of health, illness and healing, and provides students with insight into the ways in which people of different cultures define, treat and
prevent illnesses. Many people tend to believe that Western medical science is the only valid system of diagnosis and treatment, and this course aims to broaden student's understanding of the ways in which indigenous and traditional medical systems are also directed at promoting health and alleviating disease. P: Jr. stdg.

ANT 400 Topical Seminar in Anthropology (3) OD
Seminars offered on special topics related to anthropology. Topics vary from semester to semester. May be repeated under different subtitles. P: Jr. stdg.

ANT 409 Race and Gender Relations: Moral and Ethical Dilemmas (3) I (Same as SRP/SWK 409)
This course explores the multiple faceted experience of being a person of color, a specific gender and immigrants in the United States. Institutional forces (economic, educational, familial, political and social welfare) are examined that influence the structure and status of persons of color, immigrants and women and men. Emphasis is understanding the diversity of the United States and the connections between and among race, gender and class and their complexity. Ways to better understand and interact are presented in addition to ways to foster social change. P: Sr. stdg.

ANT 444 Non-Violence and Peaceful Resolution of Conflict: Cross-Cultural and Political Perspectives (3) I (Same as JPS/PLS/SRP 444)
Peace is more than the absence of war and both peace and war (or violence, in general) are socio-political constructs. This course seeks to understand how people differ in how they envision and enact peace, violence, war, non-violence, and peaceful resolutions of conflict. Students will assess their own views on alternatives to violence and modes of conflict resolution by comparing different cultures, political practices, and times. P: Sr. stdg.; PHL/THL 250.

ANT 455 Food, Society, and Environment (3) (Same as EVS/SOC/SRP 455)
Access to food is a universal, basic human need. This course considers the social and cultural significance of food, the ecological implications of producing it, and the social justice issues that surround its distribution from several disciplinary perspectives. P: Sr. Stdg.

ANT 469 Ethnohistorical Approaches to Native American Cultures (3) II AY (Same as AMS/NAS 469)

This course's approach is ethnohistorical, combining the disciplines of history and anthropology to obtain multiple perspectives on the historical interactions between native and non-Native peoples. We will research historical and cultural topics concerning both Native and Euroamerican groups from the time of European incursion into North American to the present. The result of this course will be a final research paper on some theme in the history and culture of Native peoples. P: So. stdg.
ANT 493 Directed Independent Readings (1-6) I, II, S
Survey of the literature related to a topic in anthropology not covered in the student's course work. Undertaken in close cooperation with a supervising faculty member. May be repeated to a limit of six hours. P: Sr. SOC/ANT major; DC.
ANT 495 Directed Independent Study (1-6) I, II, S
Student-initiated project on a focused topic in anthropology, utilizing library materials and involving close cooperation with a supervising faculty member. May be repeated to a limit of six hours. P: Sr. SOC/ANT major; DC.
ANT 497 Directed Independent Research (1-6) I, II, S
Student-initiated empirical project on a focused topic in anthropology, involving close coordination with a supervising faculty member. May be repeated to a limit of six hours. P: SOC 212, 314; Sr. SOC/ANT major; DC.

ANT 525 Archaeological Fieldwork and Analysis (3) S (Same as CNE/THL 525)
The student learns the principles of stratigraphic archaeology (or underwater archaeology) by participating in an excavation for a minimum of four weeks. The student will learn stratigraphic theory and excavation strategy, basic archaeological techniques, and the basic analysis of archaeological materials recovered from the site. (Underwater archaeologists will learn basic underwater techniques in place of some terrestrial methods.)
ANT 526 Archaeology of Roman Palestine (3) S (Same as CNE/THL 526)
This is a study of ancient Palestine from the rise of the Herodian dynasty in the first century B.C.E. to the aftermath of the Muslim conquest in the seventh century C.E. the material of the
course is the physical remains of archaeological sites throughout modern Israel, along with movable cultural remains that issued from these sites. The major focus of the course will be the interaction between Classical Mediterranean civilization on the one hand, and the Jews and other Middle Eastern peoples on the other, in the age that yielded Rabbinic Judaism, Christianity and Islam. CO: ANT 525

## SPANISH See Department of Modern Languages and Literatures

STATISTICS (STA)
Professors Cheng (Chair, Department of Mathematics/Computer Science) and Mordeson; Associate Professor Fong.

## STA 493 Directed Independent Readings (Credit by Arrangement)

 May be repeated to a limit of six hours.STA $495 \quad$ Directed Independent Study (Credit by Arrangement)
May be repeated to a limit of six hours.

STA 497 Directed Independent Research (Credit by Arrangement) May be repeated to a limit of six hours.

STA 499 Senior Thesis: Supervised Consulting (Credit by Arrangement) May be repeated to a limit of six hours. P: DC.
STA 513 Probability and Statistics in the Health Sciences (3) I (Same as MTH 513)
This course covers topics in probability and statistics considered useful to those students planning on a career in the health sciences. The topics covered include probability principles and distributions in health sciences, types of epidemiologic study designs, estimation of medical parameters in defined patient populations, test of hypothesis, measures and analysis of treatment of the sick, analysis of variance, methods of medical outcome prediction, and prospective, retrospective and cross-sectional studies of disease occurrence. P: MTH 246.

STA 521 Computational Methods in Statistics (3) OD
Use of packages of statistical programs, calculation of statistical tables, Monte Carlo methods. P: A course in statistics; CSC 221.

STA 525 Nonparametric Methods (3) OD
Applications of nonparametric estimates, confidence, intervals, tests, and multiple comparison procedures. P: A course in statistics.

STA 527 Sample Surveys (3) OD
Simple, systematic, stratified, and cluster random sampling; proportions; ratios; selection of sample size. P: A course in statistics.
STA 561 Mathematical Statistics I (3) I (Same as MTH 561)
Introduction to probability and probability distributions including techniques for finding expected values and variance of discrete and continuous variables. These distributions and their properties are examined to establish their application to applied statistical methods. P: MTH 246.

STA 562 Mathematical Statistics II (3) II (Same as MTH 562)
Using probability distributions as a foundation and random sampling, methods for estimating distribution parameters are developed with applications to hypothesis testing. The course also includes an introduction to linear models, regression analysis, analysis of variance and design of experiments. P: STA 561.

STA 563 Mathematical Statistics III (3) OD (Same as MTH 563)
Optimal decision procedures, further normal distribution theory, noncentral chi-square and F distributions, introduction to the theoretical basis for analysis of variance, nonparametric methods. P: STA 562.

STA 567 Linear Statistical Models (3) OD
Least squares method; general linear hypothesis; multiple correlation and regression; analysis of covariance. P: STA 561; MTH 529. signs; variance components; factorial experiments; confounding. P: STA 561.

STA 571 Linear Programming (3) OD (Same as MTH 571) Introductory course in operations research. Linear models and solutions using the simplex method, duality theory and sensitivity analysis. P: MTH 529.
STA 573 Probabilistic Models (3) OD (Same as MTH 573)
Queuing theory, inventory theory, Markov processes, simulation, and nonlinear programming. P: STA 561.
STA 575 Introductory Stochastic Processes (3) OD (Same at MTH 575)
Random walk, normal processes and covariance stationary processes, counting processes and Poisson processes, renewal counting processes, discrete and continuous parameter Markov chains. P: STA 561.

STA 577 Applied Multivariate Analysis (3) OD
Inference about mean vectors and covariance matrices, canonical correlation, principal components, discriminant analysis, cluster analysis, computer techniques. P: STA 563, 567.
STA 579 Applied Time Series Analysis (3) OD Forecasting; Box-Jenkins models; time series; regression; exponential smoothing; transfer function models; auto covariance functions. P: STA 561.

## THEATRE See Department of Fine and Performing Arts

## THEOLOGY (THL)

Associate Professor O'Keefe (Chair), Professors Hamm, Hauser, M. Lawler, Malina, and Wright; Associate Professors J. Fleming, Mueller, Reno, Shanahan, and Simkins; Assistant Professors Calef, Ehle, Roddy, Salzman, Weber, and Winn; Adjunct Assistant Professor Hart; Adjunct Instructors Driscoll, and Walsh.

## Theology Requirements

To fulfill their core curriculum requirements, Arts and Sciences students must take the 100level course ("Christianity in Context"), one course in Scripture (THL 200 through 229), and one course in Christian theology (THL 300 through 350). Students are also required to take a course in ethics; this requirement may be fulfilled either in the Theology department or in the Philosophy department (THL 250 or PHL 250). Specific requirements for Nursing are listed on pages 131-138. Specific requirements for Business Administration are listed on pages 117-130.

## Prerequisites

The course entitled "Christianity in Context" (THL 100) is required of all students. It must be taken before any other Theology course may be taken, and should be taken during the Freshman year. The second course must be a 200-level course in Scripture taken after the Freshman year. The third course in Christian theology must be taken after the first two required courses and requires Junior standing. THL 250 may be taken by those with sophomore standing at any time after the completion of the freshman theology course.

## The Fields of Concentration

Theology as a major: Thirty-six hours including THL 100. In the sophomore or junior year the major takes two Scripture courses, including both Old and New Testament studies, THL 250, and one of the 300-level courses in Christian theology required of all students in the College. In the Spring of the junior year, THL 550 is required. In the Fall of the senior year THL 492 is required. The additional five courses, chosen in consultation with the major advisor, must include three on the 400-599 level, including one in each of the following areas: Doctrinal, Historical or Liturgical Theology; Biblical Studies; Christian Life Studies.

Theology as a Co-Major: For students who are majoring in another discipline, but who wish to co-major in theology, the theology concentration requires 27 hours of courses including THL 100. Co-majors take two Scripture courses, one each in Old and New Testament studies, THL 250, one 300-level course in Christian theology, one 400-599 level course, THL 335 if not taken in Core, THL 550. THL 492 may be taken if instructor gives permission. Any remaining theology course(s) is/are chosen in consultation with the theology advisor.

Certificate Program in Liturgy: Offered through University College, this program requires twenty-five semester hours: two Scripture courses, both Old and New Testament; one of the following: THL 325, 335; and THL 250, 338, 339, 491, 544, and 561.

Certificate Program in Ministry: Offered through University College, this program requires twenty-five semester hours: two Scripture courses, both Old and New Testament; two of the following: THL 325, 335, or 339; and THL 250, 392, 491, 560, and 561.

Certificate Program in Spirituality: Offered through University College, this program requires twenty-five semester hours: two Scripture courses, both Old and New Testament; two of the following: THL 325, 335, or 339 ; and THL $250,491,544,561$, and 575.

Certificate Program in Theology: Offered through University College, this program requires twenty-five semester hours: two Scripture courses, both Old and New Testament; two of the following: Thl 325, 335, or 339; THL 250, 491, and 561; and two 300-599 level theology courses chosen in consultation with advisor.

THL 100 Christianity in Context (3) I, II
The study of religion as a universal human phenomenon and of Christianity within that context. Within that framework, students will be challenged to situate their own appropriation of faith.

THL 101 Honors Christianity in Context (3) (Same as THL 100) OD
Open to students eligible to enroll in honors courses. Requires the consent of the Director of the Honors Program.
THL 110 Religious Foundations (3) OD
Internet-based distance education course, surveying some of the most important aspects of Roman Catholic thought, especially concerning Scripture, Doctrine, and Sacrament. Course is offered to religious educators in Catholic elementary schools who have little or no academic background in the Catholic theological tradition.

THL 200 Introduction to the Bible (3) I, II
Historical and thematic overview of the Old Testament as pointing toward the New Testament. Discussion of the historical context and evolution of the New Testament with a focus on the major Pauline letters, the theological characteristics of the Synoptic gospels, Acts, and the Johannine writings. P: THL 100; So. stdg.
THL 201 Reading the Old Testament (3) I, II
Survey of the literature, history, and religion of the Old Testament. P: THL 100; So. stdg.
THL 202 Creation and Apocalypse (3) I, II
The comparative examination of biblical creation myths and their appropriation in historical, cultic, and prophetic settings P: THL 100; So. stdg.
THL 203 Biblical Ancestors and Heroes (3) I, II
Examination of the story of ancient Israel through the lens of its major figures. Emphasis on their role as literary and social figures. P: THL 100; So. stdg.
THL 205 Sickness, Disability, and Healing in the Bible (3) I, II
Introduction to critical interpretation of the bible through a focus on select texts of the Hebrew Bible/Old Testament and the New Testament; exploration, in cultural context, of the experience and understanding of sickness, disability, and healing in ancient Israel and early Christian communities; attention to the theological problem of sickness and disability and to the role of healing and exorcism in the diverse christologies of the Gospels. P: THL 100 and So. stdg.

THL 206 Honors Sickness, Disability, and Healing in the Bible (3) (Same as HRS 206) (See THL 205)

Open to students eligible to enroll in honors courses. Requires the consent of the Director of the Honors Program. P: THL 100 or 101 and So. Stdg.

THL 207 Reading the New Testament (3) I, II
A survey of selected writings from the early Christian communities, understood in their cultural and literary contexts. P: THL 100; So. stdg.

THL 208 New Testament Communities and Their Stories (3) I, II
By using a selection of New Testament texts, students will examine early Christian rhetorical and story telling styles, issues that shaped their emerging identity, and their understanding of the Jesus story. P: THL 100; So. stdg.

THL 209 The Synoptic Gospels: The Life of Jesus (3) I, II
Describing and understanding Jesus and the Jesus movement group (the "historical Jesus") from ca. 30 A.D. by means of traditions set down in writings a generation or more later. P: THL 100; So. stdg.

THL 210 Applying the Memory of Jesus: The Community of John (3) I or II
Study of the unique witness to the meaning of Jesus in the Johannine writings. P: THL 100; So. stdg.

THL 212 Paul and His Legacy (3) I, II
The correspondence of Paul and others following and adapting his tradition is examined for both their style and their message concerning what God has done in Jesus that affects their communities' lives and identities. P: THL 100; So. stdg.

THL 215 Honors Reading the Old Testament (3) (Same as THL 201)
This course is open to students eligible to enroll in honors courses. It requires the consent of the Director of the Honors Program.

THL 219 Honors Synoptic Gospels: The Life of Jesus (3) I, II (Same as THL 209)
Describing and understanding Jesus and the Jesus movement group (the "historical Jesus") from ca. 30 A.D. by means of traditions set down in writings a generation or more later. Note: This course is open only to students enrolled in theHonors Program. It requires the consent of the Director of the Honors Progrm. P: THL 100; So. stdg.

THL 250 Theological Foundations for Ethical Understanding (3) I, S (See JPS 250)
Study of traditional and contemporary frameworks for determining moral values and making moral decisions in a Christian context. The application of traditional moral understandings to contemporary moral problems. P: THL 100; So. stdg.

THL 324 Scripture and Theology: The Birth of Christian Doctrine (3) (Fall 2001)
This course explores the emergence of the Christian religion from ancient Judaism. It studies the Christian community's successful effort to articulate a coherent understanding of God, of Jesus, and of the church. The course also considers the enduring significance of these ancient doctrines for the modern world. P: THL 100 and a 200-level Scripture course and Jr. stdg.
THL 325 Catholicism: Creed and Question (3) II
This course explores the basic beliefs and teachings of the Roman Catholic Church within the context of current theological debate. P: 200-level Scripture course; Jr. stdg.

THL 326 Defending the Christian Faith (3) I
How the Christian church has defended its core doctrines and beliefs against critics both ancient and modern. P: THL 100; a 200-level Scripture course; Jr. stdg.

THL 329 Theology of the Church (3) I, II
Scriptural foundations, Petrine office, infallibility, apostolic succession, ecclesiology of Vatican II. P: 200-level Scripture course; Jr. stdg.

THL 330 Jesus Christ and the Salvation of the World (3)
This course will explore through historical analysis and contemporary theory a fundamental Christian doctrine: Jesus Christ is Savior of the world. The course will lead students in the study of some of the fundamental questions related to this doctrine. P: 200-level Scripture course; Jr. stdg.

THL 334 Theology of the Holy Spirit (3) II
The Holy Spirit in the New Testament as the Spirit who creates the Christian community. Development of theology of Holy Spirit in history. P: 200-level Scripture course; Jr. stdg.

THL 335 Jesus Christ: Yesterday and Today (3) I, II
An historical and critical analysis of the meaning of the man Jesus of Nazareth as that meaning was developed in the New Testament and in later Christian traditions. Special emphasis on contemporary theological attempts to answer the perennial question: "Who is this man?" P: 200-level Scripture course; Jr. stdg.

THL 336 Belief and the Quest for Christian Identity: Theological Explorations (3) II What difference does it make to the development of the human person to believe in God and to believe in Jesus Christ as God incarnate? Based on what we can know of the historical Jesus and on how the Christian church has viewed Jesus through the centuries, this course
seeks to provide a portrait of Jesus to attract and challenge today's inquirer. P: 200-level Scripture course; Jr. stdg.

THL 337 Nature, Grace and Sin (3) OD
Theologies of nature, grace and sin in Scripture, in the Christian tradition and in contemporary theology, with particular reference to the ways grace heals and transforms our personal, societal and environmental relationships. P: 200-level Scripture course; Jr. stdg.
THL 338 Eucharist: Sacrament of Unity or Disunity? (3) I, II
Study of the Eucharist from an ecumenical perspective. The course is intended for Catholic and Protestant, mainline and evangelical Christians seeking a critical, historical, and theological understanding of their eucharistic heritage.P: 200-level Scripture course; Jr. stdg.
THL 339 Theology of the Church and Sacraments (3) I, II
An historical and critical analysis of the sacramental dimension of Christianity as it applies to the church. A treatment of the church as the sacrament of the risen Jesus and of the classical Christian sacraments as solemn, symbolic actions of both that church and that Jesus. P: 200level Scripture course; Jr. stdg.

THL 344 Theology of Christian Marriage (3) II
Christian marriage in its sacramental reality and intrinsic mystery. Particular needs and problems confronting marriage today. P: 200-level Scripture course; Jr. stdg.
THL 346 Vatican Council II: Teachings on the Church (1) OD
Course deals with the view of the church proposed by the Second Vatican Council. Examination of the biblical basis for that view and consideration of various models of church and their implications for Catholic life. Designed for teachers and administrators in the Catholic School system of the Archdiocese of Omaha.

THL 349 Egyptian Art and Archeology (3) OD (Same as ART/CNE/HIS 349)
This course will explore the history, society, culture, and religion of ancient Egypt form the predynastic era through the Ptolemaic period, as revealed through its artistic and material remains. Attention will be given to how sculpture, painting, architecture, and other material remains provide a window on Egyptian life and thought. P: So. stdg.
THL 350 Archaeology of Syria-Palestine (3) OD (Same as ART/CNE/HIS 350)
A chronological survey of the archaeology of Syria-Palestine in which material culture provides a window on the history of society, economy, and religion from the Neolithic to Hellenistic times. Special topics include the emergence of farming and pastoral societies, the formation and dissolution of Bronze Age city-states, and the rise and fall Iron Age kingdoms such as Israel, Moab, and Edom.

THL 352 Witchcraft, Oracles and Magic: Anthropological Study of Religion (3) (Same as ANT 352)

This course studies the variety of ways in which anthropology describes and interprets religious phenomena. Its focus is on the phenomenon of religion within the context of specific human social groups. P: So. stdg.

THL 353 Introduction to Buddhism (3) OD (Same as PHL 353)
Origin and development of Buddhism's basic doctrines and beliefs. The different schools of Buddhist traditions, and the changes as Buddhism spread from India through China and Japan to the West. How Buddhist teachings are practiced in daily life. P: 200-level Scripture course; Jr. stdg.
THL 354 Introduction to Judaism (3) OD
Development of Jewish faith, philosophy, institutions, and peoplehood. P: 200-level Scripture course; Jr. stdg.
THL 356 Christianity in Africa (3) OD (Same as AFS/BKS 356)
Introduction to religion among Africans and Africans in the diaspora. African religious concepts of time, creation, the place of humans in creation, initiation rites, marriage, procreation, death. The relationship between the ecclesial and non-ecclesial dimensions; development of the Black sacred cosmos, ritual, music, folk tradition and performance practice.
THL 357 Introduction to Islam (3) I
The development of the religion of Islam, especially its institutions and structures, from the period of the Prophet Muhammad and the revelation of the Holy Quran up to the present. An
examination of the basic doctrines of Islam along with its religious practices (including Sufism, the Islamic mystical tradition), plus an overview of Islam in several selected countries or regions (e.g., Turkey, Iran, the Indian sub-continent, the USA). P: THL 100; 200-level Scripture course, Jr. stdg.

THL 359 Living Religions of the World (3) I, II Major Eastern religions: Hinduism, Buddhism, Confucianism, Taoism, Zoroastrianism, and Islam. Judaism. Christianity. P: 200-level Scripture course; Jr. stdg.

THL 360 Social Justice in Theory and Practice (3) PS (Same as JPS 360)
Experiential and academic inquiry into the sources of social injustices and remedies to them as seen from a Christian perspective. A service/immersion course offered in various locations. P: JPS/THL 250 or PHL 250 and IC; Jr. stdg.

THL 365 Faith and Moral Development (1) I (Same as JPS 365)
Sequence of three mini-seminars over three semesters examining theories of faith and moral development as well as biographies of social justice activists such as Dorothy Day and Martin Luther King, Jr. Required of JPS co-majors. Open to other students. P: JPS/THL/PHL 250 and Jr. stdg.
THL 391 Applied Ministry/Spirituality (1-3) OD
Offered only in the Certificate programs in Ministry and Spirituality. Experiential study chosen in consultation with adviser.

THL 392 Practicum in Ministry (3) OD
Students must complete a project or practicum related to a specific ministry and share it with the church community and the student's adviser.

THL 395 Community Service (1) I
Co-requisite for a designated section of 335 -level theology courses. With the guidance of the instructor, students select service sites in the Omaha community where they will volunteer 34 hours per week during the semester. Students journal about their experiences each week and integrate those reflections into their theological study. Satisfies the community service course requirement for the Justice and Peace Studies co-major. P: 200-level scripture course, Jr. stdg. CO: THL 335.

THL 416 For the Greater Glory: The Jesuits, their History and Spirituality (3) OD (Same as SRP 416)
An examination of the Society of Jesus from its founding by Ignatius of Loyola during the pivotal 16th century, through suppression and recovery to the challenges of the modern, PostVatican II era, this course seeks to understand the Jesuits on two levels: through their controversial history, set within the context of their times and as represented by the lives of selected individuals; and through the development of their particular spirituality, Ignatian methods of prayer and discernment of spirits, as originated in the Spiritual Exercises and enhanced over time. Students will have an opportunity both to analyze Jesuit history and to experience Ignatian spirituality in their own interior lives.

THL 415 Stories that Shape Lives (3) OD (Same as SRP 415)
This course examines both classic stories and the implicit stories embedded in contemporary cultures. By "classic stories" is meant fables, biblical parables, and stories of holy people. By "implicit stories embedded in contemporary culture" is meant the "lived stories" embodied in the cultures from which our students come and in which they live. We address story (as human activity) and stories (as concrete cultural artifacts) from a variety of perspectivesespecially those of literary criticism, biblical exegesis, and the cross-cultural and historical study of spirituality. P: Sr. stdg. and PHL 250 or JPS/ THL 250.

THL 418 Jesus Through the Ages: Ideas and Images Toward a Coherent Christian Identity and Ethic (3) (Same as SRP 418)
Employing methods of the fine and performing arts and theology (historical and sytematic), this course will seek the "real" Jesus admidst a plethora of images and ideas used by Christians throughout the ages to depict Jesus Christ. It will critique the historical-cultural dependencies of these images and ideas to discern which of them, if any, remain normative for Christianity, which are time-bound, which still speak powerfully, which do not--and why. In the process this course will not only inform students about the single most significant figure in human history but engage them in a personal search for an authentic Christian identity and ethic. P: Sr. stdg. and PHL 250 or JPS/THL 250.

THL 420 Science and Religion (3) OD (Same as PHL/SRP 420)
This course explores the relationship between science and religion from three perspectives: philosophy of science, scientific theories, and theology. Issues to be studied include: reductionism vs. emergentism, the relationship between God and world (including creation and evolution), the Galileo affair, and Darwin and design. P: Sr. stdg. and PHL 250 or JPS/THL 250.

THL 440 Liturgy, Music, and the Transformed Life (3) OD (Same as MUS 440, THL 440)
A study of the historical development of the relationship between the Eucharist and liturgical music. The class will study how the liturgy (Eucharist, scripture reading, music, and architecture) intends the transformation of the assembly into a moral, virtuous, and just community.
THL 457 Biomedical Ethics: Philosophical and Theological Approaches (3) OD (Same as HAP/ PHL/SRP 457)
An exploration of relations between philosophical and theological conceptions of ethics and moral methodologies, together with an application of the latter to select issues in biomedicine and health care policy. P: THL 250 or PHL 250, Sr. Stdg.

THL 461 The Role of Philosophy in Theology (3) OD (Same as PHL 461)
Examination of the relation between philosophy and theology, their different ways of thinking about God and Revelation; the role that philosophy has played and can play in the development of theological thought; the impact that theological ideas have had on philosophical thought; and the interplay between faith and reason. P: 200-level Scripture course; Jr. stdg.

THL 465 Faith and Political Action (3) OD (Same as PLS/SRP 465)
Faith in Political Action, a Senior Perspective course, challenges students to understand theological and political science perspectives on social policy issues, public policy analysis, and advocacy strategies, and allows the students to practice these new skills/understandings in a service-learning project for a local agency. In addition to class time, the course requires twenty hours of volunteer service for the agency during the semester. P: PHL or JPS/THL 250 Sr . stdg.

THL 470 Seminar in Selected Topics (3) OD
Topical seminar with topics changing in different semesters. P: 200-level Scripture course; Jr. stdg.
THR 488 Personal and Spiritual Dimensions of Leadership (3) OD (Same as COM/EDU/SRP 488)

The purpose of the course is to give students the opportunity to engage in introspection and examination of their personal belief and value systems as it relates to leadership. The course begins from the assumption that leadership is "a journey that begins within" and examines the relationship between leadership theory and Christian spirituality. Biographical examples will be analyzed; biographies will be drawn from diverse fields such as health, science, business, government, sports and education. P: Sr. stdg.
THL 491 Seminar in Liturgy/Ministry/Spirituality/Theology (1) OD
Certificate in Liturgy/Ministry/Theology/Spirituality students attend five seminars and complete the Portfolio in Ministry during their course of study.
THL 492 Senior Seminar (3) I
Study of a major theme in the Christian theological tradition. Each student will write and present a major research paper related to this theme. P: 300-level Christian Theology course; Sr. stdg. Open to Theology majors and co-majors only.
THL 493 Directed Independent Readings (1-4) OD
P: DC. May be repeated to a limit of six hours.
THL 495 Directed Independent Study (1-4) OD
P: DC. May be repeated to a limit of six hours.
THL 498 Pastoral Synthesis (3) OD
Integrating project synthesizing a personal pastoral experience under faculty direction.

Origin and composition of the first five books of the Bible. Historical and theological traditions contributing to their formation. Emphasis on their unique theology and on the use of the books in the New Testament period. P: THL 100 and a 200 -level Scripture course and Jr. stdg.
THL 502 Old Testament Themes (3) OD
In-depth study of the themes of covenant and community as they are developed in the Pentateuch and in Prophetic and Wisdom Literature. A survey of contemporary scholarship will support a careful study of the pertinent texts.
THL 503 The Prophetic Literature of the Old Testament (3) OD
The uniqueness of the prophetic movement. Background literary styles, relevance of the prophetic message. P: THL 100 and a $200-$ level Scripture course and Jr. stdg.
THL 504 The Wisdom Literature of the Old Testament (3) OD
Study of the patterns of Proverbs, Job, Ecclesiastes, some of the Psalms, compared with the wisdom literature of other ancient peoples. P: THL 100 and a 200 -level Scripture course and Jr. stdg.
THL 507 Gospel of Matthew (3) OD
A study of the theological vision of the text of this gospel, using all available methods and resources: redaction criticism, composition criticism, narrative criticism, etc. P: THL 100 and a 200-level Scripture course and Jr. stdg.
THL 508 The Gospel of Mark (3) OD
A study of the first written gospel, its outline and structure, authorship, sources and influence on later New Testament writings. P: THL 100 and a $200-$ level Scripture course and Jr. stdg.
THL 509 The Gospel of Luke and the Acts of the Apostles (3) OD
Study of Luke-Acts as a two-volume whole-a work of history, theology, and literary artistry. P: THL 100 and a 200 -level Scripture course and Jr. stdg.
THL 511 The Gospel of John (3) OD
Study of the unique witness to the meaning of Jesus in the Johannine Gospel. P: THL 100 and a 200 -level Scripture course and Jr. stdg.

THL 514 The Pastoral Epistles (3) OD
The first attempts to weld Christianity and Western humanism as initiated in the Epistles to Timothy and Titus. P: THL 100 and a 200 -level Scripture course and Jr. stdg.
THL 516 The Book of Revelation (The Apocalypse) (3) OD
A contemporary scholarly interpretation of the book of Revelation with reference to contemporary apocalyptic. P: THL 100 and a $200-$ level Scripture course and Jr. stdg.
THL 517 The Parables of Jesus (3) OD
Stories that formed the core of Jesus' preaching. How he told them. How the evangelists retold them. How we understand them today. P: THL 100 and a $200-$ level Scripture course and Jr. stdg.
THL 518 Women and the Bible (1-3) OD
Study of the representations of women in biblical narratives; attention to the construction of gender in the ancient world. Introduction to the various approaches contemporary women are taking to these biblical texts. P: THL 100 and a 200 -level Scripture course and Jr. stdg.
THL 519 Reading the Bible in the Context of the Time (1) Spring 2001
This course is intended as a primer for more carefully discerning the message of biblical passages by tempering interpretation with knowledge of the culture. Emphasis is on an analytical perspective of the cultural context within which the passages were written.
THL 520 The Dead Sea Scrolls (3) OD (Same as CNE 520) Introduction to the Dead Sea Scrolls and various theories about their origin. Exploration of the light they shed on the textual history of the Hebrew Bible, developments in ancient Judaism, and the early history of Christianity. P: THL 100 and a 200 -level Scripture course and Jr. stdg.

THL 523 The Social World of the New Testament (3) OD
Study of the physical and cultural elements of New Testament Palestine. Designed to help those teaching children at elementary levels. P: THL 100 and a 200-level Scripture course and Jr. stdg.

THL 524 History of Ancient Israel (3) OD (Same as CNE/HIS 524)
An examination and reconstruction of the history of ancient Israel from biblical and other ancient New Eastern literary texts, and from archaeological and epigraphic materials. P: THL 100 and a 200-level Scripture course and Jr. stdg.

THL 525 Archaelogical Fieldwork and Analysis (3) S (Same as ANT/CNE 525)
The student learns the principles of stratigraphic archaeology (or underwater archaeology) by participating in an excavation for a minimum of four weeks. The student will learn stratigraphic theory and excavation strategy, basic archaeological techniques, and the basic analysis of archaeological materials recovered from the site. (Underwater archaeologists will learn basic underwater techniques in place of some terrestrial methods.)
THL 526 Archaeology of Roman Palestine (3) S (Same as ANT/CNE 526)
This is a study of ancient Palestine from the rise of the Herodian dynasty in the first century B.C.E. to the aftermath of the Muslim conquest in the seventh century C.E. the material of the course is the physical remains of archaeological sites throughout modern Israel, along with movable cultural remains that issued from these sites. The major focus of the course will be the interaction between Classical Mediterranean civilization on the one hand, and the Jews and other Middle Eastern peoples on the other, in the age that yielded Rabbinic Judaism, Christianity and Islam. CO: THL 525
THL 527 Study Tour of Biblical Israel (3) S
Two-week guided tour of the biblical sites in Israel. Typical sites: Caesarea Maritima, Sea of Galilee, Tiberias, Bethsaida, Capernaum, Tabgha, Jordan River, Sepphoris, Megiddo, Nazareth, Mt. Tabor, Hazor, Tel Dan, Caesarea Philippi, Tel Bet Shean, Jericho, Judaean Wilderness, Mt. of Olives, Bethlehem, Jerusalem, Masada, and Qumran. A biblical scholar accompanies the group, supplementing local guides. Requirements include readings before trip, written reflections afterward.

THL 528 The Septuagint (3) II (Same as GRK 528)
Readings from the Greek Old Testament, commonly known as the Septuagint (LXX); study of its cultural and religious background. P: THL 100 and a Scripture course and Jr. stdg.

THL 529 Translations of the Bible (3) (Same as CNE 529)
Various ancient translations of the Bible and their significance. P: THL 100 and a 200-level Scripture course and Jr. stdg.

## HISTORICAL-DOCTRINAL-LITURGICAL STUDIES (THL 530-559)

THL 530 (455) Contemporary Catholic Theologians (3) OD
Key themes in the thought of Rahner, Congar, De Lubac, Lonergan, and other contemporary Catholic theologians. P: 200-level Scripture course; Jr. stdg.
THL 531 Studies in Early Christianity (3) I OD
This course will study the emergence of early Christian theology through the writing of the theologians of the first 500 years of the Church's history. Attention will be given to some of the following themes: the development of the doctrine of the Trinity, the emergence of Classical Christology, early Christian exegesis, the thought of St. Augustine. P: THL 100 and a Scripture course, Jr. stdg.

THL 532 Ecclesiology: Contemporary Church Questions (3)
Study of selected issues in the contemporary church. Offered at the Jesuit College in St. Paul, Minnesota.

THL 533 Ecclesiology: Contemporary Church Questions (3)
Basic contemporary questions about the life of the church will be explored in the context of the Creed and traditional dogmatic theology. Particular emphasis will be placed on the church's transition into the third millennium.

THL 535 Doctrinal Development: Christology (3) OD
Development of the Christian community's understanding and teaching about the person and work of Jesus Christ. P: THL 100 and a 200-level Scripture course and Jr. stdg.

THL 537 Doctrinal Development: Sin and Grace (3) OD
Development of the Christian community's understanding and teaching about the mysteries of grace and sin. P: THL 100 and a 200-level Scripture course and Jr. stdg.
THL 538 Seminar in Christian Anthropology (3) OD
Study of Christian theological anthropology in eastern and western traditions. P: THL 100 and a 200-level Scripture course, Jr. stdg.
THL 540 Ecclesiology: The Documents of Vatican II (3) OD Basic contemporary questions about the life of the church will be explored through a careful study of Lumen Gentium and other selected documents from Vatican II. The Council's theology is examined in the context of the Creed and traditional dogmatic theology.
THL 541 (484) Theology of Story: Encountering God in Life Stories (3) OD Christ-centered anthropology, synthesizing theology and spirituality by using theological concepts of story to discover concrete meaning of Jesus' story as the life story of God and as the model for our own life stories. P: 200-level Scripture course; Jr. stdg.
THL 544 Christian Celebration: The Liturgical Year (3) OD
Biblical origins and historical development of feast and season, e.g., Christmas and Easter. The theologies of the saints' days and celebrations. History and meaning of daily common prayer in the Church. P: THL 100 and a 200-level Scripture course and Jr. stdg.
THL 545 (485) Liturgy and Christian Life (3) OD
The historical development of Western Liturgy and its technological interpretation through the centuries. Emphasis on the saving presence of Christ and on the role of liturgy in the rest of Christian life. P: THL 100 and a 200-level Scripture course and Jr. stdg.
THL 550 History of the Christian Church (3) II
Survey of the intellectual, ecclesiastical and political developments which shaped Christianity through two millennia. Exploration of complex relations among beliefs, institutions, and practices which constitute Christian history. P: 200-level Scripture course; Jr. stdg.
THL 552 (452) The Christian Church: Keeping the Faith Through Shifting Paradigms (3) OD A historical and systematic effort (a) to determine the authentic essence and center of Christianity and (b) to describe and critically evaluate how the Christian church, via shifting paradigms and images, attempted in its journey through time, space, and cultures to preserve and propagate the authentic Christian witness. P: THL 100 and a 200-level Scripture course and Jr. stdg.

## CHRISTIAN LIFE STUDIES (THL 560-599)

THL 560 Theology of Ministry
Through historical investigation of the practice of ministries in the western church from earliest times to the present, this course aims to arrive at some systematic conclusions about the nature of ministry. P: THL 100 and a $200-$ level Scripture course and Jr. stdg.

THL 561 Finding God in Daily Life: Prayer and Discernment (3) OD
General introduction to Christian spirituality with emphasis on personal prayer. Goal is to improve the quality of Christian living and praying through better understanding of their internal dynamics. Course focuses on the theology of the Holy spirit, spirituality of Thomas Merton, mysticism and discernment of spirits. Students are expected to practice techniques presented in class. P: THL 100 and a 200-level Scripture course and Jr. stdg.
THL 562 (448) Christian Morality: Issues and Considerations (1) OD Considerations on: a foundation and approach to Christian morality; the distinctiveness of Christian morality; some contemporary moral problems; specific arguments of contemporary Christian theologians about current questions. Designed for teachers and administrators in the Catholic School system of the Archdiocese of Omaha.

THL 563 (463) Contemporary Moral Problems (3) OD A comprehensive study of one or more moral issues facing contemporary society.

## THL 564 Catholic Social Ethics (3) OD

Investigation of the historical and methodological dimensions of sexual ethics within the Catholic tradition; contemporary magisterial teachings on issues such as premarital sex, artificial birth control, homosexuality, and reproductive technologies; critical analysis of those teachings from various theological perspectives. P: THL 100 and a 200 -level Scripture course; Jr. stdg.
THL 565 Catholic Social Teaching (3) OD (Same as JPS 565)
Historical development of Catholic social teaching from the 1891 publication of "The Condition of Labor" to the present. Students are encouraged to apply the core insights of the tradition to contemporary issues. P: Two previous THL courses; Jr. stdg.
THL 566 (465) Sin, Sex, and Intimacy (3) OD
Concentrated study of the moral dimension of human sexuality. Readings: social commentary on contemporary uses of sexuality, ancient and modern assessments of the meaning and purpose of sex, authoritative Catholic documents on sexual ethics, feminist criticisms of sexual relations, and contemporary attempts to define a modern ethic of sex and intimacy. P: 200level Scripture course; J. stdg.
THL 567 (467) Ethical Issues in Health Care (3) OD
Inquiry into the values and ethical problems of modern medicine from the viewpoint of Christian theology. P: 200-level Scripture course; Jr. stdg.
THL 568 (458) Women in the Christian Tradition (3) OD
Study of the outlook on man, woman, and divinity in the Bible, the Christian churches past and present, and "post-Christian" feminism. Examination of the Judeo-Christian tradition, both the pervasiveness of its patriarchal assumptions, and the liberating resources it can contribute to a healthy understanding of maleness and femaleness today. P: 200-level Scripture course; Jr. stdg.
THL 569 (469) Death: Fact, Enigma, Mystery (3) OD
Death as seen from early mythology. Biblical approach; the Christian mystery as identified with the mystery of Christ; contemporary thinkers. P: 200-level Scripture course; Jr. stdg.
THL 570 Faith and Non-Violence (3) OD
The Christian foundation supporting a theology of non-violence. Includes examination of selected writings of Gandhi, Martin Luther King Jr., the New Testament, and Catholic Church teaching on just war, nonviolence, and conscientious objection. P: Two previous THL courses; Jr. stdg.
THL 571 Understanding and Dealing with Suffering: Hebrew and Christian Perspectives (3) OD
Survey of perspectives toward suffering from Hebrew and Christian sources. Presentation of current Christian theologies on Divine Providence - the relationship between God and suffering in the world - as well as practical guidelines for establishing helping relationships with suffering people. P: THL 100 and a 200 -level Scripture course and Jr. stdg.
THL 572 Ethics and Spirituality (3) OD
Consideration of the diverse spiritual traditions of Christianity to see asceticism, prayer, contemplation and discernment as categories which bridge spirituality and ethics. The traditional strands of Christian spirituality as resources for the contemporary life of faith and action. Readings from John of the Cross, Kierkegaard, Kenneth Kirk, Dorothy Day, Merton, Barth and Rahner. P: THL 100 and a 200 -level Scripture course and Jr. stdg.

## THL 573 Religion and Politics (3) OD

Four Christian formulations of the relation of religion to politics: the sectarian approach, linked to liberal humanism; the natural law tradition, reformulated as basic human rights; the integration of religion and politics in liberation theology; and Christian realism with its dialectic of distance and engagement. Some of the complex interpenetrations of religious issues and political realities. P: THL 100 and a $200-$ level Scripture course and Jr. stdg.
THL 574 (472) Faith and Food (3) OD
A biblical and contemporary approach to food as fellow creature, medium of fellowship, component of worship, tool of exploitation, prophetic symbol, and object of stewardship. P: $200-$ level Scripture course; Jr. stdg.

THL 575 (486) Foundations of Christian Spirituality (3) I or II, AY
Designed to introduce students to the major historic and contemporary themes, images and practices in the Christian spiritual tradition. Focus on students' integration of that tradition into their own lives. P: 200-level Scripture course; Jr. stdg.

THL 576 (473) Introduction to Jesuit Spirituality (3) OD
Study of the life and selected writings of St. Ignatius Loyola as well as contemporary interpretation of his spirituality. Topics include Jesuit prayer, selections from the Constitutions of the Society of Jesus, chief documents from the 32nd Congregation of the Society of Jesus, discernment, and the vow of obedience. P: 200-level Scripture course; Jr. stdg.

THL 577 (474) Special Questions in Jesuitica (1-4) OD
Systematic and/or historical investigation of topics relating to the Society of Jesus. Content and number of credits to be specified when the course is offered. (This course offered only at the Jesuit College, St. Paul, Minn.).
THL 578 (476) The T.V. Ritual: Learning to be Moral in America (3) OD
Critical and comparative study of TV "literary" forms and the values embodied in and mediated by those forms. How such values relate to the value system of mainstream America, the cognitive and moral development of the viewer, and the Judeo-Christian value complex. P: 200-level Scripture course; Jr. stdg.
THL 579 (479) Religion and the Human Person: Religious and Christian Anthropology (3) OD Exploration of the effect of unbelief and belief on the human person with particular emphasis on the influence of Christian belief on development toward authentic personhood. P: THL 100 and a 200 -level Scripture course and Jr. stdg.
THL 580 Christianity and Modern Humanism (3)
Comparative study of classical Christian accounts of the human condition and various modern, post-theological accounts. P: THL 100, and THL 250 or PHL 250.
THL 583 Exploring Buddhism (1) Spring 2001
An overview of the Buddhist tradition. The basic doctrines of Buddhism and the path to liberation (nirvana). Concentration on Buddhism in Tibet and the Zen tradition in Japan.
THL 585 Foundational Principles and Leadership Skills for Youth Ministry (4) OD
The foundational understandings and principles of comprehensive youth ministry; a deeper understanding for the minister of the theological foundations of Youth Ministry. Theories, skills and approaches for effective leadership in ministry.
THL 586 Fostering the Faith Growth of Youth Through the Components of Youth Ministry (4) OD Exploration of adolescent spirituality, theological and spiritual foundations for engaging young people in the work of justice and service, theological understandings of faith, discipleship, and Catholic identity, and caring for young people and their families.
THL 587 Methods of Teaching Religion in Elementary School (3) I, AY (Same as EDU 587) The course is designed to prepare students to effective religious educators in Catholic elementary schools. The course content will encompass the four dimensions of religious education: message, community, service and worship. Students will not only become acquainted with methods and materials for teaching religion, but they will also gain experience planning liturgical celebrations.

THL 590 Contemporary Religious Education: Theory and Practice (3) I Overview of the principles for communicating the Christian message effectively to different age levels with opportunities to observe and put them into practice. May be taken in lieu of EDU 449. P: Jr. stdg.

THL 592 Practicum in Ministry (3-6) OD
Supervised experience and development fo skills in appropriate ministry under faculty direction.

Graduate-level courses (600-700-series courses, open only to graduate students) offered by the Department of Theology are listed in the Graduate School issue of the Creighton University Bulletin.

## WOMEN'S AND GENDER STUDIES (WGS)

Completion of the co-major in Women's and Gender Studies requires completion of WGS 200 and twenty one additional hours of courses from at least three of the groups (Social Sciences, Professional, Humanities, Electives, Sciences) listed below. To insure that WGS co-majors are exposed to a variety of disciplines, no more than nine hours (ten hours if IDC 491is counted) can be taken from any one group. Departmental prerequisites must be fulfilled before enrolling in any course. Students planning a WGS co-major should meet with the director as early in their studies as possible.
Social Sciences: COM/SOC 440 Gender Communication, PSY 374 (334) Human Sexuality, SOC 205 American Family Issues, SWK/SOC/SRP/ANT 409 Race and Gender Relations: Moral and Ethical Dilemmas, PLS 329 Gender and Politics.
Professional: SWK 366 Status of Women: Progress and Process, SWK/SOC/SRP/ANT 409 Race and Gender Relations: Moral and Ethical Dilemmas, COM/SOC 440 Gender Communication.
Humanities: ENG 410 Women in Literature, PHL 348 Philosophy of Feminism, THL 518 Women and the Bible, THL 568 Women in Christian Tradition, HIS/AMS 460 History of Women in the United States, HIS 464 Women, Marriage and Family in East Asian Society.
Electives: HRS 403 Honors Philosophy Seminar: Feminist Philosophy, IDC 491 Women in Science ( 1 credit; may be used as an extra credit-total 25 credits-toward co-major or may be taken in combination with a two-hour Directed Independent Readings/Research), MLS 628 The Two Sexes: Gender Construction in Contemporary Culture, Independent Study or Independent Readings (listed as 493 and 495 in various departments, as approved by the WGS director).
Sciences: TBA

## WGS 200 Introduction to Women's and Gender Studies (3) OD

Introduce students to the theoretical frameworks of feminist theory, contemporary theory on gender differences, and theories of oppression and privilege, particularly with respect to ethnicity, race, class, and sexual orientation.
WGS 360 Gender, Society and Culture (3) II (Same as ANT/SOC 360)
Examines gender from anthropological perspectives, including linguistics, biological anthropology, culture history, and socio-cultural anthropology. The course will examine gender in a wide variety of cultures. P: So. stdg.


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## UNIVERSITY COMMITTEE ON STUDENT LIFE POLICY

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## FACULTY

NOTE: The year appearing in parentheses after the academic rank and official position indicates the beginning of service in Creighton University. The second date, if given, indicates the year of appointment to present rank.

AMY A. ABBOTT, Assistant Professor of Nursing (1996; 2001). B.S.N., Creighton University, 1992, M.S. in Nursing, 1998.

CARLA ABEL-ZIEG, Assistant Professor of Nursing (1999). B.S.N., Midland Lutheran College, 1991; M.S., Nursing, Creighton University, 1997.

JEROLD J. ABRAMS, Assistant Professor of Philosophy (2001). B.A., Gonzaga University, 1993; Ph.D., St. Louis Univsersity, 1999.

NATALIE ROSS ADKINS, Assistant Professor of Marketing (2000). B.S, West Virginia University, 1990; A.B.D., Virginia Polytechnic Institute and State University, 2001.

ALBERT A. AGRESTI, S.J., Professor of Psychology (1999); Dean, College of Arts and Sciences (1999-2000).
B.A., University of Massachusetts, 1971; M.A., Boston College, 1976; M.A., University of San Francisco, 1981; M.Div., Jesuit School of Theology at Berkeley; 1979; S.T.M., 1981; Ph.D., Ohio State, 1986.
ROGER C. AIKIN, Associate Professor of Fine Arts (1980; 1985). B.A., University of Oregon, 1969; Ph.D., University of California at Berkeley, 1977.

SUSAN AIZENBERG, Assistant Professor of English (2001). B.F.A., University of Nebraska-Omaha, 1989; M.F.A., Vermont College, 1992.

THALIA E. ALBERTS, Instructor of English Language Program (1981).
B.A., University of Iowa, 1968; M.A.T., School for International Training, 1974.

ROBERT F. ALLEN, Professor of Economics and Finance (1987).
B.A., Creighton University, 1962; M.A., University of Missouri at Columbia, 1963; Ph.D., Michigan State University, 1969.
LITTLETON ALSTON, Associate Professor of Fine Arts (1990; 1996).
B.F.A., Virginia Commonwealth University, 1981; M.F.A., Maryland Institute, College of Art, 1983.

DEBRA ANDERSON, Assistant Professor of Social Work, (1995).
B.S.W., Mary College, ND, 1982; M.S.W., University of Missouri, Columbia, 1988; Ph.D., University of Nebraska, 2000.
MICHAEL P. ANDERSON, Assistant Professor of Chemistry (1989).
B.A., University of Minnesota-Duluth, 1967; M.S., Michigan Technological University, 1969; Ph.D., University of Minnesota-Minneapolis, 1983.
ARIS ANDREWS, Assistant Professor of Nursing (1987; 1990).
B.A., Hastings College, 1976; M.S., Creighton University, 1986.

RICHARD V. ANDREWS, Professor of Biomedical Sciences, (1958; 1968); Dean Emeritus (1997).

Ph.D., Iowa 1963.
MARILEE AUFDENKAMP, Instructor of Nursing (1999).
B.S.N., Creighton University, 1991; M.S.in Nursing, Creighton University, 1999.

JAMES T. AULT III, Associate Professor of Sociology (1970; 1992).
B.A., University of Tulsa, 1965; M.A., 1967.

CHARLES F. AUSTERBERRY, Assistant Professor of Biology (1987).
B.A., Kalamazoo College, 1979; Ph.D., Washington University, 1987.

HELEN E. AYERS, Lecturer of English (1989).
B.A., Duchesne College, 1968; M.A., Creighton University, 1989.

HOWARD J. BACHMAN, Assistant Professor of Education (1968; 1994).
B.A., Creighton University, 1964; M.S.Guid., 1975.

THOMAS R. BAECHLE, Professor of Exercise Science (1977; 1992); Chair, Department of Exercise Science (1978).
B.S., Eastern Kentucky University, 1967; M.Ed., University of Nebraska-Lincoln, 1969; Ed.D., University of South Dakota-Vermillion, 1976.

AMY S. BADURA, Assistant Professor of Psychology (1998).
B.A., University of Notre Dame, 1992; Ph.D., University of Iowa, 1998.

SUZANNE M. BAKER, Lecturer of Sociology (1997; 2000).
B.S., University of Wisconsin-Madison, 1982; Ph.D., Boston University, 1995.

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B.S., University of Nebraska-Lincoln, 1971; M.S., 1973; M.A., 1978; Ph.D., 1982.

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DONALD A. DOLL, S.J., Professor of Fine Arts (1969; 1977; 1983); The Charles and Mary Heider Endowed Jesuit Faculty Chair (1994).
B.A., St. Louis University, 1961; Ph.L., 1962; M.Ed., 1962; M.Div., 1969.

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B.A., Shippensburg University, 1986; M.A., Pennsylvania State University, 1988; Ph.D., Lehigh University, 1992.
CHARLES J. DOUGHERTY, Professor of Philosophy (1975; 1986); Director, Creighton Center for Health Policy and Ethics (1988-95); Vice President for Academic Affairs (1995).
B.A., St. Bonaventure University, 1971; M.A., University of Notre Dame, 1973; Ph.D., 1975.

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B.A., University of California at Berkeley, 1978; M.S., Naval Postgraduate School, 1984; Ph.D., 1987.

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B.A., Creighton University, 1978; M.A., University of Nebraska-Omaha, 1993.

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B.A., St. Louis University, 1937; M.A., 1939; Ph.L., 1939; S.T.L., 1946.

GEORGE W. MCNARY, Assistant Professor of Business Law (1983; 1985).
B.S.B.A., Creighton University, 1975; M.B.A., 1977; J.D., 1980.

ROBERT J. MCQUILLAN, Associate Professor of Anesthesiology (1993; 1999). B.A., Creighton University, 1984; M.D., 1988.

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PHILIP J. MEEKS, Associate Professor of Political Science (1992). B.A., University of Notre Dame, 1972; Ph.D., University of Texas at Austin, 1980.

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B.A., Eastern Montana College, 1992; M.A., Arizona State University, 1991.

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B.A., St. Leo College (Virginia), 1983; M.A., Pittsburgh Theological Seminary, 1988.

GARY D. MICHELS, Associate Professor of Chemistry (1986; 1993); Chair, Department of Chemistry (1999).
B.S., Creighton University, 1971; Ph.D., Iowa State University, 1978.

THERESE MICHELS, Lecturer of Chemistry (1988).
B.S., University of Nebraska-Lincoln, 1973; M.S., Iowa State University, 1975; Ph.D., 1977.

DENNIS N. MIHELICH, Associate Professor of History (1975; 1981).
B.A., Kent State University, 1966; M.A., Case Western Reserve University, 1968; Ph.D., 1972.

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B.S.M., Pittsburg State University, 1976; M.S.N., University of Nebraska Medical Center, 1993.

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B.S.N., University of Illinois, 1994; M.S.N., Southern Illinois University, 1998.
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B.A., St. Louis University, 1986; B.S.Th., Pontificia Universidad de Comillas, Madrid, Spain, 1992; M.A., Boston College, 1996.

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B.A., The College of Wooster-Wooster, OH, 1983; M.B.A., Indiana University, 1989; Ph.D., 1990.

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B.M.E., Wichita State University, 1962; M.M.E., 1966.

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## INDEX

## A

Absence, 47, 85
from examination, 85-86
leave of, 47
Academic administration, 84
Academic honesty, 87
Academic Progress, Satisfactory, 89
Academic standing, 88
Academic year, 84
Accelerated Nursing Curriculum, 138
Accounting department and courses, 167 major, 126
Accreditation, 17
ACT assessment, 41-43, 80
Activities, extracurricular, 25-33
Administration and Supervision, 84-92
Administrative Staff, 10-11
Admission, 41-49
ACT assessment, 41-43, 80
advanced placement, 43-44
advanced standing, 43-44
application for, 41
CLEP, 44
credit by examination, 43-44
credit for experience, 44
credentials, 41-42
deposit, enrollment reservation, 41, 47
entrance examination, 41-42
fee, application, 41
Freshman students, 41-43
international students, 46
intra-University transfer, 47
Nursing program, 42
readmission of former students, 47
requirements, 41
scholarship requirements, 41
special students, 46
subject requirements, 42
summer preview program, 47
transfer of credits, conditions for, 45
transfer students, 44-45
transient study, 45
veterans, 45
Advanced military courses, 94-95, 277
Advanced placement, 43-44
Advanced standing, admission to, 43-44
Advertising sequence of studies, 265
Advisers, see also Counselors
pre-health sciences, 114
scholarship, 97
student, 93
Aerospace Studies, 96, 279
African Studies, 110, 169

AFROTC, 96, 279
Alumni Association, The, 36
Alumni Library, 21
American Chemical Society, 25
American College Testing (ACT) Program, 41-43, 80
American Institute of Physics, Creighton
University Student Section of, 26
American Studies, 110, 170-173
major and minor, 170
Anthropology, 334-337
Application for admission, 41
fee, 41,50
Application for degree, 90
filing dates, 4-8
Application for Financial Aid, 54
Applied Communication, 198
certificate in, 147
Applied Computer Science
certificate in, 147
Applied Electronic Commerce
certificate in, 148
Arabic, 192
Art courses, 237-242
Bachelor of Fine Arts, 109, 237
major, 237
Art Gallery, Creighton University, 28
Arts and Sciences, College of, 12, 13, 98-119
Arts-Engineering program, 111
Arts Management, 250
Associate Degrees, 144
Athletics, 26-27
Atmospheric Sciences Courses, 175-179
certificate in, 148
Attendance, class, 85
Auditing courses, 48
Awards, see Recognition of Scholarship and Leadership

## B

Bachelor's degrees
B.S. in Atmospheric Sciences, 108, 175

Bachelor of Fine Arts, 109, 237
Bachelor of Science, 109
Bachelor of Arts, 108-109
B.S. in Business Administration, 120-125
B.S. in Chemistry, 109, 187
B.S. in Emergency Medical Services, 143-144
B.S. in Mathematics, 109, 273
B.S. in Nursing, 134, 291
B.S. in Physics, 109, 329-334
B.S. in Sociology, 109, 329-334
B.S. in Social Work, 109, 325-334

Ballet courses, 243

Basic military courses, 94, 277
Basketball, 12, 27
Biology department and courses, 179-184 major, 179
Biomedical Sciences, 184
Black Studies, 110, 185
as a minor, 185
Blue Jay, The, 23
Board and room, 21-23, 52
Board of Directors, 9
Bookstore, see Creighton University Book Store
Botany, see Biology
Boys Town National Research Hospital, 20
Bulletin, Creighton University, 23, 167
Business Administration, College of, 11, 14, 120-133 certificate in, 148
Business administration-law program, 129
Business courses, 186-187

## C

Cafeteria, 22
Calendar, 4-8
Campus, main University, 18-21 map, (inside back cover)
Campus Ministry, 29, 80
Career Advising and Academic Planning, 79
Certificate in Business, for Arts and Sciences students, 148
Certificate Programs, 147-147
Certification, elementary school, 207
Certification, secondary school, 208
Change of course, 49
effective dates, 4-8
Chaplains, University, 29, 80
Chemistry department and courses, 187-191
B.S. in Chemistry, 109
major, 187
Child Development Center, 23
Chorus, The Creighton, 26
Christmas recess, 84
dates of, 4,7
Church, St. John's, 29
attendance, 15
Class attendance, 85
Classes, beginning dates of, 4-8
Classical and Near Eastern Studies
department and courses, 191-198
Arabic, 192
classical civilization, 192-195
Greek, 195
Hebrew, 196
Latin, 196
major, 191
Classification, student, 84-85
Clinical nursing courses, 291-296

Clubs, 25-26
College Level Examination Program (CLEP), 44
College officers, 9-11
College, University, 14, 141
Combined business administration-law degree program, 129
Commencement, 90
Commencement dates, 4-8
Committees, University, 350
Communication Studies department and courses, 198-202
major, 198
Company of Dancers, 28
Comprehensive examinations, dates of, 4-8
Computer courses, 202-205
Computer Science, 202-205 as major, 202
Concentration, fields of, 108-109, 120-125, 134140
Concentration major, 108-109, 120-125, 134-140 see also respective departments for major requirements, 165-349
Confidentiality of student records, 91-92
Contents, Table of, 2
Core requirements, 100
Correspondence Courses, 14, 50, 158
Costs, college, 22-23, 50-52
board and room, 22-23
Counseling and guidance, 79-80
Counseling Center, 79-80
Counseling Courses, 216
Counselors academic, 79-80 spiritual, 29, 80
Courses
adding and dropping, 49, 53
by departments or subjects, 167-349
lower- and upper-division, 83
numbering system, 84,167
of instruction, 167-349
of study, see Programs, 98-164
prerequisites, 167-349
repeating, 89
withdrawal from, 53, 86
Creative Writing, courses, 104-107
certificate in, 150
Credo of Creighton, 16
Credit, semester hours, 84
by examination, 43-44
for experience, 44
Creighton, Edward, 13
Creighton, John A., 13
Creighton, Mary Lucretia, 13
Creighton, Sarah Emily, 13
Creighton House 112, 205
Creighton University Institute for Information Technology and Management, 173
Creighton Marketing Association, 25

Creighton Center for Service and Justice, 25
Creighton Today, 23
Creighton University Book Store, 52
Creighton University Bulletin, The, 23
Creighton University Magazine, 24
Creightonian, The, 24
Criss, Dr. C. C., 18
Criss Health Sciences Center, 18
Criss, Mabel L., 18
Cultural activities, 27-28
Curriculum, see Programs of Study

## D

Dance courses, 243
major, 243
Dates, see Calendar, 4-8
of founding and incorporation, 13-15
Dean of Arts and Sciences, 11
Dean of Business Administration, 11
Dean of Nursing, 11
Dean of Students, 10
Dean of University College, 11
Dean's Honor Roll, 89
Degrees (see also Bachelor's Degrees)
application for, 90
general requirements, $98-109,120-131,134-140$
other requirements, 90
programs for, 98-109, 120-131, 134-140
Dentistry, School of, 18, 20
admission requirements, 114
Departments and courses, 167-349
Deposits enrollment, 47, 50
residence halls, 22-23
Directors, University Board of, 9
Directory, Student and Faculty, 24
Discipline, 90
Dismissal, academic, 87-88
disciplinary, 88
honorable withdrawal requirements, 49,53
Dominican Republic-Semester Abroad, 38, 113
Dormitories, see Residence halls
Dramatics, see Theater
Dropping courses, 49

## E

Economics department and courses, 205-207
major and minor, 126-127
Education department and courses, 207-215
art education, 237
major and minor, 207
music education, 245
teacher education, 207-209
Elementary-school certification, preparation for, 207-209
Emergency Medical Services, 217-219
degree requirements, 143-144
Employment service,
student, 78
graduate, 79
Engineering-arts program, 111-112
Engineering, Detroit Mercy College of, 111
English department and courses, 219-224
major, 219
English Language Program,
see Intensive English Language Institute, 39
Enrollment reservation deposit, 47, 50
Entrepreneurship, 127
Environmental Science, 225-230
certificate in, 150
Essay and speech awards and prizes, 33-36
Examinations absence from, 85-86
CLEP, 44
credit by, 43-44
dates of, 4-8
entrance, see also ACT
examination fees, 51
final, 85-86
graduating senior, 87
health, 81-83
special, 85-86
Exercise Science, 231-285
Extracurricular activities, 25-34
academic, 25-27
athletic, 27
cultural, 28-29
fraternities and sororities, 30-34
religious, 29

## F

Facilities, campus, (see also inside back cover), 18
church, 18
health sciences, 18-21
Kiewit Physical Fitness Center, 18, 27
libraries, 21
main campus, 18
medical center, 18-21
student center, see inside back cover
Faculty, 352
Fall mid-semester recess, 84
dates of, 4, 7
Family Financial Statement, 54
Fees and tuition, see Tuition and Fees
Fields of concentration, 108-109, 120-125, 134-140
Final examinations, see Examinations
Finance department and courses, 235-236
major, 127
Financial aid, 54-78
application for, 54
grants, 73
loans, 74-76
part-time employment, 78
scholarships, 55-73
Financial Aid Form, 54
Financial arrangements, 52
Fine and Performing Arts department and courses, 236-250
degree requirements, 237
Fine Arts Gallery, 27
Food service, 21-22
Foreign Study Opportunities, 37
Fraternities and sororities, 29
Fraternities, Honor, 30-33
French courses, 280-282
Freshman, applicants for admission, 41
applicants for financial aid, 54
scholarships, 55-74
seminar program, 93, 251
Full-time students, 48

## G

General information, 12-36
General Military Science Program, 94-96, 277
German courses, 282-283
Good academic standing, 88
Grades appeal of grade, 87
for continuation and promotion, 89
pass-no pass option, 85
points see Quality Points reports, 88
for obtaining and retaining scholarships and
loans, 54-74
system of grading, 85
in case of withdrawal, 49,86
Graduate study in business administration, 164
Graduate study, preparing for, 164
Graduation application for, 90
commencement dates, 5, 6, 7, 8
honors, 89
requirements for, $89,98,120,135$
Graduation rates, 17
Graphic Design, 110, 251
requirements, B.F.A.degree, 273
Grants, 73-74
Greek courses, 195
Guidance and counselin g, 79-80

## H

Handbook, The Student, 24
Health insurance, requirements, 82
Health Administration and Policy, 110
certificate in, 153
department and courses, 252 major, 248
Health Policy and Ethics, 253

Health Sciences Center, 18-21
Health sciences facilities, 18-21
Health Services, Student, 81
Hebrew courses, 191
History department and courses, 254-263 major, 254
History of University, 13
Holidays, (see Calendar), 4-8 Christmas Recess, 4, 7, 84
Mid-year, 4, 7
Fall mid-semester recess, 4, 7
Independence Day, 6
Labor Day, 4, 7
Spring Recess, 5, 8, 84
Thanksgiving Recess, 4, 7, 84
Honesty, Academic, 87
Honorable dismissal, 49, 53
requirements for, 49,53
discharge of financial and other obligations, 53 withdrawal regulations, 49, 53
Honor Roll, 89
Honor societies and fraternities, 29-33
Honors and prizes, 33-36
Honors, graduation, 89
Honors Program, 113, 263-264
Hospitalization, 82
Hospitals of Medical Center, 18-21
Housing, campus and off-campus, 22-24
Human Resources Administration certificate in, 153

## I

Incomplete, grade of, 86
Independent Study Program, 14, 158
Information, general, 12-36
Instructional facilities, 18-21
Instructional staff, 352
Insurance, requirements for, 82
Creighton University Student Health Plan, 83
Intensive English Language Institute (IELI), 39
International Business, 127
Interdisciplinary programs, 110
Interdisciplinary Courses, 264
International Baccalaureate Program, 45
International Programs and Services, 37
International Relations Club, The, 26
International Studies
Concentration Major, 309
International Student Association, 26
International Students, 37
admission of, 46
Irish Literature, 219
certificate in, 153

## J

Japanese courses, 284
Jaytalkers, see
Oratorical Association, the Creighton
Jesuits, 13, 15
Job placement, 78
Journalism and Mass Communication department
and courses, 265-268
major, 265
Justice and Peace Studies, 110, 268-269
Justice and Society, 269

## K

Key to symbols, 166
Kiewit Physical Fitness Center, 26-27

## L

Laboratories, 18-21
fee, 51
Language requirements for degrees, 100
Latin courses, 196
major, 192
Laundry service, 52
Law-business administration program, 129
Law Review, The Creighton, 24
Law, School of, 15, 114
admission requirements, 114
Leadership, recognition of, 33-36
Leave of absence, 47
Liberal education, goals of, 98
Libraries, 21
Library, Alumni Memorial, 21
Linguistics, 284
Liturgy, certificate in, 154
Living accommodations, 22-24
LOAP, see Leave of absence
Loan funds, 74-76
Location of University, 12, 18-21
Lower-division courses, 83, 165

## M

Major, see Concentration Major
Management department and courses, 270
Management Information Systems, 271, as major, 128
Map of campus, inside back cover
Marketing department and courses, 272 major, 128
Master of Business Administration Degree, 132
Master of Science in Electronic Commerce, 133
Master of Science in Information Technology Management, 132

Mathematics department and courses, 273-276
B.S. in Mathematics, 109
certificate in, 154
major, 273
Medical Center, 18-21
Medicine, School of, 15, 18-21
admission requirements, 115
Microbiology and Immunology courses, 276
Mid-semester reports: dates due, 4, 7
issuance of, 86
Military science, 94-96, 277
Ministry, certificate in, 155
Minor requirements for, see
Departments, 167-349
Mission Statement, inside front cover
Modern Languages department and courses, 277
major, 280
French, 280
German, 282
Japanese, 284
Linguistics, 284
Spanish, 284
Russian, 284
Monthly Electronic Transfer (MET) plan, 23, 52
Multi-cultural Organizations, 29
Music courses, 245
major, 245

## N

National Education Association, student, 26
Natural Science courses, 289
News Media/Broadband Sequence, 265
Noncredit courses, 159
Nondiscrimination Policy as to Students, 17
Nursing, School of, 14, 134-140
accelerated program, 138
accreditation of program, 18
Bachelor of Science in, 109, 134-140
courses, 291-296
major, 291
promotion, 135
Linking Education and Practice Program
(LEAP), 139
Nursing student loan program, 75

## 0

Objectives, statements of, 15, 98, 120, 134
Observatory, see inside back cover
Occupational Therapy, 116
Oratorical Association, the Creighton, 28
Organizational Communication, 198
certificate in, 155
Orientation, 80

P
Parents' Confidential Statement, See Financial Aid Form and Family Financial Statement
Part-time students, 48
Pass-no pass option, 85
Perkins Loan, 74
Pharmacology, 297
Pharmacy, School of, 18-19
admission requirements, 116
Philosophy department and courses, 297-305 major, 297
Physical examination, 81-83
Physical Therapy, 118
Physics department and courses, 305-308
major, 305
Health Sciences Program, 305
Physics students, Society of, 26
Placement Service, 79
Placement tests, see ACT examination
Political Science and International Studies department and courses, 308-317 major, 308
Pre-Master of Business Administration, 129
Preparing for Graduate Study, 163
Pre-Professional Study, 114
Pre-Engineering, 111
Pre-Law, 114
Pre-Health Sciences, 114
advising, 114
Pre-Dental, 114
Pre-Medical, 115
Pre-Pharmacy, 116
Pre-Occupational Therapy, 116
Pre-Physical Therapy, 118
Prerequisites for courses and majors, see
Departments and Courses, 165-349
Prizes and honors, 34-36
Probation, academic, 86-87
Professional Schools, 17-18
Programs of Study
Arts and Sciences, 98-109
Business Administration, 120-133
Nursing, 134-140
University College 141-164
Promotion, nursing, 134-140
Psychology department and courses, 318-322
major, 318
Public Relations Sequence, 265
Public Relations Society, 26
Publications, University and student, 24-25

## Q <br> Quality points and averages, 88 <br> averages of transfer students, 45 <br> determining averages, 88

for continuation and promotion, 89
for graduation, 90
for honors, 89

## R

Readmission of former students, 47
Recesses, see Holidays
Recitals, Music, 27
Recognition of scholarship and leadership, 33-36
Refundment of tuition and fees, 53
Registrar's Office, 23, 48, 90, 92
Registration, 48
adjustment and withdrawals after, 49
dates of, 4-8
freshmen, 41-43
full-time and part-time, 48
last day for, dates of, 4-8
late, 48
effective dates, 4-8
Reinert Alumni Memorial Library, 21
Religion, see Theology
Repeating courses, 89
Reports, grade, 87
Residence halls, 22-23
reservation deposit, 23
Residence requirements for degrees, 90
Room and board (see Residence Halls) campus
and off-campus, 24
deposits, 22-23
rates, 23
reservation, 23
R.O.T.C., 94-96, 277

Russian, 284

## S

St. John's Church, 29
Scholarship and leadership, recognition of, 33-36
Scholarship requirements for admission, 54
Scholarships, 55
Athletic, 74
International, 39
Secondary-school certification, preparation for, 208
Self-support, opportunities for, 78
Semester abroad, 38
Semestre Dominicano 38, 113
Semester hour, definition of, 83, 165
Senior Perspective
core requirement, 100
courses, 322-323
Services for Students With Disabilities, 17
Shadows, 24
Skills Development Program, 93
Social work degree in, 325-329
undergraduate training for, 325

Societies, honorary, 33-36
Society of Jesus, see Jesuits
Sociology department and courses, 329-334
B.A. in Sociology, 109
major, 329
Sororities and fraternities, 29-36
Spanish courses, 284
Special students, admission as, 46
Special Scholarship Advisers, 97
Speech-See Communication Studies
Spring recess, 84
dates of, 5, 8
Statistics Courses, 337
Student Board of Governors, 29
Student Center, see inside back cover
Student government, 29
Student Health Services, 81-83
Student course load, 50, 98-109, 120-133, 134140
Student organizations, 25-36
Student Services, 79-83
Student Support Services Program, 80
Student Union, 29
Students
former, 47
full-time, part-time, 48
international, 37, 46
special, 46
transfer, 44
Studios, art, 237
Study Abroad, 38
Subject requirements for admission, 42
Subjects, see Departments, 167-349
Summer preview program, 47-48
Summer Session, The, 84
calendar, 6
Supervision, administration and, 84-97
Supporting courses see respective departments
for supporting course requirements, 167-349
Swanson Hall, see inside back cover
Swimming, 27, 234-235

## T

Teacher education, 207-209
accreditation of programs, 207-209
elementary-school certification, 207
secondary-school certification, 208
Television courses, 265-268
equipment, 29
programs, 29, 265-268
stations, 29
Tests, placement, see ACT examination
Thanksgiving recess, 84
dates of 4,7
Theatre courses, 248-250
major, 248
Theatre, Creighton University, 28
Theology department and courses, 338-349
major, 339
minimum requirements for students, 339
Track, 27
Transcripts for admission, 41
issuance, 92
Transfer, intra-University, 47
Transfer of credit, condition for, 47
Transfer students, 41, 44
Transient study, 45
Tuition and fees, 21-23, 50-53
for auditors, 48-49
payment of, 52
refundment of, 53
for part-time, full-time students, 50
for special students, 46
for teachers and school administrators, 51, 161
Tuition discounts, 51, 161

## U

Unit, high-school, 42
Unit of instruction, 84
University Chaplains, see
Campus Ministry, 29, 80
University Chorus, The, 27
University College, 12, 14, 141
University Committees, 350
Upper-division courses, 84, 167

## V

Vacation periods, 84, (see Calendar, 4-8)
Veterans admission of, 45
counseling service, 79-80
credit for education experiences in service, 44
definition of full-time classification, 48
Vocational guidance, 79

## W

Welcome Week, 48
Withdrawal from the University, 49, 53
see also Honorable Dismissal
Women's and Gender Studies, 111, 349
Work opportunities, 78
Work-study Program, 78

## Y

Year, the academic, 84
Yearbook, The Bluejay, 24

# AMERICAN JESUIT COLLEGES AND UNIVERSITIES 

| Alabama | Spring Hill College, Mobile |
| :---: | :---: |
| California | Loyola Marymount University, LosAngele University of San Francisco, San Francisco University of Santa Clara, Santa Clara |
| Colorado | Regis College, Denver |
| Connecticut | Fairfield University, Fairfield |
| District of Columbia | Georgetown University, Washington |
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| Maryland | Loyola College, Baltimore |
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[^1]:    1 Registration is not complete until financial arrangements have been made.
    2 University College students may be eligible for a remission of one-third of the regular assessed rate. Remission is limited to six credit hours. For further details contact University College.
    3 This charge for each full-time student may be waived if the student presents evidence that he or she carries insurance that provides coverage at least comparable to the student insurance offered by the University.

[^2]:    1 Transcripts, diplomas, and grade reports are released only when all outstanding balances have been paid.

[^3]:    1 Class day is any day of the term when any class is in session, regardless of whether or not a specific course is scheduled to be held on that day.
    2 The nonrecurring, penalty, and special service fees include deferred payment, University fee, late payment, special examination/evaluation, challenge examination, recording, tuition grant administrative fee, and locker.

[^4]:    *Refer to General Curriculum

[^5]:    Required:

    1. Computer Science 221 and 222 (recommended to be taken before the junior year).
    2. Management Information Systems 354, 459, and 470.
    3. Six additional hours, approved by the major adviser, from the following: Accounting 377; Economics 418; Management Information Systems 464, 479; Marketing 343; Mathematics 571; Computer Science 527.
    Other courses may be utilized with special approval of the department chairperson.
[^6]:    * Refer to the General Curriculum

[^7]:    Elementary School (K-6) Teacher Curriculum
    Creighton's program in Elementary Education is fully accredited by the National Council for Accreditation of Teacher Education (NCATE). The curriculum for certification in Elementary Education requires the following sequence of courses: Freshman year: EDU 103, EDU131, ENG 150; Sophomore Year: EDU 207, EDU 209, EDU 210, ART 104, MUS 104, NSC 205, NSC 206 or other approved science courses; Junior year: EDU 301, EDU 302, EDU 303, EDU 304, EDU 311, EDU 315, EDU 525, EDU 583; Senior year: EDU 451, EDU 452, EDU 453, EDU 500.

