

# CENTRAL COLLEGE CATALOG

## *2009-10*

### **Notice**

The Central College Catalog contains the most accurate information available at the time of publication. Statements contained herein or on the online version are not contractual obligations, and verbal or other representations that are inconsistent with or not contained within the catalog's offerings or policies are not binding. Central College reserves the right to change, without specific notice, offerings, policies, procedures, qualifications, fees and other conditions. All such changes will be effective at times deemed appropriate by the proper institutional authorities and may apply to enrolled as well as prospective students.

### **For the most current information on Central College, contact:**

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Pella, IA 50219

[www.central.edu](http://www.central.edu)  
E-mail [admission@central.edu](mailto:admission@central.edu)  
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# 2009 - 2010 ACADEMIC CALENDAR

Dates are subject to change. For current calendar information go to [www.central.edu](http://www.central.edu)

## 1<sup>ST</sup> SEMESTER

### AUGUST 2009

- 17 New Faculty Orientation
- 19 International Students Arrive
- 20-21 Faculty Workshops
- 20-22 New International Student Orientation
- 22 New Students Arrive
- 22 Welcome Week Begins
- 24 Returning Students Arrive
- 25 Enrollment Confirmation Day
- 26 Fall Semester Classes Begin (Wed.)  
(Add/Drop Period: Aug. 26 – Sept. 4)

### SEPTEMBER

- 4 Last Day to Drop or Add a Course
- 7 Labor Day (no classes/college closed)
- 25-27 Homecoming/Family Weekend

### OCTOBER

- 2-3 Board of Trustees Meeting
- 16 Midterm
- 15-16 Fall Break (Thurs. – Sun.)
- 19 Classes Resume
- 20 Midterm Grades Due (noon)
- 26-Nov. 25 Spring 2010 Registration/Advising

### NOVEMBER

- 13 Last Day to Withdraw From a Course
- 26-29 Thanksgiving Break (Thu – Sun.)
- 30 Classes Resume

### DECEMBER

- 1 Registration for New & Guest Students Begins
- 11 Last Day of Fall Semester Classes (Fri.)
- 14 College-Wide Study Day
- 15-17 Final Exams
- 18 Residence Halls Closed
- 22 Fall Semester Final Grades Due (Noon)

## 2<sup>ND</sup> SEMESTER

### JANUARY 2010

- 16-17 New Student Welcome Days
- 17 Returning Students Arrive
- 18 Spring Semester Classes Begin  
(Add/Drop Period: Jan. 18-29)
- 18 Martin Luther King, Jr. Day (a.m. classes shortened)
- 29 Last Day to Drop or Add a Course.

### FEBRUARY

- 6 Central College Scholar Day #1
- 13 Central College Scholar Day #2
- 20 Central College Scholar Day #3
- 27 Central College Scholar Day #4

### MARCH

- 12 Midterm
- 15-19 Spring Break
- 16 Midterm Grades Due (Noon)
- 22 Classes Resume
- 22-Apr. 9 Fall 2010 Registration/Advising

### APRIL

- 2-5 Easter Break
- 6 Classes Resume
- 9 Last Day to Withdraw From a Course
- 16-17 Board of Trustees Meeting
- 20 Service Day (Tuesday)

### MAY

- 6-8 Tulip Time
- 7 Last Day of Spring Semester Courses
- 10 College-Wide Study Day
- 11-13 Final Exams
- 14 Senior Grades Due (noon)
- 14 Residence Halls Closed
- 15 Baccalaureate/Commencement
- 18 Final Grades Due (Noon)

## CENTRAL . . . BRIEFLY

- ◆ Located in Pella, Iowa - 40 minutes southeast of Des Moines
- ◆ Founded in 1853
- ◆ Campus includes 50 major buildings on 169 acres
  - ◆ \$17-million education and psychology building with communication studies department and community-based learning program opened Fall 2009
  - ◆ Vermeer Science Center — \$20 million renovation and addition completed fall 2003 earned Iowa's first LEED (Leadership in Energy and Environmental Design) rating, a silver medal, from the U.S. Green Building Council
  - ◆ Apartment-style residence hall opened fall 2003, with new wing completed in 2005, earned Central's second LEED rating, a gold medal
  - ◆ Scholte Hall – Central's largest residence hall, renovated in 2008
  - ◆ Weller Center for Business and International Studies
  - ◆ The Central Market, Iowa's most original dining hall with unique European market place design
  - ◆ Ron Schipper Fitness Center — state-of-the-art fitness center available to all students
  - ◆ Geisler Library 230,000 volumes and worldwide electronic access
  - ◆ Café@Geisler offers espresso, coffee, snacks and wireless internet
  - ◆ Kruidenier Center for Communication and Theatre
  - ◆ Lubbers Center for the Visual Arts — includes the only teaching glassblowing studio in the Midwest
  - ◆ Cox-Snow Music Center
  - ◆ Graham Conference Center
  - ◆ Townhouses for upper-class student housing
- ◆ Central College Abroad is nationally recognized for its programs in England, France, Austria, Spain, Mexico, Wales, the Netherlands and China
- ◆ Recognized;
  - ◆ One of 247 colleges in Barron's Best Buys in college Education
  - ◆ "Best College Value Character-" by Money Magazine
  - ◆ "Honor Roll for Building Colleges" by the John Templeton Foundation
  - ◆ "Hidden Treasure" by Newsweek/Kaplan How to Get Into College Guide
  - ◆ The President's Higher Education Community Service Honor Roll
- ◆ Accredited by the Higher Learning Commission; member of the North Central Association of Colleges and Schools ([www.hlcommission.org](http://www.hlcommission.org); 800- 621-7440)
- ◆ Also accredited by the Iowa Department of Public Instruction, National Association of Schools of Music, Commission on Accreditation of Athletic Training Education and certified by the American Chemical Society

### Students

- ◆ Total enrollment: 1558
- ◆ Number of states represented in student body: 34 states
- ◆ Foreign countries represented in student body: 11 countries
- ◆ Average aid (including scholarships, grants, work study and loans) awarded to all first-year students in 2008-09: \$21,977
- ◆ 6-year graduation rate: 68%

### Faculty

- ◆ Total full-time faculty: 88
- ◆ Ph.D. degree or terminal degree: 91 percent
- ◆ Faculty-student ratio: 15:1
- ◆ Average class size: 18

### Freshmen admission profile (Fall 2008)

- ◆ Total applications: 2072; total acceptances: 1602; final enrollment: 405 (200 men; 205 women)
- ◆ Reformed Church in America students: 33
- ◆ Percent in top 10 percent of high school class: 25 percent
- ◆ ACT composite score average: 24
- ◆ Average HS GPA: 3.48
- ◆ Percentage entering with AP or college credit: 51 percent

### Financial aid profile, entire student body

- ◆ Receiving need-based aid: 78 percent
- ◆ Receiving scholarship and grant aid: more than 99 percent

## **Music program**

Central's music department is committed to providing both majors and minors a variety of musical performance opportunities: A Cappella Choir, Brass Ensemble, Chamber Singers, Clarinet Ensemble, College-Community Band, College-Community Chorus, College-Community Orchestra, Flute Choir, Flying Pans steel drum band, Handbell Choir, Jazz Band, Pep Band, Percussion Ensemble, Piano Ensemble, String Ensemble, Symphonic Wind Ensemble, Vocal/Instrumental Jazz and Pop Combo, Woodwind Ensemble.

## **Athletic program**

- ♦ Central College is affiliated with the National Collegiate Athletic Association (Division III) and the Iowa Intercollegiate Athletic Conference for men and women. Our 19 teams include baseball, basketball, cross country, football, golf, soccer, softball, tennis, track and field, volleyball and wrestling.
- ♦ Central athletes have posted 11 NCAA Division III championships, 25 NCAA Division III national individual champions, 145 Iowa Conference championships, 64 national top-10 team finishes, 46 ISPN Academic All-Americans, 20 NCAA postgraduate scholar winners and seven NCAA Division III players of the year.

## **A.N. Kuiper Athletic Complex includes:**

- ♦ H.S. Kuyper Fieldhouse with new indoor track, tennis and basketball court surface in 2009
- ♦ Ron Schipper Fitness Center
- ♦ Ron and Joyce Schipper Stadium, with new football field and track surface in 2006
- ♦ Competition soccer field, new in 2006
- ♦ Ryerson Golf Range, new in 2005, and the only golf practice range on a college campus in Iowa
- ♦ Complete cross country course on campus
- ♦ P.H. Kuyper Gymnasium

## Vision of Central College

Central College will be a sustainable bridge to the future through leadership, stewardship, and service to the world.

## Mission of Central College

Central College is a residential liberal arts college dedicated to helping students discover and develop their greatest potential. Guided by its ecumenical Christian tradition, the College community engages in vigorous, free, open inquiry in pursuit of academic excellence.

The College nurtures the development of the mind, while fostering spiritual and emotional maturity and physical well-being. Central integrates career preparation with the development of values essential to responsible citizenship, empowering graduates for effective service in local, national and international communities.

### Goals for students

1. Acquire integrated knowledge from a variety of academic, philosophical and cultural perspectives as well as the in-depth knowledge of a chosen major.
2. Develop skills and habits of mind that lead to life-long learning: effective communication, open inquiry, critical reasoning, creativity and the ability to solve problems.
3. Develop moral character that is evident in ethical behavior, intercultural effectiveness, environmental stewardship and service to humanity.
4. Develop increasing maturity that is reflected in intellectual, spiritual, social and physical well-being.

### Goals for faculty

1. To develop a community of scholars in which teaching and learning are the activities with the highest priority.
2. To be models and mentors who support the development of students as independent learners, responsible citizens and morally responsive persons.
3. To participate in governing the college, developing its academic programs and enriching its cultural environment.
4. To grow professionally, spiritually and personally while contributing to the college and the larger academic community through research, creative expression, innovative teaching and interdisciplinary dialogue.

### Goals for the Central College community

1. To promote attitudes and values reflective of the Christian tradition: acceptance, mutual respect, justice, compassion and service to others.
2. To promote and model appreciation of our natural environment and stewardship of its limited resources.
3. To foster examination and understanding of the Christian heritage and its implications for faith and learning.
4. To provide leadership and support for reform through dialogue with the broader communities of society; sustaining values while encouraging critical analysis of ideas and institutions.
5. To experience and appreciate the diversity of cultures present in the United States and the world and to relate knowledgeably and sensitively to persons of diverse cultural perspectives.

## Central College History and Tradition

As one of the oldest and most distinguished private colleges in Iowa, Central College has, since its inception, been committed to the ideals of liberal education. Originally a Baptist institution, Central was founded in 1853 by a determined group of pioneer settlers who emigrated to central Iowa to escape religious tyranny in the Netherlands.

Central officially opened on Oct. 8, 1854 with a class of 37. The “campus” consisted of one two-story building containing three rudimentary classrooms. This fledgling institution grew both in size and mission during its first 60 years, eventually moving to a parcel of land donated by Pella’s founding father, Dominie Pieter Scholte. The college survived fires, three wars and economic depression during a period of history that saw the United States double in size.

In 1916, Central was transferred from Baptist control to the Reformed Church in America. The relationship with the RCA strengthened the college as families within the denomination sent their sons and daughters to be educated for teaching and the ministry. As its academic reputation grew, Central attracted many more students from outside the denomination.

International study programs were introduced in 1965, first in Paris, France, and later in Austria, Spain, Wales, England, China, the Netherlands and Mexico.

Today, Central College welcomes approximately 1,700 students each year from more than 25 states and 14 foreign countries. Before they graduate, over half of all graduates participate in semester or full-year study programs at Central’s foreign centers or in off-campus urban settings.

Central is located in one of the Midwest’s most picturesque communities. Pella, a town of 10,000, features flower-lined streets, distinctive Dutch architecture, charming retail shops and famous bakeries that attract tourists from around the world. The annual Tulip Festival, celebrating the town’s Dutch heritage, attracts over 100,000 visitors.

Central’s four-year liberal arts curriculum offers students an outstanding academic program with 38 majors and interdisciplinary programs offered on a two-semester calendar. The Dutch compete in 19 varsity sports, earning 11 Division III national titles — more than any other Division III college in Iowa. An extensive program of art, music, theatre and cultural events are offered every semester.

Although founded over 150 years ago, the college's facilities are modern and well-equipped. In the past 18 years, Central has constructed or completed renovations on 12 major buildings. The college's emphasis on sustainability has led to LEED (Leadership in Energy and Environmental Design) ratings from the U.S. Green Building Council on both the Vermeer Science Center (the first LEED-rated building in Iowa) and Howard McKee Hall (the first gold-rated residential building in Iowa) and another LEED rating is anticipated for Central's new education and psychology building on the southwest corner of campus.

## Family Educational Rights and Privacy Act (FERPA) of 1974

The *Family Educational Rights and Privacy Act of 1974* helps protect the privacy of student education records. The *Act* provides for the right to inspect and review education records, the right to seek to amend those records and to limit disclosure of information from the records. The intent of the legislation is to protect the rights of students and to ensure the privacy and accuracy of education records. The *Act* applies to all institutions that are the recipients of federal aid administered by the Secretary of Education.

- The right to inspect and review their education records within 45 days of the day the college receives a request for access. Students should submit written requests to Academic Records and Registration and identify the record(s) they wish to inspect. The staff of the office will make arrangements for access and notify the student of the time and place where the records may be inspected. If the requested records are not maintained by Academic Records and Registration, the student will be notified of the correct official to whom the request should be addressed.
- The right to request an amendment to the student's education records that the student believes are inaccurate or misleading. Students may ask the college to amend a record that they believe is inaccurate or misleading. They should submit the request in writing to Academic Records and Registration office and clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading. If the college decides not to amend the record as requested by the student, the college 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 will be provided to the student when notified of the hearing.
- The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure 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 law enforcement unit personnel and health staff); a person or company with whom the college has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; 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.
- The right to file a complaint with the U.S. Department of Education concerning alleged failures by the college to comply with the requirements of FERPA. The name and address of the Office that administers FERPA is:

Family Policy Compliance Office  
U.S. Department of Education  
400 Maryland Ave., SW  
Washington, D.C. 20202-5920

For a complete copy of Central's FERPA policy, contact academic records and registration, Central Hall (2nd Floor), 641.628.5442 or [registrar@central.edu](mailto:registrar@central.edu).

## Directory Information

At its discretion Central College may provide directory information in accordance with the provisions of the *Family Educational Rights and Privacy Act of 1974 (FERPA)*. Directory information is defined as that information which would not generally be considered harmful or an invasion of privacy if disclosed. At Central College this includes a student's: name, home address (city, state/country), parent name(s), parent(s) home address (city, state/country), campus mail box, Central College electronic mail address, campus residence, campus phone number, major(s)/minor(s), dates of attendance, date and title of degree, honors and awards received, participation in officially recognized activities and sports, weight and height of members of athletic teams, thesis titles/topics, photograph/image, current enrollment status, (full-time/part-time), class standing (junior, senior, etc.), anticipated graduation date, previous institutions attended

All other information (i.e. grades, course schedule, financial aid, tuition/fees owed and disciplinary records) are considered confidential and will not be released, with certain exceptions, without the student's written permission. If you wish to have non-directory information released, you need to sign Consent to Release Educational Records form and return it to academic records and registration (2<sup>nd</sup> Floor, Central Hall) to authorize the college to do so. Students may withhold directory information by completing a Request for Non-disclosure of Directory Information form which is available in the academic records and registration office.

For more information contact academic records and registration, Central Hall (2nd Floor), 641.628.5442 or [registrar@central.edu](mailto:registrar@central.edu).

## Official Transcripts

Central College official transcripts are available through academic records and registration and are printed on security paper with the registrar's signature and an embossed seal. Transcripts can be ordered in person or via the National Student Clearinghouse. Note the following transcript policies:

- in compliance with federal law as established by the *Family Education Rights and Privacy Act of 1974* as amended, transcripts will not be issued to third parties without the written consent of the student, as demonstrated by an original signature of the student approving the release of the transcript.
- transcripts will not be released if the student requesting them has outstanding financial obligations at Central College, as determined by the controller's and financial aid offices.
- transcripts will not be issued without payment in cash or Visa/MasterCard.
- regardless of the means by which the transcript will be issued (in person, by mail or by fax), there is a minimum 48-hour processing time on all transcript requests.

## Drug-free campus statement

Central College, in compliance with the Drug-Free Schools and Campuses Act of 1989 but also to speak to a strong philosophical belief, establishes the following policy:

1. The college does not allow the possession, use or distribution of illicit drugs on campus or at college-sponsored functions. Related paraphernalia is also prohibited.

Violators can expect disciplinary sanctions to be imposed, including the possibility of suspension or dismissal. Violators of this policy can also anticipate legal action being imposed. Legal sanctions could include monetary fines and/or imprisonment.

2. Substance abuse has proven to be injurious to health and very costly to employers due to accidents, time lost from the job and related health costs. Substance abuse has proven to be detrimental to the health and well-being of students, resulting in lower grades, reduced participation in various college activities and increased health problems.

The college, through its counseling service and its contacts with other health professionals in the area, is prepared to assist students with substance abuse problems. A contact with one of the college counselors could prove to be helpful.

3. Those who have questions regarding this policy should contact the student life office.

This statement does not, in any way, change existing policies that prohibit the legal use of alcohol on the campus or at college-sponsored functions. Please see the current student handbook to review all related policies in full.



# ADMISSION

## Campus visit

All prospective students are invited to explore the opportunities available in and out of the classroom at Central by arranging a personal campus visit. Prospective students tour the campus with a student host and visit with an admission counselor to discuss academic programming, extracurricular options, the admission process, scholarships and financial planning. Students may also request an appointment with a faculty member or sit in on a class in their chosen field of study. Additional meetings with music or theatre staff members or coaches can also be arranged.

The office of admission is open from 8 a.m.-5 p.m. Monday through Friday throughout the year. From September through May, the office is also open Saturdays from 9 a.m.-noon.

For more information, contact Central's campus visit coordinator toll-free at 877-462-3687 during regular office hours.

## Application for admission for new freshmen

### To apply for admission:

1. Submit a completed application with a nonrefundable \$25 application fee. This fee will be waived if: you are a child of an alumnus; you apply before January 15; you apply after a personal campus visit; and/or you apply on-line.
  - Apply on-line at [www.central.edu](http://www.central.edu) or,
  - Applications are also generally available from your high school counselor or,
  - Request one directly by writing: Office of Admission, Central College, Campus Box 5100, 812 University, Pella, IA 50219 or,
  - Phone toll free at 877-462-3687 or locally 641-628-5285.
2. Have your high school send an official transcript of your high school credits to the office of admission.
3. Have a report of your ACT or SAT test scores sent to the office of admission if the test results are not posted on your transcript.

Note: For students enrolled in college or Advanced Placement courses, an official transcript from the college(s) attended and/or the College Board (for AP courses) should be sent to the admission office.

## Admission guidelines

The college's admission committee reviews all applications for admission and especially seeks to admit students who demonstrate the desire, skills and potential to compete successfully at the college level. To be considered for admission as a degree-seeking student for fall, spring or summer, candidates should:

1. Be a graduate of an accredited secondary school or its equivalent;
2. Rank in the upper half of their secondary school graduating classes;
3. Have test scores on the ACT or SAT high enough to predict probable success at Central; (For the purposes of admission and financial aid decision-making, the college recognizes each candidate's highest ACT or SAT composite score on a single test. Students are in no way penalized for sitting for the ACT or SAT more than once.);  
*NOTE: When you register for either the ACT or SAT, use the Central College code numbers: #1284 for ACT, #6087 for SAT.*
4. Score a 530 on the TOEFL exam or a 197 on the computerized equivalent (if enrolling as an international student)

While specific courses are not required for admission, the college recommends that candidates have the following:

- English - four years, including literature;
- Mathematics - two or more years, including algebra, algebra II and geometry;
- Social studies - three or more years, including American and European history;
- Sciences - two or more years of lab science;
- Foreign languages - two or more years.

## Admission of home-schooled students

Prospective students seeking admission as freshmen who were home-schooled must submit scores from the ACT or SAT and appropriate documentation evidencing completion of a secondary-level program of study culminating in the equivalent of a high school diploma. Specific admission requirements and documentation may vary based upon the nature of the home-school program. Please consult the office of admission for guidance.

## Equivalency diploma consideration

A prospective student seeking admission as a degree candidate who is 18 years old and holds an equivalency diploma issued by his/her state department of education will be given full consideration for admission.

To apply, candidates must submit an official transcript of all attempted course work in high school and a transcript of General Education Development (GED) assessment. Students who did not take an ACT/SAT while in high school or within four years of leaving high school may be required to take an ACT/SAT at a national test site or residually at Central College.

### Regular admission

Candidates who have an ACT composite score of 20 or above (940-970 SAT critical reading and mathematics combined scores) are typically admitted to Central without restriction or condition if they meet each of the following criteria:

1. Have an unweighted cumulative grade point average of at least 2.700 on a 4.000 scale;
2. Have met the recommended college-preparatory curriculum outlined previously;
3. Rank in the top half of their secondary school graduating classes; and
4. Present no extenuating causes for special consideration.

### Great Start admission

Candidates who have ACT composite scores of 19 or lower (SAT critical reading and mathematics combined scores of 900-930), who demonstrate the potential and motivation for undergraduate success, but whose secondary school transcripts and supporting credentials suggest that a moderate amount of basic skills remediation will be necessary, may be admitted to the college through the Great Start program. A limited number of students will be admitted to the program. Great Start participants receive personalized assistance from their academic advisor and are strongly encouraged to utilize additional academic support services available at the college (center for academic excellence, counseling center, etc.). Great Start students enroll in ENGL 100 Reading and Writing Strategies, as well as other prescribed courses that are designed to strengthen their abilities as students.

### Appeals

All decisions of the admission committee may be appealed by the candidates within 30 days of notification. To appeal a decision, a candidate must submit a detailed statement that addresses the following issues:

1. What is your motivation for seeking admission specifically to Central College?
2. What extenuating circumstances or conditions should the members of the admission committee consider in re-evaluating your application?
3. How do you expect your academic performance to differ from secondary school to college? What assurance can you give that the change will, indeed, take place?
4. Which of the secondary school teachers whom you have had for a college predatory class can best speak to your potential to succeed in college (list name, department, address and telephone number)?

### Notice of admission

Applications for admission are reviewed by the admission committee. Notification of the admission decision is made within two weeks after all official documents have been received (but not before September 1 for fall semester entry), unless additional information is requested. Central College adheres to the National Candidate Reply Date that permits admitted students to select from all admission and financial aid award offers without penalty until May 1. All students planning to enroll full time (12 semester hours or more) are required to submit an enrollment deposit of \$200, which is refundable until May 1.

All full-time students must live in Central residence halls during the fall and spring semesters, unless they are married, 24 or older, or have served in the military. Any student requesting to live off campus must petition through the student life office.

### Merit scholarship notification

Students who meet the appropriate criteria and are admitted for admission as new freshmen will be invited to participate in the Presidential or Dean's Scholarship programs in January or February. Students who participate in one of Central's scholarship programs may be selected to receive a scholarship/fellowship up to full-tuition (Presidential) or up to half-tuition (Dean's). The Central Heritage Grant is awarded to any student who is the child of an alum, the sibling of a current student or graduate of Central or an active member of the Reformed Church in America. Students interested in performance-based awards in music, theatre, communication studies, creative writing, modern language and art must be admitted for admission and audition, or submit a portfolio where appropriate, before Feb. 1 for full consideration.

Transfer students from two-year institutions who are active members of the Phi Theta Kappa chapters on their campus can be considered for Phi Theta Kappa awards offered by Central. Presidential Community College Scholarships are available to students from accredited two-year institutions with a 3.5 cumulative G.P.A. on a 4.0 scale with a minimum of 24 semester credit hours. For more scholarship information, visit [www.central.edu/financialaid](http://www.central.edu/financialaid).

### Transfer Application for Admission

To apply for admission to Central as a transfer student:

1. Submit a completed application with a nonrefundable \$25 application fee. This fee will be waived if: you are a child of an alumnus; you apply before January 15; you apply after a personal campus visit; and/or you apply on-line.
  - Apply on-line at [www.central.edu](http://www.central.edu)
  - Request one directly by writing: Office of Admission, Central College, Campus Box 5100, 812 University, Pella, IA 50219 or
  - Phone toll free at 877-462-3687 or locally 641-628-5285
2. Have your high school send an official transcript of your high school credits to the office of admission.

3. Request that official transcripts from each college/university previously attended be sent directly to the office of admission at Central. Attendance at each institution must be reported regardless of whether credit was earned. Failure to submit official transcripts from all colleges/universities previously attended is sufficient cause for denial or cancellation of admission and could preclude continued enrollment at Central.
4. Have a report of your ACT or SAT test scores sent to the office of admission if the test results are not posted on your high school transcript.
5. Transfer students who are currently enrolled at another institution must also provide a final transcript prior to enrolling at Central.

Credit earned at accredited colleges or universities will be accepted in transfer if grades of at least a C- are earned in the courses, and if the courses can be applied toward a Central College degree. A maximum of 90 semester hours (transfer credit and Advanced Placement credit combined, and with no more than 66 credits from two-year community colleges) will be accepted.

If you completed Advanced Placement examinations, contact the College Board, and arrange to have an official score report sent to Central College (CEEB 6087).

Transcripts are evaluated by the registrar. For more information, see the Transfer Credit Policy in the Academic Policies section of this catalog.

### **Re-admission Application**

A student who is withdrawn from Central prior to graduation may re-apply for admission and, if admitted, return to the college at a later date. To apply:

1. Submit a completed Application for Readmission
  - Download application available online at [www.central.edu](http://www.central.edu); or
  - Request one directly by writing: Office of Admission, Central College, Campus Box 5100, 812 University, Pella, IA 50219; or
  - Phone toll free at 877-462-3687 or locally 641-628-5285

### **International student admission**

Students who hold citizenship and residency in countries other than the United States should apply well in advance of the planned enrollment date. An international student application, the \$25 application fee and properly certified copies of secondary school records, including national examinations, and/or university records must be submitted.

The SAT or ACT is highly recommended for international students, although not required for admission. Students applying for merit scholarships must submit an SAT or ACT score to be considered.

Applicants also should submit at least one recommendation from a teacher or faculty member.

Applicants whose first language is not English should take the Test of English as a Foreign Language (TOEFL) and have official scores sent to Central. Students whose first language is English do not have to submit a TOEFL. They must submit SAT or ACT scores.

### **INS requirements**

Central is authorized by federal law to enroll non-immigrant students and exchange visitors pursuant to all SEVIS regulations and guidelines. International students are required to submit proof of financial resources before an I-20 or DS-2019 is issued, respectively, for the F-1 or J-1 visa. Merit and need-based financial aid is available to international students, although the assistance offered does not cover the total cost of education.

### **Guest/non-degree seeking students**

Students not seeking to earn a bachelor's degree from Central College may be admitted and allowed to enroll in courses as guest students. Guest students may enroll on a full- or part-time basis, but are not eligible for any financial aid from Central College, the State of Iowa or federal entitlement programs. Guest students, who at a later date seek to earn a degree at Central College, must apply for admission to the College as a degree-seeking student and meet the admission requirements detailed above.

No more than 15 semester hours of credit earned while a guest student will be applied to a bachelor's degree program at Central; a guest student who might later seek degree-seeking status is therefore advised to formally apply for admission as a degree-seeking student as soon as possible.

Non-degree seeking, guest students are not required to meet the standards of satisfactory academic progress; however, Central College reserves the right to evaluate guest students' academic progress, to make recommendations for improving progress and to take progress-related actions (including but not limited to suspension or dismissal from the College). Guest student registration forms are available from academic records, or online at <https://mycentral.edu> (resources tab).

## **Post-Secondary Enrollment Option Act (PSEO) and high school visiting program**

Students currently enrolled as juniors or seniors in high school are eligible to participate in the PSEO program, if they meet each of the required standards. They must rank in the top third of their class and have a qualifying test score in one or more of the following test programs: ACT, SAT, PSAT or PACT. Students in the first or second year of high school (or a ninth or tenth grade student who is identified as a gifted and talented student according to the school district's criteria and procedures) must rank in the top 20 percent of their class and have scored a composite of 90 or 900 on the PSAT or SAT, respectively, or a composite of 20 or better on the ACT or PACT. Courses open to high school students through PSEO are limited to study above and beyond what is available in their high school curriculum.

To apply, a student must submit an official transcript with test score results. PSEO and visiting student forms are available in the office of admission, and upon admission a guest registration form is available from the academic records and registration office. Accepted students may take up to nine semester hours per academic year.

PSEO students may register for classes on a space-available basis after August 1 for the fall semester and after December 1 for the spring semester. For more information on course availability, contact the registrar at [registrar@central.edu](mailto:registrar@central.edu) or 641.628.5442.

## **Welcome Statement and Non-Discrimination Policy**

Central College is committed to being an inclusive community whose members act with consideration for the physical, intellectual and spiritual well being of all persons. All members of the college community are responsible for creating an atmosphere that fosters openness, mutual respect and diversity. (Board of Trustees, 4/26/03).

The above non-discrimination policy includes, but is not limited to, persons of every ethnicity, race, national origin, ancestry, color, socio-economic class, creed, religion, philosophical belief, marital status, disability, physical appearance, sex, age, sexual orientation, gender expression and identity, and organizational affiliation.

### **About the Welcome Statement and Non-Discrimination Policy**

Central College's *Welcome Statement and Nondiscrimination Policy* is designed to promote and protect safety, respect and integrity in relationships among all members of our community. Central College is committed to fostering diversity on campus and strives to create a community of students, faculty and staff who are dedicated to supporting and advancing the mission and goals of the college. To achieve these ends, the Central College community establishes a safe environment for all persons, including those considered diverse by contemporary and sometimes changing standards.

As a college community, we commit to a process of actualizing our mission and goals, thereby striving to achieve congruence between our daily actions and the ideals expressed in our guiding principles. As one of our goals, we promote skills and values essential to becoming responsible citizens in local, national and international communities. Further, we seek opportunities to experience and appreciate the diversity of cultures and perspectives present on campus, in the United States and the world, recognizing the necessity to relate knowledgeably and sensitively in an increasingly complex environment where diversity is to be valued.

As an inclusive academic institution we embrace and support students, faculty and staff from various spiritual perspectives who endorse the values of acceptance, mutual respect, justice, generosity, compassion, forgiveness and service to others. We aspire to be a community whose members act with consideration for the physical, intellectual, spiritual and emotional well being of others. We seek to create mutually respectful interactions and positive meaning in relationships with persons of every ethnicity, race, national origin, ancestry, color, socio-economic class, creed, religion, philosophical belief, marital status, disability, physical appearance, sex, age, sexual orientation, gender expression and identity, and organizational affiliation.

With due regard for the principles of freedom of expression and academic freedom, this policy seeks to encourage attitudes of civility necessary for meaningful exchanges between people. All members of the college community are responsible for creating an atmosphere that fosters openness, mutual respect and diversity. The application of the college's nondiscrimination policy will often involve conflicting interests, particularly when applied to freedom of expression. Because the primary business of the college is liberal education and because liberal education cannot take place without the free, open and civil exchange of ideas, the application of the nondiscrimination policy should always be made with consideration of how best to preserve the free, open and civil exchange of ideas.

Central College is an Affirmative Action and Equal Opportunity Employer. Discrimination in employment is specifically prohibited except in cases of a bona fide occupational qualification. Additionally, the college prohibits discrimination against any individual for reasons listed above. Central College students have equal rights, privileges and responsibilities unless specifically restricted by college disciplinary action.

# COLLEGE COSTS (2009-10)

(Please visit our Web site at [www.central.edu](http://www.central.edu) or call us toll free at 877-462-3687 to receive a copy of our current tuition, room, board and fees.)

## Tuition, room, board, fees

Students entering fall semester 2009-10 will be charged tuition (based on a flat amount for 12-18 s.h.), room, board and fees. Students may choose the board plan that fits their needs.

The charges given in the table below are for 2009-10. Charges for 2010-11 will be determined in January 2010. For more information, call toll free 877-462-3687, and request a printed copy of Central's fees for 2010-11.

	1 <sup>st</sup> semester	2 <sup>nd</sup> semester	Total
Tuition (12-18 semester hours)	\$ 12,315.00	\$ 12,315.00	\$24,630.00
Board (20-meal plan)	2,132.00	2,132.00	4,264.00
Board (14-meal plan)	2,032.00	2,032.00	4,064.00
Room (normal occupancy)	2,052.00	2,052.00	4,104.00
Activity fee	90.00	90.00	180.00
Technology fee	100.00	100.00	200.00
Totals (20-meal plan)	\$ 15,975.00	\$ 15,975.00	\$31,950.00
(14-meal plan)	\$ 15,875.00	\$ 15,875.00	\$31,750.00

## Tuition

Tuition is \$855 for each semester hour for those credits outside the 12-18 semester hours that constitute the normal academic load. For example, a part-time student who elects to carry 10 semester hours of credit will be charged \$8,550 for tuition (10 x \$855). A full-time student who elects to carry 19 s.h. of non-tuition exempt credit (see overload policy below) will be charged \$13,170 (\$12,315 plus \$855 for the extra semester hour of credit).

## Overload

Students who wish to register for more than 18 semester hours will need permission from the assistant academic dean unless they are enrolled in one or more of the following overload-exempt courses: group ensembles (MUSG courses), 1 s.h. study abroad pre-departure courses, 1 s.h. presidential fellowship seminars, 1-2 s.h. Central teachers academy internships (EDUC-397), honors enrichment courses, senior honors thesis courses/projects, honors seminar (COLL-285H), private music instruction (MUSL courses; instructional fee still applies).

## Room

The basic charge for all on-campus residence units is \$2,052 per semester. The general rule is two persons per room. An additional charge of \$195 per semester is assessed for a private room.

## Board

Two meal plans are offered: a 20-meal plan (no Sunday morning breakfast) and a 14-meal plan. The 2009-10 rate for the 20-meal plan is \$2,132 per semester; the 14-meal plan is \$2,032.

## Additional fees

Additional fees include:

Monthly payment plan fee	\$25/yr; \$15/sem
Monthly payment plan online fee	No Charge
Glass blowing fee	\$115
Photography lab	\$175
Ceramics lab fee (beginning)	\$75
Ceramics lab fee (advanced)	\$100
Pre-student teaching fee	\$50
Science lab	\$75
Student teaching fee	\$100
Total success program	\$100
Audit, general (above or below block per semester hour)	\$65
Student insurance (12 months)	\$338
Outdoor Pursuits class (EXSC-342)	\$100
First Aid/CPR (EXSC 151, 217 and 417)	\$ 25

### **Student activity fee**

The student activity fee supports programs, events and initiatives such as the student newspaper, the yearbook, the Campus Activities Board, the intramural programs, and various other activities and organizations on campus. The fee is \$180 for the entire year, \$90 for each semester at Central College. The fee is mandatory for all students registered for six or more semester hours.

### **Technology fee**

The student technology fee includes, but is not limited to, software, network and email accounts, internet access (including wireless), instructional support and network printing. This fee is mandatory for all students registered for six or more semester hours.

### **Textbooks**

The cost of text and reference books varies, depending on the courses taken. New and used books are available in the college bookstore. The average estimated cost is \$980 per year.

### **Private/Group music lessons**

Students who schedule a private or group music lesson will be charged the following music lesson fees.

1-credit private (weekly ½ hour private lesson):	\$240.00
1-credit class (weekly group lesson):	\$105.00
2-credit private (weekly one-hour private lesson):	\$400.00

### **Student insurance**

All full-time students enrolled on the Pella, Chicago and Washington D.C. campuses taking 12 or more semester credits are required to participate in the student health insurance plan unless proof of comparable coverage is provided. The fee will be charged directly to the student account in the student's first semester at Central. See the business office for further details.

### **Off-campus programs**

Central has study abroad programs in France, Austria, Spain, England, Wales, the Netherlands, China, and Mexico. Central also has programs in Chicago and Washington, D.C. The basic cost of study abroad programs includes tuition, fees, room, excursions and cultural events. Students provide their own transportation to and from the off-campus programs and other expenses. Please contact the controller's office for costs for the Washington, D.C. and Chicago programs. Costs for the 2009-10 academic year study abroad programs can be found under the "Central College Abroad" heading of this catalog.

Central financial aid will be available to Central students for a maximum of two semesters for off-campus programs. The semesters may be during the same year or different years but cannot exceed two off-campus semesters. Central students who choose to study abroad or at off-campus locations for more than two semesters will continue to receive Pell Grants, Iowa Tuition Grants and Federal Direct or alternative loans for which the student qualifies.

Please visit our Web site for updated prices.

### **Refund policy for official withdrawal from college**

Students are required to officially withdraw from Central College if they wish to receive a refund of institutional charges and avoid having failing grades posted to their academic record. Students should contact the student life office to begin the withdrawal process. Students studying on a Central College abroad program should consult the appropriate program handbook for withdrawal and refund policy information.

Students studying on the Pella, Chicago or Washington D.C. campuses who officially withdraw or are suspended prior to completing 60 percent of the semester will receive a refund of institutional charges for tuition, room, board and fees based on the percentage of the semester that has not been completed. Financial aid will be returned to the federal, state and Central programs based on the same percentage. Federal sources of financial aid will be returned to the programs from which the student received aid during the payment period in the following order: Unsubsidized Federal Stafford Loans, Subsidized Federal Stafford Loans, Perkins Loans, PLUS Loans, Pell Grants, Academic Competitiveness Grant, National Smart Grants, and SEOG Grants. Outside scholarships will remain on the student account unless it creates an over-award situation or the donor specifically requests a refund. All work study earned will be paid to the student. Students who withdraw during the semester will be charged an additional \$100 administrative fee.

After the 60 percent point in the semester, no refund will be granted, nor will financial aid be reduced. The portion of the semester completed is based on calendar days from the first day of the semester through the last scheduled day of finals, including weekends and mid-semester breaks of less than five days. In simple terms – if the student completes 20 percent of the term, the student would only be charged for 20 percent of the tuition, room, board and fees and would only receive 20 percent of the financial aid other than outside scholarships and work study.

Students studying on a Central College abroad program will have their federal and state financial aid refunded based on the percentage of the term that has not been completed as stated above. Students should consult the appropriate program handbook concerning the policy for a refund of charges.

## **Refund policy for unofficial withdrawal from college**

Students are responsible for officially withdrawing from Central if they choose to leave or stop attending. Students who do not officially withdraw due to illness, accident, grievous personal loss or other circumstances beyond the student's control will have their institutional charges and financial aid adjusted in accordance with the refund policy stated above. The assistant dean of academic affairs will determine the date that most accurately reflects when the student ceased academic attendance due to circumstances beyond their control.

A refund of institutional charges will not be granted to other students who make a choice to stop attending without officially withdrawing from college. Additionally, if the student received Federal Title IV financial aid funds, Central College is required by law to comply with the federal programs Return of Title IV Funds Policy. Central is required to review any student who fails all courses as a possible unofficial withdrawal. If we cannot document that the student was in attendance at class through the 60 percent point in the semester, the student's federal financial aid will be returned to the appropriate programs based on the midpoint of the payment (enrollment) period. This means that 50 percent of the student's federal financial aid must be returned to the federal programs in the order stated above. Students will very likely have a balance due on their student account resulting from financial aid refunds without a corresponding refund of institutional charges. Students will have a period of 14 calendar days after the unofficial withdrawal determination is made to appeal and document their attendance in class after the 60 percent point in the term. If the appeal is granted, none of the aid will be refunded.

## **Refund policy for suspension and dismissal**

Students who are suspended or dismissed must vacate their rooms within 24 hours. No tuition, room, board or fees will be refunded. If a dismissed student received federal Title IV financial aid and is dismissed prior to completing 60 percent of the semester, the federal aid programs will be refunded in accordance with federal policies and based on the percentage of the semester not completed.

## **Registration and housing deposit**

For returning students who wish to reserve courses for the following academic year and live on campus, his/her student account must be paid in full, with an additional \$25 deposit for course reservations and \$100 deposit for housing. The credits are applied against the student's account. If the student decides not to return, the deposits are nonrefundable.

## **Payment of accounts**

Student accounts are payable on the published due date each semester. Satisfactory arrangements must be made with the controller's office if full payment cannot be made on the payment date. Students will not be admitted to class unless accounts are paid in full or they have made satisfactory payment arrangements. Interest will be assessed against unpaid balances. Students who have not completed verification by the end of the drop and add period each semester will be charged interest on any unpaid balances.

Transcripts will be withheld until all accounts with the college are settled.

## **SAFE accounts**

Central students may make deposits into a SAFE account any time. The college will pay an attractive interest rate and automatically make transfers to cover tuition costs on registration day. Contact the controller's office for additional information.

## **Monthly payment plans**

A monthly payment plan is available to Central College students. Information is sent to all students each spring. An annual fee of \$25 is required. For more information and an application, contact the controller's office.

## **Liability waiver**

The college does not carry insurance on personal property of faculty members, staff, students or other workers while on campus and is not responsible for the loss or damage of such property.

# FINANCIAL AID

The cost of a quality college education is an important investment in your future. Financial aid, in the forms of scholarships, grants, employment and/or loans, is often necessary to help make a Central College education a financial possibility.

In fall 2008, 100 percent of those new students who sought financial aid received aid. The average new freshman financial aid package for fall 2008 was \$21,977, which included scholarships, grants, work study, and subsidized loans. Financial aid is awarded on a yearly basis, and you must reapply each year. Central tries to maintain consistency in annual awarding; however, individual awards may be influenced by significant changes in your demonstrated need factor, academic achievement, and/or funding from federal, state, or institutional sources.

## Applying for financial aid

To be considered for financial aid, you must be an accepted degree-seeking applicant. If you wish to be considered for need-based financial aid, you should file a Free Application for Federal Student Aid (FAFSA) as soon after Jan. 1 as accurate income information is available. Iowa residents must have a completed needs analysis form at the federal processor prior to July 1 to be considered for need-based gift assistance from the state.

FAFSA forms are available from your high school counselor or from the office of financial aid at Central College. Please indicate that you would like to have the results released to Central College (code 001850). Students filing a FAFSA will receive a Student Aid Report (SAR) directly from the federal processor. The student should review the information for accuracy and immediately make corrections if needed. Results received at Central for accepted applicants prior to March 15 will be given first consideration for funding. Apply for aid early, even if you believe you may not qualify. Missed deadlines can challenge your ability to attend the school of your choice.

## 'No-need' awards

If you choose not to file a FAFSA, or the results indicate that you and your parents will be able to meet the academic year's cost of college without financial aid, you may be considered for financial aid on an academic basis. Central has a number of scholarships and awards available to students who have demonstrated high academic achievement or outstanding ability in some special area (excluding sports).

## The aid award

The financial aid committee regularly reviews files to develop an aid award for accepted students who have either had the FAFSA results sent to Central or wish to be considered for aid on an academic basis only. Such an award will be made up of one or more types of aid: gift assistance that does not need to be repaid in the form of scholarships, grants or awards; loans that must eventually be repaid; or employment in an on-campus or community service position. New students who decide to attend Central should accept the aid award and return one copy to the office of financial aid at Central College. Current student awards are considered passive acceptance awards, meaning that we assume you want the award unless you tell us otherwise.

## Crediting the student's account

The value of the award is divided proportionately over the academic year. A portion of the gift and Federal Perkins Loan assistance is credited to the student's account at the beginning of each semester. Outside scholarships and loan funds (other than Perkins) are credited to the student's account when the funds are received and endorsed if necessary. Employment earnings are paid to the student periodically based on the hours worked or job performed. Employment earnings should be viewed as a student's spending money, not a reduction of the amount owed. Aid is awarded with the expectation that the student will be enrolled in a sufficient number of credits to be considered full time. If a student is enrolled in less than full-time status, aid will be reduced in accordance with federal, state, and institutional policies. Students must be enrolled at least at half-time status (minimum of 6 s.h. in a given semester) to qualify for most aid programs.

Students selected for verification must complete the verification process or have it waived, if applicable, before any federal or state aid may be credited to the student's account. Students who have not completed verification by the end of the drop and add period of each semester will be charged interest on the unpaid balance of the student account, including amounts that may be covered by federal or state aid after verification is complete.



## **Renewal/Satisfactory Academic progress**

Financial aid is generally available for four academic years at Central College. Renewal is not automatic, however, and it is the student's responsibility to see that all requirements for renewing aid are met. Continuation of financial aid beyond the fourth year may be considered for students who have previously formalized their intentions to enroll as a part-time student or who have been granted an extra semester or year based on an appeal documenting circumstances beyond the student's control that either prevented them from completing their degree requirements in the traditional four-year-time-frame or that require them to be enrolled for a semester beyond graduation.

Application materials are distributed to current students prior to Christmas break through their Central e-mail accounts. Current students will be notified in late spring or early summer of the aid awarded for the next academic year. Students not making satisfactory academic progress as defined below for financial aid purposes may jeopardize their financial aid. Any questions concerning financial aid should be directed to the financial aid office.

### **Student must have earned:**

- 23 semester hours at the end of one full academic year
- 47 semester hours at the end of two full academic years
- 73 semester hours at the end of three full academic years
- 100 semester hours at the end of four full academic years

### **and have a cumulative grade point average of at least:**

- 1.600 after 1 semester
- 1.700 after 2 semesters
- 1.800 after 3 semesters
- 1.850 after 4 semesters
- 1.900 after 5 semesters
- 1.950 after 6 semesters
- 2.000 after 7 semesters

Please note that this is the satisfactory academic progress policy for determining financial aid eligibility. Academic policies that relate to probation and dismissal from the college may differ. Students receiving tuition remission or tuition exchange employee benefits for dependent children and spouses must meet these standards to continue receiving the employee benefit.

## Scholarships-Grants-Loans-Student Employment

### Scholarships

#### Merit scholarships and awards

Central College offers a variety of both competitive and non-competitive scholarships and awards. Most scholarship and award values are for a specific amount based on the year that you enter Central and other criteria. We set the value at a level that we hope will recognize and honor the recipients and their specific qualifications as well as helping to make Central an affordable college choice. The scholarship or award value does not increase from year to year, as an increase in aid that is not funded by annual gifts or significant increases to the endowment would create a need for further increases in tuition to cover the cost. Students selected as the *top* candidates for our Scholars Programs will be awarded fellowships based on a percentage of tuition; these fellowship awards do adjust in value with tuition increases during the student's enrollment. Students will be awarded the highest merit scholarship or award based on academic and/or talent criteria for which they qualify. Other Central awards may be added to academic awards provided the award value does not exceed full tuition and students will not be awarded in more than one of these areas. Heritage Awards may also be added to other academic awards provided full tuition is not exceeded.

#### Endowed and Annual Gift Scholarships

A number of endowed and annual gift scholarships are available as a result of generous gifts to the college. Grants are also made on an annual basis by donors. The endowment income and gifts are awarded annually to deserving students and may be based on academic as well as financial considerations. Students should complete the endowed scholarship application on the <http://my.central.edu> website for consideration.

### Grants

#### Federal Pell Grants

This federal program is designed for students who demonstrate the highest level of financial need and could not attend college without significant financial aid. Awards range in value and are based on the family contribution and the cost of attending Central College. Apply by filing a Free Application for Federal Student Aid.

#### Federal Academic Competitiveness Grants

This federal program is designed to assist full-time students who are U.S. citizens, eligible for the Federal Pell Grant, who completed a rigorous high school program as defined by federal regulation. The award level for students in their first academic year is \$750. Students who continue to meet all eligibility criteria and have a 3.00 cumulative GPA at the end of the first academic year completed will qualify for a second year award valued at \$1300.

#### Federal SMART Grant

This federal program is designed to assist full-time students who are U.S. citizens, eligible for the Federal Pell Grant, with a 3.00 cumulative GPA at the start of each semester during their 3<sup>rd</sup> and 4<sup>th</sup> academic years. Students must be majoring in a program leading to a degree in specific majors as identified under federal regulations. Currently the eligible Central majors are Information Systems, Systems Management, Computer Science, Biology, Mathematics, Natural Science, Math/Computer Science, Chemistry and Physics. If a student falls below the 3.00 cumulative GPA requirement, changes to an ineligible major or enrolls in less than full-time coursework, the student will lose SMART Grant eligibility.

#### Federal Supplemental Educational Opportunity Grants

These grants are available to a limited number of undergraduate students who demonstrate extremely high need and are eligible for the Federal Pell Grant. Application is made by filing a Free Application for Federal Student Aid.

#### Iowa Tuition Grant

Iowa residents attending private colleges and universities in the state may be eligible to receive an Iowa Tuition Grant under a program established by the 63rd General Assembly of the Iowa Legislature.

The program is administered by the Iowa College Student Aid Commission. The awards will be based solely on the applicant's need for financial aid, with priority given to the neediest candidates. Scholarships and grants-in-aid from other sources will be taken into consideration in determining a candidate's financial need. In the event that available state funds will be insufficient to pay the full amount of each approved grant due to the state's fiscal condition, the Iowa College Student Aid Commission will administratively reduce the maximum award to an amount less than the statutory maximum.

To apply for a State of Iowa Tuition Grant a student must file a Free Application for Federal Student Aid prior to July 1 listing Central College.

## Loans

### Federal Carl D. Perkins Loans

Federal Perkins Loans are made directly through Central with funds provided jointly by Central College and the federal government. The amount of the loan shown in your financial aid package is the maximum amount that can be borrowed for the year at Central. Students may choose to borrow less. No interest accrues nor is repayment required while enrolled in college at least half-time. Simple interest of 5 percent begins to accrue nine months after the student is no longer enrolled in college at least half-time. Repayment begins in the ninth month after the student leaves school at a minimum rate of \$120 per quarter. Partial loan cancellation may be granted if the graduate is in certain types of teaching, Peace Corps, law enforcement, corrections' officer or under certain circumstances involving military service. Students are given information regarding rights and responsibilities when they arrive on campus, and the loan papers will be available for signing at registration.

### Federal Direct Stafford Loans

Federal Direct Stafford Loans are available to aid applicants who filed a needs analysis form and are enrolled at least half-time in college. These loans are federally funded with the federal government paying an interest subsidy, if applicants show financial need, and without an interest subsidy, if the applicant does not show need. If eligible for the interest subsidy, the government will pay the interest on the loan until six months after the student graduates, withdraws from college, or enrolls less than half-time. If eligible for an unsubsidized loan, the student is responsible for the interest while in college or no longer enrolled at least half-time as well. A loan fee of up to 2 percent, rebated to 0.5%, will be deducted from each disbursement. No payment toward the principal is required while enrolled as at least a half-time student. Repayment of the principal plus simple interest begins six months after the student leaves school at a minimum rate of \$50 a month. The interest rate is fixed under current regulations. The Federal Direct Stafford Loan is suggested only as an additional source of funds. Students are not obligated to apply for a Federal Direct Stafford Loan if it is not needed.

### Federal Direct Plus Loans (PLUS)

Federal Direct Parent Loans (PLUS) are available to parents who have a dependent child enrolled in college. These loans are guaranteed by the federal government. Individual eligibility is determined by subtracting any financial aid available for the year from the cost of education. Financial need is not a prerequisite. The loans are made payable to the parent and Central in multiple disbursements. A loan fee of up to 4 percent, rebated to 2.5%, will be deducted from each disbursement. Repayment begins immediately upon disbursement with a minimum payment of \$50 a month. Federal Direct PLUS Loans have a fixed interest rate of 7.9 percent under current regulations. The borrower may take at least five years to repay Federal Direct PLUS Loans and there are a variety of repayment options available. Federal Direct PLUS Loans should be sought as supplemental funds after all other federal sources of assistance have been investigated.

### Central College Loans

Loan funds are available to help full-time students who are making satisfactory progress toward their degrees. Amounts of such loans depend on the availability of a student's personal funds and funds from other sources. To obtain a loan, the student should submit a completed application form to the controller's office accompanied with a letter from the parent indicating why the loan is needed, how repayment of the loan will be made, and any special circumstances meriting consideration in granting the loan. Application forms are available from the controller's office. Loan applications will be evaluated by the loan committee and will be considered on a first come, first served basis. Other criteria will be the student's cumulative grade point average, total financial aid and campus activities.

### Parent/Computer Loans

The Parent/Computer Loan fund is designed to help parents of students, married students, and single parent students borrow funds to finance the purchase of a computer. This loan must be paid in full at the time a student graduates, transfers to another school or terminates attendance at Central.

### Vance Loans

The Vance Loan Fund is designed to help parents of students finance the cost of attending Central. The college expects that all other available forms of Financial aid be pursued prior to applying for a Vance Loan. This loan program is available after the student has completed one semester at Central College's Pella campus and is designed to help in unusual economic situations. Loan amounts are not to exceed the cost of attending Central College less other forms of Financial aid. The maximum amount is \$6000 per year. While the student is attending Central College a reduced payment schedule will be in effect. Application forms are available in the loan office located in the controller's office.

### Henry Strong Student Loans

The Henry Strong Educational Foundation was created from the estate of Henry Strong to help deserving students obtain college educations. Upperclass students who have completed at least one semester at Central College and are 25 years of age or younger with a co-signer may receive consideration for this loan.

### Langerak Loan Fund

The Langerak Loan Fund was established in 1981 by Dr. Willard Langerak, a 1933 graduate of Central College and an active supporter of Central College. The loan fund is intended to help students who are preparing to enter the Christian ministry.

**Central College International Student Loans**

This fund has been established by Don and Maxine Huffman to meet special monetary problems encountered by Central students from foreign countries who have completed at least two semesters at Central.

**Root Loan Fund**

The Richard Morton Root and Ruth Bailey Root Charitable Trust Fund is to provide a means whereby students studying in the liberal arts or fine arts might obtain a loan to further their educational studies. This loan is for an Iowa student and must maintain a grade point average of at least a 3.0.

**Student Employment**

More than 80 percent of Central's students are given some employment opportunity during the school year. Students who demonstrate financial need are given priority for on-campus employment.

Efforts are made to assign students to positions for which they are best suited by past experience and training, and to provide work in amounts proportionate to their needs. Continued employment is contingent on good performance.

Students should limit themselves in the number of hours they work each week. Students who are having difficulty with their studies, or who fail to make satisfactory progress toward a degree should not attempt off-campus work. Accordingly the college reserves the right to deny employment to any student who has not maintained a "C" average.

Part-time employment is dependent upon the student's class schedule. Although the student employment office will make every effort to assist interested students seeking part-time work, the college does not guarantee locating employment nor that the student will earn the total amount allocated to them. Application for part-time employment should be made to the student employment office.

Employed students are paid directly by the controller's office every four weeks. The student is allowed to earn the amount specified in their aid award but the final responsibility for whether the amount is earned belongs to the student.

## ACADEMIC PHILOSOPHY

To fulfill its goals for students, faculty, and the entire college community — and to do so explicitly guided by and in concert with the college mission — the faculty of Central College have developed and continually assess, refine and augment an academic curriculum recognized nationally for its:

- unfailing foundation in the liberal arts
- innovative programs to develop high-level rhetorical skills
- significant emphasis on multicultural awareness, and the understanding and appreciation of all facets of human diversity
- demonstrated academic rigor and intellectual challenge

While students' academic experiences are governed by the college's graduation requirements, those experiences are most powerfully shaped by the instructive and nurturing relationships developed among students and faculty, and by each student's individual desire to be intellectually curious and to engage oneself in the lifelong quest for the knowledge that sustains and advances us all.

### Communication across the curriculum

One of the most significant components of Central's curriculum — and of all quality liberal arts curricula — is an exemplary commitment to the development of speaking and writing skills. Central College has one of the longest histories in American higher education of helping students become rhetorically sophisticated, so that they may best adapt to and communicate successfully in a multitude of academic and professional settings.

Central's Communication Across the Curriculum Program, initially funded by the National Endowment for the Humanities and the Meredith Corporation and subsequently driven by its own success, is grounded in the understanding that communication skills employed in context are best learned in context. Accordingly, the development of students' written and oral rhetorical skills is the responsibility of faculty teaching courses in each academic major, throughout the curriculum. Faculty fulfill that responsibility through two key program components:

### Central Foundations

As part of Central's Core requirements, all students must complete at least two courses (at least 6 s.h. of credit) identified as Central Foundations courses within the first two years. These courses are distinguished as follows:

1. They address the basic assumptions and values of an academic discipline at the introductory level (100).
2. They approach study of the discipline via methods that demand active student involvement in and critical analysis of the disciplinary exchange of ideas; process – as much as product – is emphasized. Assignments demand a progression of skills such that students can summarize, analyze, evaluate and produce their own arguments within both disciplinary and interdisciplinary contexts.
3. They are identified throughout this catalog by a lower-case letter f next to course numbers (e.g., CHEM 131fq, EDUC 110f, ENGL 120ft, etc.).
4. To best facilitate the type of growth detailed above, class size is generally limited to 22 students.

### Communications skills endorsement

A critical requirement of each academic major - and, thus, a graduation requirement - is that students must earn a faculty endorsement of their communication skills in the context of their major discipline. Generally, students skills are assessed at the time of major declaration so that a program of further development — and, if necessary, remediation – can be embarked upon. Major-specific communication skills endorsement requirements and procedures are detailed in the sections of this catalog addressing the individual majors.

### First-Year Seminar: *Intersections*

A hallmark of the first-year experience at Central College is the *Intersections* course, COLL 110f. Required of all new, first-year students in the fall semester, *Intersections* is an interdisciplinary seminar designed to introduce students to the intellectual life at a liberal arts college in general and, more specifically, to academic life at Central. Small groups of students explore the intersections at which academic/intellectual disciplines, ideas, and events converge, connect and collide. Faculty from throughout the natural sciences, behavioral sciences, fine arts and humanities teach the seminars. All sections of the course share a common topic and many common readings and experiences, while each instructor adds a unique emphasis.

## Advising

Academic advising at Central College is a shared responsibility of the student, the advisor, and the college. The academic advising program aims to empower students to become lifelong learners through examination of life goals, participation in curricular and co-curricular programs, and knowledge of career opportunities. A faculty advisor is assigned to each student admitted to Central. Students may change advisors as their major interests change or develop.

Advisors' responsibilities are

- To provide accurate information about requirements for the Core, majors, minors and overall fulfillment of the degree
- To provide guidance and referrals for choosing classes and helping students map a career path
- To be available and responsive to concerns and questions
- To provide guidance and referrals for students to resolve academic or personal issues
- To maintain confidentiality regarding students' academic records

Students' responsibilities are

- To know the college's requirements and policies
- To articulate and pursue personal, educational and career goals congruent with personal values and realistic self-appraisal
- To monitor progress by means of the degree audit
- To consult with an academic advisor several times a semester to review their academic program and progress toward their goals.
- To accept the consequences of academic decisions such as declaration of a major or minor, course selection or withdrawal, follow-through with referrals, and related decisions.

# GRADUATION REQUIREMENTS

To earn the Bachelor of Arts degree from Central College, all students must:

- 1) **Complete all Central Core requirements**
- 2) **Complete all requirements for at least one academic major**
  - with a GPA of 2.000 in all courses applied toward the major(s)
- 3) **Complete a total of 120 semester hours (s.h.) of course work:**
  - with a cumulative GPA of 2.000
  - with at least 20 s.h. of course work at the 300-level or above
  - with no more than 20 s.h. of internship, practicum or experiential course work
  - with no more than 60 s.h. of course work taken in the major discipline counting toward the total 120 s.h. required (for disciplinary/departmental majors only)
- 4) **Complete 45 of their last 60 semester hours in a Central College program, with at least 15 of these on the Pella campus.** Students who fulfill all requirements of one of the co-op pre-professional degree programs meet this residency requirement. The assistant dean of academic affairs may grant exceptions to this residency requirement.
- 5) **Application for Graduation.** Students must submit an application for graduation at least two semesters prior to the awarding of the degree. For more information, see “Academic policies” in this catalog or contact academic records and registration at registrar@central.edu.

*Note: While academic advisors, faculty and staff provide significant academic planning and related assistance to students, completion of all degree requirements — and the process of monitoring progress to that end — is ultimately the responsibility of the student.*

## Central Core requirements

The cornerstone of Central’s liberal arts curriculum is the Core, a combination of course and proficiency requirements that ensure that the education of all Central College students is grounded in an understanding of the breadth of human thought and experience. All Core requirements are listed below and refer to courses that fulfill these Core requirements. Core courses are identified throughout this catalog by lower-case letters (e.g. h, r, s, etc.) next to course numbers (e.g. HIST 130h, REL 111r, SOC 120s, etc.).

### 3 s.h. of COLL 110f Intersections

All new, first-year students will take in their first semester *COLL 110f Intersections (3)*, an interdisciplinary seminar designed to introduce students to the intellectual life at a liberal arts college and, more specifically, to academic life at Central. Small groups of students explore the intersections at which academic/intellectual disciplines, ideas, and events converge, connect and collide. Faculty from throughout the natural sciences, behavioral sciences, fine arts and humanities teach the seminars. All sections of the course share a common topic and many common readings and experiences, while each instructor adds a unique emphasis. *Taking COLL 110f Intersections will automatically satisfy 3 of the total 6 s.h. requirement for Central Foundations credit (see below).* Transfer students are not required to take Intersections.

### 6 s.h. of Central Foundations credit – f

Courses that carry the *f* designation are specifically designed to introduce students to 1) the basic assumptions and values of the disciplines, and 2) to college-level reading, writing, speaking, listening and critical thinking skills throughout the disciplines. Both instructional approach and course content will emphasize developing these skills, distinguishing these courses from any others — especially those at other colleges or universities — taught on similar subjects. *Accordingly, no courses accepted in transfer will be allowed to fulfill the Central Foundations requirement.* Normally these courses are taken during the freshman year, but must be completed by the end of the sophomore year. Transfers with sophomore standing are required to take only 3 s.h. of *f* course work; transfers with junior or higher standing are excused from the *f* requirement.

### 2 s.h. of Experiential credit – x

Courses (or appropriate service projects and internships) that carry the *x* designation involve significant contact and interaction with some minority, subculture or international group. *Note: This requirement will be waived for students studying abroad, or at the Chicago Metropolitan Center program, and for international students studying on the Pella campus.*

### 6 s.h. of Cultural Awareness credit – c

Courses that carry the *c* designation focus on culture as a general concept, a particular culture, subculture or minority culture, or a language other than English and the cultures that speak that language. *Note: Most foreign language courses at Central College are designated as c courses, and can therefore be applied toward the completion of this requirement.*

### 3 s.h. of Non-Western/Minority credit – n

Courses that carry the *n* designation involve the study of minority, indigenous or non-Western cultures (e.g. Native American/African American/Hispanic American/Asian/African/Middle Eastern topics), or those concerning the history, art, literature, economics, and/or social structures of such cultures.

**3 s.h. of Arts credit – a**

Courses that carry the *a* designation examine works of art whose essence of creation, depth of expression and impact transcend the routine of daily existence.

**3 s.h. of Historical Perspective credit – h**

Courses that carry the *h* designation study the related and interconnected phenomena that constitute a culture's development over time.

**3 s.h. of Mathematical Reasoning credit – m**

Courses that carry the *m* designation focus on quantitative problem solving and the development of mathematical modeling skills.

**3 s.h. of Religion credit – r**

Courses that carry the *r* designation study the ideas and practices by which humans have sought to come to terms with ultimate reality, (i.e., the relation of the experienced world to a transcendent origin, the moral significance of human behavior, the human predicament and its solution, the destiny of the world).

**3 s.h. of Scientific Inquiry credit – q**

Courses that carry the *q* designation approach science as a dynamic and exploratory discipline, teaching students that hypotheses must be tested against the external reality of the universe.

**3 s.h. of Social and Behavioral Inquiry credit – s**

Courses that carry the *s* designation study human beings as individuals and as members of groups in a variety of social, cultural, psychological, economic, historical and political contexts.

**3 s.h. of Textual Interpretation credit – t**

Courses that carry the *t* designation study written representations and interpretations of the human condition. These courses analyze works that address the meaning of human life, thereby defining and shaping our lives and cultures.

**Demonstration of minimum proficiency in a foreign language**

Students must demonstrate minimum proficiency in a foreign language and can do so in one of three ways:

- 1) Successfully complete one full year (6-8 s.h.) of college-level study of one foreign language. Note: Most foreign language courses at Central College are designated as “c” courses, and therefore can also be applied to meet the 6 s.h. cultural awareness/“c” requirement of the Core.
- 2) Take the placement exam before beginning course work at Central College and earn a score placing them beyond the first-year language courses. Note: This does not exempt students from the 6 s.h. cultural awareness/“c” requirement of the Core.
- 3) Take the placement exam before beginning course work at Central College, earn a score placing them in the second semester of the first-year language sequence, and then enroll in and successfully complete the second semester course.
- 4) Request proficiency testing in a language not taught at Central College. The student must petition the chair of the Cross Cultural Division during the first semester at Central College to take a proficiency exam or interview in the language. The division chair will arrange for testing at another college or university. Costs involved will be the responsibility of the student.

*Note: Students who place beyond the first semester, complete additional language course work, and earn a grade of “C” or better are eligible for credit by proficiency (see “Credit by Proficiency” section of this catalog).*

**Core “Double-Counting”**

Core designations fall into two categories:

**Group One: f, x**

**Group Two: c, n, a, h, m, q, r, s, t**

Courses listed with more than one Group Two Core designation can be used to fulfill only one of the Group Two Core requirements, chosen by the student. (Students should contact the academic records and registration office to make alternate Core designation assignments.) Courses listed with both a Group Two and a Group One Core designation can be used to fulfill both of these Core requirements.

Students with a disciplinary/departmental major may count a maximum of 10 semester hours of credit earned in the major discipline toward satisfying Core requirements. This may include any of the following, provided the total does not exceed 10 s.h.:

- up to 6 s.h. applied toward the Central foundations (*f*) requirement;
- up to 2 s.h. applied toward the experiential (*x*) requirement;
- up to 4 s.h. applied toward any Group Two Core requirement (*c, n, a, h, m, q, r, s, t*)

Students with general studies or interdisciplinary majors have no limitations on how many credits earned in the major may count toward the Core.



# ACADEMIC POLICIES

## Academic Appeals

Students who wish to appeal an academic policy or graduation requirement must file a petition with the curriculum committee. Forms are available from the academic records and registration office. Rules have been established by faculty in support of good educational practice. Neither negligence nor ignorance of rules is regarded a good reason for granting approval.

## Semester calendar

At Central College, the academic year is divided into two 16-week semesters and a summer term. Students normally enroll for 15 semester hours of credit each semester, enabling them to complete, on average, 30 semester hours of credit per academic year and 120 semester hours of credit – the minimum required for graduation – throughout four years.

## Application for Graduation and Participation in Commencement

Students notify the academic records and registration office of their intent to graduate and participate in commencement by filing an application for graduation at least two semesters prior to the intended date of graduation. Applications are due as follows:

<u>Anticipated Completion Month</u>	<u>Graduation Application Due</u>
May	Due May 1, one year prior
August	Due August 1, one year prior
December	Due December 1, one year prior

Seniors who have applied for graduation will have their names listed in the commencement program and are expected to participate in the commencement ceremony.

Central College holds one commencement ceremony in May of each year. August and December graduates may request permission to participate in the commencement ceremony prior to the anticipated completion date if:

- student is enrolled during the spring semester;
- the student is in good academic standing, and
- student is within 17 semester hours of completing graduation requirements, and
- student is able to complete all remaining graduation requirements by the end of the fall semester following the commencement ceremony.

Students requesting an exception to the above policy must request, in writing, permission to participate from the registrar.

## Graduation with honors

Students who achieve a cumulative grade point average of at least 3.5 may be recommended by the faculty for commencement distinctions. The degree may be granted cum laude for those students with a cumulative GPA of 3.50-3.699, those with magna cum laude for those with a cumulative GPA of 3.70-3.899, and summa cum laude for those with a cumulative GPA of 3.90 or above. No student with more than one grade below C- during the last three years at the college will be considered for academic distinction.

Students who transfer to Central no later than the beginning of their junior year and complete at least 60 s.h. at Central are eligible for the honors, but only their performance at Central College will be considered.

## Grading system

Central employs the following grading system:

A	4.0 grade points per semester hour
A-	3.7 grade points per semester hour
B+	3.3 grade points per semester hour
B	3.0 grade points per semester hour
B-	2.7 grade points per semester hour
C+	2.3 grade points per semester hour
C	2.0 grade points per semester hour
C-	1.7 grade points per semester hour
D+	1.3 grade points per semester hour
D	1.0 grade points per semester hour
D-	0.7 grade points per semester hour
F (Failure)	0 grade points per semester hour
P (Pass)	<i>not applicable</i>
I (Incomplete)	<i>not applicable</i>
W (Withdrawal)	<i>not applicable</i>
NR (No Record/No Pass)	<i>not applicable</i>
AUD (satisfactory audit)	<i>not applicable</i>

Grades of P, I, W, NR, and AUD are not included when calculating grade point average. Only courses completed at Central College on the Pella campus, abroad, Chicago or Washington D.C. are used to calculate the grade point average.

### **Incomplete (“I”) grade**

The incomplete grade “I” is a temporary grade indicating that work for the course is not complete. Instructors may assign an incomplete grade in a course that the student cannot complete on time due to extenuating circumstances, such as major illness or a death in the family, by filing an Incomplete Grade Request form with academic records and registration prior to the end of the current grading period. The date by which a student must complete a course is determined by the course instructor, but may not be more than one semester after the last day of the term in which the incomplete was awarded. At the time of the incomplete request, instructors will provide the grade the student is currently earning in the course which is the grade the student can expect to receive if the course is not completed by the agreed-upon deadline. In extenuating circumstances, requests for an extension beyond one semester should be made, in writing, to the assistant academic dean prior to the previously approved deadline. Both the instructor and student must agree to the extension.

### **Withdrawn (“W”) grade**

A grade of “W” indicates a student has either withdrawn from college or withdrawn from a particular course after the course drop and add period (typically the first 10 days to two weeks of class). The “W” grade is recorded on the transcript, but no credit is given. A student may not withdraw from a course after the end of the 12th week of class.

### **Pass (“P”)/No Record (“NR”) grades**

With the approval of the advisor and course instructor, junior- and senior-level students may elect to attempt a maximum of 20 s.h. outside core, major, or minor requirements, and those courses required for certification, on a pass/no record basis. Courses offered on a pass/no record only basis may be used at the discretion of the department to meet major or minor requirements. Credit and a P (pass) grade is granted provided the student has earned the equivalent of a ‘C’ grade or better. A ‘P’ grade will have no effect on the grade point average. Students who earn a grade below a ‘C’ will not receive credit for the course and an ‘NR’ (no record) grade will appear on the transcript. NR grades will have no effect on the grade point average. A student must submit an approved pass/no record option form to the academic records and registration office before the end of the 10th day of classes.

### **Grade Appeals**

A student who believes his/her final grade in a course is incorrect should first review the syllabus and collect graded assignments. The student should then contact the faculty member of the course as soon as possible to discuss the perceived problem and to request that the grade be reviewed and refigured in case an error has been made.

If the student still believes the grade to be unfair or incorrect after this initial review, he/she should see the assistant dean who will review the class requirements with the student and help him/her to determine whether there is a reasonable basis for an appeal.

Students who wish to appeal must submit a written letter to the assistant dean within one month of the beginning of the semester following the semester in which the grade was received. The letter should explain in detail the basis for the appeal. The assistant dean will then discuss the case with the faculty member, and if further review is necessary, request the department chair, division chair or an appropriate designee to objectively review the appeal. These faculty colleagues will consult with the faculty member involved to help him/her determine whether the disputed grade was fair and consistent with published expectations for grading in the course. The assistant dean will convey the result of these discussions to the student.

Final responsibility for grades rests with the instructor of that class. If an instructor is no longer available at the time of appeal, disposition of the case will fall to the current department chair. Only grades issued by Central College faculty may be appealed. Grades from other institutions must be appealed at those institutions.

Students who believe the above process has been unfairly applied may further appeal to the dean of the faculty.

### **Dean’s list**

Students who complete at least 12 semester hours in which grades other than ‘P’ are assigned and earn at least a 3.5 grade point average in a given semester are named to the dean’s list for that semester.

### **Student Classification**

Freshman standing	0 - 26 semester hours
Sophomore standing	27 - 53 semester hours
Junior standing	54 - 83 semester hours
Senior standing	84 and above

### **Declaring a major**

By the end of the sophomore year, students must file a Declaration of Major/Minor form with academic records and registration in order to be eligible to register for the third year (or 5<sup>th</sup> semester) of study. Students are required to complete the major requirements in effect at the time the student submits the form.

## Registration

### General information

Students register for courses several months in advance of each semester and have several opportunities to make changes to their schedules (see below). New students starting in the fall semester generally register for courses during New Student Orientation in the preceding summer. All students who have not made satisfactory arrangements with the student accounts office for payment of all tuition and fees may 1) be ineligible to register for courses and/or 2) have their registration in courses cancelled.

Students themselves are responsible for registration in and official withdrawal from courses. Class attendance does not constitute registration in a course; likewise, absence from a class – including never attending even one class session — does not constitute official withdrawal from a course. No credit will be awarded for courses in which a student is not properly registered, and no refunds will be given for courses from which students have not officially withdrawn.

Students who plan on being considered “full-time” (enrolled in at least 12 semester hours in a given semester) for financial aid, athletics, insurance, or any other purpose, must be attentive to the number of credits for which they are officially enrolled. Students enrolled in fewer than 12 semester hours in any semester will have their financial aid reduced according to state and federal regulations. Student athletes enrolled in fewer than 12 semester hours will be ineligible for competition in such semesters. It is each student’s sole responsibility to know when they have dropped below full-time status and what the ramifications of doing so are.

### Changes in registration

Registration change forms are available from academic records and registration or my.central.edu. Policies governing such changes are as follows:

1. Registration changes (withdrawals, additions, substitutions) must be approved by students’ academic advisor and, at times, the course instructor, as well.
2. Full-semester courses dropped during the official drop/add period (typically the Friday of the first full week of classes; see current academic calendar for drop/add dates) will not appear on the transcript.
3. Courses dropped after the official drop/add period and before the end of the 12th week of the semester will appear on transcripts with a grade of “W” (withdrawn), and no tuition or fee refunds will be made.
4. Withdrawal from any courses after the end of the 12th week of the semester is not permitted and students will receive the grade earned as determined by the instructor.
5. Under unusual circumstances, a student may appeal to the assistant dean of academic affairs for a waiver of these policies.

For courses that do **not** meet for the entire semester (for example, 1 s.h. courses such as COLL 116, EXSC 135, MUS 110, and many others):

1. Students may withdraw only through the first week of class without a transcript notation.
2. Withdrawals after the first week but before 75 percent of the regularly scheduled class sessions have been conducted will be noted with a grade of “W” on the student transcript.
3. Withdrawal after 75 percent of the regularly scheduled class sessions have been conducted is **not** permitted and a grade (A-F, P, NC) will be issued by the instructor.

### Withdrawal

Students who wish to withdraw entirely from the college must complete a withdrawal form in the student life office and must have an exit interview with the director of academic support services. Students living on campus who withdraw from the college must vacate their residence hall room within 24 hours. Students who withdraw prior to the start of classes or during the official drop/add period will be dropped from their courses without a transcript notation. Students who withdraw after the official drop/add period and before the end of the 12<sup>th</sup> week of class will receive a ‘W’ (withdraw) grade on the transcript for each full-semester course they are currently registered. Students who withdraw after the 12<sup>th</sup> week of the term will receive the grade earned in the course as determined by the instructor. The courses and term for which the student enrolled may be counted for satisfactory academic progress purposes. Students who received financial aid will have the term counted as one of their terms of financial aid used toward the maximum financial aid eligibility. For refund policy information see ‘College Costs.’

A transcript notation will indicate that a student has withdrawn from the institution (i.e. Withdrawn MM/DD/YYYY). Students who withdraw from the college and later wish to re-enroll should consult the policies governing re-admission.

### Administrative withdrawal

When a student has missed all classes for 10 consecutive class days, the college will begin the process to administratively withdraw the student from the college. The student will be notified by registered mail and a student signature procured. Students who are withdrawn from the college must vacate their campus residences within 48 hours of having been withdrawn. For refund policy information see ‘College Costs.’

A transcript notation will indicate that a student has withdrawn from the institution (i.e. Withdrawn MM/DD/YYYY).

### **Disciplinary/academic suspension and dismissal**

Students may be suspended or dismissed from the college at any time during the semester. Students who are suspended or dismissed must vacate their rooms within 24 hours. Students who are suspended or dismissed after the official drop/add period and before the end of the 12<sup>th</sup> week of class will receive a 'W' (withdraw) grade on the transcript for each full-semester course they are currently registered. Students who withdraw after the 12<sup>th</sup> week of the term will receive the grade earned in the course as determined by the instructor. The courses and term for which the student enrolled may be counted for satisfactory academic progress purposes. Students who received financial aid will have the term counted as one of their terms of financial aid used toward the maximum financial aid eligibility. For refund policy information see 'College Costs.'

A transcript notation will indicate that a student has been suspended or dismissed from the institution (i.e. disciplinary suspension MM/DD/YYYY or academic dismissal MM/DD/YYYY). Students who are suspended from the college and later wish to re-enroll should consult the policies governing re-admission.

### **Overload**

Students who wish to register for more than 18 semester hours will need permission from the assistant academic dean unless they are enrolled in one or more of the following overload exempt courses:

#### **Overload Tuition Exempt (no overload fees apply)**

1. Group Ensembles (MUSG courses)
2. 1 s.h. study abroad pre-departure courses
3. 1 s.h. Presidential Fellowship seminars
4. 1-2 s.h. Central Teachers Academy internships (EDUC-397)
5. Honors Enrichment courses.
6. Senior Honors Thesis courses/projects.
7. Honors Seminar (COLL-285H).
8. Private music instruction (MUSL courses)\*

*\*Students will incur the private lesson instructional fee; however, they do not pay per-credit tuition above and beyond the lesson fee.*

Students will be charged per-credit tuition for each non-tuition exempt semester hour in excess of 18. See Catalog section "College Costs" for more information. The Overload Request form is available from academic records and registration.

### **Repeating a course**

A student is permitted to repeat up to 20 semester hours of credit at Central. All course grades will appear on the transcript but only the most recent grade and credits earned will be count toward graduation and in calculation of the student's cumulative grade point average. The following restrictions apply to course repeats:

- Students may not repeat a course via directed study unless the student's first attempt was itself a directed study.
- Students may not audit a course in which they have previously earned an A-F or P grade.
- Students may not receive transfer credit for any course previously attempted at Central College.

## Transfer of credit

All transfer credit must be earned at a regionally accredited college or university with a grade of “C-” or better. Work to be considered for transfer credit must be submitted on an official transcript and mailed directly to Central College from the transfer institution or delivered in a sealed envelope with the registrar’s signature across the seal. Credit earned at non-regionally accredited institutions may be accepted if the transfer student’s first year at Central is completed successfully, as defined by the policies governing academic standing. All students are required to provide official transcripts for all institutions previously attended.

Additional policies governing the transfer of credit are as follows:

- Only official transcripts (not photocopies) of admitted students will be evaluated. Official transcripts are those noted as such by the issuing institution and that are delivered to Central in a sealed envelope.
- All official transcripts are evaluated for admitted and matriculated students by academic records and registration and determination of transfer credit is made by the registrar in consultation with departmental faculty. Course review may include the evaluation of the course’s specific educational goals, academic content, and the level of credit earned. Vocational, remedial and continuing education credits are not transferrable.
- Accepted credits may be used to satisfy course prerequisites, Core requirements or, at the discretion of departmental faculty, major and minor requirements. The registrar determines if credits fulfill any Core curriculum requirements, in consultation with faculty as needed. Students may not use transfer credit to fulfill either the Central Foundations (‘F’) or Intersections (COLL-110) requirements.
- Grades and credit earned in transfer courses are not included in the calculation of a student’s Central College cumulative or major grade point averages.
- A maximum of 66 semester hours (or 100 quarter hours) of transferable credit may be accepted from all two-year/community colleges attended.
- Students transferring to Central who at their previous institution(s) completed most or all of the courses required for their Central College major may be required to take up to 14 additional semester hours of credit in the major. Students transferring to Central should consult with the chair of their prospective major/minor to determine the number of Central College courses that will be required to complete the major or minor.
- Current Central College students who wish to take a course(s) at another institution and transfer the credit back to Central must submit a Request for Transfer Credit Pre-Approval form to the academic records and registration. Students may not repeat a Central course at any other college or university.
- Correspondence, TV/video, internet-based and experiential courses will not be accepted toward meeting any Core requirement.

## Advanced Placement (AP), College Level Examination Program (CLEP), International Baccalaureate (IB)

Students who earn a score of 3 or better on (AP) examinations will be granted a minimum of three semester hours of credit for each subject area. Some specific transfer course equivalencies will require scores of 4 or 5. Credit will not be awarded for an AP exam taken after matriculation to Central College. AP scores must be sent directly to Central from the College Board.

Students who earn a score of 50 or higher on College Level Examination Program (CLEP) examinations will receive three semester hours of credit for each subject area. CLEP scores must be sent directly to Central from the College Board.

Students who earn a score of 4 or better on International Baccalaureate (IB) higher level examinations (subsidiary level examinations are not accepted) will be granted a minimum of three semester hours of credit for each subject area. International Baccalaureate scores must be sent directly to Central from International Baccalaureate.

A list of approved AP, CLEP, and IB credit course prerequisites and Core equivalencies is available from academic records & registration.

## Credit by proficiency

Central College awards credit by proficiency in the areas of foreign languages, mathematics and computer science. Credit is awarded based on enrollment in and successful completion (as defined below) of upper-level courses predicated by sufficient scores on appropriate placement exams. Note: Students are not charged for any credit by proficiency awarded.

### Credit by proficiency in foreign languages

Credit by proficiency in foreign languages will be awarded as follows:

1. Students who place at the 122-level and subsequently complete a 122-level language course with a grade of “C” or better will be awarded 2 semester hours of 100-level language proficiency credit.
2. Students who place at the 221-level and subsequently complete a 221-level language course with a grade of “C” or better will be awarded 4 semester hours of 100-level language proficiency credit.
3. Students who place at the 222-level and subsequently complete a 222-level language course with a grade of “C” or better will be awarded 4 semester hours of 100-level language proficiency credit and 2 semester hours of 200-level language proficiency credit, for a total of 6 semester hours.
4. Students who place at the 321-level and subsequently complete a 321-level language course with a grade of “C” or better will be awarded 4 semester hours of 100-level and 4 semester hours of 200-level language proficiency credit, for a total of 8 semester hours of proficiency credit.
5. Students who place at the 322-level and subsequently complete a 322-level language course with a grade of “C” or better

will be awarded 4 semester hours of 100-level, 4 semester hours of 200-level, and 2 semester hours of 300-level language proficiency credit, for a total of 10 semester hours of proficiency credit.

6. Students who place beyond the 322-level and subsequently complete an upper-level literature or civilization course with a grade of “C” or better will be awarded 4 semester hours of 100-level, 4 semester hours of 200-level, and 4 semester hours of 300-level language proficiency credit, for a total of 12 semester hours of proficiency credit.

*Note: Of the credit by proficiency awarded, a maximum of 4 semester hours may be applied to meet the cultural awareness (“c”) Core requirement.*

*Note: All language-based credit by proficiency may be applied to the foreign language major or minor at the appropriate level.*

#### **Credit by proficiency in mathematics**

Credit by proficiency in mathematics will be awarded as follows:

1. Students who place in MATH 132Pm Calculus II and complete that course with a grade of “C” or better will be awarded 4 semester hours of proficiency credit for MATH 131Pm Calculus I.
2. Students who place in MATH 231Pm Multivariable Calculus and complete that course with a grade of “C” or better will be awarded 4 semester hours of proficiency credit for MATH 132Pm Calculus II and 4 semester hours of proficiency credit for MATH 131Pm Calculus I.

#### **Credit by proficiency in computer science**

A limited amount of credit by proficiency in computer science can be awarded for selected advanced students. Contact the chair of the MATH/COSC department for details.

## Academic warning, probation, suspension and dismissal

Central College admits students whom we believe have the background, desire and ability to be successful in college and to make adequate progress toward the degree. To graduate from Central College a student must earn 120 semester hours of credit and earn a minimum cumulative grade point average of 2.0 and a minimum grade point average of 2.0 or above in the major. Full-time students are expected to complete the requirements for graduation within four years (eight semesters) by completing an average of 30 credits each year.

The academic progress committee makes recommendations to the assistant dean of academic affairs regarding which students are to be warned, placed on probation, continued on probation, suspended or, as a last resort, dismissed if they are not progressing at the rates indicated below:

### **\*\*Student must have earned:**

- 23 semester hours at the end of one full academic year
- 47 semester hours at the end of two full academic years
- 73 semester hours at the end of three full academic years
- 100 semester hours at the end of four full academic years

### **and have a cumulative grade point average of at least:**

- 1.600 after 1 semester
- 1.700 after 2 semesters
- 1.800 after 3 semesters
- 1.850 after 4 semesters
- 1.900 after 5 semesters
- 1.950 after 6 semesters
- 2.000 after 7 semesters

*\*\*The faculty of Central College will consider and vote on a revised academic progress rate chart at the beginning of the 2009-10 academic year. The revised policy, if approved, will be effective immediately. Contact the registrar at [registrar@central.edu](mailto:registrar@central.edu) for a copy of the new policy, or visit [www.central.edu](http://www.central.edu) for the most recent version of the 2009-10 Catalog.*

### **Academic warning**

Students who meet the above minimum standards but whose academic performance warrants concern may receive a warning notice if one or more of the following is observed:

- A semester GPA below 2.000;
- A cumulative GPA less than 2.000, but greater than the minimum required for a classification;
- Earning fewer than 12 semester hours of credit in any term;
- Repeatedly earning credits at a pace slower than what is outlined for satisfactory progress.

Students who remain on academic warning for more than one semester may be placed on academic probation at the discretion of the academic progress review committee.

### **Academic probation**

When a student does not meet the cumulative grade point average and/or falls 15 or more credits below the number expected for their classification, the student will be placed on academic probation and the adviser and parents will be notified. Probation is a period during which students are expected to improve academically, and the time on academic probation can be an opportunity to clarify goals, identify campus resources, develop mentoring relationships, and grow the academic skill set. Students on academic probation are not eligible to participate in a) any NCAA Division III athletics, practices, competitions, or related activities; b) co-curricular musicals, theatrical productions, or music groups; c) student government leadership; d) CAB leadership; e) fraternity/sorority pledging; or f) similar college-sponsored co-curricular activities.

Students who improve their cumulative grade point average and total credits earned to the minimum level expected will be removed from academic probation. Students who make a noted improvement, but have not achieved the minimum levels outlined above will be continued on probation until their minimum grade point average and/or completed credits are at the level(s) expected for their classification. Students who demonstrate little or no improvement will be continued on probation, suspended or dismissed. Students on academic probation for more than one semester can have their financial aid reduced. See catalog section on Financial Aid Satisfactory Academic Progress for more information.

### **Academic suspension**

Students who do not benefit from academic probation or who demonstrate an abrupt decline in academic progress will be suspended and advisors and parents will be notified. Suspension is deemed appropriate when it is apparent that the student needs a break from studies at Central so they can prioritize their academic goals and ultimately return and achieve a Central degree. Students are suspended for a minimum of two semesters; however, first-year students may be allowed one semester of suspension. A transcript notation will indicate that a student has been suspended for academic reasons (i.e. academic suspension MM/DD/YYYY).

Students need to apply for re-instatement through the assistant academic dean and the application will be evaluated in light of interim experiences that reflect increased readiness to succeed academically. Students who reapply have greater likelihood of admittance if they show evidence of growth by successfully completing courses at another accredited institution, securing counseling to resolve personal issues, etc. For more information, contact the assistant academic dean.

### Academic dismissal

Students who consistently fail to meet satisfactory academic progress standards will be dismissed from the college and parents will be notified. Typically, students will be placed on academic probation or suspension prior to dismissal, although a particularly unsuccessful semester may result in dismissal. Students academically dismissed are not eligible to re-enroll at Central. A transcript notation will indicate that a student has been dismissed for academic reasons (i.e. academic suspension MM/DD/YYYY).

### Appeal of academic suspension or dismissal

Students who have been suspended or dismissed for academic reasons may appeal to the assistant academic dean in writing. Permission to continue may be granted if there is new evidence previously not available to the committee of factors that contributed to the unsuccessful semester; however, emotional appeals will not be considered. Students who successfully appeal a suspension or dismissal decision will be placed on academic probation. If the appeal is denied, the suspended student may reapply to the assistant academic dean after two semesters out of school. First-year students may reapply after one semester out of school.

### Mitigating circumstances

Central College may set aside the minimum standards for an individual student if it is determined that an unusual situation affected the student's progress. The academic progress committee will make this determination on behalf of the student. Mitigating circumstances would include:

- Documented serious/prolonged student illness or injury;
- Death of a close relative;
- Other circumstances may be considered on a case-by-case basis with supporting documentation.

### Amended student records

Acceptable academic progress is based on the student's official academic records at the time of the progress review. Records that are amended to reflect appropriate changes (for example, when an incomplete "I" grade is replaced by a standard letter grade), the academic progress committee may, at the point at which a student's record is officially amended, re-assess the student's academic status and, accordingly, warn, place/continue the student on probation, suspend or dismiss the student from the college. Suspension or dismissal will be effective immediately.

### Academic Honesty

The mission statement of Central College charges us to "promote the sensitivity to and appreciation of values essential for students to become effective citizens" at the local, national and international levels. These values include mutual respect and justice. Mutual respect for our colleagues and ourselves requires that we perform our work with integrity. Justice requires adherence to a process that upholds Central College's standards of academic integrity. Justice also requires creating an atmosphere of intellectual safety where individuals know their work is secure from being copied by others or abused in any way. An academic community with a high degree of integrity is essential if Central College is to succeed in its mission and sustain an academic center whose scholarship and graduates are valued.

Integrity in academic performance is about much more than grades earned, it is about how individual members of the academic community have earned their grades. Because you are responsible for and accountable to upholding these standards of integrity, this guide is provided as a resource.

A key component of academic integrity involves taking on the responsibility of being honest in the production of our work as scholars. Academic honesty requires that we do not plagiarize, engage in inappropriate or unauthorized collaborations, cheat, aid others in being academically dishonest, or engage in other activities that are dishonest, such as misusing technology or other college resources. Each of these violations of academic honesty threatens the overall integrity of Central College and all members of our academic community. Thus, these violations cannot and will not be tolerated.

### What to avoid

Plagiarism and/or misuse of ideas from other sources:

- Deliberately representing the work of someone else as your own work.
  - ◆ Using the ideas, text, formulas, images, or other materials produced by someone else and not acknowledging them as the source.
  - ◆ Cutting and pasting the work of others into your assignments without acknowledging the source of this material (includes material taken from the web or Internet as well as from books, journals, and mass media).
- Failing to provide proper and complete identification of sources for material incorporated into your own work whether text or graphics.
  - ◆ Not including proper within text citations and/or proper footnotes or endnotes.
  - ◆ Not including a full citation on the reference page for each and all sources used in producing your work.

Unauthorized collaborations:

- Working in teams or groups without the instructor's knowledge or permission.
- Turning in the same or very similar paper for multiple assignments without the knowledge and permission of each instructor involved.



**Cheating:**

- Copying homework or test answers/responses from other students and turning it in as your own work.
- Use of cell phones, personal data assistants (PDAs), calculators without the instructor's permission to gain an advantage on an exam or course assignment.
- Using unauthorized materials on an exam or assignment.
- Presenting others' work as one's own.
  - ◆ Obtaining work or unauthorized assistance from another student.
  - ◆ Obtaining work or unauthorized assistance from another source such as online term papers or help.
- Failing to report miscalculations in grading.

**Facilitation of dishonest academic activity:**

- Use of technology, such as cell phones or the Internet, to assist another student in gaining an illicit advantage on an exam or course assignment without the instructor's permission.
- Doing work for or providing work to another student who misrepresents this work as being his or her own.
- Assisting another student to earn a grade that is not by that student's own efforts.
- Failure to report cheating or other dishonest acts by others.
- Allowing others to view your work during exams or assignments, including leaving materials on a public access hard drive or other media.

**Improper use of technology:**

- Using technology in ways that violate copyrights.
  - ◆ Downloading copyrighted material from the Internet to avoid purchasing of the same material, i.e., music songs or video material.
  - ◆ Cutting and pasting material from the Internet into your own work without proper acknowledgement of the source(s).
- Sharing electronic files of copyrighted material with others and not having permission from the copyright holder.

**Falsification of credentials or grades:**

- Presenting false credentials.
- Altering or forging official university documents and/or files.

**Responsibilities for maintaining standards of Academic Honesty**

Each member of the Central College community is responsible and accountable for maintaining these standards of academic honesty if the integrity of the college is to be maintained.

**Instructors** must model academic honesty, as well as provide guidance and monitor academic projects to be certain that works are really created by the student. Course instructors must also be aware of changing laws regarding dishonesty (i.e.-copyright violations) in order to avoid problems both for themselves and their students. Should infractions of academic honesty rules occur, it is the duty of the faculty to report and act on any suspected dishonesty in a timely fashion.

**Students** must know the rules. When in doubt, inquire. Not every situation that can cause problems is covered in this section of the college catalog. Seek out and understand what is considered dishonest (both college rules and general societal rules) for submitting work that is your own and/or to appropriately document the source(s) from which work is taken. Maintain high standards for yourself and others.

**Administrators** administer the policies that govern reported dishonesty and encourage honesty in every endeavor.

**Procedures for violations of academic standards of integrity**

1. In a case of perceived academic dishonesty, the student will be presented with all of the evidence compiled by the instructor within the shortest possible time after the alleged infraction has been identified. The department chair will be notified of the situation before the instructor makes any disposition of the case. If the student denies the allegation, the evidence will be reviewed and evaluated by the department chair.
2. When a student is observed cheating on a test, the faculty member will confront the student as soon as is feasible but before the student leaves the classroom building. The instructor will take custody of the evidence, i.e., notes and the test. The student may be removed from the course and a failing grade issued. The faculty member will consult with the department chair and the assistant dean.
3. Depending on the nature of the offense, the penalty for academic dishonesty ranges from permission to redo the project (if the violation was inadvertent), failing the project, to failing the course. The instructor of the course will determine the penalty in each specific case in consultation with the assistant dean.
4. Students may appeal in writing to the assistant dean; a hearing will commence to review the evidence presented by the faculty member.

5. Every case of academic dishonesty will be reported to the dean of academic services of the college indicating the nature of the offense and the action taken. A letter of probation or warning will be sent to the student and a copy placed in the student's file. A second offense is grounds for dismissal from Central College. Serious violations may result in immediate dismissal. The college will keep all files for 5 years after graduation or withdrawal from Central College.

**Information on academic integrity**

For further information about plagiarism and other violations of academic integrity, go to the Geisler Library home page. Under the heading *Research Assistance*, you will find two specific resources devoted to issues of academic integrity. The first resource titled *Citing Resources* provides specific information on using the most common academic citation formats to properly cite sources both within the paper and on the reference page(s). The second resource titled *Copyright & Academic Integrity* provides information on the proper use of copyrighted material and how to avoid plagiarism of other people's materials.

# ACADEMIC DIVISIONS & DEPARTMENTS

The academic component of Central College is composed of seven academic divisions, most of which are further composed of one or more academic departments. Each division and its departments are listed below:

## Applied Arts Division

- Education
- Exercise Science

## Behavioral Sciences Division

- Communication Studies
- Economics/Accounting/Management
- Political Science
- Psychology
- Sociology/Anthropology

## College Division

## Cross-Cultural Studies Division

- Modern Languages
- Library

## Fine Arts Division

- Art
- Theatre
- Music

## Humanities Division

- English
- History
- Philosophy/Religion

## Natural Sciences Division

- Biology
- Chemistry
- Mathematics/Computer Science
- Physics

## Majors

A fundamental graduation requirement for all students is the completion of an academic major with a GPA of 2.000 in all courses applied toward the major. By the end of the sophomore year, students must file a Declaration of Major/Minor form with academic records and registration in order to be eligible to register for the third year (or 5<sup>th</sup> semester) of study. Students are required to complete the major requirements in effect at the time the student submits the form.

### Disciplinary/departmental majors

*Note: For students completing a disciplinary/departmental major, no more than 60 s.h. of credit earned in the major discipline may be applied toward the total 120 s.h. of credit required for graduation.*

Accounting	Elementary Education	Music Education
Anthropology (Cultural)	English	Philosophy
Art	Exercise Science	Physics
Athletic Training	French	Political Science
Biology	German Studies	Psychology
Business Management	History	Religion
Chemistry	International Management	Sociology
Communication Studies	Mathematics	Spanish
Computer Science	Mathematics/Computer Science	Theatre
Economics	Music	

### Interdisciplinary majors

Actuarial Science  
 Environmental Studies  
 General Studies\*  
 Individualized \*\*  
 Information Systems  
 International Studies (Latin America, East Asia, Africa, and Western European)  
 Linguistics  
 Natural Science  
 Social Science

\*A general studies major is designed by a student and the faculty member serving as director of the general studies major. Students should submit a completed "General Studies Major Proposal" form to the academic records and registration office prior to preregistration for a student's fifth semester.

\*\*Students may design a customized interdisciplinary major with the assistance of faculty members from two departments primarily involved in the major. The major must consist of 50-60 s.h. of courses and be comprised of lower-, middle-, and upper-level courses. It is in the student's best interest to submit a completed "Interdisciplinary Major Proposal" form to the academic records and registration office by the end of the sophomore year; proposals will not be accepted after the end of the first semester of the junior year.

**Minors**

A number of academic minors – that require in-depth study in a discipline without the breadth of a full major – are also offered, and can be taken in conjunction with one or more majors. To earn a minor the student must attain a GPA of 2.000 in all courses applied toward the minor. Additional policies governing specific minors are outlined in the sections addressing the majors. As with majors, minors must be officially declared by students. Students must submit a “Declaration of Major/Minor” form to the academic records and registration office prior to registration for the final semester of enrollment.

**Teaching endorsements**

Teaching endorsements at the elementary and secondary school levels are offered through Central’s education department. Note that teaching endorsements and academic minors (detailed above) are not the same. Contact the licensure officer in the education department for information regarding teaching endorsements.

**Cancellation of courses**

The college reserves the right to cancel courses in which enrollment is low or as a result of staffing changes.

**Curriculum changes**

The college reserves the right to modify its academic programs, courses and requirements. When changes are required, students will be informed promptly. Moreover, the college will make serious efforts to permit students to continue in their declared academic programs, although that cannot be guaranteed. When it is not possible for a student to complete the declared academic program at Central College, the college will assist the student in choosing an alternate academic program at Central and/or in transferring to another institution where the desired program is offered.

## Course numbering/coding system

### Course levels

Courses are numbered according to the level of difficulty at which they are taught. Course levels are:

100-199 Introductory-level courses

200-299 Intermediate-level courses

300-499 Advanced-level courses

### Special course numbers

Some course numbers designate certain kinds of courses, regardless of level or discipline. These special course numbers are as follows:

#### **x00-x09 Courses that do not count toward a major in the specific discipline**

#### **x83-x84 Field Experience**

An off-campus experience supervised by a faculty member designed to give students an opportunity to apply principles learned in academic course work in a professional/vocational setting.

#### **x85-x89 Seminar**

Seminars are special topics courses designed for small, highly specific groups of students (i.e., students with a certain major) in which the students are actively involved in all aspects of the course.

#### **x90 Topics**

Experimental or “one-time only” courses. The “Topics” designation enables faculty to offer timely courses of special interest to students.

#### **x91 Topics (Honors Level)**

Experimental or “one-time only” courses specifically designed for students admitted to Central’s Honors Program. The “Topics” designation enables faculty to offer timely courses of special interest to students.

#### **x92-x95 Practicum**

An on-campus work experience, directly supervised by a Central faculty member, is designed to give students an opportunity to apply principles learned in academic course work in a professional/vocational setting. Offered on a pass/no record only basis. Credit is arranged but not to exceed 3 s.h. without permission of the assistant dean of academic services.

#### **x96 Co-Op**

A full-time work experience, carrying variable college credit, in the area of the major. The co-op is monitored by Central faculty to meet appropriate academic and professional goals. Generally, enrollment in a co-op precludes enrollment in more than 3 s.h. of other course work during the co-op semester.

#### **x97 Internship**

Internships are short-term, supervised learning experiences in a practical work setting, under the direction of a professional in the field and overseen by a faculty person or Central representative. Internships are usually part time during the school year but can be full time in the summer. Some internships are paid positions, although many are not. In addition to the actual work responsibilities, students will fulfill an academic component, developed by the faculty supervisor. The faculty supervisor will also visit the student on site, if possible. Internships vary in credit, from one to six semester hours, based on the work required and the time on the job. Internships may not exceed six semester hours without permission of the assistant dean of academic services. As a general rule, 12-14 hours of work at the internship site per week for 14 weeks is worth three semester hours of credit. Internships are graded on a pass/no record basis.

#### **x98 Research**

Supervised advanced-level research directed by faculty members. 1-3 s.h.

#### **x99 Independent Study**

Students work one-on-one with a professor on an agreed upon topic not addressed as such elsewhere in the Central curriculum. 1-3 s.h.

*Note: As distinguished from Independent Study courses, directed study courses are those in which a student, working one-on-one with a professor, takes a standard, cataloged course. Directed Study courses are identical in content and rigor to their regularly offered versions.*

**Additional course codes**

Letters following the course numbers in the catalog provide additional information about the courses, as follows:

- f** Courses that meet the Central Foundations Core requirement
- c** Courses that meet the cultural awareness Core requirement
- x** Courses that meet the experiential Core requirement
- n** Courses that meet the non-western/minority Core requirement
- a** Courses that meet the arts Core requirement
- h** Courses that meet the historical perspective Core requirement
- m** Courses that meet the mathematical reasoning Core requirement
- q** Courses that meet the scientific inquiry Core requirement
- r** Courses that meet the religion Core requirement
- s** Courses that meet the social and behavioral inquiry Core requirement
- t** Courses that meet the textual interpretations Core requirement
- I** Courses that require instructor permission for registration
- P** Courses that have a prerequisite(s) that must be satisfied for registration

# ACCOUNTING

*Behavioral Sciences Division*

*Economics, Accounting and Business Management Department*

## Faculty

Debela Birru (chair), Lori Bell, Andrew Campbell, Jann Freed, Robert Maurer, Michael Murray, Brian Peterson, Jaclyn Rundle, Alan Terpstra, Sherrie Wilson

## Statement of philosophy

Central's accounting curriculum begins with a solid foundation in financial and managerial accounting rooted in the theoretical bases of economics and other liberal arts including ethics, communication, mathematics and statistics. In upper-level courses, students grow through coverage of a variety of theoretical and applied financial accounting topics, as well as cost, tax and auditing. Computers are used both within and outside the classroom as learning and professional productivity tools, emphasizing the use and preparation of spreadsheets and databases for accounting applications. Small classes facilitate interactive learning processes. The accounting seminar provides opportunities for students to polish their research and presentation skills.

The program prepares students professionally for careers in public, private, government and not-for-profit accounting. Students are encouraged to study abroad with one of Central's international programs to enhance their development as global citizens, or with Central's Chicago program and the Washington, D.C. program, to pursue an internship (available in Europe, Chicago, Washington, D.C., and regionally) and to become active in various student educational and/or service organizations and other co-curricular activities.

Central's accounting graduates are well qualified, as demonstrated by recent success, for national standardized professional exams such as the Certified Public Accountant (CPA) and the Certified Management Accountant (CMA), or to enter graduate or professional programs. Students can choose to complete the 150 semester hours required by most states, and of the American Institute of Certified Public Accountants (AICPA), at Central or pursue a graduate degree.

## Study abroad opportunities

Accounting majors who intend to participate in the study abroad program should discuss the options with their faculty advisors early in their college careers.

## Accounting Major Requirements (53 s.h.)

*Note: The accounting major may not be combined with the information systems major–accounting option.*

### 1. Complete all of the following:

ECON	112s	Principles of Microeconomics (3)
ECON	113Ps	Principles of Macroeconomics (3)
MATH	105m	Introduction to Statistics (4)
BMGT	251P	Principles of Management (3)
ACCT	241	Introduction to Financial Accounting (3)
ACCT	242Pm	Introduction to Management Accounting (3)
ACCT	341P	Intermediate Financial Accounting I (3)
ACCT	342P	Intermediate Financial Accounting II (3)
ACCT	343Pm	Advanced Management Accounting (3)
ACCT	344P	Individual Tax Accounting (3)
ACCT	347P	Accounting Information Systems (3)
ACCT	441P	Advanced Financial Accounting (3)
ACCT	442P	Auditing (3)
ACCT	485P	Accounting Research Seminar (1)

### 2. Complete one of the following:

ACCT	345P	Advanced Taxation (3)
ACCT	346P	Government and Non-Business Accounting (3)

### 3. Complete one of the following:

COSC	106	Introduction to Web Programming (3)
COSC	110m	Introduction to Computer Science (3)

### 4. Complete one ethics-related course from the Philosophy/Religion department; consult an Accounting faculty member for a list of acceptable courses.

**5. Complete one of the following:**

- COMM 268c Intercultural Communication (3)
- COMM 270 Public Speaking (3)
- COMM 340P Public Relations (4)
- COMM 342P Communication in Organizations (3)
- COMM 364P Argumentation (3)

**6. Complete all requirements for the Communication Skills Endorsement**

**A note about the CPA exam**

Students who wish to take the CPA exam in Iowa are advised to also take BMGT 331P, BMGT 332P, and BMGT 361Pm. Other students should consult the specific requirements of the state in which they intend to take the exam. Consult with a member of the accounting faculty concerning requirements of other national exams.

**Communication skills endorsement**

The department's communication skills requirement has three components: reading and writing, speaking, and professional development. The following are the minimum standards in each area:

**Reading and writing**

Students may satisfy the reading and writing requirement in any one of the following ways:

- ENGL 101f Composition with a grade of at least "B"; or
- ENGL 120Pft Introduction to Literature with a grade of at least "B-"; or
- ENGL 201P Technical Writing with a grade of at least "C+"; or
- Complete one of the following courses with a grade of at least "C":
  - ENGL 211-216 200-level English literature course
  - ENGL 240a The Personal Essay
  - ENGL 241a Short Story Writing
  - ENGL 343PIa Travel Writing

or other English course numbered 211 or above, with the approval of the department.

Alternately, a score of 4 or 5 on the AP English and Composition Examination or the AP English Literature and Composition Examination will be accepted to fulfill the reading and writing component of the Economics, Accounting and Management Department communication skills endorsement.

**Speaking**

Students must complete one of the following courses:

- COMM 160f Introduction to Communication Studies
- COMM 266a Readers Theatre
- COMM 268c Intercultural Communication
- COMM 270 Public Speaking
- COMM 340P Public Relations
- COMM 342P Communication in Organizations
- COMM 364P Argumentation

or complete significant communication experience approved by the Economics/Accounting/Management Department

**Professional development**

Students must successfully complete all of the following sessions in the professional development series, offered by the career services office:

1. Job Search Success
2. Resume/Cover Letter Writing
3. Interviewing Strategies
4. Dress for Success
5. Dining Etiquette

It is recommended that students complete this program by the end of their junior year. At the latest, the program should be completed by the end of the fall semester of the senior year.

The only acceptable alternative for students who have failed to attend the regularly scheduled sessions by the career services office will be to complete a 10-page research paper for each unmet requirement. The research paper must include an annotated bibliography containing a minimum of ten credible, authoritative sources. In addition, students will be required to make a 15-minute presentation to departmental faculty for each unmet requirement. The research papers and presentations must be completed at least three weeks prior to the beginning of the final exam week of the semester during which the student anticipates graduation.



### Final communication skills approval

Students must also successfully demonstrate a professional level presentation skill through the Accounting Seminar. EAM Department faculty require significant writing and presentation assignments in most Economics, Accounting and Business Management courses. By evaluating assigned course papers and presentations, EAM faculty can assess skill improvements throughout each student's academic program.

Students should be aware that mere completion of the specific Reading-Writing and Speaking requirements listed above does not guarantee departmental approval of a student's communication skills requirement. The Economics, Accounting and Business Management faculty members retain the right to continuously monitor every student's progress and make appropriate referral(s) to the Center for Academic Excellence or elsewhere for additional work.

### Typical sequence of major courses for the accounting major

#### *Freshman year*

ECON 112s Principles of Microeconomics  
 ECON 113Ps Principles of Macroeconomics  
 COSC 106 Introduction to Web Programming or  
 COSC 110m Introduction to Computer Science

#### *Sophomore year*

BMGT 242Pm Introduction to Management Accounting  
 BMGT 251P Principles of Management  
 MATH 105m Introduction to Statistics

#### *Junior and/or senior years*

ACCT 341P Intermediate Financial Accounting I  
 ACCT 342P Intermediate Financial Accounting II  
 ACCT 343Pm Advanced Management Accounting  
 ACCT 344P Individual Tax Accounting  
 ACCT 345P Advanced Taxation  
 ACCT 346P Government & Non-Business Accounting  
 ACCT 347P Accounting Information Systems  
 ACCT 441P Advanced Financial Accounting  
 ACCT 442P Auditing

**Note:** Philosophy/ethics course may be taken any year. Communication course may be taken after the first year. Other sequences of courses are possible to facilitate study abroad or some other off-campus experience. Consult a member of the accounting faculty for information.

### Accounting Minor Requirements (*18 s.h. minimum*)

#### 1. Complete all of the following:

ACCT 241 Introduction to Financial Accounting (3)  
 ACCT 242Pm Introduction to Management Accounting (3)  
 ACCT 341P Intermediate Financial Accounting I (3)  
 ACCT 342P Intermediate Financial Accounting II (3)

#### 2. Complete one of the following:

ACCT 343Pm Advanced Management Accounting (3)  
 ACCT 344P Individual Tax Accounting (3)  
 ACCT 346P Government and Non-Business Accounting (3)  
 ACCT 347P Accounting Information Systems (3)  
 ACCT 441P Advanced Financial Accounting (3)  
 ACCT 442P Auditing (3)

#### 3. Complete one of the following:

COSC 106 Introduction to Web Programming (3)  
 COSC 110m Introduction to Computer Science (3)

# ACTUARIAL SCIENCE

*Interdisciplinary Major*

## Faculty

Mark Mills (director)

## Statement of philosophy

The actuarial science major is specifically designed to prepare students for a career as an actuary. However, combined with the Central liberal arts education, students completing this major have a broad foundation that will prepare them for many different business-oriented careers.

Because an actuary must have both mathematical/technical skills and more general business skills, the major combines components from mathematics and business. Students completing the actuarial science major will have a good foundation in the material for the actuarial industry's Exam P (Probability), will have some background in the material for Exam FM (Financial Mathematics), and will have completed the actuarial industry's Validation by Educational Experience (VEE) requirements in Economics, Corporate Finance, and Applied Statistical Methods (Regression). (Students will still have to fulfill the VEE requirement in Applied Statistical Methods (Time Series) elsewhere.)

Internships are strongly recommended. They may be obtained through local or regional businesses and organizations, or potentially through one of Central's international program sites or the Chicago Metropolitan Center. This experience provides the student with rich learning opportunities and puts course work into practice.

## Major/minor restrictions

Actuarial Science majors cannot also declare a major in mathematics/computer science or a major or a minor in either business management or mathematics.

## Actuarial Science Major Requirements (58 s.h.)

### 1. Complete all of the following:

ACCT 241	Introduction to Financial Accounting (3)
ACCT 242Pm	Introduction to Management Accounting (3)
BMGT 251P	Principles of Management (3)
BMGT 361Pm	Corporate Finance (3)
BMGT 362P	Principles of Investment (3)
COSC 110m	Introduction to Computer Science (3)
ECON 112s	Principles of Microeconomics (3)
ECON 113Ps	Principles of Macroeconomics (3)
ECON 281Pm	Research Methods in Economics (3)
MATH 131Pm	Calculus I (4)
MATH 132Pm	Calculus II (4)
MATH 215Pm	Applied Statistics (4)
MATH 231Pm	Multivariable Calculus (3)
MATH 240Pm	Linear Algebra (4)
MATH 330Pm	Mathematical Modeling (3)
MATH 341Pm	Probability (3)

### 2. Complete all requirements listed below for the Communication Skills Endorsement.

#### Communication skills endorsement

The major's communication skills requirement has three components: reading and writing, speaking, and professional development. The following are the requirements in each area.

#### Reading and Writing

Students satisfy the reading and writing requirements by completing ENGL 201 Technical Writing with a grade of at least "C".

#### Speaking

Students must complete one of the following courses with a grade of at least "C":

COMM 160f	Introduction to Communication Studies
COMM 270	Public Speaking
COMM 340P	Public Relations
COMM 342P	Communication in Organizations
COMM 364P	Argumentation <u>or</u> complete a significant communication experience approved by the program's faculty.

### Professional development

Students must successfully complete all of the following sessions in the professional development series, offered by the career services office:

1. Job Search Success
2. Resume/Cover Letter Writing
3. Interviewing Strategies
4. Dress for Success
5. Dining Etiquette

It is recommended that students complete the professional development series by the end of their junior year.

### Final communication skills approval

Successful completion of the aforementioned requirements does not guarantee program approval of a student's communication skills requirements. The program's faculty members retain the right to continuously monitor every student's progress and make appropriate referral(s) to the Center for Academic Excellence or elsewhere for additional work.

### Typical sequence of courses for the actuarial science major

#### *Freshman year*

ECON 112s Principles of Microeconomics  
 ECON 113Ps Principles of Macroeconomics  
 MATH 131Pm Calculus I  
 MATH 132Pm Calculus II  
 Central core courses and electives

#### *Sophomore year*

ACCT 241 Introduction to Financial Accounting  
 ACCT 242Pm Introduction to Management Accounting  
 COSC 110m Introduction to Computer Science  
 MATH 215Pm Applied Statistics

#### Sophomore year (continued)

MATH 231Pm Multivariable Calculus  
 MATH 240Pm Linear Algebra  
 Central core courses and electives

#### *Junior and/or senior years*

BMGT 251P Principles of Management  
 BMGT 361Pm Corporate Finance  
 BMGT 362P Principles of Investment  
 ECON 281Pm Research Methods in Economics  
 MATH 330Pm Mathematical Modeling  
 MATH 341Pm Probability  
 Central core courses and electives

### Additional recommended courses

Students pursuing the Actuarial Science major are encouraged to take additional courses as their schedules allow. While the courses below are not required for the major, having them will better prepare students for future actuarial exams and job experiences.

BMGT 331P Business Law I  
 BMGT 332P Business Law II  
 BMGT 363P Advanced Financial Management  
 COSC 130Pm Data Structures  
 ECON 212Pms Intermediate Microeconomics  
 ECON 213Ps Intermediate Macroeconomics  
 ECON 324Ps Monetary Theory and the Financial System  
 MATH 342Pm Statistics  
 MATH 370Pm Numerical Analysis

# ANTHROPOLOGY (CULTURAL)

*Behavioral Sciences Division*

*Sociology/Anthropology Department*

## Faculty

Jeffrey Bass, Timothy Knickerbocker

## Statement of philosophy

The sociology and anthropology department offers students the option of choosing between either sociology or cultural anthropology majors.

Cultural anthropology asks what it means to be human. Holistic and broad in scope, cultural anthropologists have an interest in all humans in all times and places. In a Western setting, such as Central College, there is an emphasis on learning about indigenous peoples and peoples from non-Western societies, with the goal of preparing ourselves to understand better an increasingly diverse and culturally dynamic world.

The cultural anthropology major is structured to provide students with a strong grounding in cultural anthropology within an interdisciplinary framework. The required courses offer a combination of academic anthropological knowledge and real world experiences, which gives students the foundation they will need to put their anthropological training to use after college. The major is also structured in a way that allows students to easily combine with another program of study (e.g. foreign language major or minor, political science major or minor, not-for-profit management interdisciplinary program, etc.), providing even more opportunities for students to turn their individual interests into credible life endeavors.

## Communication Skills Endorsement

The Sociology/Anthropology department begins to evaluate each student's reading, writing, and speaking skills one semester after the student declares his/her intention to major in cultural anthropology. All available evidence will be used including results of tests, grades received in courses and information supplied by department members. Students may be required to demonstrate communication proficiency either by providing a portfolio of their writing or by writing an essay on a broad topic of anthropological significance. Students will receive either a departmental endorsement or an outline of procedures that may include taking composition courses, developmental reading or speaking courses and working with the skills center.

## Study Abroad and Language

Living in another culture and learning a second language have been important aspects of anthropology from its inception, since learning about another culture means immersing oneself in the local scene and interacting with people in their native language. Also, cultural anthropology majors who have lived in another culture and have a proficiency in a second language will have a wider range of employment opportunities outside of anthropology available to them than majors who do not. Therefore, studying abroad for at least one semester and second language acquisition are strongly encouraged for all cultural anthropology majors.

## Cultural Anthropology Major Requirements (34 s.h.)

### 1. Complete all of the following (13 s.h.):

ANTH	120ns	Introduction to Cultural Anthropology (3)
ANTH	366Pc	Ethnographic Field Methods (3)
ANTH	462Pcs	Culture Theory (3)
ANTH	465Ps	Applied Anthropology (4)

### 2. Complete 21 s.h. of elective courses, of which:

\* at least 12 s.h. must be anthropology (ANTH) or sociology (SOC) courses

\* up to 9 s.h. may be, upon ANTH faculty approval, from the following list:

COMM	268c	Intercultural Communication (3)
ENGL	211nt	Literature of India and the Pacific (3)
ENGL	212nt	African and Caribbean Literature (3)
ENGL	330	Principles of Linguistics (3)
ENGL	335s	Sociolinguistics (3)
HIST	150h	Latin American Civilization (3)
HIST	171nh	Modern East Asian Civilization (3)
HIST	180nh	Modern African Civilization (3)
HIST	262nh	Mideastern Civilization (3)
HIST	271nh	History of Modern China (3)

HIST	275nh	History of Modern Japan (3)
MATH	105m	Introduction to Statistics (4) <i>or</i> PSYC 335m <i>Fundamentals of Statistics</i> (4)
MUS	114na	World Music (3)
PHIL	128nt	Philosophies in the Far East (3)
POLS	120ns	Politics in Foreign Countries (3)
POLS	140fs	Introduction to International Politics (3)
POLS	223hs	Contemporary Europe (3)
PSYC	334s	Social Psychology (3)
REL	230nr	Asian Religions (3) <i>or</i> REL 330Inr <i>Readings in Asian Religions</i> (4)
REL	235nr	Islam (3) <i>or</i> REL 335Inr <i>Readings in Islam</i> (4)

*Note: International education and honors courses may be applied toward the major upon ANTH departmental approval.*

### **Cultural Anthropology Minor (18 s.h.)**

Complete ANTH 120ns Introduction to Cultural Anthropology (3), and an additional 15 s.h. of ANTH and/or SOC courses, with at least 6 s.h. at the 300-400 level.

# ART

*Fine Arts Division  
Art Department*

## Faculty

Brian Roberts (chair), Mathew Kelly, Ransook Yoon

## Statement of philosophy

Central College's Art Department is rooted in the belief that art functions as a form of communication and that the visual arts are a primary mode of inquiry within a broad liberal arts experience. The acquisition of critical thinking skills, in addition to formal and technical skills, is stressed at both the beginning and advanced levels for both the major and non-major.

The department provides students with a range of experiences with the world of art. In the studio setting, students work firsthand with the materials and techniques necessary to create competent works of art. Emphasizing the elements of art and conceptual development, these classroom situations allow students to work closely with their instructor to realize their aesthetic ideas.

In addition to the classroom experiences, our students are active in a variety of student organizations and co-curricular activities. All of these activities contribute to the total development of our students and help prepare them to become leaders for the 21st century.

## Study abroad opportunities

Art students are encouraged to participate in one of Central's international programs and/or the Chicago metropolitan program. Art courses are available in several of the European centers including Leiden, Merida and Vienna. Students should consult with the department faculty and the office of internships and career services for learning opportunities available through internships with such organizations as galleries and museums. Internships are also an integral part of the Chicago program.

Art courses offered on study abroad programs may apply to the major. Students should consult with the international education office and the art department concerning such courses.

## Art Major Requirements (42 s.h.)

### 1. Complete all of the following:

- ART 130a Drawing I (3)
- ART 135a Introduction to Visual Language (3)
- ART 137a 3-D Design (3)
- ART 221ah History of Art: Ancient through Medieval (3)
- ART 222ah History of Art: Renaissance through Modern (3)
- ART 325ah History of Modern Art (3)
- ART 425P Art Theory and Criticism (3)
- ART 430P Senior Seminar in Art (3) - includes senior exhibit

### 2. Complete 18 s.h. of ART electives

### 3. Complete all requirements for the Communication Skills Endorsement

*Note: ART 101fa Introduction to the Visual Arts (3) will not count toward the art major (above) or the art minor (below).*

## Art Minor Requirements (18 s.h.)

### 1. Complete 18 s.h. of ART courses, including at least one art history course

## Visual Communication Minor Requirements (21 s.h.)

### 1. Complete all of the following:

- ART 130a Drawing (3)
- ART 135a Introduction to Visual Language (3)
- ART 238P Graphic Design (3)
- COMM 160f Introduction to Communication Studies (3)
- THEA 173a Introduction to Theatrical Design (3)

**2. Complete one of the following:**

- COSC 106 Introduction to Web Programming (3)
- COSC 110m Introduction to Computer Science (3)

**3. Complete at least 3 s.h. of Practicum or Internship, as approved by program coordinator**

**Elementary Teaching Licensure – Art**

Students seeking teaching licensure in art at the elementary level must, in addition to the above-listed requirements of the art major, take *ART 210 Elementary School Art*. For detailed information on all teaching licensure issues, please contact the licensure officer in the education department.

**Communication skills endorsement**

First-year students who indicate their interest in an art major are initially evaluated by means of the reading/writing assessment scores provided at the time of matriculation. Based on that information, students are directed to enroll in basic writing/reading courses, such as ENGL 101 Composition and ENGL 200 Modes of Argument in Reading and Writing.

As art majors, students are required to enroll in three art history courses that will monitor communication skills by means of classroom discussion, oral presentations and essays. Students must receive at least a C grade in these courses in order to meet the communication skills requirements of the department.

As senior art majors, students are required to enroll in the senior capstone course (ART 430), which requires daily reading, writing and speaking. Journals are maintained during the semester and are graded for content and style. Students must receive at least a C grade in this course in order to meet the communication skills endorsement of the art department. In addition, students are required to make a formal oral presentation and written commentary in conjunction with their senior exhibitions in order to receive the communication skills endorsement required for graduation.

**Typical sequence of major courses for the art major**

***Freshman year***

- ART 130a Drawing I
- ART 135a Introduction to Visual Language
- ART 137a 3-D Design
- ART 221ah History of Art: Ancient through Medieval  
or ART 222ah History of Art: Renaissance through Modern

- 200 level studio electives
- 200 level art history electives

***Junior year***

- 200/300 level studio electives
- 200/300 level art history electives
- ART 425P Art Theory and Criticism

***Senior year***

- 200/300 level studio electives
- 200/300 level art history electives
- ART 430P Senior Seminar in Art

# ATHLETIC TRAINING

*Applied Arts Division  
Exercise Science Department  
Athletic Training Education Program*

## Faculty

John Roslien (program director), Dustin Briggs, Leslie Duinink, Chris Viesselman

## Statement of philosophy

The athletic training education program will provide health science experiences in collaboration with health professionals enabling athletic training students to master the competencies and proficiencies to be competent, professional entry-level athletic trainers. Athletic training education will occur within the liberal arts framework and the mission of Central College. This will occur through interactions with staff, faculty, mentors, professionals and peers within the college and the Pella community.

The Athletic Training Education Program is accredited by the Commission on Accreditation of Athletic Training Education (CAATE). Students wishing to prepare for the Board of Certification (BOC) examination and become a BOC certified athletic trainer (ATC) must complete the Athletic Training major.

The primary objective of the Central College Athletic Training Education Program is to prepare entry-level athletic trainers for future challenges. Athletic training program students are provided with clinical experiences that develop and enhance their skills. These experiences are an extension of the academic classroom and allow students to master clinical proficiencies and competencies.

To receive an application and get more information regarding this program, contact John Roslien, program director as soon as possible. Or visit [www.central.edu](http://www.central.edu).

## Athletic Training Major Requirements (53 s.h.)

### 1. Complete all of the following:

AT	223P	Level 1: Clinical Rotation I (1)
AT	224P	Level 1: Clinical Rotation II (1)
AT	272P	Athletic Injury Assessment: Lower (3)
AT	273P	Athletic Injury Assessment: Upper (3)
AT	323P	Level 2: Clinical Rotation I (2)
AT	377P	Therapeutic Modalities (3)
AT	378P	Therapeutic Exercise (3)
AT	423P	Level 3: Clinical Rotation I (2)
AT	424P	Level 3: Clinical Rotation II (2)
AT	472	Medical Conditions for the Athletic Trainer (3)
BIOL	131q	Introduction to Cells (4)
EXSC	149f	Foundations of Health and Exercise Science (3)
EXSC	151	First Aid and Sports Injuries (3)
EXSC	217I	CPR for the Professional Rescuer (1)
EXSC	234P	Sports Nutrition (3)
EXSC	254P	Human Anatomy and Kinesiology (4)
EXSC	356P	Operation & Management of Exercise and Sports Medicine Facilities (3)
EXSC	357P	Fitness Assessment and Exercise Prescription (4)
EXSC	460P	Exercise Physiology (3)
EXSC	461P	Exercise Physiology Lab (2)

### 2. Complete all requirements for the Communication Skills Endorsement.

#### Communication skills endorsement

A communication skills endorsement from the athletic training department indicates students have achieved college level mastery in both the written and verbal domain. Communication skills will be assessed using predetermined rubric tools during the following classes: EXSC 149, AT 223, AT 224, EXSC 254, EXSC 356, EXSC 357, and EXSC 460. Any students assessed as needing further development will be referred to the Department Chair for a prescriptive plan to improve their communication skills.



## A typical four-year schedule for an Athletic Training major

### *Freshman year*

BIOL 131q Introduction to Cells  
 EXSC 149f Foundations of Health & Exercise Science  
 EXSC 151 First Aid and Sports Injuries  
 Core courses and electives

### *Sophomore year – fall semester*

AT 223P Level 1: Clinical Rotation 1  
 AT 254P Human Anatomy and Kinesiology  
 EXSC 234P Sports Nutrition  
 AT 272PI Athletic Injury Assessment: Lower  
 Core courses and electives

### *Sophomore year – spring semester*

AT 224P Level 1: Clinical Rotation 2  
 EXSC 260 Substance Abuse  
 AT 273PI Athletic Injury Assessment: Upper  
 AT 377P Therapeutic Modalities  
 Core courses and electives

### *Junior year – fall semester*

AT 323P Level 2: Clinical Rotation 1  
 EXSC 356P Operation & Management of Exercise and  
 Sports Medicine Facilities  
 AT 378P Therapeutic Exercise  
 EXSC 357P Fitness Assessment & Exercise Prescription  
 Core courses and electives

### *Junior year – spring semester*

International/Internship Experiences  
 Core courses and electives

### *Senior year – fall semester*

AT 423P Level 3: Clinical Rotation 1  
 AT 472 Medical Conditions for the Athletic Trainer  
 EXSC 460P Exercise Physiology  
 EXSC 461P Exercise Physiology Lab  
 Core courses and electives

### *Senior year – spring semester*

EXSC 217I CPR for the Professional  
 AT 424P Level 3: Clinical Rotation 2  
 Core courses and electives

## Admission to the Athletic Training Education Program

New students interested in applying to the athletic training education program and majoring in athletic training should contact the program director as soon as possible. Application and interview process will occur prior to beginning the program in the fall of the student's second year. The requirement to complete the ATEP is 5 semesters of coursework over three years. There are no required courses during your fourth semester. To receive an application, policies and procedures handbook, copy of the technical standards, transfer policy, learn GPA requirements, and to get the most current information regarding this program, contact the director of the athletic training education program, or go to [www.central.edu](http://www.central.edu)

## Transfer Policy for the Athletic Training Education Program

Transfer students will be considered on an individual basis following admission to the college and the completion of all Athletic Training Education Program application procedures. (See above) All required courses in the Athletic Training Education Program and athletic training competencies and proficiencies must be audited or completed in the Central College Athletic Training Education Program. Central's Athletic Training Education Program is a three-year/five semester program. To receive an application, policies and procedures handbook, copy of the technical standards, transfer policy, learn GPA requirements, and to get the most current information regarding this program, contact John Roslien, Director of the Athletic Training Education Program, or go to [www.central.edu](http://www.central.edu)

## Transfer Students from CAATE programs

Students with previous documented clinical experience from a CAATE accredited athletic training program who transfer to Central College and meet all the application requirements may be eligible for admission to the Athletic Training Education Program upon enrollment in their first semester.

All application materials must be completed prior to beginning the program.

To receive an application, policies and procedures handbook, copy of the technical standards, transfer policy, learn GPA requirements, and to get the most current information regarding this program, contact the director of the athletic training education program, or go to [www.central.edu](http://www.central.edu)

Transfer Requirements:

1. Initiate and complete the application process with the athletic training education program director.
2. Documentation of a minimum of 100 hours of clinical experience supervised by a BOC certified athletic trainer or a state credentialed athletic trainer in a CAATE program.
3. Provide a recommendation from the student's primary supervising athletic trainer at the previous institution and include a copy of his/her BOC certification card. Also provide two additional recommendations from a faculty member, academic advisor, program director or a different clinical supervisor at the student's previous institution.

**Transfer Students from CAATE programs Required Course Work**

Students meeting the transfer criteria above may be admitted without previously completing EXSC 149 or BIOL 131. Credit for these classes must be transferred in or the course must be completed within the first year after having been accepted in the program. EXSC 151 must be completed at Central College.

**Transfer students should contact the Director of the Athletic Training Education Program as soon as possible in their application process to the college.**

# BIOLOGY

*Natural Sciences Division*

*Biology Department*

## Faculty

Russell Benedict (chair), Glenn Barnett, Anya Butt, Ellen Du Pré, Paulina Mena, Nicole Palenske, Kristin Siewert, Paul Weihe

## Statement of philosophy

Advances in such critical areas as the environment, genetics and medicine clearly show that biology is one of the most dynamic disciplines of our time; perhaps the only certainty is that no one knows which of its many facets will become important next. It is also clear that very few undergraduates enter college with a final decision on their ultimate vocational preference. The philosophy of the biology department reflects both of these realities by offering our students a strong foundation in biology without over-specialization. We emphasize an intellectual approach rooted in the college's liberal arts tradition. The biology faculty use the framework of biology to develop the kinds of abilities that will serve students well no matter what paths their lives take: to think critically, analytically and independently; to communicate effectively; to search for an original approach; to solve problems efficiently; to achieve and maintain intellectual curiosity; and to demonstrate an understanding of human impact on the global environment. The result has been graduates who meet with success no matter where their life choices take them.

## Student research in biology

The biology department is committed to fostering student research. In addition to state-of-the-art laboratories and equipment in the Vermeer Science Center, the College maintains the 63-acre Carlson-Kuyper Biology Field Station on Lake Red Rock.

## Study abroad opportunities

For decades, the biology department has been at the forefront promoting Central's study abroad programs and the department will work with biology majors so that they can obtain the benefit of a foreign study experience and still graduate in four years.

## Biology Major Requirements (53 s.h.)

### 1. Complete all of the following:

BIOL 130q	Diversity of Life (4)
BIOL 131Pq	Introduction to Cells (4)
BIOL 221Pq	Genetics (4)
BIOL 229Pq	Principles of Ecology (4)
BIOL 320Pq	Evolution (4)
BIOL 385P	Junior Seminar (1)
BIOL 485P	Senior Seminar (1)
CHEM 131fq	General Chemistry (5)
CHEM 235Pq	Organic Chemistry I (4)
CHEM 236Pq	Organic Chemistry II (4)

### 2. Complete at least 6 s.h. from the following:

Any MATH course numbered 105 or higher  
Any COSC course numbered 110 or higher

### 3. Complete three of the following:

BIOL 223Pq	Vertebrate Natural History (4)
BIOL 290	Topics in Biology (4)
BIOL 321Pq	Comparative Vertebrate Anatomy (4)
BIOL 324Pq	Field Botany (4)
BIOL 335Pq	Functional Histology (4)
BIOL 341Pq	Human Physiology (4)
BIOL 342Pq	Mammalogy (4)
BIOL 343Pq	Ornithology (4)
BIOL 345Pq	Limnology (4)
BIOL 360P	Human Anatomy(4)
BIOL 361Pq	Microbiology (4)
BIOL 390	Topics in Biology (4)
CHEM 320P	Biochemistry (4)

### 4. Complete all requirements for the Communication Skills Endorsement

### Communication skills endorsement

Certification of communication skills for the biology major, encompassing reading, writing, speaking, listening, numeric, bibliographic and computer skills, is accomplished in three steps:

1. BIOL 130, 131, 221, 229 and 320. These courses all have integral components requiring satisfactory communication at a level appropriate for a science major. These include: writing term papers and formal laboratory reports; keeping a research notebook; presenting lab results to classmates; listening to presentations by classmates; conducting literature searches using computer data bases; reading and critiquing reports prepared by classmates; analyzing laboratory data.
2. BIOL 385. This seminar is taken after the above courses and provides further evaluation and development of communication skills. If these skills are inadequate for college work the instructor will award a grade of less than C, in which case the student must repeat the seminar. Usually the student should arrange remedial work before rescheduling, and BIOL 385 must be repeated until a grade of at least C is earned. This seminar meets concurrently with BIOL 485.
3. BIOL 485. In this seminar the goal is mastery of those communication skills appropriate for a college graduate with a science major. This seminar is structured as a capstone experience, usually taken in the senior year. It meets concurrently with BIOL 385 and a grade of C or better constitutes certification of the student's communication skills for graduation.

### Typical sequence of courses for the biology major

#### Fall semester

##### *Freshman year*

CHEM131fq General Chemistry  
BIOL131Pq Introduction to Cells

##### *Sophomore year*

CHEM 236Pq Organic Chemistry II  
BIOL 229Pq Principles of Ecology

##### *Junior year*

MATH/COSC requirement  
Biology electives  
(Study abroad)

##### *Senior year*

BIOL 485P Senior Seminar  
Biology electives

#### Spring semester

##### *Freshman year*

CHEM 235Pq Organic Chemistry I  
BIOL130q Diversity of Life

##### *Sophomore year*

BIOL 221Pq Genetics  
MATH/COSC requirement  
(Study abroad)

##### *Junior year*

BIOL 385P Junior Seminar  
Biology electives

##### *Senior year*

BIOL 320P Evolution  
Biology electives

### Biology Minor Requirements (24 s.h.)

#### 1. Complete all of the following:

BIOL 130q	Diversity of Life (4)
BIOL 131Pq	Introduction to Cells (4)
BIOL 221Pq	Genetics (4)
BIOL 229Pq	Principles of Ecology (4)
BIOL 320Pq	Evolution (4)

#### 2. Complete one of the following:

BIOL 223Pq	Vertebrate Natural History (4)
BIOL 290	Topics in Biology (4)
BIOL 321Pq	Comparative Vertebrate Anatomy (4)
BIOL 324Pq	Field Botany (4)
BIOL 335Pq	Functional Histology (4)
BIOL 341Pq	Human Physiology (4)
BIOL 342Pq	Mammalogy (4)
BIOL 343Pq	Ornithology (4)
BIOL 345Pq	Limnology (4)
BIOL 360P	Human Anatomy (4)
BIOL 361Pq	Microbiology (4)
BIOL 390	Topics in Biology (4)
CHEM 320P	Biochemistry (4)

# BUSINESS MANAGEMENT

*Behavioral Sciences Division*

*Economics, Accounting and Business Management Department*

## Faculty

Debela Birru (chair), Lori Bell, Andrew Campbell, Jann Freed, Robert Maurer, Michael Murray, Brian Peterson, Jaclyn Rundle, Alan Terpstra, Sherrie Wilson

## Statement of philosophy

Consistent with the mission of Central College, the business management major offers students the opportunity to gain an understanding of business operations in the context of the liberal arts tradition. The major provides students a foundation in business with an emphasis in one of four business administration areas: business administration, finance, marketing and not-for-profit management. An emphasis can also be individually designed to better meet a student's objective. In cooperation with Central College's education department, students can also be certified to teach business classes at the secondary level.

The major enables students to acquire a general understanding in a field that prepares them to compete in a dynamic marketplace. The performance of Central students on standardized examinations such as GMAT and LSAT, their acceptance into quality graduate programs and their success in careers demonstrate the strengths of the program.

Central students benefit from multidimensional teaching approaches that facilitate active learning: computer simulations, case studies, presentations, class discussions and team projects. Each of these various methodologies emphasizes written and oral communication skills.

Quality education must extend well beyond the classroom. Accordingly, academic advising is geared toward assisting students in making sound choices regarding courses and appropriate co-curricular learning experiences. Students are encouraged to participate in Central's College abroad programs and/or the Chicago Semester Program and the Washington, D.C. program, to explore co-op and internship opportunities, and to participate in student organizations. By integrating practical and theoretical experiences, students are prepared to appreciate the global and cultural diversity of the 21st century.

## Teacher licensure

In cooperation with Central College's education department, the economics, accounting and business management department offers the following licensure options for secondary teachers: (1) social science - economics; (2) business - general and marketing/management. Specific information regarding requirements is available from associate professor Robert Maurer.

## Business Management Major Requirements (51 s.h.)

*Note: This major may not be declared in combination with either 1) the international management major or 2) the information systems major with the management track.*

### 1. Complete all of the following:

ECON 112s	Principles of Microeconomics (3)
ECON 113Ps	Principles of Macroeconomics (3)
ECON 281Pm	Research Methods in Economics (3)
ACCT 241	Introduction to Financial Accounting (3)
ACCT 242Pm	Introduction to Management Accounting (3)
MATH 105m	Introduction to Statistics (4)
BMGT 251P	Principles of Management (3)
BMGT 351Ps	Organizational Behavior (3)
BMGT 361Pm	Corporate Finance (3)
BMGT 371P	Principles of Marketing (3)
BMGT 381Pm	Operations Management (3)

### 2. Complete one of the following:

COSC 106	Introduction to Web Programming (3)
COSC 110m	Introduction to Computer Science (3)

### 3. Complete one of the following capstone courses:

BMGT 451P	Strategic Management (3)
BMGT 453PI	Global Strategic Management (3)
BMGT 455P	Small Business & Entrepreneurship (3)

4. Complete *three to five* courses from one of the following emphases (contact a departmental faculty member for a list of specific courses in each emphasis):
- Business Administration emphasis
  - Business Economics emphasis
  - Business Education emphasis
  - Finance emphasis
  - Individually Designed emphasis
  - Marketing emphasis
  - Not-for-Profit Management emphasis

*Note: Students may not complete more than one emphasis*

5. Complete all requirements for the Communication Skills Endorsement

**Communication skills endorsement**

The department's communication skills requirement has three components: reading and writing, speaking, and professional development. The following are the minimum standards in each area:

**Reading and writing**

Students may satisfy the reading and writing requirement in any one of the following ways:

- ENGL 101 Composition with a grade of at least "B"; or
- ENGL 120 Introduction to Literature with a grade of at least "B-"; or
- ENGL 201 Technical Writing with a grade of at least "C+"; or
- Complete one of the following courses with a grade of at least "C":
  - ENGL 211-216 200-level English literature course
  - ENGL 240 The Personal Essay
  - ENGL 241 Short Story Writing
  - ENGL 343 Travel Writing
- or other English course numbered 211 or above, with the approval of the department.

Alternately, a score of 4 or 5 on the AP English and Composition Examination or the AP English Literature and Composition Examination will be accepted to fulfill the reading and writing component of the Economics, Accounting and Management Department communication skills endorsement.

**Speaking**

Students must complete one of the following courses:

- COMM 160 Introduction to Communication Studies
- COMM 266 Readers Theatre
- COMM 268 Intercultural Communication
- COMM 270 Public Speaking
- COMM 340 Public Relations
- COMM 342 Communication in Organizations
- COMM 364 Argumentation

or complete significant communication experience approved by the Economics/Accounting/Management Department

**Professional development**

It is recommended that students complete this program by the end of their junior year. Students must successfully complete all of the following sessions in the professional development series, offered by the career services office:

- Job Search Success
- Resume/Cover Letter Writing
- Interviewing Strategies
- Dress for Success
- Dining Etiquette

The only acceptable alternative for students who have failed to attend the regularly scheduled sessions by the career services office will be to complete a 10-page research paper for each unmet requirement. The research paper must include an annotated bibliography containing a minimum of ten credible, authoritative sources. In addition, students will be required to make a 15-minute presentation to departmental faculty for each unmet requirement. The research papers and presentations must be completed at least three weeks prior to the beginning of the final exam week of the semester during which the student anticipates graduation.

### Final communication skills approval

EAM Department faculty require significant writing and presentation assignments in most Economics, Accounting and Business Management courses. By evaluating assigned course papers and presentations, EAM faculty can assess skill improvements throughout each student's academic program. Students should be aware that mere completion of the specific Reading-Writing and Speaking requirements listed above does not guarantee departmental approval of a student's communication skills requirement. The Economics, Accounting and Business Management faculty members retain the right to continuously monitor every student's progress and make appropriate referral(s) to the Center for Academic Excellence or elsewhere for additional work.

### Typical sequence of courses for the business management major

#### *Freshman year*

ECON 112s Principles of Microeconomics  
 ECON 113Ps Principles of Macroeconomics  
 COSC 106 Introduction to Web Programming (or COSC 110m)

#### *Sophomore year*

ACCT 241 Introduction to Financial Accounting  
 ACCT 242P Introduction to Management Accounting  
 BMGT 251P Principles of Management  
 MATH 105m Introduction to Statistics  
 ECON 281Pm Research Methods in Economic

#### *Junior and/or senior years*

BMGT 351Ps Organizational Behavior  
 BMGT 361Pm Corporate Finance  
 BMGT 371P Principles of Marketing  
 BMGT 381Pm Operations Management  
 BMGT 451P Strategic Management (or BMGT 453PI or BMGT 455P)  
 3-5 emphasis courses (approved by the department)

### Business Management Minor Requirements (21 s.h. minimum)

#### 1. Complete all of the following:

ECON 112s Principles of Microeconomics (3)  
 ECON 113Ps Principles of Macroeconomics (3)  
 ACCT 241 Introduction to Financial Accounting (3)  
 ACCT 242Pm Introduction to Management Accounting (3)  
 BMGT 251P Principles of Management (3)

#### 2. Complete one of the following:

BMGT 361Pm Corporate Finance (3) (Prerequisites: ECON 112s; ECON 113Ps; ACCT 241; ACCT 242Pm; MATH 105; and junior standing)  
 BMGT 381Pm Operations Management (3) (Prerequisites: MATH 105m; ECON 218Pm; and junior standing)

#### 3. Complete one of the following:

BMGT 351Ps Organizational Behavior (3)  
 BMGT 371P Principles of Marketing (3)

# CHEMISTRY

Natural Sciences Division  
Chemistry Department

## Faculty

Catherine Haustein (chair), Glenn Barnett, Jane Owens, James Shriver

## Statement of philosophy

The chemistry department strives to foster in students an intuitive knowledge of chemistry by emphasizing key concepts and their integration. Since chemistry is inherently experimental, the department is committed to providing students with ample laboratory experience in order to develop the tools necessary to become successful experimentalists. This is accomplished in courses and through individual projects with faculty mentors.

Chemists need to be able to effectively communicate their ideas to their peers and to society. Accordingly, an emphasis on the development of writing and oral skills through laboratory reports, oral presentations and research papers helps our majors gain experience in communication.

The faculty strives to remain abreast of modern chemical techniques while being aware of the benefits and responsibilities of living in a technological society. Our department follows guidelines of the American Chemical Society, so chemistry majors receive instruction comparable to that at larger institutions while benefiting from individualized attention that is the hallmark of Central College.

Chemistry is often referred to as the central science. All physical and natural sciences are touched by chemistry. A chemistry major opens the door to such diverse career options as basic research, medicine, pharmacology, public health, biochemistry, teaching, industrial lab work, environmental testing and forensic science. In addition, chemistry majors at Central are eligible for admission to the chemical engineering programs at Washington University in St. Louis and Iowa State University following completion of their junior year.

## Study abroad opportunities

The chemistry department encourages all chemistry students to study abroad. The Option I sequence of courses allows for convenient study abroad in the fall semester of the senior year.

## American Chemical Society certification

What does our American Chemical Society certification mean? According to the American Chemical Society, a department that follows and meets the guidelines for certification produces graduates with the background necessary to enter graduate school or employment in which a strong background in chemistry is needed. An ACS approved department will “assure students that they have high quality programs in chemistry. For the student, a certified degree in chemistry is a valuable personal credential that serves as a national-level recognition for successfully completing a rigorous academic chemistry curriculum in an ACS-approved department..The extra rigor and additional requirements of the certified degree are valued by potential employers and graduate schools alike.” (Undergraduate Professional Education in Chemistry Guidelines and Evaluation Procedures, Spring 2003, American Chemical Society Committee on Professional Training)

In connection with our ACS certification, students in our department have on-line access to all American Chemical Society publications.

## Chemistry Major Requirements (54 s.h.)

### 1. Complete all of the following:

CHEM 131fq	General Chemistry (5)
CHEM 235Pq	Organic Chemistry I (4)
CHEM 236Pq	Organic Chemistry II (4)
CHEM 241Pq	Analytical Chemistry (4)
CHEM 251Pq	Inorganic Chemistry (4)
CHEM 361P	Physical Chemistry I (3)
CHEM 362P	Physical Chemistry II (3)
CHEM 363P	Physical Chemistry Lab: Kinetics (1)
CHEM 364P	Physical Chemistry Lab: Advanced (1)
BIOL 131Pq	Introduction to Cells (4)
MATH 131Pm	Calculus I (4)
MATH 132Pm	Calculus II (4)
PHYS 111Pmq	General Physics I (5)
PHYS 112Pmq	General Physics II (5)



2. Complete ***at least 3 s.h.*** from the following:

Note: Students pursuing the ACS version of the major (see below) must take CHEM 320P

CHEM 320P	Biochemistry (4)
CHEM 430P	Advanced Organic Chemistry (3)
CHEM 446P	Chemistry Seminar (1)
CHEM 447P	Instrumental Analysis (4)
CHEM 452P	Advanced Inorganic Chemistry (3)
CHEM 463P	Advanced Physical Chemistry (3)

3. Complete the Communication Skills Requirements, as detailed below

**American Chemical Society Certified Chemistry Major Requirements (67 s.h.)**

*Note: For other ACS course options and updates to the requirements for ACS certification, please see the department chair.*

1. Complete ***all*** of the above courses required for the Central College chemistry major

2. Complete ***all*** of the following:

CHEM 447P	Instrumental Analysis (4)
CHEM 452P	Advanced Inorganic Chemistry (3)

3. Complete ***two*** of the following:

CHEM 430P	Advanced Organic Chemistry (3)
CHEM 463P	Advanced Physical Chemistry (3)
CHEM 498PI	Research (3)

**Communication skills endorsement**

The communications skills requirements for the chemistry major are as follows: In the spring of the sophomore year (or upon declaration of the major), the department will make a preliminary judgment with respect to reading, writing and speaking skills based on lab reports, other writing assignments, class presentations and performances on skills tests such as the PSAT, ACT, URE and reading labs. Students deemed to be weak in one or more skills will be advised of the weakness and possible remedial activities. Diagnostic and self-help materials for writing skills will be made available. Endorsement will be made at the end of CHEM 364, Physical Chemistry Lab: Advanced. Additional requirements are as follows:

**Reading**

The emphasis for chemistry majors' reading skills will be on comprehension rather than speed. Students with reading problems will be asked to take ENGL 100 Reading and Writing Strategies and/or work on reading at the Center for Academic Excellence. The reading skills requirement should be met by the end of the junior year.

**Writing**

Students must perform at a satisfactory level on lab reports and term papers to receive departmental endorsement. Failure to perform at the minimum level will necessitate further work by the student in composition courses and/or at the skills center until the student meets departmental endorsement.

**Speaking**

The oral skills of each chemistry major will be evaluated for organization, delivery and use of visual aids. Oral assignments in specified chemistry courses taught by different chemistry faculty members will be used to evaluate this skill. Weaknesses in speaking ability will be pointed out to the student so that remedial work may be undertaken. Endorsement of exit-level writing and oral skills will take place after the student has completed CHEM 364.

## Typical sequence of courses for the chemistry major

### Option I

#### Fall semester

##### *Freshman year*

CHEM 131fq General Chemistry  
MATH 131Pm Calculus I  
BIOL 131Pq Introduction to Cells

##### *Sophomore year*

CHEM 236Pq Organic Chemistry II  
PHYS 111Pmq General Physics I  
CHEM 241Pq Analytical Chemistry

##### *Junior year*

CHEM 362P Physical Chemistry II  
CHEM 364P Physical Chemistry Lab: Advanced  
CHEM 320P Biochemistry

##### *Senior year*

Study abroad

### Option II

#### Fall semester

##### *Freshman year*

CHEM 108q Chemistry in Context  
BIOL 131Pq Introduction to Cells

##### *Sophomore year*

CHEM 241Pq Analytical Chemistry  
MATH 131Pm Calculus I

##### *Junior year*

CHEM 236Pq Organic Chemistry II  
PHYS 111Pmq General Physics I

##### *Senior year*

CHEM 362P Physical Chemistry II  
CHEM 364P Physical Chemistry Lab: Advanced  
CHEM 320P Biochemistry

#### Spring semester

##### *Freshman year*

CHEM 235Pq Organic Chemistry I  
CHEM 251Pq Inorganic Chemistry  
MATH 132Pm Calculus II

##### *Sophomore year*

PHYS 112Pmq General Physics II  
CHEM 361P Physical Chemistry I  
CHEM 363P Physical Chemistry Lab: Kinetics

##### *Junior year*

Advanced electives

##### *Senior year*

Advanced electives

#### Spring semester

##### *Freshman year*

CHEM 131fq General Chemistry

##### *Sophomore year*

CHEM 235Pq Organic Chemistry I  
MATH 132Pm Calculus II  
CHEM 251Pq Inorganic Chemistry

##### *Junior year*

PHYS 112Pmq General Physics II  
CHEM 361P Physical Chemistry I  
CHEM 363P Physical Chemistry Lab: Kinetics

##### *Senior year*

Advanced electives

## Chemistry Minor Requirements (20 s.h.)

### 1. Complete all of the following:

CHEM 131fq	General Chemistry (5)
CHEM 235Pq	Organic Chemistry I (4)
CHEM 236Pq	Organic Chemistry II (4)
CHEM 241Pq	Analytical Chemistry (4)

### 2. Complete at least 3 additional s.h. of CHEM courses numbered 251 or higher

# CHINESE

*Cross-cultural Studies Division  
Modern Languages Department*

## **Statement of philosophy**

The department of modern languages believes that the ability to communicate (listen, speak, read and write) in another language is fundamental for attaining an understanding of the many cultures that make up the world. For significant intercultural understanding, students must also learn what members of other cultures consider worth talking about; their historical, artistic and literary heritage; their contemporary political, social and economic problems; and their basic customs and values.

Modern language course offerings are intended to build basic communication skills and insight into important topics in literature and culture. All on-campus courses include laboratory sessions with native-speakers or advanced speakers of the target language and are supported by co-curricular activities in the language, including the language house program and social activities. All courses aim to increase language proficiency and cultural awareness as well as to prepare students for an extended, off-campus immersion in a culture where the target language is spoken.

## **Chinese minor requirements (13 s.h.)**

Complete at least 13 s.h. of Chinese language courses at the 700-level or above during the China Program.

# COMMUNICATION STUDIES

*Behavioral Sciences Division*

*Communication Studies Department*

## Faculty

Richard McGrath (chair), Dennis Doyle, Yeon Kyeong Kim, Linda Laine

## Statement of philosophy

The Communication Studies program provides students with a broad-based exposure to the academic discipline that focuses on human symbolic interaction. In an effort to cultivate critical thinking, clear writing, articulate speaking and proficiency with technology, our students study communication within interpersonal, group, organizational, public and mediated contexts. Through a combination of theoretical grounding and practical experience, we prepare our majors for a range of careers, enable them to participate productively in a democratic culture, and instill in them a desire for life-long learning. Course work is supplemented by practica, internships, co-curricular activities and supervised independent study.

## Communication Studies Major Requirements (38-39 s.h.)

### 1. Complete *all* of the following:

- COMM 160F Introduction to Communication Studies (3)
- COMM 270P Public Speaking (3)
- COMM 280P Communication Theory and Research (3)

### 2. Complete *at least 2 s.h.* of credit (but no more than 6 s.h.) from the following:

- COMM 292I Practicum in Communication Services (Arr)
- COMM 294I Practicum in Broadcasting (Arr)
- COMM 295I Practicum in Journalism (Arr)
- COMM 296I Practicum in Video Production (Arr)
- THEA 292I Practicum in Theatre (Arr)

### 3. Complete *at least 27 s.h.* of COMM electives with a minimum of 12 s.h. at the 300-level, including at least one course from each of the following groups:

#### *Group I: Mediated Communication*

- COMM 330P Media Criticism (3)
- COMM 332P Advanced Journalism (3)

#### *Group II: Business and Professional Communication*

- COMM 340P Public Relations (4)
- COMM 342P Communication in Organizations (3)

#### *Group III: Applied Communication*

- COMM 360P Communication Ethics (3)
- COMM 362P Environmental Communication (3)

#### *Group IV: Public Communication*

- COMM 364P Argumentation (3)
- COMM 366P Persuasion (3)

*Note: Upon departmental approval, 9 s.h. (or three courses) may be taken from areas other than Communication Studies.*

### 4. Compile an e-portfolio comprised of academic and related work

Communication Studies majors are required to create and maintain an assessment e-portfolio on Blackboard. The assessment e-portfolio provides the Communication Studies faculty with a representative sample of student work for the purpose of determining progress toward fulfilling the Central College Communication Skills requirement. Ultimately, the contents of this assessment e-portfolio constitute the foundation upon which a professional e-portfolio may be constructed during a student's senior year for the purpose of seeking employment or gaining entry into graduate school. The portfolio is begun the semester a student officially declares a major in Communication Studies and assembled in consultation with her or his academic advisor. Communication Studies majors are required to demonstrate progress in skills reflected in their assessment e-portfolio as a precondition of academic advising and registration for courses each semester. Departmental approval of the assessment e-portfolio is a prerequisite for graduation.

### 5. Complete all requirements for the communication skills endorsement

Competency in oral communication is demonstrated through the completion of COMM P Public Speaking with a minimum grade of “C” for the course. Communication Studies majors attaining less than this level of proficiency must retake the course until achieving a satisfactory level of performance.

Competency in written communication skills is assessed by the evaluation of materials contained in a student’s portfolio and the completion of COMM 280 Communication Theory and Research with a minimum grade of “C” for the course. A grade of less than “C” on the diagnostic writing assignment at the beginning of COMM 280 Communication Theory and Research requires contracting with the Center for Academic Excellence for remediation of writing skills.

### Typical sequence of major courses for the communication studies major

#### Freshman year

COMM 160 Introduction to Communication Studies  
COMM electives at the 100--200 level

#### Sophomore year

COMM 270 Public Speaking  
COMM 280 Communication Theory and Research  
COMM electives at the 100--200 level

#### Junior year

COMM 292-296 Practicum  
COMM electives at the 200--300 level

#### Senior year

COMM electives at the 300--400 level  
COMM 497 Internship in Communication

### Communication Studies Minor Requirements (21 s.h.)

#### 1. Complete all of the following:

COMM 160f Introduction to Communication Studies (3)  
COMM 262Ps Interpersonal Communication (3)  
COMM 270 Public Speaking (3)

#### 2. Complete at least 12 s.h. of COMM electives with a minimum of 6 s.h. at the 300-level

*Note: No more than 2 s.h. may be from the following: COMM 292I, COMM 294I, COMM 295I, COMM 296I or THEA 292I*

# COMPUTER SCIENCE

*Natural Sciences Division*

*Mathematics/Computer Science Department*

## Faculty

Wendy Weber (chair), Robert Franks, Stephen Fyfe, Russell Goodman, Allen Hibbard, Mark Johnson, Thomas Linton, Mark Mills

## Departmental information

The mathematics/computer science department offers four distinct majors: mathematics, mathematics with secondary education emphasis, computer science and a joint mathematics/computer science major (please see appropriate sections of this catalog for information on the mathematics and mathematics/computer science majors). Students who declare either the computer science or mathematics major may not also declare the joint mathematics/computer science major as a second major. Students who declare computer science or mathematics/computer science as their major may not declare an information systems major with an emphasis in computer information systems. Those who wish to combine the disciplines of business and computer science may wish to consider the information systems major. Students seeking a teaching endorsement should consult the EDUC department.

## Statement of philosophy

The computer science curriculum integrates three different learning methodologies: design, abstraction and theory. Design is used in the development of software systems to solve problems. Students become familiar with abstraction through programming assignments and experimentation in laboratory activities. Facility with theory is acquired by manipulating symbolic systems. As recommended by the Association for Computing Machinery, the object-oriented programming language Java functions as the introduction to the course of study in computer science. Programming serves as the vehicle for exploring the recurring fundamental concepts of levels of abstraction, efficiency, completeness, evolution of design, complexity of large problems, consistency, conceptual versus formal models, human and machine communication and reusability.

Students work with various computing environments such as Windows and Linux, along with a variety of programming languages such as Python, Java, Perl, Php, SQL, and Visual Basic. Internship experiences, which are recommended for majors, provide students with the opportunity to apply their knowledge. These may be obtained locally, or through one of Central's international program sites or through the Chicago Metropolitan Center. Course work can also be acquired in several of the international programs. Additional computing resources are accessible through Central's Internet connection and through departmental servers.

No previous computing experience is required before beginning the computer science program. Many computer science majors participate in the international programs along with co-curricular activities. With this computer science background, students are well prepared to pursue either immediate employment or graduate studies.

## Computer Science Major Requirements (43 s.h.)

### 1. Complete one of the following:

- COSC 110m Introduction to Computer Science (3)
- COSC 115Pm Scientific Programming (3)

### 2. Complete all of the following:

- COSC 130Pm Data Structures (3)
- COSC 220Pm Software Design (3)
- COSC 235Pm Discrete Structures (3)
- COSC 245Pm Computer Organization and Architecture (4)
- COSC 320P Advanced Software Design (3)
- COSC 330Pm Algorithms (3)
- COSC 385P Mathematics/Computer Science Junior Seminar (2)
- COSC 485P Mathematics/Computer Science Senior Seminar (1)
- MATH 131Pm Calculus I (4)

3 additional semester hours of MATH courses from MATH 105m or other MATH courses at the 132-level or above, excluding MATH 396I/397I

### 3. Complete 11 s.h. of elective COSC courses at the 200-level or higher, excluding internships and practicums.

### 4. Complete all requirements for the Communication Skills Endorsement

### Communication skills endorsement

The department believes that it is essential that majors in computer science and mathematics are able to speak, read and write satisfactorily within the discipline. As such, many courses throughout the major include activities that evaluate the student's ability to communicate.

The department faculty meet annually to discuss and evaluate each major's communication skills. Students can expect to be evaluated at least once during each academic year. A student whose skills in one or more areas (speaking, reading and writing) are not sufficient must work with her/his advisor to design an improvement plan.

The final evaluation of a student's communication skills occurs in MATH/COSC 385P Mathematics/Computer Science Junior Seminar (2) and MATH/COSC 485P Mathematics/Computer Science Senior Seminar (1). In these courses, students are required to give two oral presentations and write a paper covering the topic used in the second presentation. Reading, listening and research skills are also covered in these courses.

### Typical sequence of major courses for the computer science major

#### Freshman year

COSC 110 Introduction to Computer Science  
 COSC 130 Data Structures  
 MATH 131 Calculus I

#### Sophomore year

COSC 220 Software Design  
 COSC 235 Discrete Structures  
     or MATH 221Pm Foundations of Mathematics  
 COSC 245 Computer Organization and Architecture  
 COSC elective courses

#### Junior year

COSC 330Pm Algorithms  
 COSC 385P Mathematics/Computer Science Junior Seminar  
 COSC elective courses  
 Mathematics elective

#### Senior year

COSC 485P Mathematics/Computer Science Senior Seminar  
 COSC 320P Advanced Software Design  
 COSC elective courses

### Computer Science Minor Requirements (23 s.h.)

#### 1. Complete one of the following:

COSC 110m Introduction to Computer Science (3)  
 COSC 115Pm Scientific Programming (3)

#### 2. Complete all of the following:

COSC 130Pm Data Structures (3)  
 COSC 220Pm Software Design (3)  
 COSC 235Pm Discrete Structures (3)  
 COSC 330Pm Algorithms (3)

#### 3. Complete 8 s.h. of additional COSC courses numbered above 120, excluding COSC 396I and 397I

### Computational Science Minor Requirements (29 s.h. minimum)

#### 1. Complete all of the following:

COSC 115Pm Scientific Programming (3)  
 COSC 130Pm Data Structures (3)  
 MATH 131Pm Calculus I (4)  
 MATH 132Pm Calculus II (4)  
 NASC 315P Computational Science Methods (4)

#### 2. Complete one of the following introductory science sequences:

PHYS 111Pmq and 112Pmq General Physics I and II (10)  
 CHEM 131fq and 235Pq General Chemistry and Organic Chemistry I (9)  
 BIOL 130q and 131Pq Introduction to Cells and Diversity of Life (8)

#### 3. Complete one of the following elective courses:

COSC 330Pm Algorithms (3)  
 MATH 240Pm Linear Algebra (4)  
 MATH 250Pm Differential Equations (3)  
 MATH 330Pm Mathematical Modeling (3)  
 MATH/COSC 370Pm Numerical Analysis (3)  
 PHYS 328PI Engineering Problems (3)

# ECONOMICS

*Behavioral Sciences Division*

*Economics, Accounting and Business Management Department*

## Faculty

Debela Birru (chair), Lori Bell, Andrew Campbell, Jann Freed, Robert Maurer, Michael Murray, Brian Peterson, Jaclyn Rundle, Alan Terpstra, Sherrie Wilson

## Statement of philosophy

The study of economics is part of the traditional liberal arts and offers the student a knowledge of and appreciation for the complexities of the human experience. Economics studies the decision-making behavior of individuals, firms, national economies and other economic groups. It is an important field of study for those who wish to be educated citizens in today's world.

The purpose of Central's economics program is to provide students with a comprehensive understanding of economic theory and a mastery of the important methodologies. Students acquire the ability to apply economic theory to contemporary issues and to utilize its tools in the search for solutions to daily problems. The faculty seek to actively involve students in the learning process by placing them in situations in which students must make economic decisions.

Majors in economics take courses in microeconomics, macroeconomics and quantitative methods, plus a minimum of five additional courses at the 300-400 level. Students are strongly encouraged to study at one of Central's international centers and/or in the Chicago program, and to extend their education beyond the classroom through internships, involvement in the Economics Club, Omicron Delta Epsilon and other co-curricular activities on campus.

Many Central economics majors enter the business world upon graduation; others begin careers in the government sector, working with such agencies as the Department of Labor or the Federal Reserve. In addition, a number of graduates go on to acquire graduate degrees in business, economics, law and public administration.

## Teacher licensure

In cooperation with Central College's education department, the economics, accounting and business management department offers the following licensure options for secondary teachers: (1) social science - economics; (2) business - general and marketing/management. Specific information regarding requirements is available from associate professor Robert Maurer.

## Economics Major Requirements (44 s.h.)

### 1. Complete all of the following:

- ECON 112s Principles of Microeconomics (3)
- ECON 113Ps Principles of Macroeconomics (3)
- ECON 212Pms Intermediate Microeconomics (3)
- ECON 213Ps Intermediate Macroeconomics (3)
- ECON 281Pm Research Methods in Economics (3)
- ECON 485P Economics Research Seminar (3)
- MATH 105m Introduction to Statistics (4)
- MATH 131Pm Calculus I (4)

### 2. Complete one of the following:

- COSC 106 Introduction to Web Programming (3)
- COSC 110m Introduction to Computer Science (3)

### 3. Complete 15 s.h. from 300- and 400-level courses in ECON, POLS 241s International Political Economy, and MATH 330Pm Mathematical Modeling

### 4. Complete all requirements for the Communication Skills Endorsement

## Communication skills endorsement

The department's communication skills requirement has three components: reading and writing, speaking, and professional development. The following are the minimum standards in each area:

## Reading and writing

Students may satisfy the reading and writing requirement in any one of the following ways:

- ENGL 101 Composition with a grade of at least "B"; or
- ENGL 120 Introduction to Literature with a grade of at least "B-"; or
- ENGL 201 Technical Writing with a grade of at least "C+"; or
- Complete one of the following courses with a grade of at least "C":



ENGL 211-216 200-level English literature course  
 ENGL 240 The Personal Essay  
 ENGL 241 Short Story Writing  
 ENGL 343 Travel Writing  
 or other English course numbered 211 or above, with the approval of the department.

Alternately, a score of 4 or 5 on the AP English and Composition Examination or the AP English Literature and Composition Examination will be accepted to fulfill the reading and writing component of the Economics, Accounting and Management Department communication skills endorsement.

### Speaking

Students must complete *one* of the following courses:

COMM 160 Introduction to Communication Studies  
 COMM 266 Readers Theatre  
 COMM 268 Intercultural Communication  
 COMM 270 Public Speaking  
 COMM 340 Public Relations  
 COMM 342 Communication in Organizations  
 COMM 364 Argumentation

or complete significant communication experience approved by the Economics/Accounting/Management Department

### Professional development

Students must successfully complete *all* of the following sessions in the professional development series, offered by the career services office:

1. Job Search Success
2. Resume/Cover Letter Writing
3. Interviewing Strategies
4. Dress for Success
5. Dining Etiquette

It is recommended that students complete this program by the end of their junior year. At the latest, the program should be completed by the end of the fall semester of the senior year.

The only acceptable alternative for students who have failed to attend the regularly scheduled sessions by the career services office will be to complete a 10-page research paper for each unmet requirement. The research paper must include an annotated bibliography containing a minimum of ten credible, authoritative sources. In addition, students will be required to make a 15-minute presentation to departmental faculty for each unmet requirement. The research papers and presentations must be completed at least three weeks prior to the beginning of the final exam week of the semester during which the student anticipates graduation.

### Final communication skills approval

EAM Department faculty require significant writing and presentation assignments in most Economics, Accounting and Business Management courses. By evaluating assigned course papers and presentations, EAM faculty can assess skill improvements throughout each student's academic program.

Students should be aware that mere completion of the specific reading-writing and speaking requirements listed above does not guarantee departmental approval of a student's communication skills requirement. The Economics, Accounting and Business Management faculty members retain the right to continuously monitor each student's progress and make appropriate referral(s) to the Center for Academic Excellence or elsewhere for additional work.

## Typical sequence of major courses for the economics major

### *Freshman year*

ECON 112s Principles of Microeconomics  
 ECON 113Ps Principles of Macroeconomics  
 MATH 131Pm Calculus I  
 COSC 106 Introduction to Web Programming  
 or COSC 110m Introduction to Computer Science

### *Sophomore year*

ECON 212Pms Intermediate Microeconomics  
 ECON 213Ps Intermediate Macroeconomics  
 MATH 105m Introduction to Statistics  
 ECON 281Pm Research Methods in Economics

### *Junior and/or senior years*

Five upper-level Economics courses

**Economics Minor Requirements (22 s.h.)****1. Complete all of the following:**

ECON 112s Principles of Microeconomics (3)  
ECON 113Ps Principles of Macroeconomics (3)  
ECON 212Pms Intermediate Microeconomics (3)  
ECON 213Ps Intermediate Macroeconomics (3)  
MATH 131Pm Calculus I (4)

**2. Complete two of the following:**

ECON 281Pm Research Methods in Economics (3)  
ECON 321Ps Environmental Economics (3)  
ECON 322Ps International Economics (3)  
ECON 323Ps Labor Economics (3)  
ECON 324Ps Monetary Theory and the Financial System (3)  
ECON 325Ps Public Finance (3)  
ECON 326P Public Choice (3)  
ECON 327Ps International Finance (3)  
ECON 329Ps Economic Development (3)

# EDUCATION (ELEMENTARY)

*Applied Arts Division  
Education Department*

## **Faculty**

Esther Streed (chair), Christine Day, Jennifer Diers, Alida Droppert, Philip George, Kris Kilibarda, Paula Lee, Joy Prothero, Rex Shahriari

## **Statement of philosophy**

The philosophical foundation of teacher education at Central College is the liberal arts tradition. The following goal statements reflect that commitment and complement the goals of Central College. The graduates of the Central teacher education program will:

- demonstrate integrated knowledge of the content, organization, values and tools of inquiry for the discipline
- use and model effective communication skills, thinking skills and creative expression
- understand the developmental characteristics of students and how these characteristics impact all domains of learning and achievement
- understand and appreciate diversity of thought, background, and inherent abilities of learning and life experiences in an interdependent, global society
- plan and implement learning activities that incorporate a variety of instructional and assessment strategies that are equitable, adaptable and a reflection of best practice in education
- understand the role of technology in education and utilize skills to infuse technology throughout the curriculum
- understand the dynamics of individual and group behavior and implement classroom management strategies that create meaningful learning environments and assist students in the development of self-concept, self-control and self-motivation
- develop collaborative relationships that facilitate students' social development and active engagement in learning
- demonstrate a commitment to life-long learning and engage in professional development activities
- demonstrate stewardship, leadership, and ethical responsibility to students, parents, colleagues and community

The achievement of these goals is based on a commitment to the personal and professional fulfillment of each student. Students receive individualized attention through advising, instruction and supervision of field experiences. Programs at Central College combine the best of traditional educational practice with the latest in innovative contemporary theory.

Field experiences are extensive and developmentally appropriate. Continuous contact with teachers and students in realistic settings enables prospective teachers to successfully transfer educational theory into effective practice. Students also are encouraged to consider the numerous off-campus internship opportunities available at urban and overseas sites.

## **Program approval**

The Central College teacher education program is approved by the Iowa Department of Education and the North Central Association of Colleges and Secondary Schools. Students successfully completing one of the prescribed programs may be considered candidates for an Iowa Teaching License that is endorsed according to the type of program completed.

The credentials of Central College are respected outside Iowa, but students desiring to teach in any other state should be acquainted with the professional requirements of the state in question as early as possible in their college career. Any student who is seeking Iowa licensure or arranging a program of studies to meet the licensure requirements of another state should consult with the Department of Education.

## **Admission and retention requirements**

Application for the teacher education program is expected during the sophomore year or following EDUC 110f. Students who wish to major in elementary education should complete a major declaration form no later than the sophomore year. Candidates are reviewed at the point of admission, prior to student teaching and before application for licensure.

The criteria commonly used in admission and retention in the teacher education program are:

1. Competence as evidenced by a required cumulative grade point average of 2.7;
2. A minimum grade of C- is required in all major courses in elementary education, all required support courses for the elementary education major, all courses that fulfill an elementary minor endorsement program and all professional education courses for elementary and secondary licensure programs;
3. Evidence of a commitment to teaching;
4. Successful completion of field experience assignments;
5. Demonstrated concern for others and desirable personal qualities;
6. Demonstrated competence in basic skills;
7. Recommendation of major department;
8. Recommendations of faculty.

Students may be recommended for licensure after satisfactory completion of course work, student teaching, demonstration of appropriate personal and professional behavior, and competencies consistent with the teacher education program goals.

### Study abroad opportunities

The education department encourages students to consider the advantages of study abroad. Specific internships and programs of study in teacher education are available at most overseas sites.

## Endorsements and special programs for Iowa licensure

### Elementary education

The endorsement for teaching kindergarten through grade six may be granted to those who have:

1. A bachelor's degree with a major in elementary education.
2. Support courses from various departments as advised by the education department to meet licensure requirements.
3. An additional licensure endorsement program
4. Received approval of the teacher education committee and the education department for licensure.
5. Fulfilled the departmental communication skills endorsement.

### Elementary Education Major Requirements (47 s.h. minimum)

*Note: Students seeking teacher licensure must, in addition to these major requirements, complete all Teacher Licensure Requirements, listed following these major requirements.*

#### 1. Complete all of the following:

EDUC 110f	Foundations of Education (3)
EDUC 215Px	Human Relations (2)
EDUC 233P	Social Studies Curriculum and Methods (3)
EDUC 235Ps	Exceptional Children (3)
EDUC 239P	Psychology in Elementary Education (3)
EDUC 250P	Introduction to Instructional Technology (1)
EDUC 333P	Science and Technology Curriculum and Methods (3)
EDUC 337P	Teaching Language Arts and Reading (3)
EDUC 352P	Teaching of Reading (3)
EDUC 354P	Teaching of Mathematics (3)
EDUC 374P	Behavior and Classroom Management (2-3)
EDUC 453P	Advanced Integration of Technology in Education-Elementary (1)
EDUC 460PI	Elementary Student Teaching (12)
EDUC 485P	Senior Seminar in Elementary Education (2)

#### 2. Complete one of the following:

EDUC 270Ps	Child Development (3)
EDUC 281Ps	Developmental Psychology (3)
PSYC 382Ps	Child/Adolescent Development (3)

#### 3. Complete all Communication Skills Requirements

### Teacher licensure requirements

*(in addition to 47-48 s.h. education major requirements)*

#### 1. Complete all elementary education major requirements (47-48 s.h. -- see above)

#### 2. Complete the following:

ENGL 208P	Literature for Children (3)
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#### 3. Complete two of the following:

ART 210P	Elementary School Art (3)
MUS 241	Elementary School Music (2)
EXSC 210P	Teaching Health and Physical Education in Elementary School (3) or EXSC 212P Adapted Physical Education (3)

**4. Complete a 24 s.h. teacher licensure endorsement program in one of the following areas (please see the education department program guides for specific courses in each endorsement program):**

Art	Music
Early childhood education	Physical education
English/language arts	Reading
English as a second language	Science
French	Social science/social studies
German	Spanish
Health	Special education-Strategist I
Mathematics	Speech communication/theatre
Middle school	

**Communication skills endorsement**

The communication skills endorsement expectations addressing reading, writing and speaking for Central College are replicated in one of the Education Department's ten goals for all of its majors. This communication goal is accompanied by seven measurable competencies that more clearly delineate specific expectations.

The initial evaluation of communication skills takes place in EDUC 110f during freshman or sophomore year. Writing skills are evaluated through writing assignments that are assessed for content, style and mechanics. Writing assignments include term papers, journals, position papers, lesson plans and research papers. Reading skills are assessed for literal, inferential and evaluative comprehension of a variety of education materials. Speaking and listening skills are evaluated in assignments that involve small group discussion, leading large groups, teaching classes, oral presentations and debates.

Prior to formal admission into teacher education, each student must achieve a passing score on the reading and writing components of the College BASE (C-BASE), a standardized, criterion-referenced academic achievement examination.

Communication skills assessment is a continuous process throughout a student's career. All departmental courses required of elementary education majors involve evaluation of class assignments in each skill area, often addressing one or more of the department's competencies.

Final evaluation is normally made during the student teaching semester when students have established that they are able to communicate effectively in the elementary school classroom and complete written and oral projects for the Senior Seminar (EDUC 485P). As a culminating experience, students must present their program portfolio to faculty members and peers.

Students who are deficient in any of the skills areas are required to remediate the deficiencies through the Center for Academic Excellence or in consultation with a member of the department faculty.

**Typical sequence of major courses for the elementary education major**

**Freshman year**

EDUC 110f Foundations of Education  
Endorsement program courses

**Sophomore year**

EDUC 215Px Human Relations  
EDUC 233P Social Studies Curriculum & Methods  
EDUC 235Ps Exceptional Children  
EDUC 239P Psychology in Elementary Education  
EDUC 250P Educational Technology  
EDUC 270Ps Child Development or  
EDUC 281Ps Developmental Psychology or  
PSYC 382Ps Child/Adolescent Development  
Endorsement program courses

**Junior year**

ENGL 208P Literature for Children  
EDUC 333P Science and Technology Curriculum and Methods  
EDUC 337P Teaching Language Arts and Reading  
EDUC 352P Teaching of Reading  
EDUC 354P Teaching of Mathematics  
EDUC 374P Behavior and Classroom Management  
EDUC 453P Advanced Instructional Technology  
Endorsement program courses

**Senior year**

EDUC 460P Elementary Student Teaching  
EDUC 485P Senior Seminar  
Endorsement program courses

**Art, music and physical education**

K-6 and 7-12 endorsement programs are available in art, music, and physical education. Students may fulfill requirements for programs at both levels and be qualified to teach kindergarten through grade twelve. Consult with the education department regarding specific requirements in each area.

**English as a second language**

A K-12 endorsement is available in English as a second language. This program is available to students who complete the elementary education major or the secondary education endorsement program with a major in another area. Consult with the education department for specific requirements.

**Instructional Strategist I**

This endorsement makes students eligible to teach students with mild or moderate disabilities in a variety of educational settings. This endorsement is available to students who complete either the elementary or secondary licensure program.

**Middle school**

This program provides a 5-8 endorsement that makes the student eligible to teach English/language arts, mathematics, natural science, or social studies at the middle school level. This endorsement is available to students who complete either the elementary or secondary licensure programs.

# EDUCATION (SECONDARY)

*Applied Arts Division  
Education Department*

## Faculty

Esther Streed (chair), Christine Day, Jennifer Diers, Alida Droppert, Philip George, Kris Kilibarda, Paula Lee, Joy Prothero, Rex Shahriari

## Statement of philosophy

*For general information about Central's Education Department and teacher education programs, please consult the "Education – Elementary" section of this catalog.*

## Admission and retention requirements

Application for the teacher education program is expected during the sophomore year or following EDUC 110. Students who wish to major in secondary education should complete a major declaration no later than the sophomore year. Candidates are reviewed at the point of admission, prior to student teaching and before application for licensure.

The criterion commonly used in admission and retention in the teacher education program includes:

1. Competence as evidenced by a required cumulative grade point average of 2.7;
2. A minimum grade of C- is required in all professional education courses; major program grade point average requirements for teacher licensure must be fulfilled;
3. Successful completion of standardized basic skills tests;
4. Evidence of a commitment to teaching;
5. Successful completion of field experience assignments;
6. Demonstrated concern for others and desirable personal qualities;
7. Demonstrated competence in basic skills;
8. Recommendations of major department;
9. Recommendations of faculty.

## Communication skills endorsement for secondary education program students

Students preparing to teach at the secondary level must pass the communication skills endorsement criteria established by their major departments.

## Secondary Education Licensure Requirements

1. Complete all requirements of one of the following Central academic majors (shown below, right) leading to a corresponding teaching endorsement (shown below, left):

### Teaching Endorsement(s)

Art (K-6 and 7-12)  
Physical Education and/or Health (K-6 and 7-12)  
Business General and/or Business Marketing/Management  
English/Language Arts  
French  
German  
Spanish  
Mathematics  
Music (K-6 and 7-12)  
Biological Science  
Chemistry  
General Science and/or Physical Science and/or Natural Science  
Physics  
American Government  
American History and/or World History  
Economics  
Psychology  
Sociology  
Social Science  
Speech Communication/Theatre

### Corresponding Central Major

Art  
Exercise Science\*  
Business Management\*  
English\*  
French  
German Studies  
Spanish  
Mathematics\*  
Music Education\*  
Biology  
Chemistry  
Natural Science\*  
Physics  
Political Science\*  
History\*  
Economics  
Psychology  
Sociology  
Social Science\*  
Communication Studies\*

*\* Certain tracks/emphases or courses within these majors must be earned for certain endorsements. Contact the Education Department for details.*

**Note: ESL Teacher, Middle School, and Instructional Strategist I Endorsements Also Available**

Central also offers programs leading to the following secondary-level teaching endorsements: **ESL Teacher, Middle School, and Instructional Strategist I**. These endorsement programs require students to complete a specialized block of courses *in addition to* a standard Central College academic major, as well as in addition to the requirements listed below. For more details about these special endorsements, contact the Education Department.

**2. Complete all of the following (35 s.h.):**

- EDUC 110f Foundations of Education (3)
- EDUC 215Px Human Relations (2)
- EDUC 235Ps Exceptional Children (3)
- EDUC 250P Introduction to Instructional Technology (1)
- EDUC 281Ps Developmental Psychology (3)  
*Or PSYC 382Ps Child/Adolescent Development (3)*
- EDUC 374P Behavior and Classroom Management (2)
- EDUC 384P Field Experience in Secondary Education (1)
- EDUC 440P Psychology in Secondary Education (2)
- EDUC 442P Reading in the Content Area – Secondary (1)
- EDUC 450P Secondary General Methods (2)
- EDUC 451P Secondary Special Methods (1)
- EDUC 455P Advanced Integration of Technology in Education – Secondary (1)
- EDUC 470PI Secondary Student Teaching (12)
- EDUC 486P Professional Development Seminar-Secondary (1)

**Typical sequence of EDUC courses taken toward secondary education licensure****Freshman year**

EDUC 110f Foundations of Education  
Plus major/endorsement program courses

**Sophomore year**

EDUC 215Px Human Relations  
EDUC 235Ps Exceptional Children  
EDUC 250P Introduction to Instructional Technology  
EDUC 281Ps Developmental Psychology  
*or PSYC 382Ps Child/Adolescent Development*  
Plus major/endorsement program courses

**Junior year**

EDUC 374P Behavior and Classroom Management  
EDUC 384P Field Experience in Secondary Education  
EDUC 440P Psychology in Secondary Education  
EDUC 442P Reading in the Content Area – Secondary  
EDUC 450P Secondary General Methods  
EDUC 451P Secondary Special Methods  
EDUC 455P Advanced Integration of Technology in  
Education – Secondary  
Plus major/endorsement program courses

**Senior year**

EDUC 470PI Secondary Student Teaching  
EDUC 486P Professional development Seminar-Secondary  
Plus major/endorsement program courses



# ENGLISH

*Humanities Division  
English Department*

## Faculty

Mary Stark (chair), Linda Blatt, Walter Cannon, Joshua Dolezal, Michael Harris, Arthur Johnson, Kimberly Koza, David Purnell, Keith Ratzlaff

## Statement of philosophy

The field of English studies is concerned both with the interpretation and production of a variety of texts. The discipline provides students with a range of critical approaches to reading the world of words – literary and non-literary texts alike – and it offers formal instruction in various kinds of writing: poetry, fiction and non-fiction. The English department is keenly interested in developing the intellectual potential of all majors: students are encouraged to be critically engaged with texts and with the classroom audience by writing and speaking perceptively and persuasively. The department offers a thorough and flexible curriculum of English courses that prepares students for graduate and professional schools, for high school and elementary school teaching, for teaching abroad and for the business world. The department also offers a writing minor and concentration within the English major as well as an endorsement in English as a second language for K-12. Most important, English majors receive the preparation to be culturally informed and critically conscious citizens.

English majors are expected to begin with a series of courses that survey English and American literature, but the curriculum is not entirely Euro-centric: students are encouraged to take world literature and post-colonial literature. In addition, students should take courses that feature major authors such as Shakespeare, Milton and Chaucer, or major topics and fields, such as literary criticism, film and literature and linguistics, or major genre studies such as drama, poetry, fiction and non-fiction. Students are also encouraged to take courses in supporting fields such as history and philosophy, and to pursue competency in a modern foreign language.

## Study Abroad Opportunities

We strongly encourage students in English to study abroad. Majors will find their course of study meshes easily with academic offerings at almost any of the Central College abroad sites, but especially those in London, England; Bangor, Wales; and Hangzhou, China.

The London program offers courses in contemporary as well as Shakespearean theater, art, architecture, history and politics. London also offers a wealth of internship opportunities in communication, publishing, journalism, Library Science, broadcasting, education and theatre.

In Bangor, students enroll directly at the University of Wales/Bangor. Classes in Welsh literature and creative writing are especially attractive to English majors.

During the intensive three-week summer session in Hangzhou, Central students earn 6 hours of internship credit by teaching English in Chinese elementary and middle schools. This option pairs well with spring term study in Hangzhou on Central's semester program at Zhejiang University.

## English Major Requirements (37 s.h.)

### 1. Take **both** of the following required courses:

ENGL 251t British Literature I (3)  
ENGL 346t Shakespeare (3)

### 2. Take **two** of the following surveys in British and American Literature:

ENGL 236t American Literature I (3)  
ENGL 237t American Literature II (3)  
ENGL 252t British Literature II (3)  
ENGL 253t British Literature III (3)

### 3. Take **three** courses from the following group in genre and issue studies:

ENGL 211nt Literature of India and the Pacific (3)  
ENGL 212nt African and Caribbean Literature (3)  
ENGL 213t Nature Writing and Environmental Literature (3)  
ENGL 214t Literature by Women (3)  
ENGL 215nt African-American Literature (3)  
ENGL 216nt American Ethnic Literature (3)  
ENGL 245a British Novel (3)  
ENGL 247t American Novel (3)  
ENGL 248t Comedy(3)

ENGL 249t Poetry (3)  
 ENGL 260ct Irish Literature (3)

**4. Take two courses from the following group of advanced studies in a period, issue, or genre:**

ENGL 361t World Literature I (3)  
 ENGL 362t World Literature II (3)  
 ENGL 371t Medieval Literature (3)  
 ENGL 372t Renaissance Literature (3)  
 ENGL 373t Studies in 17<sup>th</sup> and 18<sup>th</sup> Century Literature (3)  
 ENGL 374t Studies in 19<sup>th</sup> Century Literature (3)  
 ENGL 375t Studies in 20<sup>th</sup> Century Literature (3)  
 ENGL 376t Literary Criticism (Arr)

**5. Take one course in advanced writing:**

ENGL 240a The Personal Essay (3)  
 ENGL 241a Short Story Writing (3)  
 ENGL 343PIa Travel Writing (3)  
 ENGL 344 Writing for Non-Profit Organizations (3)

**6. Take one course in advanced language study:**

ENGL 330 Principles of Linguistics (3)  
 ENGL 331h History of the English Language (3)  
 ENGL 332 Advanced English Grammar (3)  
 ENGL 360 Teaching English as a Second Language (3)

**7. Take one capstone course:**

ENGL 425t Seminar in American Literature (4)  
 ENGL 426t Seminar in British Literature (4)

**8. Complete all requirements for the Communication Skills Endorsement**

**English Major with Additional Emphasis in Writing (52 s.h.)**

*Note: Students must meet with the Writing Minor/Writing Emphasis Coordinator to declare their intention to major in English with Writing Emphasis no later than the end of their junior year.*

**1. Complete all requirements for the English major listed above (37 s.h.)**

**2. Complete one of the following (in addition to those taken above):**

ENGL 240a The Personal Essay (3)  
 ENGL 241a Short Story Writing (3)  
 ENGL 343PIa Travel Writing (3)  
 ENGL 344 Writing for Non-Profit Organizations (3)

**3. Complete three of the following (in addition to those taken above):**

COMM 242 Introduction to Journalism (4)  
 ENGL 201P Technical Writing (3)  
 ENGL 240a The Personal Essay (3)  
 ENGL 241a Short Story Writing (3)  
 ENGL 242a Poetry Writing (3)  
 ENGL 293PI Practicum in Technical Writing (3)  
 ENGL 342a Advanced Poetry Writing (3)  
 ENGL 343PIa Travel Writing (3)  
 ENGL 344 Writing for Non-Profit Organizations (3)  
 ENGL 492I Practicum in English (Arr)  
 ENGL 790W The Arts of Writing (3) *offered in Wales*  
 ENGL 790W Creative Writing: Showing & Telling (3) *offered in Wales*  
 ENGL 790W Creative Writing: The Novel (3) *offered in Wales*  
 ENGL 790W Writing for Film/Media (3) *offered in Wales*

**4. Complete one of the following:**

ENGL 497PI Internship in Writing (3)  
 ENGL 499I Independent Studies in English (3)

### Communication skills endorsement

At the time students declare their intent to major in English, the department will evaluate their writing, reading, speaking and critical thinking skills for the first time. Students will submit a portfolio of at least two papers that demonstrate analytical skills (other types of papers may also be included). The department will also use other available evidence of skills development, including results of tests and information supplied by faculty with whom students have taken courses. Students with communication problems will receive an outline of remedial procedures and may be asked to resubmit their portfolios periodically. A critical demonstration of skills development occurs during the required seminar (ENGL 425, ENGL 426), which includes a major project involving reading, writing, and speaking. The department conducts a final portfolio review during the senior year over a minimum of five analytical papers, including the seminar paper. Passing the final portfolio review is necessary to receive the communication skills endorsement.

### Typical sequence of major courses for the English major

#### *Freshman and sophomore years*

ENGL survey courses

ENGL 251t British Literature I

#### *Junior year*

ENGL genre, period and issue studies courses

ENGL advanced writing course

Study abroad

*Teaching major/minors should also take: ENGL 222 Literature for Young Adults and ENGL 320 Teaching Writing*

#### *Senior year*

ENGL 346t Shakespeare

ENGL language study course

ENGL seminar course

### English Minor Requirements (21 s.h. minimum)

#### 1. Take four of the following (with at least one course addressing literature before 1850 and at least one 300-level course)

- ENGL 211nt Literature of India and the Pacific (3)
- ENGL 212nt African and Caribbean Literature (3)
- ENGL 213t Nature Writing and Environmental Literature (3)
- ENGL 214t Literature by Women (3)
- ENGL 215nt African-American Literature (3)
- ENGL 216nt American Ethnic Literature (3)
- ENGL 236t American Literature I: 1620-1890 (3)
- ENGL 237t American Literature II: 1890-Present (3)
- ENGL 245a British Novel (3)
- ENGL 247t American Novel (3)
- ENGL 248t Comedy (3)
- ENGL 249t Poetry (3)
- ENGL 251t British Literature I: 800-1660 (3)
- ENGL 252t British Literature II: 1660-1850 (3)
- ENGL 253t British Literature III: 1850-Present (3)
- ENGL 260ct Irish Literature (3)
- ENGL 361t World Literature I (3)
- ENGL 362t World Literature II (3)
- ENGL 371t Medieval Literature (3)
- ENGL 372t Renaissance Literature (3)
- ENGL 373t Studies in 17th and 18th Century Literature (3)
- ENGL 374t Studies in 19<sup>th</sup> Century Literature (3)
- ENGL 375t Studies in 20<sup>th</sup> Century Literature (3)
- ENGL 376t Literary Criticism (3)

#### 2. Take one of the following:

- ENGL 240a The Personal Essay (3)
- ENGL 241a Short Story Writing (3)
- ENGL 343PIa Travel Writing (3)
- ENGL 344 Writing for Non-Profit Organizations (3)

**3. Take *one* of the following:**

- ENGL 330 Principles of Linguistics (3)
- ENGL 331h History of the English Language (3)
- ENGL 332 Advanced English Grammar (3)
- ENGL 360 Teaching English as a Second Language (3)

**4. Take *one* of the following:**

- ENGL 346t Shakespeare (3)
- ENGL 425t Seminar in American Literature (4)
- ENGL 426t Seminar in British Literature (4)

*Note: Students seeking a teaching minor must also take ENGL 222 and ENGL 320; teaching minors should also take either ENGL 332 or ENGL 360 to fulfill the language study requirement.*

### **Writing Minor Requirements (18 s.h.)**

*Note: Students must meet with the Writing Minor Coordinator to declare their intention to minor no later than the end of their junior year.*

**1. Complete *six* of the following:**

- COMM 242 Introduction to Journalism (3)
- COMM 332P Advanced Journalism (3)
- ENGL 201P Technical Writing (3)
- ENGL 240a The Personal Essay (3)
- ENGL 241a Short Story Writing (3)
- ENGL 242a Poetry Writing (3)
- ENGL 342a Advanced Poetry Writing (3)
- ENGL 343PIa Travel Writing (3)
- ENGL 344 Writing for Non-Profit Organizations (3)
- ENGL 790W The Arts of Writing (3) *offered in Wales*
- ENGL 790W Creative Writing: Showing & Telling (3) *offered in Wales*
- ENGL 790W Creative Writing: The Novel (3) *offered in Wales*
- ENGL 790W Writing for Film/Media (3) *offered in Wales*
- ENGL 492I Practicum in English (Arr)
- ENGL 497PI Internship in Writing (Arr)
- ENGL 499I Independent Studies in English (Arr)

**2. Produce a writing portfolio in consultation with the Writing Minor Coordinator during the senior year.**

### **English courses for licensure in secondary education**

Students should take either ENGL 332 or 360 to fulfill the language study requirement.

- ENGL 222 Literature for Young Adults (1)
  - ENGL 320 Teaching Writing (2)
  - EDUC 451P Secondary Special Methods (1)
- Plus 12 s.h. of Secondary Student Teaching

The English department will not recommend for teacher licensure students whose grade average within their English courses is below 3.00. The department has advised the teacher education committee that such students should be denied admission to or be dropped from the certification process until grades in English have been brought up to 3.00.

### **Endorsement in English as a second language K-12**

The ESL endorsement for grades K-12 requires 24 semester hours of course work in ESL, including teaching ESL, applied linguistics, bilingual education, language in culture, the nature of language and language acquisition. In addition, an ESL practicum of 45 contact hours in the classroom must be completed. A list of required courses is available from the Education department.

# ENVIRONMENTAL STUDIES

*Interdisciplinary Major*

## Faculty

Anya Butt (director), Russ Benedict (Biology), Brian Peterson (Economics), Paul Weihe (Biology), Jim Zaffiro (Political Science)

## Statement of philosophy

Environmental studies is an interdisciplinary major that provides students with an understanding of environmental relationships and the relationship between human and natural systems. Students will gain a broad understanding of global and local environmental issues. Students select either the environmental science track or the global environmental policy track and work with an advisor to plan their programs.

Strongly recommended for both tracks: at least one semester of study abroad and an internship experience. Central has developed an extensive network of internship opportunities at the local, state, national, and international levels. Some are in conjunction with study abroad programs or the Chicago Metropolitan Program. In most cases credit toward the major may be arranged. Students are urged to discuss internship interests and possibilities with their track director early in their college careers to ensure a thorough search for appropriate opportunities and to increase chances of placement.

## The Environmental Science Track

Given the synergistic physical system of Earth, governed by complex interrelated processes involving the geosphere, atmosphere, hydrosphere and biosphere, this track focuses on understanding and analyzing the relevant interactions of chemical, physical, biological and dynamical processes within the environment. Properly addressing environmental problems requires the ability to analyze these complex systems within the context of socio-cultural, economic and political factors influencing the decision-making process.

Through course work, supervised independent research, career-focused internships, experiential and service learning opportunities, students gain a comprehensive ability to address environmental issues by exploration and direct application of skills. During the program, students can elect an emphasis in either more biological, chemical or geoscience applications.

Career opportunities for environmental science are expanding rapidly. Individuals with a strong chemical background will have opportunities in a number of industries, including agribusiness, looking for entry level (B.A.) individuals with strong analytical skills for water, air, biological or soil analyses for toxic substances. Opportunities for those with a biological emphasis exist in areas of wetlands monitoring, restoration, and delineation; habitat restoration; monitoring the biological effects of solid waste management; reserve and park design and management; and environmental education and technical writing about environmental issues. Individuals with an emphasis on the earth sciences have opportunities in surveying and mapping environmental phenomena; monitoring water quality; addressing issues associated with resource extraction and habitat restoration following extraction; natural hazard delineation; and any of the numerous applications of Geographic Information Systems (GIS) in local and national, public and private services.

## Environmental Studies Major/ Environmental Science Track Requirements (59 – 60 s.h.)

### 1. Complete all of the following:

BIOL	130q	Diversity of Life (4)
BIOL	131Pq	Introduction to Cells (4)
BIOL	229Pq	Principles of Ecology (4)
CHEM	131fq	General Chemistry (5)
CHEM	241Pq	Analytical Chemistry (4)
ECON	112s	Principles of Microeconomics (3)
MATH	215m	Applied Statistics (4)*
NASC	120q	Introduction to Environmental Science (4)
NASC	210q	Introduction to GIS (3)
NASC	380PI	Environmental Studies Seminar (1)
NASC	480P	Environmental Studies Senior Seminar (1)

*\*MATH-105m may be substituted for MATH 215m, but MATH-215m is the recommended statistics course for the major*

### 2. Complete two of the following:

COMM	362P	Environmental Communication (3)
ECON	321Ps	Environmental Economics (3)
POLS	233hs	American Environmental History and Policy (3)
POLS	242s	Global Sustainability (3)

### 3. Complete one of the following:

NASC	125q	Geology (3)
NASC	237q	Physical Geography (4)

4. Complete *at least 12 s.h.* of credit from the following:

BIOL	123q	Natural History of the Great Plains (4)
BIOL	221Pq	Genetics (4)
BIOL	223Pq	Vertebrate Natural History (4)
BIOL	224Pq	General Botany (4)
BIOL	310Pq	Tropical Ecology (4)
BIOL	324Pq	Field Botany (4)
BIOL	342Pq	Mammology (4)
BIOL	343Pq	Ornithology (4)
BIOL	345Pq	Limnology (4)
BIOL	361Pq	Microbiology (4)
CHEM	235Pq	Organic Chemistry I (4)
CHEM	236Pq	Organic Chemistry II (4)
CHEM	251Pq	Inorganic Chemistry (4)
CHEM	320P	Biochemistry (4)
CHEM	446P	Analytical Chemistry Seminar (1)
CHEM	447P	Instrumental Analysis (4)
NASC	222Iq	Field Studies (3) <i>or</i>
NASC	322PIq	Advanced Field Studies (3)
NASC	335Pq	Surface and Groundwater Resources (3)
PHYS	101Pmq	Introductory Physics I (4)
PHYS	102Pmq	Introductory Physics II (4)
	<i>or</i>	
	PHYS	111Pmq General Physics I (5)
	PHYS	112Pmq General Physics II (5)
PHYS	204Pq	Energy and Environment (3)

400 level internship by arrangement  
 Note: Study abroad courses may also apply as electives

5. Complete all requirements for the Communication Skills Endorsement

**The Global Environmental Policy Track**

This track emphasizes political, economic and social/cultural aspects of the human impact on the natural environment, while still grounding students in fundamentals of the natural and earth sciences. Students explore governmental and non-governmental structures, processes, actors and policies relating to the environment at the global, national and local levels. Course work is enriched by supervised independent research, career-focused internships, experiential and service learning opportunities.

Study abroad and foreign language proficiency, at the intermediate level or higher, are strongly recommended. In addition, most competitive environmental policy graduates also have strong backgrounds in the natural and earth sciences, economics, and statistics, GIS and computing. Career opportunities in this important and rapidly growing field include a diverse variety of interesting positions in environmental protection and policy for a wide variety of government agencies and departments at the national, state and local levels; work with international governmental and nongovernmental organizations that address issues of poverty and environmental degradation; international education; agricultural economics, rural development, resource management and land use planning.

**Environmental Studies Major/  
 Global Environmental Policy Track Requirements (55 s.h.)**

1. Complete *all* of the following:

BIOL	130q	Diversity of Life (4)
CHEM	131q	General Chemistry (4)
COLL	210P	Research Strategies (1)
ECON	112s	Principles of Microeconomics (3)
ECON	113Ps	Principles of Macroeconomics (3)
ECON	321Ps	Environmental Economics (3)
MATH	215m	Applied Statistics (4)*
NASC	120q	Introduction to Environmental Science (4)
NASC	210q	Introduction to GIS (3)
NASC	237q	Physical Geography (4)
NASC	380PI	Environmental Studies Seminar (1)
NASC	480P	Environmental Studies Senior Seminar (1)
POLS	233hs	American Environmental History and Policy (3)
POLS	242s	Global Sustainability (3)

*\*MATH-105m may be substituted for MATH 215m, but MATH-215m is the recommended statistics course for the major*

**2. Complete one of the following:**

- POLS 250Ps Methods of Political Research (4)  
 SOC 350Ps Methods of Social Research (4)

**3. Complete 9 s.h. of the following elective courses (with at least 6 s.h. of these at the 200-level or above):**

- ANTH 120ns Introduction to Cultural Anthropology (3)  
 ANTH 260ns Medical Anthropology (3)  
 BEHS 285 Not-for-Profit Seminar (1)  
 BEHS 397P Internship in Not-for-Profit Management (3)  
 BIOL 123q Natural History of the Great Plains (4)  
 BIOL 131Pq Introduction to Cells (4)  
 BIOL 229Pq Principles of Ecology (4)  
 BIOL 345Pq Limnology (4)  
 COMM 268c Intercultural Communication (3)  
 COMM 362P Environmental Communication (3)  
 ECON 323Ps Labor Economics (3)  
 ECON 325Ps Public Finance (3)  
 ECON 329Ps Economic Development (3)  
 ENGL 201P Technical Writing (3)  
 ENGL 213t Nature Writing and Environmental Literature (3)  
 ENGL 344 Writing for Non-Profit Organizations  
 NASC 125q Geology (3)  
 PHIL 245t Environmental Ethics (3)  
 POLS 140fs Introduction to International Politics (3)  
 POLS 241s International Political Economy (3)  
 SOC 310Ps Science, Technology and Society (3)  
 SOC 344s Conflict Resolution (3)

400 level internship by arrangement

Note: Study abroad courses may also apply as electives

**4. Complete all requirements for the Communication Skills Endorsement**

*Note: Strongly recommended for students in the global environmental policy track is foreign language competency at the intermediate, mid-level proficiency level (usually the equivalent of two years of study).*

**Communication skills endorsement (both tracks)**

The Environmental Studies (ES) faculty believes it essential for all majors to be able to effectively speak, read, write and think critically within the context of their ES course work. For this reason, many required courses and electives include assignments and activities that evaluate students' communication skills proficiency.

The ES faculty meets annually to discuss and evaluate each major's communication skills development. Students can expect to be assessed at least once during year following declaration of the major. Students whose skills are judged to be weak or insufficient in one or more areas (speaking, reading, writing) will be directed to design a communication skills improvement plan with his or her academic advisor and to have the plan approved by the student's ES track director.

Evaluation of students' communication skills occurs in COLL 210: Research Strategies and NASC 380P: Environmental Studies Seminar. Final pre-graduation evaluation of students' communication skills occurs in NASC 480PI, Environmental Studies Senior Seminar (1). Two requirements of this common capstone course are a major paper and an oral public presentation of the research results reported in the paper. The quality of these assignments, as judged by the ES faculty, determines whether or not ES majors have successfully satisfied the communication skills (writing, speaking) requirements.

**Environmental Studies Minor Requirements (24 s.h.)**

**1. Complete all of the following:**

- ECON 112s Principles of Microeconomics (3)  
 NASC 120q Introduction to Environmental Science (4)  
 NASC 210q Introduction to GIS (3)  
 POLS 233hs American Environmental History and Policy (3)

**2. Complete at least 11 s.h. of additional electives with the approval of the Environmental Science director and advisor**

# EXERCISE SCIENCE

*Applied Arts Division  
Department of Exercise Science*

## Faculty

David Pavlat (chair), Richard Bowzer, Dustin Briggs, Leslie Duinink, Kelli O'Neal, Nicole Palenske, Pam Richards, John Roslien, Jodee Schaben, Chris Viesselman

## Statement of philosophy

Exercise science has shifted from an education-centered program to one that encompasses a broad spectrum of movement, health science and health care management. As a result, majors in Central's exercise science department move from student to professional through mastery of information, use of scientific methodology, pre-service educational experiences and, frequently, an internship/practicum in a variety of professional settings. At this level of involvement, students become active learners and acquire the skills necessary to meet the challenges of tomorrow's world. Existing assessment tools, a comprehensive body of knowledge, and communication skills are developed and utilized in a problem-solving environment.

Departmental focus is aimed at improvement of performance and maintenance of physical, social and cognitive well-being. Graduates know how to respond, adjust and adapt to exercise; analyze and evaluate individual physiological performance; design and assess exercise programs in the psychomotor domain; read, interpret and conduct research, and have developed an ethic of accountability to improve oneself, interested others and the profession at large.

## The exercise science major

The exercise science major features four programs: 1) health and physical education, 2) health promotion, 3) strength and conditioning and 4) health and exercise science.

## Communication skills endorsement

A communication skills endorsement from the exercise science department indicates students have achieved college level mastery in both the written and verbal domain. Communication skills will be assessed using predetermined rubric tools during the following classes: EXSC 149, EXSC 254, EXSC 357, and EXSC 460. Students assessed as needing further development will be referred to the department chair for a prescriptive plan to improve their communication skills.

## Exercise Science/Health and Exercise Science Major Requirements (59 s.h.)

### 1. Complete all of the following:

BIOL	131Pq	Introduction to Cells (4)
BIOL	341Pq	Human Physiology (4)
BIOL	360P	Human Anatomy (4)
CHEM	131fq	General Chemistry (5)
CHEM	235Pq	Organic Chemistry I (4)
EXSC	135	Cardiovascular Endurance (1)
EXSC	136	Muscular Strength (1)
EXSC	149f	Foundations of Health and Exercise Science (3)
EXSC	151	First Aid and Sports Injuries (3)
EXSC	234P	Sport Nutrition (3)
EXSC	254P	Human Anatomy and Kinesiology (4)
EXSC	297I	Internship (1)
EXSC	357P	Fitness Assessment and Exercise Prescription (4)
EXSC	379P	Epidemiology of Physical Activity (3)
EXSC	397I	Internship (1)
EXSC	460P	Exercise Physiology (3)
EXSC	461P	Exercise Physiology Lab (2)
EXSC	497I	Internship (1)
PHYS	101Pmq	Introductory Physics I (4)
PHYS	102Pmq	Introductory Physics II (4)

### 2. Complete all requirements for the Communication Skills Endorsement



### A typical four-year schedule for the EXSC/Health and Exercise Science major.

#### Freshman Year

BIOL	131Pq	Introduction to Cells
CHEM	131fq	General Chemistry
CHEM	235Pq	Organic Chemistry I
EXSC	135	Cardiovascular Endurance
EXSC	136	Muscular Strength
EXSC	149f	Foundations of Health & Exsc Sci
EXSC	151	First Aid and Sports Injuries

Core courses and electives

#### Junior Year

BIOL	341Pq	Human Physiology
BIOL	360P	Human Anatomy
EXSC	357P	Fitness Assessment and Exercise Prescription
EXSC	379P	Epidemiology of Physical Activity
EXSC	397I	Internship

Core courses and electives

#### Sophomore year

EXSC	234P	Sport Nutrition
EXSC	254P	Human Anatomy and Kinesiology
EXSC	297I	Internship
PHYS	101Pmq	Introductory Physics I
PHYS	102Pmq	Introductory Physics II

Core courses and electives

#### Senior Year

EXSC	460P	Exercise Physiology
EXSC	461P	Exercise Physiology Lab
EXSC	497I	Internship

Core courses and electives

### Exercise Science/Health and Physical Education Major Requirements (52s.h.)

#### 1. Complete all of the following:

BIOL	111Pq	Introduction to Human Anatomy and Physiology I (4)
BIOL	112Pq	Introduction to Human Anatomy and Physiology II (4)
EXSC	110	Introduction to Stress Management (3)
EXSC	136	Fundamentals of Muscular Strength (1)
EXSC	149f	Foundations of Health and Exercise Science (3)
EXSC	151	First Aid and Sports Injuries (3)
EXSC	160	Personal Health (3)
EXSC	210	Methods of Teaching Health and Physical Education for Elementary School (3)
EXSC	212P	Adapted Physical Education (3)
EXSC	213	Principles of Coaching (3)
EXSC	214	Methods of Teaching Health and Physical Fitness Skills for Secondary School (3)
EXSC	234	Sports Nutrition (3)
EXSC	254P	Human Anatomy and Kinesiology (4)
EXSC	265	Group Exercise Leadership (2)
EXSC	357P	Fitness Assessment and Exercise Prescription (4)
EXSC	460P	Exercise Physiology (3)
EXSC	462P	Motor Learning (3)

#### 2. Complete all requirements for the Communication Skills Endorsement

#### 3. Teaching Licensure

Students seeking licensure must complete all requirements in the education department as well. Endorsements following the completion of the Exercise Science/Health and Physical Education major include: K-8 and 5-12 physical education, K-8 and 5-12 health and coaching endorsement, and the athletic coach endorsement. See the education major section of this catalog or contact the Exercise Science department for complete information.

#### 4. Coaching authorization

Students who do not anticipate obtaining a teaching license are encouraged to visit the Iowa Board of Educational Examiners for current coaching information at <http://www.state.ia.us/boee>

## A typical four-year schedule for the EXSC/Health and Physical Education major

### ***Freshman year***

BIOL 111 Human Anatomy and Physiology I  
 BIOL 112 Human Anatomy and Physiology II  
 EXSC 149 Foundations of Health and Exercise Science  
 EXSC 151 First Aid and Sport Injuries  
 EXSC 136 Fundamentals of Muscular Strength  
 Core courses, education courses and electives

### ***Sophomore year***

EXSC 160 Personal Health  
 EXSC 210 Methods of Teaching Physical Education and Health (Elem)  
 EXSC 214 Methods of Health and Physical Fitness Skills for Secondary School  
 EXSC 265 Group Exercise Leadership  
 Core courses, education courses and electives

### ***Junior year***

EXSC 212 Adapted Physical Education  
 EXSC 357 Fitness Assessment & Exercise Prescription  
 SOC 242 Sociology of the Family  
 Core courses, education courses and electives

### ***Senior year***

EXSC 460 Exercise Physiology  
 EXSC 462 Motor Learning  
 EDUC 450 Secondary General Methods  
 Student teaching  
 Core courses, education courses and electives

## Exercise Science/Health Promotion Major Requirements (45\*-49 s.h.)

### 1. Complete all of the following:

*BIOL 111Pq	Human Anatomy and Physiology I (4)
*BIOL 112Pq	Human Anatomy and Physiology II (4)
EXSC 135	Fundamentals of Cardiovascular Endurance (1)
EXSC 136	Fundamentals of Muscular Strength (1)
EXSC 149f	Foundations of Health and Exercise Science (3)
EXSC 151	First Aid and Sport Injuries (3)
EXSC 160	Personal Health (3)
EXSC 234P	Sports Nutrition (3)
EXSC 254P	Human Anatomy and Kinesiology (4)
EXSC 265	Group Exercise Leadership (2)
EXSC 356P	Operations & Management of Exercise and Sports Medicine Facilities (3)
EXSC 357P	Fitness Assessment and Exercise Prescription (4)
EXSC 358P	Principles of Personal Training (3)
EXSC 379	Epidemiology of Physical Activity (3)
EXSC 380	Worksite Program Planning and Evaluation (3)
EXSC 460P	Exercise Physiology (3)
EXSC 461	Exercise Physiology Lab (2)

*\*BIOL 131Pq Introduction to Cells may be substituted for BIOL 111/112 and the major will then consist of 45 s.h.*

### 2. Additional Recommended Course:

Students pursuing the Exercise Science Health Promotion major are encouraged to take additional courses as their schedules allow. While the courses below are not required for the major, having them will better prepare student for future job opportunities.

EXSC 110	Introduction to Stress Management (3)
EXSC 261	Community and Consumer Health (3)
EXSC 342	Outdoor Pursuits (3)
EXSC 363P	Human Sexuality (3)
EXSC 372P	Principles and Theories of Strength and Conditioning (4)
EXSC 432P	Fitness after Fifty (3)
EXSC 497PI	Internship (3)

### 3. Complete all requirements for the Communication Skills Endorsement

#### A typical four-year schedule for the EXSC/Health Promotion major

##### *Freshman year*

BIOL 111Pq Survey of Human Anatomy and Physiology I  
 BIOL 112Pq Survey of Human Anatomy and Physiology II  
 or BIOL 131Pq  
 EXSC 135 Fundamentals of Cardiovascular Endurance  
 EXSC 136 Fundamentals of Muscular Strength  
 EXSC 149 Foundations of Health and Exercise Science  
 EXSC 151 First Aid and Sports Injuries  
 EXSC 160 Personal Health  
 Core courses and electives

##### *Sophomore year*

EXSC 234 Sports Nutrition  
 EXSC 254 Human Anatomy and Kinesiology  
 EXSC 265 Group Exercise Leadership  
 Core courses and electives

##### *Junior year*

EXSC 356 Operation & Management of Exercise and Sports Medicine Facilities  
 EXSC 357 Fitness Assessment and Exercise Prescription  
 EXSC 379 Epidemiology of Physical Activity  
 EXSC 380 Program Planning and Evaluation  
 Core courses and electives

##### *Senior year*

EXSC 358 Principles of Personal Training  
 EXSC 432 Fitness After Fifty  
 EXSC 460 Exercise Physiology  
 EXSC 461 Exercise Physiology Lab  
 EXSC 497 Internship  
 Core courses and electives

### Exercise Science/Strength and Conditioning Major Requirements (50\*-54 s.h.)

#### 1. Complete all of the following:

*BIOL	111Pq	Survey of Human Anatomy and Physiology I (4)
*BIOL	112Pq	Survey of Human Anatomy and Physiology II (4)
EXSC	135	Fundamentals of Cardiovascular Endurance (1)
EXSC	136	Fundamentals of Muscular Strength (1)
EXSC	149f	Foundations of Health and Exercise Science (3)
EXSC	151	First Aid and Sport Injuries (3)
EXSC	234P	Sports Nutrition (3)
EXSC	254P	Human Anatomy and Kinesiology (4)
EXSC	293PI	Strength and Conditioning Practicum I (3)
EXSC	356P	Operations & Management of Exercise and Sports Medicine Facilities (3)
EXSC	357P	Fitness Assessment and Exercise Prescription (4)
EXSC	358P	Principles of Personal Training (3)
EXSC	372P	Principles and Theories of Strength and Conditioning (4)
EXSC	393PI	Strength and Conditioning Practicum II (3)
EXSC	460P	Exercise Physiology (3)
EXSC	461P	Exercise Physiology Lab (2)
EXSC	462P	Motor Learning (3)
EXSC	493PI	Strength and Conditioning Practicum III (3)

*Note: \*BIOL 131Pq Introduction to Cells may be substituted for BIOL 111/112 and the major will then consist of 50 s.h.*

#### 2. Complete all requirements for the Communication Skills Endorsement

**Exercise Science Minor Requirements (20 s.h.)****1. Complete all of the following:**

- EXSC 149f Foundations of Exercise Science (3)
- EXSC 151 First Aid and Sports Injuries (3)
- EXSC 254P Human Anatomy and Kinesiology (4)
- EXSC 356P Operations & Management of Exercise and Sports Medicine Facilities (3)
- EXSC 357P Fitness Assessment and Exercise Prescription (4)
- EXSC 460P Exercise Physiology (3)

# FRENCH

*Cross-Cultural Studies Division  
Modern Languages Department*

## Faculty

Nicole Kaplan

## Departmental statement of philosophy

The department of modern languages believes that the ability to communicate (listen, speak, read and write) in another language is fundamental for attaining an understanding of the many cultures that make up the world. For significant intercultural understanding, students must also learn what members of other cultures consider worth talking about: their historical, artistic and literary heritage; their contemporary political, social and economic problems; and their basic customs and values.

Modern language course offerings are intended to build basic communication skills and insight into important topics in literature and culture. All on-campus courses include laboratory sessions with native-speakers or advanced speakers of the target language and are supported by co-curricular activities in the language, including the language house program and social activities. All courses aim to increase language proficiency and cultural awareness as well as to prepare students for an extended, off-campus immersion in a culture where the target language is spoken.

## Teaching licensure

Students seeking teaching licensure must secure information from the department of modern languages and the department of education concerning departmental and state requirements. Requirements for students seeking teaching licensure are not necessarily identical to those of the general major/minor.

## Foreign language credit by proficiency

For information on earning credit by proficiency in a foreign language, please see the *Credit by Proficiency* section of this catalog.

## French major statement of philosophy

Classes are taught exclusively in French in order to maximize the opportunity for students to master the language. Distinct courses are offered in language, literature, civilization, translation and business. However, because a language and its culture are inextricably linked, the French department sees the study of language as encompassing much more than course work. The French program at Central College also involves the opportunity to live in the French House, to have frequent contact with native French assistants and to live and study in Paris. Taking full advantage of the program prepares students for a broad range of options after graduation, among which are education, graduate school, and the world of international business.

## Study abroad opportunities

It is strongly recommended that majors spend at least one academic year studying in the Central College Abroad Paris program. At least one semester's study in Paris is required for students planning to teach French. All courses offered in the Central College Abroad Paris program at the 700-800 level apply toward the French major.

## French Major Requirements (27 s.h. minimum)

### 1. Complete either:

- ◆ 27 semester hours in FREN courses numbered 321 or higher on the Pella campus (or the 700-800 level at the Paris program), or
- ◆ 35 semester hours in FREN courses numbered 221 or higher, or
- ◆ 43 semester hours in FREN courses numbered 121 or higher

### 2. Included in the hours taken above must be all of the following:

- ◆ 6 semester hours in French literature courses
- ◆ 3 semester hours in French civilization courses
- ◆ FREN 489P taken on Pella campus upon returning from studying abroad
- ◆ Additional 3 semester hours of French courses numbered higher than 322 on Pella campus upon returning from study abroad

### 3. Complete all requirements for the Communication Skills Endorsement

### Communication skills endorsement

All students at Central College are expected to demonstrate communication skills appropriate for their major(s). In addition to modern language skills, students in the department are expected to offer evidence of a high level of proficiency in English. Students should satisfy this requirement as soon as they declare their major, if at all possible before the end of the sophomore year. Approved oral and written work in English prepared for, or in connection with, courses in the major may be used to document skills. One faculty member is designated to certify communication skills for the department and to prescribe remediation when necessary.

### Typical sequence of major courses for the French major

#### *Freshman year*

Begin at highest level of competence

FREN 121c Beginning French I

FREN 122Pc Beginning French II or

FREN 221Pc Intermediate French I

FREN 222Pc Intermediate French II or

FREN 321Pc Advanced Conversation and Composition I

FREN 322Pc Advanced Conversation and Composition II

#### *Sophomore year*

Continue the next highest language sequence

FREN 221Pc Intermediate French I

FREN 222Pc Intermediate French II or

FREN 321Pc Advanced Conversation and Composition I

FREN 322Pc Advanced Conversation and Composition II

FREN 333Pch French Civilization or

FREN 343Pct Early French Literature: Middle Ages and Renaissance

FREN 344Pct French Literature of the 17th and 18th Centuries

FREN 345Pct 19th Century French Literature

FREN 346Pct 20th Century French Literature

#### *Junior year*

If FREN 322Pc or 333Pch is completed in the sophomore year, study abroad is strongly recommended.

#### *Senior year*

If FREN 333Pc is completed in the junior year, study abroad is strongly recommended. Take FREN 489P.

### French Minor Requirements

#### 1. Complete *either*

- ◆ 20 semester hours of FREN courses numbered 121 or higher, or
- ◆ 10 semester hours of FREN courses numbered 322 or higher taken at Central.

# GENERAL STUDIES

*Interdisciplinary Major*

## Faculty

Michael Schrier, director

## Statement of philosophy

The general studies major is designed to permit the creation of an integrated, interdisciplinary major with both breadth and depth. Unlike other interdisciplinary majors that may combine two or more departments within the same academic division, the general studies major requires substantial work in at least three divisions. The flexibility of the major can make it an excellent preparation for a variety of graduate school programs and professional careers.

## Study abroad opportunities

All courses taken abroad can be included in the general studies major.

## General Studies Major Requirements (78-80 s.h.)

### 1. Complete *either*:

- ♦ 26 s.h. of credit in each of three academic divisions *or*
- ♦ 20 s.h. of credit in each of four academic divisions

*Note: Courses that will **not** count toward the major are:*

COMM 160f Introduction to Communication Studies (*will meet the communication skills requirement, however*)

ENGL 101f Composition (*will meet the communication skills requirement, however*)

ENGL 100 Reading and Writing Strategies

HUM 101P Introduction to American Language and Civilization

MATH 103P College Algebra

### 2. Complete all requirements for the Communication Skills Endorsement

#### Communication skills endorsement

An initial evaluation of skills will be based on the student's performance in Central Foundations ("F") courses, supplemented by the student's scores on standardized tests such as ACT, SAT or the Nelson-Denny Reading Test. The student's progress will be monitored chiefly through his/her academic performance and consultation with faculty if problems appear.

To gain final communication skills endorsement in the general studies major, a student must:

1. achieve a grade of B- or better in ENGL 201P Technical Writing or ENGL 240a The Personal Essay
2. achieve a grade of B- or better in one of the following courses: COMM 160f Introduction to Communication Studies, COMM 264a Oral Interpretation, COMM Public Speaking, or COMM 262Ps Interpersonal Communication

# GERMAN STUDIES

*Cross-Cultural Studies Division  
Modern Languages Department*

## Faculty

Amy Young

## Departmental statement of philosophy

The department of modern languages believes that the ability to communicate (listen, speak, read and write) in another language is fundamental for attaining an understanding of the many cultures that make up the world. For significant intercultural understanding, students must also learn what members of other cultures consider worth talking about: their historical, artistic and literary heritage; their contemporary political, social and economic problems; and their basic customs and values.

Modern language course offerings are intended to build basic communication skills and insight into important topics in literature and culture. All on-campus courses include regular conversation sessions with native-speakers or advanced speakers of the target language and are supported by co-curricular activities in the language, including the language house program and social activities. All courses aim to increase language proficiency and cultural awareness as well as to prepare students for an extended, off-campus immersion in a culture where the target language is spoken.

## Study abroad opportunities

All majors in the department of modern languages (especially those seeking secondary teaching licensure) are expected to spend one year – or at least one semester – in Central’s study abroad program in Vienna, Austria. Before departure, students should review with their advisor those courses offered abroad that can be used to meet major requirements, and file a preliminary plan of study with the advisor. Students must make effective use of their time and experience abroad in order to reach the proficiency levels required of the major. Students seeking a minor in the department are encouraged to study abroad as well.

## Teaching licensure

Students seeking teaching licensure must secure information from the department of modern languages and the department of education concerning departmental and state requirements. Requirements for students seeking teaching licensure are not necessarily identical to those of the general major/minor.

## Foreign language credit by proficiency

For information on earning credit by proficiency in a foreign language, please see the “Credit by Proficiency” section of this catalog.

## German major statement of philosophy

Students completing the German Studies major may choose from three emphasis areas: literature, language or cultural history. At the heart of each student’s major program is study in a German-speaking country, typically as a participant in the Central College Germany/Austria program. Graduating majors are expected to demonstrate skills in German comparable to those of persons qualified to do advanced work at a German or American university. The ultimate aim of the program goes beyond the acquisition of linguistic competence, however, to laying the foundations for active and responsible world citizenship. German majors are encouraged to plan early for participation in the Central College Germany/Austria program.

## German Studies Major Requirements (32 s.h.)

*Note: All majors are expected to study in Germany or a German-speaking country, and to have skills in German comparable to those of persons qualified to do advanced work and receive admission to a German university. Students are advised to confer with the department regarding the best sequence of course work to fulfill major requirements, and the courses in Vienna that may be applied toward departmental requirements. Whenever possible, the civilization requirement should be met before going abroad.*

### 1. Complete:

**32 s.h. of GERM courses, including an area of emphasis, at the 300 level or higher**

Note: A course may fulfill more than one requirement for the major. For example, the capstone course required after returning from Vienna (requirement #2.6) might also count toward completion of an emphasis area, but the student must still complete a minimum of 32 s.h. for the major.

### 2. Included in the hours taken above must be all of the following (23 s.h.):

1. GERM 321Pc Advanced German I (4) *or equivalent*
2. GERM 322Pc Advanced German II (4) *or equivalent*
3. 6 s.h. in German language beyond GERM 322Pc (often fulfilled abroad)
4. 3 s.h. in German literature, taught in German (at the Pella campus or abroad)
5. 3 s.h. in German civilization or cultural history (at the Pella campus or abroad)
6. 3 s.h. in an approved advanced language, literature, or cultural history course taken as a capstone course on the Pella campus after returning from the study abroad program (may be waived for students whose last semester prior to graduation is spent in Central’s Vienna program)



### 3. Complete 9 s.h. in one of the following emphases:

- *Literature emphasis:* 9 s.h. chosen in consultation with the major advisor from offerings on the Pella campus or in Vienna; at least 6 s.h. must be taught in German.
- *Language emphasis:* 9 s.h. chosen in consultation with the major advisor from approved language courses in Vienna, and/or from courses in the linguistics track in Central College's English Department.
- *Cultural history emphasis:* 9 s.h. chosen in consultation with the major advisor from offerings in German, the humanities, social sciences and/or fine arts.

### 4. Complete all requirements for the Communication Skills Endorsement

#### Communication skills endorsement

All students at Central College are expected to demonstrate communication skills appropriate for their major(s). In addition to modern language skills, students in the department are expected to offer evidence of a high level of proficiency in English. Students should satisfy this requirement as soon as they declare their major and if at all possible before the end of the sophomore year. Approved oral and written work in English prepared for, or in connection with, courses in the GERM major may be used to document skills. Each language area has at least one faculty member designated to certify communication skills for the department and to prescribe remediation when necessary.

#### Non-major support courses

During the year abroad, majors may take support courses in Austrian culture and the civilization. The department can help students to choose the civilization and literature courses in Vienna that can count toward major requirements. On campus, majors are encouraged to start a second major or to get strong minors in areas of interest (e.g., business, communications, linguistics, various pre-professional curricula, etc.); students are particularly encouraged to pursue work in another language, literature or area of cultural studies.

#### Additional information

1. A second foreign language and second major are both recommended. Also available is a single semester or summer study for 8 weeks or 12 weeks at the Goethe Institut in Germany. The Goethe Institut program can serve beginners in German as well as advanced students. Details may be obtained from the office of international education.
2. Each incoming student must take a placement test before enrolling at her/his appropriate level of competence. Final placement decision is made by the department on the basis of previous language study and/or performance on a placement test. Usually the advisor can get a good preliminary recommendation from the department chair. During the initial three weeks of the first semester of study, the student may move to a higher or lower level according to the recommendation of the language instructor.
3. Students with prior foreign language knowledge will be granted advanced placement credit according to college policy. Students should consult with the department chair regarding the policy on which credits count toward graduation, the major and teacher certification.
4. Specific information on the requirements for the minor and/or the teaching major/minor in German can be secured from the department. Requirements for students seeking teaching certification are not necessarily identical with those of the general major/minor. The department is especially stringent in its expectation that candidates for teacher certification study abroad.
5. The department wishes to work closely with majors studying abroad; all students are asked to obtain statements on file with the department concerning specific offerings in Vienna that may count toward the major.

#### Typical sequence of courses for the German studies major

##### *Freshman year*

Begin at highest level of competence  
 GERM 121c Beginning German I or  
 GERM 122Pc Beginning German II

GERM 221PC Intermediate German I or  
 GERM 222Pc Intermediate German II: Composition/Conversation  
 or other appropriate advanced course work.

##### *Sophomore year*

If completed GERM 322Pc or higher, eligible for year's study abroad. Otherwise, continue the next highest language sequence, GERM 221, 222 or 321, 322 or other appropriate advanced course work including 361.

##### *Junior year*

If completed GERM 322Pc or higher as a sophomore, should take year's study abroad. Students who began German at Central College may apply to study abroad as juniors.

***Senior year***

If completed GERM 322Pc or 333 as a junior, should take year's study abroad. If returned from abroad, complete at least one departmentally approved advanced course.

**German Studies Minor Requirements**

1. Complete at least GERM 321Pc (4) and GERM 322Pc (4) (or equivalent), with the highest two courses for the minor taken at Central College or at Central's program in Vienna.
2. Achieve the equivalent of intermediate-high proficiency in all skills as demonstrated in an oral exam with a faculty member (ACTFL scale)

*Note: Special requirements apply for teacher certification.*

# HISTORY

Humanities Division  
History Department

## Faculty

Michael Schrier (chair), Mark Barloon, Chia Ning, Lori Witt

## Statement of philosophy

The history department believes that one of the most important ways in which people establish who they are is through an accounting of what they have done over time. Since all human activities provide resources for this understanding, the history department includes in the study of history all social and cultural activities in which people have engaged. History is more than past politics. To insure that its students have the opportunity to know the variety that characterizes the human experience, the history department offers courses in all periods from ancient to modern and in most regions, including the Middle East, Africa, Asia, Europe and America.

Since history involves more than the simple setting forth of facts, the department exposes its students to the variety of interpretations and arguments that have characterized historians' study. It also seeks to make them aware of the difficulties in coming to agreement in these matters. The department intends that engagement in such investigation assists students in developing their reasoning skills, as well as advanced reading and writing skills, which provides excellent preparation for graduate and professional study.

In addition to the standard major, the history department offers two options that lead either to certification in secondary education or an emphasis in public history. Course work in cultural anthropology, archaeology, art history, cultural and historical geography, and environmental studies is encouraged depending on individual student interests.

## Study abroad opportunities

All history courses taken abroad can be used for the major.

## History Major Requirements (38 s.h.)

### 1. Complete all of the following:

HIST	110fh	Early Western Civilization (3)
HIST	111fh	Modern Western Civilization (3)
HIST	130h	United States to 1877 (3)
HIST	131h	United States Since 1877 (3)
HIST	385I	History Seminar (4)
HIST	386I	Public History Seminar (4)

### 2. Complete one of the following:

HIST	150h	Latin American Civilization (3)
HIST	170nh	Early East Asian Civilization (3)
HIST	171nh	Modern East Asian Civilization (3)
HIST	180nh	African Civilization (3)
HIST	220nh	Middle Eastern Civilization (3)
HIST	271nh	History of Modern China (3)
HIST	275nh	History of Modern Japan (3)
HIST	280nh	African History (3)
POLS	222nhs	African Politics Since 1935 (3)
POLS	225hs	Modern Latin America (3)
POLS	230nhs	Africa, Asia, and Latin America in World Affairs (3)

### 3. Complete two of the following:

HIST	310h	Studies in World History (3)
HIST	330h	Studies in American History (3)

*Note: Each of these courses may be repeated for credit with different topics.*

### 4. Complete 9 additional s.h. of approved electives at the 200 or 300 levels.

*Note: Approved electives include POLS 222nhs African Politics Since 1935, POLS 223hs Contemporary Europe, POLS 225hs Modern Latin America, POLS 230nhs Africa, Asia, and Latin America in World Affairs, POLS 231nhs The Middle East in World Affairs, POLS 233hs American Environmental History and Policy, POLS 235hs The U.S. in World Affairs, REL 250br American Religious Thought, REL 252br The Reformation, REL 253br Medieval Christendom, and REL 254br The Early Church, in addition to all 200 and 300 level HIST courses.*

### 5. Satisfy the departmental communication and information literacy skills endorsement. *The department will formally assess the communication skills of each major in all required history classes in addition to all 300 level topics classes. The final determination will be made on the student's work in HIST 385I and HIST 386I.*

### Communication skills endorsement

Evaluation in all skills is based on student's performance in HIST 385I and 386I. This two-course sequence requires extensive writing and reading in addition to development of research skills, and the student must receive a minimum grade of "C" for the course to obtain departmental recommendation for graduation with a history major. Preliminary evaluations of all skills are made when evaluating the student's performance in the western civilization sequence, which is classified as central foundations ("P") course work. The student's skills will be continually monitored through subsequent course work in the major. If serious problems are apparent as a result of the preliminary evaluation or if endorsement is not earned after completion of HIST 385I-386I, students will be asked to undertake a remedial program devised in consultation with the advisor.

### History Minor Requirements (24 s.h.)

#### 1. Complete 24 s.h. of HIST credit, including the following:

- ◆ three courses in American history
- ◆ three courses in world history.

*Note: The history minor will **not** meet the State of Iowa requirements for teaching certification in history as a minor field.*

#### Typical sequence of required courses for the history major

##### *Freshman year*

HIST 110fh Early Western Civilization  
 HIST 111fh Modern Western Civilization  
 HIST 130h United States to 1877  
 HIST 131h United States Since 1877

##### *Sophomore year*

Three to four history electives

##### *Junior year*

HIST 385I History Seminar  
 HIST 386I Public History Seminar  
 History electives  
 Core courses and electives

##### *Senior year*

HIST 386I Public History Seminar  
 History electives  
 Core courses and electives

#### Secondary education teaching licensure

Students seeking secondary education teaching licensure must, in addition to completing all education (EDUC) courses required for licensure, complete 38 s.h. of history credit, including:

- ◆ HIST 110fh, HIST 111fh, HIST 130h, HIST 131h
- ◆ one history elective from group 2
- ◆ two world history electives
- ◆ three American history electives
- ◆ HIST 385I and HIST 386I

In addition, students seeking teaching licensure must earn a GPA of 3.0 in the history major.

# INDIVIDUALIZED INTERDISCIPLINARY MAJOR

## The Individualized Interdisciplinary Major Requirements

The individualized interdisciplinary major was created for students whose academic interests and goals can be best met outside the structure of any single disciplinary/departmental major, any combination of majors, or any combination of major(s) and minor(s).

Students may design a customized interdisciplinary major with the assistance of faculty members from two departments primarily involved in the major. The major must consist of 50-60 s.h. of courses and be comprised of lower-, middle- and upper-level courses. As all students at Central College are expected to demonstrate communication skills appropriate for their major, the student - in consultation with the two academic advisors - also needs to explicitly address how the communications skills endorsement will be fulfilled as part of the major in the proposal. It is in the student's best interest to submit a completed "Interdisciplinary Major Proposal" form to the academic records and registration office by the end of the sophomore year; proposals will not be accepted after the end of the first semester of the junior year.

# INFORMATION SYSTEMS

*Behavioral Sciences Division  
Interdisciplinary Major*

## Faculty

Stephen Fyfe and Robert Maurer (co-directors)

## Statement of philosophy

Students desiring a technical specialty within either business management or accounting or an applied area of computer science will find the interdisciplinary information systems major of interest. The major offers a common core of courses, devised to meet student needs as the disciplines continue to change, and three emphases: **accounting information systems (AIS)**, **computer information systems (CIS)** or **management information systems (MIS)**.

Accounting information systems gives students exposure to computing and the other fields within business, focusing on the various aspects of accounting. A similar situation occurs with management information systems, surveying the different fields within the business management area. The student in the computer information systems track receives the core economics, accounting, business management background and has the applied courses of computer science such as COSC 255P Programming: Cobol, COSC 275P Computer Networking and COSC 325P Database Systems.

Internships are strongly recommended. They may be obtained through locally or regionally located businesses and organizations, through one of Central's international program sites or through the Chicago Metropolitan Center. This experience provides the student with rich learning opportunities and puts course work into practice.

## Major/minor restrictions

Information systems majors cannot also declare a minor in either business management or computer science. Information systems majors with the AIS emphasis cannot also declare a major or minor in accounting. Information systems majors with the CIS emphasis cannot also declare a computer science major or a mathematics/computer science major. Information systems majors with the MIS emphasis cannot also declare a business management major.

## Information Systems Major Requirements (50 s.h. minimum)

### 1. Complete all of the following:

ACCT	241	Introduction to Financial Accounting (3)
ACCT	242Pm	Introduction to Management Accounting (3)
BMGT	251P	Principles of Management (3)
COSC	110m	Introduction to Computer Science (3)
COSC	130Pm	Data Structures (3)
COSC	220Pm	Software Design (3)
COSC	255P	Programming: COBOL (2)
COSC	360P	Database Systems (3)
COSC	372P	Computer Networks (2)
ECON	112s	Principles of Microeconomics (3)
ECON	113Ps	Principles of Macroeconomics (3)
MATH	105m	Introduction to Statistics (4)

### 2. Complete one ethics-related course from the Philosophy/Religion department; consult the Information Systems co-chairs for a list of acceptable courses.

### 3. Complete all requirements for one of the following emphases:

\* *Accounting information systems (AIS) emphasis:*

ACCT	341P	Intermediate Financial Accounting I (3)
ACCT	342P	Intermediate Financial Accounting II (3)
ACCT	343P	Advanced Management Accounting (3)
ACCT	347P	Accounting Information Systems (3)
ACCT	442P	Auditing (3)

\* *Computer information systems (CIS) emphasis:*

COSC	260P	Web Application Development (3)
COSC	320P	Advanced Software Design (3)

6 s.h. of elective COSC courses at the 220 level or higher, excluding internships and practicums

\* *Management information systems (MIS) emphasis:*

BMGT	351Ps	Organizational Behavior (3)
BMGT	361Pm	Corporate Finance (3)

BMGT 371P Principles of Marketing (3)  
 BMGT 381Pm Operations Management (3)  
 ECON 281Pm Research Methods in Economics (3)

#### 4. Complete all requirements for the Communications Skills Endorsement

##### Communication skills endorsement

The department's communication skills requirement has three components: reading and writing, speaking, and professional development. The following are the minimum standards in each area:

##### Reading and writing

Students may satisfy the reading and writing requirement in any one of the following ways:

ENGL 101f Composition with a grade of at least "B"; or  
 ENGL 120Pft Introduction to Literature with a grade of at least "B-"; or  
 ENGL 201P Technical Writing with a grade of at least "C+"; or  
 Complete one of the following courses with a grade of at least "C":

ENGL 211-216	200-level English literature course
ENGL 240a	The Personal Essay
ENGL 241a	Short Story Writing
ENGL 343PIa	Travel Writing

##### Speaking

Students must complete one of the following courses:

COMM 160f	Introduction to Communication Studies
COMM 266a	Readers Theatre
COMM 268c	Intercultural Communication
COMM	Public Speaking
COMM 340P	Public Relations
COMM 342P	Communication in Organizations
COMM 364P	Argumentation

or complete significant communication experience approved by the economics/accounting/management department

##### Professional development

Students must successfully complete all of the following sessions in the professional development series, offered by the career services office:

1. Job Search Success
2. Resume/Cover Letter Writing
3. Interviewing Strategies
4. Dress for Success
5. Dining Etiquette

It is recommended that students complete this program by the end of their junior year. At the latest, the program should be completed by the end of the fall semester of the senior year.

The only acceptable alternative for students who have failed to attend the regularly scheduled sessions by the career services office will be to complete a 10-page research paper for each unmet requirement. The research paper must include an annotated bibliography containing a minimum of ten credible, authoritative sources. In addition, students will be required to make a 15-minute presentation to departmental faculty for each unmet requirement. The research papers and presentations must be completed at least three weeks prior to the beginning of the final exam week of the semester during which the student anticipates graduation.

Business management and international management majors will not be allowed to enroll in a capstone course until all communication skills requirements, including the professional development series, have been completed.

##### Final communication skills approval

Successful completion of the aforementioned requirements does not guarantee departmental approval of a student's communication skills requirements. The economics/accounting/management faculty members retain the right to continuously monitor every student's progress and make appropriate referral(s) to the central for academic excellence or elsewhere for additional work.

# INTERNATIONAL MANAGEMENT

*Behavioral Sciences Division*

*Economics, Accounting and Business Management Department*

## Faculty

Debela Birru (chair), Lori Bell, Andrew Campbell, Jann Freed, Robert Maurer, Michael Murray, Brian Peterson, Jaclyn Rundle, Alan Terpstra, Sherrie Wilson

## Statement of philosophy

The purpose of the international management major at Central College is to acquaint students with the cultural, economic, legal, financial and sociological aspects of engaging in international business. The program focuses on the integration of knowledge from business management, economics and foreign languages as well as other areas in the liberal arts. Majors are required to study abroad in one of our foreign language programs (Granada, Paris, Vienna) for at least one semester; an internship may be included in their international experience. The overseas study strengthens Central students' understanding of the international environment and the complexities involved in international transactions. Central's overall goal is aimed at creating an environment that fosters personal growth and intellectual maturity so that Central's students can prepare themselves for advanced studies and career opportunities.

## International Management Major Requirements (51 s.h.)

*Note: This major may not be declared in combination with the following majors: Business Management, Management Information Systems, and Economics.*

### 1. Complete all of the following

ECON	112s	Principles of Microeconomics (3)
ECON	113Ps	Principles of Macroeconomics (3)
ECON	322Ps	International Economics (3)
ECON	329Ps	Economic Development (3) <i>or approved substitute</i>
ACCT	241	Introduction to Financial Accounting (3)
ACCT	242Pm	Introduction to Management Accounting (3)
MATH	105m	Introduction to Statistics (4)
BMGT	251P	Principles of Management (3)
BMGT	361Pm	Corporate Finance (3)
BMGT	370P	International Business (3)
BMGT	371P	Principles of Marketing (3)
BMGT	370P	International Business (3)
BMGT	453PI	Global Strategic Management (3)
CRCL	210c	Introduction to International Studies (3) <i>or approved substitute</i>

### 2. Complete one of the following:

COSC	106	Introduction to Web Programming (3)
COSC	110m	Introduction to Computer Science (3)

### 3. Complete two of the following:

POLS	241s	International Political Economy (3)
POLS	242s	Global Sustainability (3)
POLS	344s	International Law and Organizations (3)

### 4. Complete a minimum of one semester of study abroad at one of Central's study abroad programs. Study abroad for one full year is highly recommended.

### 5. Complete all requirements for one of the following two emphases:

*\* Business Administration Emphasis*

NASC	210q	Introduction to GIS (3)
BMGT	351Ps	Organizational Behavior (3)
ECON	327Ps	International Finance (3) <i>or approved substitute</i>

*\* Language/Cross-Cultural Emphasis*

Achieve proficiency in a foreign language at the 322 level or above

### 6. Complete all requirements for the Communications Skills Endorsement



### Communication skills endorsement

The department's communication skills requirement has three components: reading and writing, speaking, and professional development. The following are the minimum standards in each area:

#### Reading and writing

Students may satisfy the reading and writing requirement in any one of the following ways:

- ENGL 101f Composition with a grade of at least "B"; or
- ENGL 120Pft Introduction to Literature with a grade of at least "B-"; or
- ENGL 201P Technical Writing with a grade of at least "C+"; or

Complete one of the following courses with a grade of at least "C":

- ENGL 211-216      200-level English literature course
  - ENGL 240a        The Personal Essay
  - ENGL 241a        Short Story Writing
  - ENGL 343PIa      Travel Writing
- or other English course numbered 211 or above, with the approval of the department.

#### Speaking

Students must complete one of the following courses:

- COMM 160f      Introduction to Communication Studies
- COMM 266a      Readers Theatre
- COMM 268c      Intercultural Communication
- COMM            Public Speaking
- COMM 340P      Public Relations
- COMM 342P      Communication in Organizations
- COMM 364P      Argumentation

or complete significant communication experience approved by the Economics/Accounting/Management Department

#### Professional development

Students must successfully complete all of the following sessions in the professional development series, offered by the career services office:

1. Job Search Success
2. Resume/Cover Letter Writing
3. Interviewing Strategies
4. Dress for Success
5. Dining Etiquette

It is recommended that students complete this program by the end of their junior year. At the latest, the program should be completed by the end of the fall semester of the senior year.

The only acceptable alternative for students who have failed to attend the regularly scheduled sessions by the career services office will be to complete a 10-page research paper for each unmet requirement. The research paper must include an annotated bibliography containing a minimum of ten credible, authoritative sources. In addition, students will be required to make a 15-minute presentation to departmental faculty for each unmet requirement. The research papers and presentations must be completed at least three weeks prior to the beginning of the final exam week of the semester during which the student anticipates graduation.

Business management and international management majors will not be allowed to enroll in a capstone course until all communication skills requirements, including the professional development series, have been completed.

#### Final communication skills approval

EAM department faculty require significant writing and presentation assignments in most Economics, Accounting and Business Management courses. By evaluating assigned course papers and presentations, EAM faculty can assess skill improvements throughout each student's academic program.

Students should be aware that mere completion of the specific reading-writing and speaking requirements listed above does not guarantee departmental approval of a student's communication skills requirement. The Economics, Accounting and Business Management faculty members retain the right to continuously monitor every student's progress and make appropriate referral(s) to the center for academic excellence or elsewhere for additional work

**Typical sequence of major courses for the international management major*****Freshman year***

ECON 112s Principles of Microeconomics  
ECON 113Ps Principles of Macroeconomics  
COSC 106 Introduction to Web Programming (or COSC 110m)  
200/300-level foreign language courses

***Sophomore year***

ACCT 241 Introduction to Financial Accounting  
ACCT 242Pm Introduction to Management Accounting  
BMGT 251P Principles of Management  
MATH 105m Introduction to Statistics  
300-level foreign language courses

***Junior and/or senior years***

Foreign language study abroad—minimum of one semester  
ECON 322Ps International Economics  
BMGT 361Pm Corporate Finance  
BMGT 371P Principles of Marketing  
BMGT 381Pm Operations Management  
BMGT 453PI Global Strategic Management

# INTERNATIONAL STUDIES

## *Interdisciplinary Major*

### Faculty

Co-Directors: James Zaffiro (African studies), Allison Krogstad (Latin American studies), Chia Ning (East Asia studies), Michael Schrier (West European studies)

### Statement of philosophy

International studies is an interdisciplinary major that develops international understanding of historical and contemporary world issues through basic course work in international issues, a focus on a particular world region, and proficiency in a foreign language and study abroad. The program seeks to encourage cross-cultural sensitivity and emphasizes the interrelatedness of cultural, linguistic, political, social, economic, environmental and aesthetic issues in a particular region of the world. Students choose to pursue either the **African Studies (AFS) track**, the **East Asian Studies (EAS) track**, the **Latin American Studies (LAS) track**, or the **West European Studies (WES) track** of the major and are assigned to an area studies director to plan their programs.

### Study abroad

Students are required to enroll at least one semester in an appropriate Central College abroad program or another program approved by the appropriate international studies track director and the college. Because the overseas experience is so vital to proper preparation for active participation in an international environment, students should confer with their area studies director early in their college careers to plan for the best combination of home and overseas course work to fulfill major requirements.

### Communication skills endorsement

A student must pass two Central foundation courses with an average of 2.7 or better or earn a B- or better in the senior seminar to earn the major's communication skills endorsement.

## International Studies Major/African Studies Track Requirements (45 s.h. plus language proficiency - French strongly recommended)

### 1. Complete all of the following:

ANTH 120ns Introduction to Cultural Anthropology (3)  
CRCL 210c Introduction to International Studies (3)  
HIST 180nh Modern African Civilization (3)

### 2. Complete one of the following:

HIST 280nh African History (3)  
POLS 222nhs African Politics Since 1935(3) or POLS 322Inhs Readings in African Politics Since 1935(3)

### 3. Complete one of the following:

ANTH 366Pc Ethnographic Field Methods (3)  
FREN 490Pct Topics in Francophone Literature and Civilization (3)  
NASC 480PI Environmental Studies Seminar (3)  
POLS 489PIs Research Seminar (3)

### 4. Complete 30 s.h. of African Studies electives from the list below; selections must be approved by the track director at the time of major declaration. See track director for updated list.

ANTH 161n African-American Culture and History (3)  
ANTH 462Pcs Culture Theory (3)  
ART 247na African Art (3)  
ART 347na Readings in African Art (3)  
BMGT 453PI Global Strategic Management (4)  
COMM 268c Intercultural Communication (3)  
CRCL 311Pc Topics in Cross-Cultural Perception and Communication (3)  
ECON 112s Principles of Microeconomics (3)  
ECON 113Ps Principles of Macroeconomics (3)  
ECON 322Ps International Economics (3)  
ECON 329Ps Economic Development (3)  
ENGL 212nt African and Caribbean Literature (3)  
ENGL 215nt African-American Literature (3)  
ENGL 284I Field Methods in Linguistics (3)  
ENGL 330 Principles of Linguistics (3)  
ENGL 335s Sociolinguistics (3)  
ENGL 362t World Literature (3)

FREN	333Pch	French Civilization (3)
FREN	352Pc	French for Business (3)
MUS	114na	World Music (3)
POLS	120ns	Politics in Foreign Countries (3)
POLS	140fs	Introduction to International Politics (3)
POLS	241s	International Political Economy (3)
POLS	242s	Global Sustainability (3)
POLS	344s	International Law and Organizations (3)
REL	235nr	Islam (3) <i>or</i> REL 335Inr <i>Readings in Islam</i> (3)
SOC	236Pns	Minority Groups (3)

5. Demonstrate proficiency in a foreign language at the intermediate-high level (ACTFL scale)
6. Complete all requirements for the Communication Skills Endorsement

### International Studies Major/East Asian Track Requirements (45 s.h. plus language proficiency)

1. Complete all of the following:

ANTH	120ns	Introduction to Cultural Anthropology (3)
CRCL	210c	Introduction to International Studies (3)
HIST	170nh	Early East Asian Civilization (3) <i>or</i> HIST 171nh Modern East Asian Civilization (3)

2. Complete one of the following:

HIST	271nh	History of Modern China (3)
HIST	275nh	History of Modern Japan (3)

3. Complete one of the following:

ANTH	366Pc	Ethnographic Field Methods (3)
ENGL	335s	Sociolinguistics (3)
ENGL	360	Teaching English as a Second Language (3)
HIST	385I	Seminar I-History (4)
POLS	489PIs	Research Seminar (3)
REL	330Inr	Readings in Asian Religions (4)

4. Complete 30 s.h. of East Asian electives from the list below; courses taken in China apply. Selections must be approved by the track director at the time of major declaration. See track director for updated list.

ANTH	265cs	Ethnicity and Nationalism (3)
ANTH	365lcs	Readings in Ethnicity and Nationalism (3)
ANTH	462Pcs	Culture Theory (3)
BMGT	370P	International Business (3)
BMGT	453PI	Global Strategic Management (3)
COMM	268c	Intercultural Communication (3)
CHIN	221Pn	Intermediate Chinese I (4)
CHIN	222Pn	Intermediate Chinese II (4)
CHIN	399	Independent Study: Advanced Chinese I (4)
CHIN	399	Independent Study: Advanced Chinese II (4)
ECON	322Ps	International Economics (3)
ECON	327Ps	International Finance (3)
ENGL	211nt	Literature of India and the Pacific (3)
ENGL	284I	Field Methods in Linguistics (3)
ENGL	330	Principles of Linguistics (3)
ENGL	335s	Sociolinguistics (3)
ENGL	360	Teaching English as a Second Language (3)
ENGL	362t	World Literature II (3)
HIST	170nh	Early East Asian Civilization (3)
HIST	171nh	Modern East Asian Civilization (3)
HIST	271nh	History of Modern China (3)
HIST	272nh	History of Chinese Minorities (3)
HIST	275nh	History of Modern Japan (3)
MUS	114na	World Music (3)
PHIL	228nt	Asian Philosophy (3)
POLS	140fs	Introduction to International Politics (3)

POLS	235hs	The U.S. in World Affairs (3)
POLS	230nhs	Africa, Asia, and the Latin America in World Affairs (3)
POLS	241s	International Political Economy (3)
POLS	242s	Global Sustainability (3)
POLS	344s	International Law and Organizations (3)
REL	230nr	Asian Religions (3)
REL	330Inr	Readings in Asian Religions (4)
SOC	236Pns	Minority Groups (3)

5. Study abroad at Hangzhou, China, in Central College Abroad program at Zhejiang University
6. Demonstrate proficiency in a foreign language at the intermediate-high level (ACTFL scale)
7. Complete all requirements for the Communication Skills Endorsement

### International Studies Major/Latin American Studies Track Requirements (45 s.h. plus language proficiency and study abroad)

1. Complete all of the following:

ANTH	120ns	Introduction to Cultural Anthropology (3)
ANTH	255ns	Cultures of Latin America (3)
ANTH	366Pc	Ethnographic Field Methods (3)
CRCL	210c	Introduction to International Studies (3)
HIST	150h	Latin American Civilization (3)

2. Complete one of the following:

POLS	140fs	Introduction to International Politics (3)
POLS	241s	International Political Economy (3)

3. Complete one of the following senior seminars:

HIST	385I	Seminar I-History (4)
POLS	489PIs	Research Seminar (3)
A senior seminar in a foreign language (3)		

4. Complete 24 s.h. of Latin American studies electives from the list below. See track director for updated list. Courses taken in Spain may apply; all courses (except Spanish language courses) taken in Yucatan apply.

BIOL	310Pq	Tropical Ecology (1-4)
COMM	268c	Intercultural Communication (3)
CRCL	311Pc	Topics in Cross Cultural Perception and Communication (3)
ECON	322Ps	International Economics (3)
ECON	329Ps	Economic Development (3)
ENGL	360	Teaching English as a Second Language (3)
MUS	108na	Studies in Music (1)
MUS	114na	World Music (3)
NASC	237q	Physical Geography (4)
POLS	225hs	Modern Latin America (3)
POLS	230nhs	Africa, Asia, and Latin America in World Affairs (3)
POLS	242s	Global Sustainability (3)
POLS	344s	International Law and Organizations (3)
REL	274r	World Christianity (3)
REL	398PIx	Cross Cultural Ministry Internship (2)**
SOC	236Pns	Minority Groups (3)
SPAN	342Pnt	Modern Spanish American Literature (3)
SPAN	343Pn	Civilization of Hispanic America (3)
SPAN	350Pn	Hispanics/Latinos in the U.S. (3)

5. Demonstrate proficiency in a foreign language at the intermediate-high level (ACTFL scale)
6. Study abroad in Merida, Yucatan, Mexico (or other study abroad program approved by the track director)
7. Complete all requirements for the Communication Skills Endorsement

## International Studies Major/West European Studies Track Requirements (46 s.h. plus language proficiency)

### 1. Complete all of the following:

ANTH	120ns	Introduction to Cultural Anthropology (3)
CRCL	210c	Introduction to International Studies (3)
HIST	111fh	Modern Western Civilization (3)

### 2. Complete one of the following:

POLS	120ns	Politics in Foreign Countries (3)
POLS	140fs	Introduction to International Politics (3)

### 3. Complete one of the following:

ANTH	366Pc	Ethnographic Field Methods (3)
HIST	385P	Seminar I History (4)
POLS	489PIs	Research Seminar (3)

A senior seminar in a foreign language

### 4. Complete 31 s.h. of West European studies electives from the list below; selections must be approved by the track director at the time of major declaration. See track director for updated list. Courses taken abroad may apply.

ANTH	462Pcs	Culture Theory (3)
ART	221ah	History of Art: Ancient through Medieval (3)
ART	222ah	History of Art: Renaissance through Modern (3)
ART	325ah	History of Modern Art (3)
BMGT	374P	International Marketing (3)
COMM	268c	Intercultural Communication (3)
CRCL	311Pc	Topics in Cross Cultural Perception and Communication (3)
ECON	112s	Principles of Microeconomics (3)
ECON	113Ps	Principles of Macroeconomics (3)
ECON	322Ps	International Economics (3)
ECON	329Ps	Economic Development (3)
ENGL	248t	Comedy (3)
ENGL	252t	British Literature II: 1660-1850 (3)
ENGL	253t	British Literature III: 1850-Present (3)
ENGL	284I	Field Methods in Linguistics (3)
ENGL	330	Principles of Linguistics (3)
ENGL	335s	Sociolinguistics (3)
ENGL	346t	Shakespeare (3)
ENGL	360	Teaching English as a Second Language (3)
ENGL	361t	World Literature I (3)
ENGL	374t	Studies in 19th Century Literature (3)
ENGL	375t	Studies in 20th Century Literature (3)
FREN	333Pch	French Civilization (3)
FREN	343Pct	Early French Literature: Middle Ages and Renaissance (4)
FREN	344Pct	French Literature of the 17th and 18th Centuries (4)
FREN	345Pct	19th Century French Literature (3)
FREN	346Pct	20th Century French Literature (3)
FREN	352Pc	French for Business (3)
FREN	490Pct	Topics in Francophone Literature and Civilization ** (4)
GERM	332Pct	Masterworks of German Literature (3)
GERM	352Pct	German for Business (3)
GERM	353Pc	History of the German Language (3)
GERM	361Pch	German Cultural History (3) or HIST 262ch <i>German Cultural History</i> (3)
HIST	110fh	Early Western Civilization (3)
HIST	223hs	Contemporary Europe (3) or HIST 323Ibs <i>Readings in Contemporary Europe</i> (3)
HIST	211h	Readings in European History (4)
HIST	213h	The USSR (3)
HIST	252hr	The Reformation (3) or REL 252br <i>The Reformation</i> (3)
HIST	253hr	Medieval Christendom (3) or REL 253br <i>Medieval Christendom</i> (3)
HIST	254hr	The Early Church (3) or REL 254br <i>The Early Church</i> (3)
MUS	109xa	Studies in Music (1)
PHIL	221t	Classical Thought (3)
PHIL	222t	Modern Thought (3)

PHIL	225t	Modern Continental Philosophy (3)
PHIL	240t	Political Philosophy (3)
POLS	223hs	Contemporary Europe (3)
POLS	230nhs	Africa, Asia, and Latin America in World Affairs (3)
POLS	241s	International Political Economy (3)
POLS	242s	Global Sustainability (3)
POLS	344s	International Law and Organizations (3)
REL	233r	The Jewish Experience (3)
REL	270r	Christianity and Culture (3) <i>or REL 370Ir Readings in Christianity and Culture (4)</i>
SOC	236Pns	Minority Groups (3)
SPAN	332Pct	Modern Spanish Literature (3)
SPAN	485Pct	Seminar: Spanish Literature (3)
SPAN	490Pc	Topics in Spanish Culture and Civilization (3)

Note: \*\* Assumes appropriate topic

5. Demonstrate proficiency in a foreign language at the intermediate-high level (ACTFL scale)
6. Complete all requirements for the Communication Skills Endorsement

### Typical sequence of courses for the international studies major

#### *Freshman year*

Language courses  
Core courses

#### *Sophomore Year*

Language courses  
Study Abroad

#### *Junior Year*

AFS/EAS/LAS/WES courses  
Study abroad  
Core courses

#### *Senior Year*

AFS/EAS/LAS/WES courses  
Senior language seminar

### International Studies Minor Requirements (24 s.h. plus language proficiency)

1. Complete all of the following:
 

ANTH	120ns	Introduction to Cultural Anthropology (3)
CRCL	210c	Introduction to International Studies (3)
HIST	111fh	Modern Western Civilization (3)
2. Complete one of the following:
 

POLS	120s	Politics in Foreign Countries (3)
POLS	140fs	Introduction to International Politics (3)
3. Complete 12 s.h. of area studies electives, all from either the AFS, WES or LAS track electives list
4. Demonstrate proficiency in a foreign language at the intermediate-mid level (ACTFL scale)
5. Study abroad for at least one semester

### International Studies/East Asian Track Minor Requirements (24 s.h. plus language proficiency)

1. Complete all of the following:
 

ANTH	120ns	Introduction to Cultural Anthropology (3)
CRCL	210c	Introduction to International Studies (3)
HIST	170nh	Early East Asian Civilization (3) or HIST 171nh Modern East Asian Civilization (3)
2. Complete one of the following:
 

HIST	271nh	History of Modern China (3)
HIST	275nh	History of Modern Japan (3)
3. Complete 12 s.h. from area studies electives, either from China Study Abroad courses or the East Asian Studies electives list
4. Demonstrate proficiency in a foreign language at the intermediate-mid level (ACTFL, scale)
5. Participation to the China Program is strongly encouraged or study abroad for least one semester is recommended

# LINGUISTICS

*Humanities Division  
Interdisciplinary Major*

## Faculty

David Purnell (director)

## Statement of philosophy

The linguistics major is designed to prepare students for a variety of situations in which systematic language analysis is necessary. At times, a strong theoretical grounding is necessary, as in the field of computational linguistics. In other activities, such as teaching English as a second or foreign language, the emphasis is on application. Many tasks (e.g., field translation, area studies, work with less frequently taught languages) require both. Some specialties, such as ethnolinguistics, demand collateral work in the social sciences; others, such as the history of the English language, are best served by broad and extensive studies in the humanities; persons intending to pursue further training for professions in speech pathology and remediation need adequate preparation in the natural sciences. In some instances, extensive work in computer science may be necessary. For all these reasons, there is no single fixed curriculum required for the linguistics major. It is imperative, however, that students be trained in all areas of linguistic science, with a choice of specific course work reflecting individual interests, aspirations and talents.

Students are encouraged, where possible, to take Principles of Linguistics before taking other linguistics courses for the major or minor.

## Study abroad opportunities

Linguistics majors are encouraged to plan early for participation in one of Central College's nationally recognized study programs in Europe, Mexico or China.

## Linguistics Major Requirements (47 s.h. minimum)

### 1. Complete the following course:

ENGL 330 Principles of Linguistics (3)

### 2. Complete 12 s.h. of the following (approved in consultation with the director):

COMM 268c Intercultural Communication (3)  
 CRCL 311Pc Topics in Cross-Cultural Perception and Communication (3)  
 ENGL 284I Field Methods in Linguistics (3)  
 ENGL 331h History of the English Language (3)  
 ENGL 332 Advanced English Grammar (3)  
 ENGL 333 Phonetics and Phonemics (3)  
 ENGL 335s Sociolinguistics (3)  
 ENGL 360 Teaching English as a Second Language (3)  
 ENGL 397PI Internship: Teaching English as a Second Language (3)  
 ENGL 399I Independent Studies in English (Arr)  
 ENGL 499I Independent Studies in English (Arr)  
 or a phonetics course (Arr) from the Paris international studies program

### 3. Complete one course from each of the following two groups:

*Group I:*

BIOL 131Pq Introduction to Cells (4)  
 BIOL 321Pq Comparative Vertebrate Anatomy (4)  
 PSYC 239Ps The Brain and Behavior (3)  
 PSYC 340P Cognitive Psychology (3)  
 or an approved course in human anatomy

*Group II:*

PHIL 125m General Logic (3) *or*  
 one COSC course (at least 3 s.h.) approved by the director

### 4. Complete one director-approved anthropology course, such as:

SOC 236Pns Minority Groups (3)  
 ANTH 266n North American Indians (3)  
 ANTH 120ns Introduction to Cultural Anthropology (3)

### 5. Complete one psychology course (from the education or psychology department)

### 6. Complete 12 s.h. of electives chosen in consultation with the director



7. Complete at least 8 s.h. in a foreign language or demonstrate a reading knowledge in a second language
8. Complete all requirements for the Communication Skills Endorsement

### Communication skills endorsement

At the time a student declares the major in linguistics (normally before or during the sophomore year), the student's writing, reading, speaking and critical thinking skills will be evaluated by the department. Upon applying to become a linguistics major, students will submit a portfolio of at least two pieces of writing produced in college-level classes that demonstrate their ability to write effectively. Additional evidence, such as a grade of C or better in courses labeled Central foundations and textual interpretation, will be considered as evidence of the student's reading, speaking and critical thinking skills at the time of application for the major.

Skills assessment is a continuous process throughout a student's course work in the major. Subsequent writing assignments in the major may include reading reports, lesson plans, term papers and research papers. Reading skills are assessed by the evaluation of a student's written response, in classes and seminars, to assigned material. Oral skills are evaluated during the many oral presentations made in the linguistics track courses (see requirements for the major).

Final evaluation of a student's communication skills is usually made in the spring of a student's junior year. Students who are deficient in any of the skills areas are required to remediate the deficiencies through the Center for Academic Excellence or in consultation with a member of the department faculty. Individual contracts may be drawn up specifying steps the student must take to meet the requirements.

### Linguistics Minor Requirements (18 s.h.)

**Complete 18 s.h. in linguistics.** Typically courses would include ENGL 330 Principles of Linguistics, ENGL 331 History of the English Language, ENGL 332 Advanced English Grammar, ENGL 360 Teaching English as a Second Language or others approved by the program directors.

### English as a Second Language Teaching Endorsement

An English as a second language teaching endorsement is available. A parallel program is also available for those preparing to teach English as a second language outside the public schools. Both constitute a specialized, ESL-focused linguistics minor. Specific information may be obtained from the linguistics faculty.

### Additional information

Recommendations: study of a less commonly taught language, plus a course in computer science, if not already taken in fulfillment of requirement 3 above. The student should learn about several languages so that the concepts of comparative linguistics become meaningful. The student will ideally become familiar not only with the field of language itself, but also with supporting disciplines such as psychology, philosophy and anthropology.

Students wishing to focus their studies on an area of specialization (e.g., teaching English as a second language, computer assisted language analysis, missionary field work, languages not conventionally taught in the college curriculum, ethnographic or anthropological linguistics, or language and logic) are encouraged to consult early with the linguistics faculty to plan required and elective courses that meet special needs.

### Typical sequence of required courses for the linguistics major

*Note: Since many linguistics majors study abroad (and indeed are encouraged to do so), it is entirely possible that a student may choose, in consultation with the directors of the linguistics program, to begin the course work in linguistics prior to the junior year.*

#### **Freshman year**

Philosophy course  
Foreign language courses

#### **Sophomore year**

Philosophy course  
2 foreign language courses  
Anthropology course

#### **Junior year**

Two linguistics courses  
Psychology course

#### **Senior year**

Three linguistics courses

# MATHEMATICS

*Natural Sciences Division*

*Mathematics/Computer Science Department*

## Faculty

Wendy Weber (chair), Robert Franks, Stephen Fyfe, Russell Goodman, Allen Hibbard, Mark Johnson, Thomas Linton, Mark Mills

## Departmental information

The mathematics/computer science department offers four distinct majors: mathematics, computer science, mathematics with secondary education emphasis and a joint mathematics/computer science major (please see appropriate sections of this catalog for information on the mathematics and mathematics/computer science majors). Students who declare either the computer science or mathematics major may not also declare the joint mathematics/computer science major as a second major. Students who declare computer science or mathematics/computer science as their major may not declare an information systems major with an emphasis in computer information systems. Students who declare mathematics as a major may not declare the joint mathematics/computer science major as a second major. Those who wish to combine the disciplines of business and computer science may wish to consider the information systems major. Students seeking a mathematics teaching endorsement should consult the education department.

## Statement of philosophy

Mathematics, one of the keystones of the liberal arts, combines the study of patterns and abstract structures with the art of problem-solving. The ability to reason with quantitative information and solve intricate problems is, and will continue to be, a highly-valued skill. No less important is the ability to communicate technical material to a non-technical audience. The mathematics faculty is committed to developing these skills in all of our students.

At the heart of the mathematics major are courses in algebra and real analysis, two of the main branches of contemporary mathematics. All majors study each of these areas. Other course requirements are flexible, allowing students to obtain teacher certification, gain practical experience in an internship or go overseas on one of Central's College abroad programs. During the junior and senior years, the seminar provides a capstone experience in which each student makes oral and written presentations to the entire department. Whether teaching, in graduate school, or in the workplace, graduates with a liberal arts major in mathematics have the tools they need for success.

## Mathematics credit by proficiency

For information on earning credit by proficiency in mathematics, please see the "Credit by Proficiency" section of this catalog.

## Mathematics Major Requirements (43 s.h.)

### 1. Complete all of the following:

- MATH 131Pm Calculus I (4)
- MATH 132Pm Calculus II (4)
- MATH 210Pm Introduction to a Computer Algebra System (1)
- MATH 221Pm Foundations of Mathematics (3)
- MATH 231Pm Multivariable Calculus (3)
- MATH 240Pm Linear Algebra (4)
- MATH 385P Mathematics/Computer Science Junior Seminar (2)
- MATH 421Pm Abstract Algebra I (3)
- MATH 431Pm Real Analysis I (3)
- MATH 485P Mathematics/Computer Science Senior Seminar (1)

### 2. Complete one of the following:

- COSC 110m Introduction to Computer Science (3)
- COSC 115Pm Scientific Programming (3)

### 3. Complete 12 s.h. of the following electives:

- MATH 250Pm Differential Equations (3)
- MATH 310Pm Geometry (3)
- MATH 330Pm Mathematical Modeling (3)
- MATH 341Pm Probability (3)
- MATH 342Pm Statistics (3)
- MATH 370Pm Numerical Analysis (3)
- MATH 422Pm Abstract Algebra II (3)
- MATH 432Pm Real Analysis II (3)
- MATH 390/490 Topics in Mathematics (3)

### 4. Complete all requirements for the Communication Skills Endorsement

### **Communication skills endorsement**

The department believes that it is essential that majors in computer science and mathematics are able to speak, read and write satisfactorily within the discipline. As such, many courses throughout the major include activities that evaluate students' ability to communicate.

The department faculty meet annually to discuss and evaluate each major's communication skills. Students can expect to be evaluated at least once during each academic year. Students whose skills in one or more areas--speaking, reading and writing--are not sufficient must work with her/his advisor to design an improvement plan.

The final evaluation of a student's communication skills occurs in MATH/COSC 385 Mathematics/Computer Science Junior Seminar and MATH/COSC 485 Mathematics/Computer Science Senior Seminar. In these courses, students are required to give two oral presentations and write a paper covering the topic used in the second presentation. Reading and research skills are also covered in these courses.

### **Typical sequence of courses for the math major**

#### ***Freshman year***

COSC 110m Introduction to Computer Science  
 MATH 131Pm Calculus I  
 MATH 132Pm Calculus II  
 Central core courses and electives

#### ***Sophomore year***

MATH 231Pm Multivariable Calculus  
 MATH 221Pm Foundations of Mathematics  
 MATH 240Pm Linear Algebra  
 MATH 210Pm Introduction to a Computer Algebra System  
 Central core courses and electives

#### ***Junior year***

MATH 385P Mathematics/Computer Science Junior Seminar  
 MATH 421Pm Abstract Algebra I\* and  
 MATH 422Pm Abstract Algebra II\* or  
 MATH 431Pm Real Analysis I\* and  
 MATH 432Pm Real Analysis II\*  
 Two courses from:  
 MATH 250Pm Differential Equations\*  
 MATH 370Pm Numerical Analysis\*  
 MATH 310Pm Geometry\*  
 MATH 390/490 Topics: Mathematics\*  
 Central core courses and electives

#### ***Senior year***

MATH 485P Mathematics/Computer Science Senior Seminar  
 MATH 421Pm Abstract Algebra I\* and  
 MATH 422Pm Abstract Algebra II\* or  
 MATH 431Pm Real Analysis I\* and  
 MATH 432Pm Real Analysis II\*

Two courses from:

MATH 330Pm Mathematical Modeling\*  
 MATH 341Pm Probability\*  
 MATH 342Pm Statistics\*  
 Central core courses and electives

\*Offered in alternate years.

## Mathematics Major/Secondary Education Emphasis Requirements (43 s.h.)

The mathematics and computer science department will not recommend for teacher licensure students whose grade point average within their mathematics and computer science courses is below 2.5. The department has advised the Teacher Education Committee that such students should be denied admission or be dropped from the certification process until grades in mathematics and computer science have been brought up to 2.5.

### 1. Complete all of the following:

- MATH 131Pm Calculus I (4)
- MATH 132Pm Calculus II (4)
- MATH 210Pm Introduction to a Computer Algebra System (1)
- MATH 221Pm Foundations of Mathematics (3)
- MATH 231Pm Multivariable Calculus (3)
- MATH 240Pm Linear Algebra (4)
- MATH 310Pm Geometry (3)
- MATH 385P Mathematics/Computer Science Junior Seminar (2)
- MATH 421Pm Abstract Algebra I (3)
- MATH 485P Mathematics/Computer Science Senior Seminar (1)

### 2. Complete one of the following:

- COSC 106 Introduction to Web Programming (3)
- COSC 110m Introduction to Computer Science (3)
- COSC 115Pm Scientific Programming (3)

### 3. Complete either:

- MATH 341Pm Probability (3) *and* MATH 342Pm Statistics (3)
- or*
- MATH 215Pm Applied Statistics (4)

### 4. Complete two or three of the following electives to reach a minimum of 43 s.h. in the major:

- MATH 250Pm Differential Equations (3)
- MATH 330Pm Mathematical Modeling (3)
- MATH 341Pm Probability (3)
- MATH 342Pm Statistics (3)
- MATH 370Pm Numerical Analysis (3)
- MATH 422Pm Abstract Algebra II (3)
- MATH 431Pm Real Analysis I (3)
- MATH 432Pm Real Analysis II (3)
- MATH 390/490 Topics in Mathematics (3)

### 5. Complete all requirements for the Communication Skills Endorsement

## Mathematics Minor Requirements (21 s.h.)

### 1. Complete all of the following:

- MATH 131Pm Calculus I (4)
- MATH 132Pm Calculus II (4)
- MATH 240Pm Linear Algebra (4)

### 2. Complete an additional 9 s.h. of the following electives:

Any MATH course numbered 215 or higher, excluding MATH 385P, 396I, 397I and 485P. MATH 221Pm is recommended since it is a prerequisite for some 300 and 400-level MATH courses. COSC 235 may be substituted for MATH 221.

## Mathematics Teaching Minor Requirements (26-28 s.h.)

Note: The mathematics and computer science department will not recommend for teacher licensure students whose grade point average within their mathematics and computer science courses is below 2.5. The department has advised the Teacher Education Committee that such students should be denied admission or be dropped from the certification process until grades in mathematics and computer science have been brought up to 2.5.

**1. Complete all of the following:**

MATH 131Pm Calculus I (4)  
 MATH 132Pm Calculus II (4)  
 MATH 310Pm Geometry (3)\*

\*Note: MATH 310Pm has a prerequisite of MATH 221Pm; COSC 235Pm may satisfy this prerequisite with instructor approval.

**2. Complete one of the following:**

COSC 235Pm Discrete Structures (3)  
 MATH 221Pm Foundations of Mathematics (3)

**3. Complete one of the following:**

MATH 240Pm Linear Algebra (4)  
 MATH 421Pm Abstract Algebra I (3)

**4. Complete one of the following:**

COSC 106 Introduction to Web Programming (3)  
 COSC 110m Introduction to Computer Science (3)  
 COSC 115Pm Scientific Programming (3)

**5. Complete either:**

MATH 341Pm Probability (3) and MATH 342Pm Statistics (3)

or

MATH 215Pm Applied Statistics (4) and 3 s.h. of MATH courses numbered 231 or higher, excluding MATH 385P, 396I, 397I, and 485P

# MATHEMATICS/COMPUTER SCIENCE

*Natural Sciences Division*

*Mathematics/Computer Science Department*

## Faculty

Wendy Weber (chair), Robert Franks, Stephen Fyfe, Russell Goodman, Allen Hibbard, Mark Johnson, Thomas Linton, Mark Mills

## Departmental information

The mathematics/computer science department offers four distinct majors: mathematics, computer science, mathematics with secondary education emphasis and a joint mathematics/computer science major (please see appropriate sections of this catalog for information on the mathematics and mathematics/computer science majors). Students who declare either the computer science or mathematics major may not also declare the joint mathematics/computer science major as a second major. Students who declare computer science or mathematics/computer science as their major may not declare an information systems major with an emphasis in computer information systems. Students who declare mathematics/computer science as a major may not declare either mathematics or computer science as a second major. Those who wish to combine the disciplines of business and computer science may wish to consider the information systems major. Students seeking a mathematics teaching endorsement should consult the education department.

## Mathematics/Computer Science credit by proficiency

For information on earning credit by proficiency in mathematics and computer science, please see the “Credit by Proficiency” section of this catalog.

## Additional information

The college also offers an information systems major, which combines computer science with accounting and business management courses.

## Mathematics/Computer Science Major Requirements (53 s.h.)

### 1. Complete all of the following:

COSC	110m	Introduction to Computer Science (3)
COSC	130Pm	Data Structures (3)
COSC	220Pm	Software Design (3)
COSC	245Pm	Computer Organization and Architecture (4)
COSC	330Pm	Algorithms (3)
MATH	131Pm	Calculus I (4)
MATH	132Pm	Calculus II (4)
MATH	210Pm	Intro to a Computer Algebra System (1)
MATH	231Pm	Multivariable Calculus (3)
MATH	240Pm	Linear Algebra (4)
MATH	385P	Mathematics/Computer Science Junior Seminar (2)
MATH	421Pm	Abstract Algebra I (3)
MATH	485P	Mathematics/Computer Science Senior Seminar (1)

### 2. Complete one of the following:

COSC	235Pm	Discrete Structures (3)
MATH	221Pm	Foundations of Mathematics (3)

### 3. Complete one of the following MATH electives:

MATH	310Pm	Geometry (3) [Required for teacher certification]*
MATH	341Pm	Probability (3) **
MATH	342Pm	Statistics (3) **
MATH	370Pm	Numerical Analysis (3)
MATH	422Pm	Abstract Algebra II (3)
MATH	431Pm	Real Analysis I (3)
MATH	432Pm	Real Analysis II (3)
MATH	390/490	Topics in Mathematics (3)

\*Note: For students seeking certification to teach mathematics, the MATH elective must be MATH 310Pm. MATH 310Pm has a prerequisite of MATH 221Pm; COSC 235Pm may satisfy this prerequisite with instructor approval.

**4. Complete one of the following COSC electives:**

- COSC 260P Web Application Development (3)
- COSC 320P Advanced Software Design (3)
- COSC 355Pm Programming Language Concepts (3)
- COSC 360P Database Systems (3)
- COSC 375Pm Introduction to Operating Systems (3)
- COSC 390P Topics in Computer Science (3)
- COSC 490P Topics in Computer Science (3)

**5. Complete an additional 6 s.h. of COSC or MATH electives**

*\*\*Note: For students seeking certification to teach mathematics, the 9 s.b. of total electives should include both MATH 341Pm and MATH 342Pm. When this is impossible to schedule, the 9 s.b. of electives should consist of MATH 215Pm and 3 s.b. semester hours from the each of the MATH and COSC elective lists above.*

**6. Complete all requirements for the Communication Skills Endorsement**

Note: The mathematics and computer science department will not recommend for teacher licensure students whose grade point average within their mathematics and computer science courses is below 2.5. The department has advised the Teacher Education Committee that such students should be denied admission or be dropped from the certification process until grades in mathematics and computer science have been brought up to 2.5.

**Communication skills endorsement**

The department believes that it is essential that majors in computer science and mathematics are able to speak, read and write satisfactorily within the discipline. As such, many courses throughout the major include activities that evaluate students' ability to communicate.

The department faculty meet annually to discuss and evaluate each major's communication skills. Students can expect to be evaluated at least once during each academic year. Students whose skills in one or more areas--speaking, reading and writing--are not sufficient must work with her/his advisor to design an improvement plan.

The final evaluation of a student's communication skills occurs in MATH/COSC 385P Mathematics/Computer Science Junior Seminar (2) and MATH/COSC 485P Mathematics/Computer Science Senior Seminar (1). In these courses, students are required to give two oral presentations and write a paper covering the topic used in the second presentation. Reading, listening and research skills are also covered in these courses.

**Typical sequence of courses for the mathematics/computer science major**

**Freshman year**

MATH 131Pm Calculus I  
 MATH 132Pm Calculus II  
 COSC 110m Introduction to Computer Science  
 COSC 130Pm Data Structures  
 MATH 210Pm Introduction to a Computer Algebra System  
 Central core courses and electives

**Sophomore year**

COSC 235Pm Discrete Structures or MATH 221Pm Foundations of Mathematics  
 MATH 240Pm Linear Algebra  
 COSC 220Pm Software Design  
 COSC 245P Computer Organization and Architecture  
 Central core courses and electives

**Junior year**

COSC 330Pm Algorithms  
 MATH 385P Mathematics/Computer Science Junior Seminar  
 MATH 231Pm Multivariable Calculus  
 Mathematics elective  
 Computer science elective  
 Central core courses and electives

**Senior year**

COSC 485P Mathematics/Computer Science Senior Seminar  
 MATH 421Pm Abstract Algebra I - Offered on an alternate-year basis  
 Mathematics or computer science elective  
 Central core courses and electives

# MUSIC

*Fine Arts Division  
Department of Music*

## Faculty

Mark Babcock (chair), Carol lei Breckenridge, Stan Dahl, Cynthia Doggett, Gabriel Espinosa, Patrice Ewoldt, Mitchell Lutch, Peter (Ty) Myers, Anne Petrie

## Statement of philosophy

The Bachelor of Arts in Music is designed to provide students with a broad introduction to music in the context of a comprehensive liberal arts program. It can serve as a foundation for further study for students desiring careers as performers, music scholars, music teachers, church musicians or other music professionals. Through a balanced emphasis on the analytical, historical, cultural and creative aspects of music, it also provides excellent preparation for any endeavor for which a solid liberal-arts background is valuable. Recognizing the value of study in other cultures, the department is committed to encouraging music majors' participation in study at one of Central's international campuses.

The department seeks to assist non-music majors and members of the broader community to achieve competence in an artistic discipline and to gain an appreciation of the fine arts. The department serves the campus and community by providing a rich and varied cultural life on campus and in the community at large.

The music department stresses academic integrity in all aspects of the music curriculum through faculty dedication to the discipline. The department is committed to the development of students and to the recruitment of students with strong academic potential. To be accepted for entry to the music major, each student must pass an audition to indicate aptitude and prospects for success including competence in at least one major performance area.

## Study abroad opportunities

Music study abroad opportunities exist at Central College's centers in London, Vienna, Paris, Granada, Merida and Bangor. Music faculty advisors will work carefully with music majors to coordinate departmental requirements with study abroad.

## Music Major Requirements (42 s.h.)

### 1. Complete all of the following:

MUS	114na	World Music (3)
MUS	120	Theory and Aural Skills I (5)
MUS	125P	Theory and Aural Skills II (5)
MUS	211a	Music History I (3)
MUS	212a	Music History II (3)
MUS	220P	Theory & Aural Skills III (4)
MUS	235P	Theory & Aural Skills IV (4)
MUS	240	Music Technology (1)
MUS	330P	Advanced Literature Seminar (2)
MUS	331P	Conducting (2)

### 2. Complete 8 s.h. of applied lessons (MUSL) in the primary area of music study

### 3. Complete 2 s.h. of applied lessons (MUSL) in a secondary area of music study

*Note: MUS 217I or 218I may count as secondary area courses*

### 4. Maintain continuous enrollment in a major ensemble (MUSG)

*Note: Major ensembles are MUSG 2201a, 2221a, 2231a, 2241a, 2251a, 2281a*

### 5. Pass the piano proficiency exam

*Note: Completion of MUS 2181I with a grade of "C" or better fulfills the piano proficiency requirement for the bachelor of arts in music (not music education).*

### 6. Present a senior recital of one-half hour (or other approved significant senior project)

### 7. Complete all requirements for the communication skills and departmental skills endorsements

## Optional major emphases

Optional emphases (comprising course work above and beyond all requirements listed above) are available within the music major in the following areas: arts management, church music, music history/literature, theory/composition, performance, piano pedagogy, piano accompanying/chamber music, early keyboard and jazz studies. See the department chair for details.



### Communication skills and departmental skills endorsements

In order to be certified for graduation, a music or music education major must show competency in communication skills: reading, writing and speaking. The reading component will be evaluated by a reading comprehension test centering around a music article selected by the music faculty; the writing component will be evaluated through music history papers; the speaking component will be evaluated by an oral presentation, either for two music faculty members or within a music course. Remediation, if needed, will take place through individualized programs set up through the Center for Academic Excellence.

Additionally, in order to be certified for graduation, a music or music education major must pass tests in theory fundamentals, aural skills and piano proficiency. Remediation, if needed, will take place through theory courses (for theory fundamentals and aural components) and keyboard classes or lessons (for piano proficiency).

Music majors are required to attend 48 recitals or concerts prior to graduation. Further information on departmental policies and procedures is provided in the department's Music Major Handbook.

### Typical sequence of courses for the music major

*Note: Some upper level courses are taught in alternate years, causing variations in this sequence.*

#### Fall semester

##### *Freshman year*

MUS 120 Theory and Aural Skills I  
MUS 240 Music Technology  
MUSL lessons  
MUSG performance group\*  
Core courses and electives

##### *Sophomore year*

MUS 211a Music History I  
MUS 220P Theory & Aural Skills III  
MUSL lessons  
MUSG performance group\*  
Core courses and electives

##### *Junior year*

MUS 331P Conducting  
MUSL lessons  
MUSG performance group\*  
Core courses and electives

##### *Senior year*

MUSL lessons  
MUSG performance group\*  
Core courses and electives

#### Spring semester

##### *Freshman year*

MUS 125P Theory and Aural Skills II  
MUS 114 World Music  
MUSL lessons  
MUSG performance group\*  
Core courses and electives

##### *Sophomore year*

MUS 212a Music History II  
MUS 235P Theory & Aural Skills IV  
MUSL lessons  
MUSG performance group\*  
Core courses and electives

##### *Junior year*

MUS 330 Advanced Literature Seminar  
MUSL lessons  
MUSG performance group\*  
Core courses and electives

##### *Senior year*

MUSL lessons  
MUSG performance group\*  
Core courses and electives

*\*at least one MUSG participation course must be a major ensemble in the student's primary performance area*

### Music Minor Requirements (27 s.h.)

#### 1. Complete all of the following:

MUS 114na World Music (3)  
MUS 120 Theory and Aural Skills I (5)  
MUS 125P Theory and Aural Skills II (5)  
MUS 211a Music History I (3)  
MUS 212a Music History II (3)

#### 2. Complete 4 s.h. of applied lessons (MUSL)

#### 3. Complete 4 s.h. of music electives (MUS/MUSG/MUSL)

# MUSIC EDUCATION (ELEMENTARY)

# MUSIC EDUCATION (INSTRUMENTAL)

# MUSIC EDUCATION (VOCAL)

*Fine Arts Division*

*Department of Music*

## Faculty

Mark Babcock (chair), Carol lei Breckenridge, Stan Dahl, Cynthia Doggett, Gabriel Espinosa, Patrice Ewoldt, Mitchell Lutch, Peter (Ty) Myers, Anne Petrie

## Departmental statement of philosophy

*Please consult the music major section of this catalog.*

## Music education majors

The department of music offers three distinct tracks in music education: Elementary music education, instrumental music education (teaching licensure options in K-12 and 7-12) and vocal music education (teaching licensure options in K-12 and 7-12).

All three music education majors share a common set of courses comprising 32 s.h. of credit. That common set of courses is listed below followed by all additional requirements for each specific major.

## Study abroad opportunities

Music study abroad opportunities exist at Central College's centers in London, Vienna, Granada, Mérida and Bangor. Music faculty advisors will work carefully with music education majors to coordinate departmental requirements with study abroad.

## Requirements for all Music Education Majors (32 s.h.)

### 1. Complete all of the following:

MUS	114na	World Music (3)
MUS	120	Theory and Aural Skills I (5)
MUS	125P	Theory and Aural Skills II (5)
MUS	211a	Music History I (3)
MUS	212a	Music History II (3)
MUS	220P	Theory & Aural Skills III (4)
MUS	235P	Theory & Aural Skills IV (4)
MUS	240	Music Technology (1)
MUS	330P	Advanced Literature Seminar (2)
MUS	331P	Conducting (2)

### 2. Complete all major-specific requirements for one of the following music education majors:

- ◆ Instrumental music education (choose either K-12 or 7-12 teaching licensure)
- ◆ Vocal music education (choose either K-12 or 7-12 teaching licensure)
- ◆ Elementary music education

### 3. Maintain continuous enrollment in a major ensemble (MUSG)

*Note: Primary ensembles are MUSG 220Ia, 222Ia, 223Ia, 224Ia, 225Ia, 228Ia. The student is exempt from this requirement during the student teaching semester.*

### 4. Pass the piano proficiency exam

*A music education major will not be recommended for entry into student teaching until the piano proficiency exam is passed.*

For music education majors, all sections of the piano proficiency requirements must be passed by the spring of the sophomore year. If they are not passed, the student must take either Applied Piano or Beginning or Intermediate Keyboard in each of the following semesters until all sections are passed.

### 5. Present a senior recital of one-half hour (or other approved significant senior project)

### 6. Complete all requirements for the communication skills and departmental skills endorsements

## Elementary Music Education Major Requirements (60 s.h.)

1. Complete all common requirements listed above (32 s.h.)
2. Complete ***all*** of the following:
 

MUS	341P	Vocal Pedagogy (3)
MUS	342P	Methods for Elementary Music (3)
MUS	484P	Elementary Music Field Experience (1)
MUS	349	Instrumental Methods: Percussion (1)
MUS	352	Instrumental Methods: Strings (1)
3. Complete ***one*** of the following:
 

MUS	350	Instrumental Methods: Woodwinds (1)
MUS	351	Instrumental Methods: Brass (1)
4. Complete ***8 s.h.*** of applied lessons (MUSL) in the primary area of music study
5. Complete ***2 s.h.*** of applied lessons (MUSL) in a secondary area of music study  
*Note: MUS 217I or 218I may count as secondary area courses*
6. Complete ***2 s.h.*** of applied lessons (MUSL) in keyboard or guitar
7. Complete ***6 s.h.*** of music (MUS/MUSG/MUSL) electives

## Instrumental Music Education Major Requirements – K-12 licensure (60 s.h.)

1. Complete all common requirements listed above (32 s.h.)
2. Complete ***all*** of the following:
 

EDUC	451P	Secondary Special Methods (1)
MUS	323P	Orchestration (1)
MUS	324I	Methods and Materials of Instrumental Literature (1)
MUS	333PI	Advanced Instrumental Conducting (2)
MUS	334	Marching Band Techniques* (1)
MUS	335	Jazz Band Techniques* (1)
MUS	342P	Methods for Elementary Music (3)
MUS	349	Instrumental Methods: Percussion (1)
MUS	350	Instrumental Methods: Woodwinds (1)
MUS	351	Instrumental Methods: Brass (1)
MUS	352	Instrumental Methods: Strings (1)
MUS	484P	Elementary Music Field Experience (1)
MUSG	226Ia	Chamber Ensemble (.5)
3. Complete ***8 s.h.*** of applied lessons (MUSL) in the primary area of music study
4. Complete ***1 s.h.*** of applied lessons (MUSL) in a secondary area of music study  
*Note: MUS 217I or 218I may count as secondary area courses*
5. Complete ***1 s.h.*** of applied lessons in voice
6. Complete ***2.5 s.h.*** of music (MUS/MUSG/MUSL) electives  
*Note: Students anticipating careers not including marching bands or jazz ensembles may substitute equal hours of elective credits for these courses.*

## Instrumental Music Education Major Requirements – 7-12 licensure (60 s.h.)

1. Complete all common requirements listed above (32 s.h.)
2. Complete all of the following:
 

EDUC	451P	Secondary Special Methods (1)
MUS	323P	Orchestration (1)
MUS	324	Methods and Materials of Instrumental Literature (1)
MUS	333PI	Advanced Instrumental Conducting (2)
MUS	334	Marching Band Techniques* (1)
MUS	335	Jazz Band Techniques* (1)
MUS	349	Instrumental Methods: Percussion (1)
MUS	350	Instrumental Methods: Woodwinds (1)
MUS	351	Instrumental Methods: Brass (1)
MUS	352	Instrumental Methods: Strings (1)
MUSG	2261a	Chamber Ensemble (.5)
3. Complete 8 s.h. of applied lessons (MUSL) in the primary area of music study
4. Complete 2 s.h. of applied lessons (MUSL) in a secondary area of music study  
*Note: MUS 117I, 118I, 217I or 218I may count as secondary area courses*
5. Complete 6.5 s.h. of music (MUS/MUSG/MUSL) electives

*Note: Students anticipating careers not including marching bands or jazz ensembles may substitute equal hours of elective credits for these courses.*

## Vocal Music Education Requirements – K-12 licensure (60 s.h.)

1. Complete all “common” requirements listed above (32 s.h.)
2. Complete all of the following:
 

EDUC	451P	Secondary Special Methods (1)
MUS	225	Italian Diction (.5)
MUS	226	German Diction (.5)
MUS	227	French Diction (.5)
MUS	328P	Methods and Materials of Choral Literature (1)
MUS	332P	Advanced Choral Conducting (2)
MUS	341P	Vocal Pedagogy (3)
MUS	342P	Methods for Elementary Music (3)
MUS	484P	Elementary Music Field Experience (1)
3. Complete one of the following:
 

MUS	349	Instrumental Methods: Percussion (1)
MUS	350	Instrumental Methods: Woodwinds (1)
MUS	351	Instrumental Methods: Brass (1)
MUS	352	Instrumental Methods: Strings (1)
4. Complete 8 s.h. of applied lessons (MUSL) in the primary area of music study; if the primary area is not voice, the student must additionally take 4 s.h. of applied lessons in voice
5. Complete 2 s.h. of applied lessons (MUSL) in keyboard or guitar  
*Note: MUS 217I or 218I may be counted as keyboard applied lessons*
6. Complete 4.5 s.h. of music (MUS/MUSG/MUSL) electives

## Vocal Music Education Major Requirements – 7-12 licensure (60 s.h.)

1. Complete all “common” requirements listed above (32 s.h.)
2. Complete all of the following:
 

EDUC	451P	Secondary Special Methods (1)
MUS	225	Italian Diction (.5)
MUS	226	German Diction (.5)
MUS	227	French Diction (.5)
MUS	328P	Methods and Materials of Choral Literature (1)
MUS	332P	Advanced Choral Conducting (2)
MUS	341P	Vocal Pedagogy (3)
3. Complete one of the following:
 

MUS	349	Instrumental Methods: Percussion (1)
MUS	350	Instrumental Methods: Woodwinds (1)
MUS	351	Instrumental Methods: Brass (1)
MUS	352	Instrumental Methods: Strings (1)
4. Complete 8 s.h. of applied lessons (MUSL) in the primary area of music study; if the primary area is not voice, the student must additionally take 4 s.h. of applied lessons in voice
5. Complete 2 s.h. of applied lessons (MUSL) in keyboard or guitar  
*Note: MUS 217I or 218I may be counted as keyboard applied lessons*
6. Complete 8.5 s.h. of music (MUS/MUSG/MUSL) electives

### Communication skills and departmental skills endorsements

All communication skills and music skills requirements must be passed before the student can be certified for graduation. Within the communications skills area, the reading component will be evaluated by a reading comprehension test centering on a music article selected by the music faculty; the writing component will be evaluated through first music history papers; the oral component will be evaluated by an oral presentation, either for two music faculty members or within a music course. Remediation, if needed, will take place through individualized programs set up through the center for academic excellence. Music skills areas requiring evaluation are as follows: theory fundamentals, aural skills and piano proficiency. Remediation, if needed, will take place through theory courses (for theory fundamentals and aural skills) and keyboard classes (for piano proficiency.) All music skills areas must be passed before the student can be certified for graduation. The piano proficiency exam must be passed before the student will be recommended for student teaching.

Music education majors are required to attend 48 recitals or concerts prior to graduation. Further information on departmental policies and procedures is provided in the department’s Music Major Handbook.

### Music Education Minors

The music department offers three distinct minors in music education: **elementary music education**, **instrumental music education** and **vocal music education**. These minors satisfy the licensure requirement for elementary concentrations in music.

## Elementary Music Education Minor Requirements (32 s.h.)

1. Complete all of the following:
 

MUS	114na	World Music (3)
MUS	120	Theory and Aural Skills I (5)
MUS	125P	Theory and Aural Skills II (5)
MUS	211Pa	Music History I (3)
MUS	212Pa	Music History II (3)
MUS	331P	Conducting (2)
MUS	342P	Methods for Elementary Music (3)
MUS	349	Percussion Methods (1)
MUS	484P	Elementary Music Field Experience (1)
2. Complete 3 s.h. of applied lessons (MUSL), 1 s.h. of which must be in voice
3. Pass the departmental theory fundamentals, aural skills, and piano proficiency evaluations

## Instrumental Music Education Minor Requirements (30 s.h.)

### 1. Complete all of the following:

MUS	114na	World Music (3)
MUS	120	Theory and Aural Skills I (5)
MUS	125P	Theory and Aural Skills II (5)
MUS	211Pa	Music History I (3)
MUS	212Pa	Music History II (3)
MUS	331P	Conducting (2)
MUS	333P	Advanced Instrumental Conducting (2)

### 2. Complete 3 s.h. of applied lessons (MUSL)

*Note: Up to 1 s.h. of MUS 217I and 218I may count as applied lessons*

### 3. Complete 1 s.h. of music (MUS/MUSG/MUSL) electives

### 4. Pass the departmental theory fundamentals, aural skills and piano proficiency evaluations

## Vocal Music Education Minor Requirements (33 s.h.)

### 1. Complete all of the following:

MUS	114na	World Music (3)
MUS	120	Theory and Aural Skills I (5)
MUS	125P	Theory and Aural Skills II (5)
MUS	211Pa	Music History I (3)
MUS	212Pa	Music History II (3)
MUS	331P	Conducting (2)
MUS	328P	Methods and Materials of Choral Literature (1)
MUS	332P	Advanced Choral Conducting (2)
MUS	341P	Vocal Pedagogy (3)

### 2. Complete two of the following:

MUS	225	Italian Diction (.5)
MUS	226	German Diction (.5)
MUS	227	French Diction (.5)

### 3. Complete 3 s.h. of applied lessons (MUSL)

*Note: Up to 1 s.h. of MUS 217I and 218I may count as applied lessons*

### 4. Pass the departmental theory fundamentals, aural skills and piano proficiency evaluations

# NATURAL SCIENCE

*Natural Sciences Division*

*Interdisciplinary Major*

## Faculty

Anya Butt (director)

## Statement of philosophy

The natural science major offers the opportunity to develop knowledge and skills in several disciplines. This major is particularly appropriate for prospective natural science teachers at the secondary level. The natural science major is also available for students who desire a broad background in the natural sciences as preparation for a variety of career options and graduate or professional school.

## Natural Science Major Requirements (56-59 s.h.)

### 1. Complete *all* of the following:

BIOL	130q	Diversity of Life (4)
BIOL	131Pq	Introduction to Cells (4)
BIOL	221P	Genetics (4)
BIOL	229Pq	Ecology (4)
CHEM	131fq	General Chemistry (5)
CHEM	235Pq	Organic Chemistry I (4)
CHEM	241Pq	Analytical Chemistry (4)
CHEM	251Pq	Inorganic Chemistry (4)
MATH	131Pm	Calculus I (4)
MATH	132Pm	Calculus II (4)
PHYS	111pmq	General Physics I (5)
PHYS	112Pmq	General Physics II (5)
PHYS	331P	Advanced Laboratories (2)

### 2. Complete *either A or B* below:

A. PHYS	211Pq	Analog Electronics (3) <i>and</i>
	PHYS	212Pq Digital Electronics (3)
B. PHYS	221Pq	Modern Physics (3)

### 3. Complete all requirements for the Communication Skills Endorsement

*Note: The following courses are not required but are strongly recommended:*

BIOL	320Pq	Evolution (4)
CHEM	361P	Physical Chemistry I (4)
		<i>or CHEM 320P Biochemistry (4)</i>

## Communication skills endorsement

Natural Science majors are required to meet the communication skills endorsement requirements of the chemistry department. Note: endorsement of exit-level writing and oral skills will take place after the student has completed PHYS 331P.

# NOT-FOR-PROFIT MANAGEMENT

## *Interdisciplinary Program Minor*

### Statement of philosophy

Not-for-profit organizations are looking for talented individuals who are prepared to take on the challenges of managing their organizations. Examples of such organizations include the American Red Cross, Big Brothers Big Sisters of America, Chamber of Commerce, Department of Human Resources, Des Moines Playhouse, Iowa Arts Council, Iowa Department of Economic Development, Lutheran Social Services, Fair Haven Nursing Home, Girl Scouts of America, Pella Historical Society, Pittsburgh Symphony Orchestra, United Way, YMCA, World Vision and hundreds of others. Such organizations need people to promote the organization, raise funds, organize volunteers and spark caring in their communities.

Numerous Central College students are looking for a career that will use their social skills and their organizational abilities, and will offer them the fulfillment of helping others. Central's not-for-profit management program prepares graduates to assume entry level management positions in the nonprofit sector by helping students develop their skills in fundraising, grant writing, volunteer development, marketing and program planning.

The Not-For-Profit Management minor is designed primarily for students majoring in subjects other than business who plan careers in nonprofit organizations (educational institutions; governmental agencies; and social service organizations such as Habitat for Humanity, the Red Cross, the Iowa Arts Council, or the YMCA). For more information about the Not-For-Profit Management minor, or to declare the minor, please contact Dr. Jaclyn Rundle.

### Not-For-Profit Management Minor Requirements (19 s.h. minimum)

#### 1. Complete all of the following:

BEHS	285	Not-For-Profit Seminar (1)
BMGT	251P	Principles of Management (3)
ACCT	201P	Introduction to Not-For-Profit and Government Accounting (3)
BMGT	371P	Principles of Marketing (3)
BMGT	335P	Not-For-Profit Management (3)
ENGL	344	Writing for Non-Profit Organizations (3)

#### 2. Complete one of the following:

THEA	230	Arts Management (4)
BMGT	351Ps	Organizational Behavior (3)
BMGT	352P	Human Resource Management (3)
BEHS	397P	Internship in Not-For-Profit Management (3)

### Service leadership

Due to the nature of this career, students are strongly encouraged to volunteer in and demonstrate leadership in on-campus and off-campus volunteer organizations. Possibilities include Action, Kinship, orchestra, drama, Student Senate, scouting programs and many others.

### Off-campus opportunities

Since many not-for-profit organizations are charitable and international nongovernmental organizations, students are encouraged to study abroad with Central's programs to take advantage of the numerous opportunities for international internships available in not-for-profit agencies. Excellent internship opportunities are also available in the Chicago Metropolitan Program and in Washington, D.C. at the Washington Center.



# PHILOSOPHY

*Humanities Division*

*Philosophy/Religion Department*

## Faculty

David Timmer (chair), Michael Patzia, A. Chadwick Ray

## Statement of philosophy

The educational mission of the philosophy and religion department is to serve the Central Core and both the philosophy and religion majors. The department takes seriously its obligation to introduce to all students philosophy and religion as humanities disciplines. All courses at the 100- and 200-level are open to and designed for students at different stages of their general education, yet the department also seeks to offer a balanced array of courses for majors and minors.

Course offerings in philosophy introduce students to logic, the history of western philosophy, a sample of important areas of philosophical investigation and applied philosophy. In every philosophy course, the careful analysis and construction of arguments is emphasized. Reading and discussion of primary sources is preferred to textbook summaries in most courses.

## Philosophy Major Requirements (30 s.h.)

### 1. Take all of the following:

PHIL 125m General Logic (3)  
 PHIL 221t Classical Thought (3)  
 PHIL 222t Modern Thought (3)

### 2. Take an additional 21 s.h. of PHIL courses, with at least 12 s.h. of those at the 200-level or above

### 3. Complete all requirements for the Communication Skills Endorsement

#### Communication skills endorsement

By the time they graduate, philosophy majors should be able to grasp, reproduce and critically assess written arguments. From the time that they declare their intention to complete a major in philosophy until their communications skills are endorsed, they will be expected each spring to present to their philosophy advisor at least two philosophy papers that they have submitted in courses during the preceding two terms. The advisor will review the student's progress with colleagues in the department as appropriate and then discuss with the student his or her development of communication skills. The discussion should indicate any deficiencies so that the student is clear on what sorts of improvement are desirable. A student with serious deficiencies should receive from the advisor, at least two semesters before anticipated graduation, a written statement of remedial measures to be taken. The department may endorse a student's communications skills before the junior year. After a major's skills are endorsed, further submission of papers for skills review is optional.

## Philosophy Minor Requirements (15 s.h.)

### 1. Take the following:

PHIL 125m General Logic (3)

### 2. Take one of the following:

PHIL 221t Classical Thought (3)  
 PHIL 222t Modern Thought (3)

### 3. Take an additional 9 s.h. of PHIL, with at least 6 s.h. of those at the 200-level or above

## Philosophy/Religion Minor Requirements (18 s.h.)

Students must take 18 semester hours of PHIL and REL courses selected to focus on a particular theme such as great ideas, beliefs and values, or the Christian faith. The philosophy/religion department must approve the minor, both as to thematic focus and to the courses used to satisfy it. Students wishing to complete such a minor should have a minor advisor within the department. With department approval, one course from outside the department and outside the student's first major may be used to count toward the minor.

## Critical Thinking Minor Requirements (18 s.h.)

1. Complete 18 s.h. of approved minor courses, including those required as stated below
2. Complete at least one advanced-level 3 s.h. theory or methodology course from the student's major field (subject to departmental approval)
3. Complete at least one of the following:
 

PHIL	125m	General Logic (3)
PHIL	221t	Classical Thought (3)
COMM	366P	Persuasion (3)
4. Complete at least two of the following:
 

PHIL	221t	Classical Thought (3)
PHIL	222t	Modern Thought (3)
PHIL	223t	Contemporary Philosophy (3)
PHIL	228nt	Asian Philosophy (3)
REL	230r	Asian Religions (3)
REL	272r	Modern Christian Thought (3)
5. Complete one of the following (if needed to earn 18 s.h. total):
 

PHIL	120ft	Introduction to Philosophy (3)
PHIL	121ft	Ethics (3)
REL	112fr	The Christian Heritage (3)
REL	255r	Christian Ethics (3)

# PHYSICS

*Natural Sciences Division  
Physics Department*

## Faculty

Viktor Martisovits (chair), Alexey Pronin

## Statement of philosophy

The physics program at Central College is a four-year program that prepares students for jobs in engineering and other technical areas, teaching, graduate school and research. It is the major that is the foundation for most of the engineering specialties in Central's engineering dual-degree programs with Washington University in St. Louis, The University of Iowa, and Iowa State University. Our mission is to teach physics theory, problem-solving skills, and experimental techniques with an emphasis on science as a method for exploring the world. We prepare our students to be able to reason from the general fundamental principles to specific applications in physics and engineering. A student trained in physics will be able to work in a variety of specialties. Physics, the most fundamental physical science, is concerned with the basic principles of the universe. It is the foundation on which engineering, technology and the other sciences are based.

## Study abroad opportunities

Students majoring in physics have been able to study abroad with careful planning. The London University program may permit students to take some courses in the physics major abroad.

## Physics Major Requirements (55 s.h.)

### 1. Complete all of the following:

PHYS 111Pmq	General Physics I (5)
PHYS 112Pmq	General Physics II (5)
PHYS 221Pq	Modern Physics I (3)
PHYS 331P	Advanced Labs (4) (2 semesters)
CHEM 131fq	General Chemistry (5)
MATH 131Pm	Calculus I (4)
MATH 132Pm	Calculus II (4)
MATH 231Pm	Multivariable Calculus (3)
MATH 250Pm	Differential Equations (3)

### 2. Complete 19 s.h. from the following elective courses:

PHYS 211Pq	Analog Electronics (3)
PHYS 212Pq	Digital Electronics (3)
PHYS 222Pq	Modern Physics II (3)
PHYS 321Pq	Electricity and Magnetism I (3)
PHYS 322Pq	Optics (3)
PHYS 324P	Thermodynamics (3)
PHYS 326Pq	Analytical Mechanics (4)
PHYS 328PI	Engineering Problems (4)
PHYS 412P	Quantum Mechanics (4)
PHYS 421P	Electricity and Magnetism II (3)

### 3. Complete all requirements for the Communication Skills Endorsement

#### Communications skills endorsement

The communication skills goals of the physics department are to prepare our students to be able to read the technical and mathematical literature used in physics and to be able to explain physical concepts in a clear and logical fashion both in writing and speaking. Difficulties that arise in oral communication occur typically in public speaking situations and are best addressed by practice provided in speech classes. Early evaluation of skills is done in PHYS 111Pmq. Skill in reading physics texts is evaluated through normal chapter tests and quizzes in which comprehension of test questions and text material is required to pass. Writing skills are evaluated through laboratory reports that require a formal writing style. Speaking skills are evaluated through personal conversations with the students by the physics faculty during normal conversation involving technical matters.

Monitoring and remedial opportunities occur in each physics course in that tests, quizzes, and personal discussions with the students provide us with information that is used to advise students about any changes that must be made to improve their communication skills. Students in many courses are assigned short presentations to give to a class. Enrollment in PHYS 331P for two semesters is required of all physics majors. Each student must be able to communicate orally on a one-to-one basis with the instructor of the class regarding technical problems arising from experiments performed.

All graduating physics majors know how to read technical material, if slowly. Since speed is not a concern, no specific reading endorsement is required. PHYS 331P has sufficiently high standards of technical writing that passing both semesters with a C or better is an endorsement of a student's writing skills. The formal requirement needed to obtain a departmental endorsement in speaking is to pass COMM 160f Intro to Communication Studies or COMM Public Speaking with a grade of C or better.

### Physics Minor Requirements (18 s.h.)

1. Complete all of the following:

PHYS	111Pmq	General Physics I (5)
PHYS	112Pmq	General Physics II (5)
PHYS	221Pq	Modern Physics I (3)
PHYS	331P	Advanced Laboratories (2)

2. Complete an additional 3 s.h. of PHYS courses numbered 211 or above

### Pre-engineering

Central's dual degree engineering program is an excellent way for students to obtain both an engineering degree and a liberal-arts degree. This program leads to a B.A. from Central and a B.S. in engineering from either Washington University (St. Louis), The University of Iowa or Iowa State University. Students obtain a strong liberal-arts education. A broad background in the liberal arts, as well as our emphasis on communication skills, helps students to establish themselves as thoughtful, creative, productive engineers. The transition from high school to a demanding course of study such as engineering can be difficult. Students are helped by small classes taught by extremely well-qualified, experienced teachers committed primarily to their teaching.

Typically, a student enrolls at Central College and chooses a science major closely allied with an engineering field of interest (usually physics, chemistry, mathematics or computer science). After three years of full-time study at Central (with least 90 s.h. of credit completed, including all Core requirements and all major requirements), the student leaves Central and enrolls at either Washington University, The University of Iowa or Iowa State University. Upon completion of one year of engineering study at Washington University, The University of Iowa or Iowa State University, appropriate credits are transferred back to Central, enabling the student to graduate with a B.A. degree from Central. The student will then earn a B.S. in engineering from the cooperating institution after an additional one to two years of engineering study.

Prior to the start of the first semester of classes in the first year at Central, interested students must formally declare to Central's pre-engineering program director their intent to participate in order to graduate in the time frame mentioned above. They must also complete specific courses at specific points in their academic programs to remain eligible for continued participation. Careful consultation with the appropriate faculty advisors makes this cooperative program successful.

This dual degree program also enables students to complete a full four years of study and the B.A. degree at Central. Students opting to do so may then take advantage of their advanced standing toward the fulfillment of B.S. in Engineering requirements at any of the cooperating institutions. Students pursuing this option must declare their intent prior to the start of their second year at Central.

# POLITICAL SCIENCE

*Behavioral Sciences Division  
Political Science Department*

## Faculty

Andrew Green (chair), James Zaffiro, Keith Yanner

## Statement of philosophy

Government is the process through which people pursue collective goals, allocate scarce resources, and attempt to establish justice. Government decisions affect life and death, wealth and poverty, crime and punishment, individual freedom, opportunity, and happiness. Students in the political science program learn about government and how individuals and groups interact with government in the United States, other countries, and international organizations. Student learning focuses on theory and experience. In their courses political science students confront classic as well as contemporary political questions: Is there a best political order; how can hunger be eliminated; what are the causes of political violence and terrorism; what is the citizen's responsibility to the environment; what is the most efficient way to fund local schools? Political science students also learn how to do original research and citizenship projects that apply their theoretical knowledge to questions and concerns of personal interest. This is accomplished through the required research sequence, supervised independent study, service learning, and internships. Many of our students study abroad to learn firsthand about foreign and international politics, or intern on one of Central's programs in Washington, D.C., Des Moines, or Chicago to learn about federal, state, and local government in the U.S.

## Political Science Major Requirements (34 s.h.)

### 1. Complete all of the following:

POLS 110s	Introduction to American Politics (3)
POLS 140fs	Introduction to International Politics (3)
POLS 250Ps	Political Science Research Methods
POLS 489P	Research Seminar in Political Science

### 2. Complete three of the following:

POLS 223hs	Contemporary Europe
POLS 225hs	Modern Latin America
POLS 230nhs	Asia, Africa, Latin America in World Affairs
POLS 231nhs	Middle East in World Affairs
POLS 241s	International Political Economy
POLS 242s	Global Sustainability
POLS 326s	Political Violence and Terrorism
POLS 344Ps	International Law and Organizations

### 3. Complete four of the following:

POLS 212s	Congress
POLS 213s	Courts
POLS 214s	The Presidency
POLS 215s	The Politics of State and Local Governments
POLS 216s	Political Behavior
POLS 233hs	American Environmental History and Policy
POLS 235hs	The US in World Affairs
POLS 355s	Seminar in Public Policy
POLS 361t	American Political Philosophy

Note: Students may count up to 3 sh of POLS 397I Internship toward either Group 2 or Group 3 elective credit.

### 4. Complete all requirements for the Communication Skills Endorsement

## Political Science Minor Requirements (18 s.h.)

Complete 18 s.h. of Political Science credit with a 6 s.h. limit on internship credit in POLS 397I.

# PSYCHOLOGY

*Behavioral Sciences Division*

*Psychology Department*

## Faculty

Keith Jones (chair), Peggy Fitch, Soo Uhm, Edmond Willis

## Statement of philosophy

The curriculum of the psychology department is designed to inform students about approaches used, discoveries made, explanations offered and questions asked by people in the discipline to promote greater understanding about the nature of being human. Courses encourage students to examine their lives in personal, communal, societal and cultural contexts; to teach about ways to develop more productive and satisfying relationships; to understand how belief systems color and shape perceptions of self and others; to be aware of development across the life span; to be open to experience; and to grow in self-acceptance. Awareness is directed both to what is and to options about what could and, perhaps, should be.

Majors are prepared for graduate study in a variety of areas and are provided with the interpersonal skills and the communication skills that make them attractive at the B.A. level to employers in a wide variety of work situations. The department offers opportunities to do research and to have off-campus study experiences through participation in internships, service-learning, study abroad programs, and the Chicago Metropolitan Program.

## Study abroad opportunities

Students are strongly encouraged to participate in Central College abroad programs.

## Psychology Major Requirements (37 s.h.)

### 1. Complete *all* of the following:

PSYC 122s	General Psychology (3)
PSYC 220Ps	Psychological Investigations (3)
PSYC 335m	Fundamentals of Statistics (4)
PSYC 336P	SPSS for Psychological Research (1)
PSYC 348P	Experimental Psychology (3)
PSYC 480PI	Advanced Research in Psychology (3)

### 2. Complete 20 s.h. of PSYC elective courses

### 3. Complete all requirements for the Communication Skills Endorsement

#### Communication skills endorsement

An initial evaluation of a student's writing, reading, speaking, information literacy, computer skills, and critical thinking skills occurs in PSYC 220Ps and recommendations about ways to enhance skill development are made to the student. Subsequently, students who declare a major in psychology are evaluated by individual faculty and referred to the Center for Academic Excellence as needed for additional skill development. Each semester the psychology faculty discuss the status of each student's skills and make recommendations as needed to the student for skills improvement. Final evaluation and certification normally occur during the senior year after the student has completed PSYC 480PI Advanced Research in Psychology (3) and PSYC 336P SPSS for Psychological Research (1), which involve substantial writing, reading, information literacy, critical thinking, computer skills, and both informal and formal speaking components (including a presentation at a departmental research symposium).

## Psychology Minor Requirements (18 s.h.)

### Complete 18 s.h. of PSYC courses

*Note: Students wishing to earn a minor should seek advising from a member of the psychology department early in the development of their program.*

## Typical sequence of major courses for the psychology major

### Freshman year

PSYC 122s General Psychology

### Sophomore year

PSYC 220Ps Psychological Investigations

Psychology electives

### Junior year

PSYC 335m Fundamentals of Statistics

PSYC 336P SPSS for Psychological Research

PSYC 348P Experimental Psychology

PSYC 480PI Advanced Research in Psychology

Psychology electives

### Senior year

Psychology electives, including internship

### Recommended (not required) non-major support courses

*The psychology department recommends the following courses to psychology majors seeking to earn non-major ("general") elective credits.*

BIOL	111Pq	Human Anatomy and Physiology I
BIOL	221Pq	Genetics
EDUC	235Ps	Exceptional Children
EDUC	239P	Psychology in Elementary Education
EDUC	240P	Family, School, and Community Relationships
EDUC	244P	Introduction to Students with Mild/Moderate Disabilities
EDUC	330P	Diagnosis and Assessment of Exceptional Learners
EXSC	160	Personal Health
EXSC	260	Substance Abuse
MATH	102m	Contemporary Mathematics
MATH	131Pm	Calculus I
PHIL	120ft	Introduction to Philosophy
PHIL	121ft	Ethics
PHIL	122f	Social Issues
PHIL	223t	Contemporary Philosophy
PHIL	255Pt	Feminist Philosophy
PHIL	265t	Philosophy of Mind
All 100-300 level SOC and ANTH courses		
Any ENGL literature courses		

# RELIGION

*Humanities Division*

*Philosophy/Religion Department*

## Faculty

David Timmer (chair), Terence Kleven, Chad Pierce, Elena Vishnevskaya

## Statement of philosophy

The educational mission of the philosophy and religion department is to serve the Central Core and both the philosophy and religion majors and minors. The department takes seriously its obligation to introduce to all students philosophy and religion as humanities disciplines. All courses at the 100- and 200-level are open to and designed for students at different stages of their education, yet the department also seeks to offer a balanced array of courses for majors and minors.

Course offerings in religion cover biblical studies, the history of Christian thought, world religions (Judaism, Islam, and South and East Asian religions), religious ethics and theology. Nearly all courses contain a strong emphasis on the historical development of religious ideas and practices. Students are taught to interpret texts rather than to amass pre-interpreted information. In addition to the standard religion major, a major with an additional Christian ministries emphasis is also offered. Since the core religion requirement is connected with the college's identity as a liberal arts college in the Christian tradition, the department offers a wide variety of courses that introduce students to the sources and development of the Christian tradition, with other religious traditions presented on their own terms, not in relation to Christianity.

## Religion Major Requirements (30 s.h.)

30 semester hours of REL courses or other approved courses with at least eight hours at the 300 level, including:

### 1. Complete at least *one* of the following:

REL	110fr	Old Testament History and Religion (3)
REL	111r	New Testament and Early Christianity (3)
REL	210r	The Prophets (3)
REL	211r	The Writings (3)
REL	216r	The Gospels and Jesus (3)
		<i>Or REL 316Ir Readings in The Gospels and Jesus (3)</i>
REL	310Ir	Readings in The Prophets (4)
REL	311Ir	Readings in The Writings (4)

### 2. Complete at least *one* of the following:

REL	112fr	The Christian Heritage (3)
REL	250hr	American Religious Thought (3)
REL	252hr	The Reformation (3)
REL	253hr	Medieval Christendom (3)
REL	254hr	The Early Church (3)

### 3. Complete at least *one* of the following:

REL	230nr	Asian Religions (3)
REL	233nr	The Jewish Experience (3)
REL	235nr	Islam (3)
REL	330Inr	Readings in Asian Religions (4)
REL	335Inr	Readings in Islam (4)

### 4. Complete at least *one* of the following:

REL	255r	Christian Ethics (3)
REL	270r	Christianity and Culture (3)
REL	272r	Modern Christian Thought (3)
REL	355Ir	Readings in Christianity Ethics (4)
REL	370Ir	Readings in Christianity and Culture (4)
REL	372Ir	Readings in Modern Christian Thought (4)

### 5. Complete the following:

REL	499I	Independent Study (Arr)
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## 6. Complete REL electives (as necessary to earn a total of 30 s.h. of major courses)

*Note: Up to 4 semester hours of the following courses may be counted as religion major electives (check with the department for more details)*

HIST 262h Mideastern Civilization (3)

HIST 263h Biblical Archaeology (3)

Any PHIL course *except* PHIL 125m

## 7. Complete all requirements for the Communication Skills Endorsement

### Communication skills endorsement

The skills endorsement of the philosophy and religion department indicates that the student who completes a major in either philosophy or religion can verbally communicate at the high level appropriate for the recipient of a bachelor of arts degree in core areas of a liberal-arts curriculum.

To ensure achievement at the required level, the communication performance of philosophy and religion majors will be monitored from the time of major declaration. An evaluation of the student's abilities will be made in the earliest class possible and assessments and recommendations deriving from this evaluation will be discussed with the student and the student's advisor. Where appropriate, evaluation and recommendation will continue through the course work in the major until such time as the appropriate faculty (philosophy or religion) are satisfied that the student is consistently performing at the desired level.

### Pre-Ministry Program

Central College continues the emphasis of the Christian tradition in general, and the Reformed tradition in particular, to prepare students for a life of service to God and community, and to prepare some students for a vocation in the ministry.

The chaplaincy and the religion faculty work together to provide a period of reflection and discernment for students who are considering ministry, whether this be lay ministry (such as missions, church-related teaching, or para-church service) or ordained ministry that requires further graduate or seminary study. In addition to pastoral and vocational counseling by the chaplain, the director of the Christian ministries emphasis of the religion major, and other faculty members, there are three courses designed specifically for students who are considering vocations in the ministry. These courses are REL 285PI Pre-Ministerial Seminar, REL 220r Christian Worship and REL 286P Doctrines and Ministry. In addition, pre-ministerial students usually complete either a major or a minor in religion in order to give them adequate grounding in scriptural studies, in church history, theology, and ethics, and in at least one world religion other than Christianity. The students also have an opportunity to do ministry internships in churches and church-related organizations either locally or through some type of internship program conducted elsewhere. Students may also choose to receive spiritual discipling from a designated mentor.

The variety of denominations represented by the faculty, students, and staff at Central College provides student with a rich exposure to various formulations of Christian teachings and practices. Although our aim is to provide students with an opportunity to study various church teachings besides their own, we also focus a particular student's study on the Church teaching to which he or she is most accustomed. As parts of an educational institution, the chaplaincy, the Christian ministries emphasis, and the religion major encourage students to develop a strong sense of the centrality of education to ministry. We foster an integration of faith with training of intellectual qualities of mind in order to establish a student's vocation on the best that is thought and known in Christian teaching and ministry.

### Christian Ministries Emphasis

Students may choose to earn a Christian ministries emphasis within the Religion major. To earn this emphasis, students must complete all of the following courses in the process of meeting the requirements of the religion major (as detailed above):

REL 220r Christian Worship (3)

REL 272r Modern Christian Thought (3)  
or REL 372r Readings in Modern Christian Thought (4)

REL 285PI Pre-Ministerial Seminar (Arr)

REL 397PI The Ministry Internship (Arr)  
or REL 398PIx Cross-Cultural Ministry Internship (2)

In addition, REL 286P Doctrines and Ministry (3) is recommended for students pursuing this emphasis. Contact the Christian ministries emphasis coordinator for more details.

### Typical sequence of courses for the religion major

There are no required courses with prerequisites, and therefore no typical sequence. The department recommends that at least two "readings" courses at the 300-level be taken during the junior and senior years, and that REL 499 Independent Study be taken during the senior year.

**Religion Minor Requirements (18 s.h.)**

Complete 18 s.h. of REL courses with at least 12 s.h. of those at the 200-300 level, including: at least 3 hours in each of three of the following areas: biblical studies; history of Christianity; comparative religious traditions; religious ethics and theology; and culture.

**Philosophy/Religion Minor Requirements (18 s.h.)**

Complete 18 s.h. of PHIL and REL courses, selected to focus on a particular theme such as great ideas, beliefs and values, or the Christian faith. The philosophy/religion department must approve the minor, both as to thematic focus and to the courses used to satisfy it.

Students wishing to complete such a minor should have a minor advisor within the department. With department approval, one course from outside the department and outside the student's first major may be used to count toward the minor.

**Recommended courses outside the department**

The department recommends course work in other disciplines of the humanities division (philosophy, English literature, history), as well as foreign languages and relevant areas of the social sciences.

# SOCIAL SCIENCE

*Interdisciplinary Major*

## Faculty

Michael Schrier (director)

## Statement of philosophy

The social science major offers the opportunity to develop knowledge and skills in several disciplines. This major appeals to students who desire a broadly based experience in the social sciences. A critical element of the major is the recognition of essential understandings within academic disciplines and the relationships among the disciplines.

The social science major provides a solid background for a variety of career options. It is particularly appropriate for prospective social studies teachers at the secondary level.

## Social Science Major Requirements (45-47 s.h.)

*Note: A minimum GPA of 3.0 in the major is required before a student can be recommended for student teaching.*

### 1. Complete all courses from each of three of the areas below:

#### *American history (16 s.h.)*

HIST 130h United States to 1877 (3)  
 HIST 131h United States Since 1877 (3)  
 HIST 386I Public History Seminar (4)  
 Two American History Electives at the 200 or 300-level

#### *World history (16 s.h.)*

HIST 120fh Early Western Civilization (3)  
 HIST 121fh Modern Western Civilization (3)  
 HIST 150h Latin American Civilization (3)  
     or HIST 170nh Early East Asian Civilization (3)  
     or HIST 171nh Modern East Asian Civilization (3)  
     or HIST 180nh African Civilization (3)  
 HIST 385PI Seminar I-History (4)  
 One HIST elective at the 200-level or above (3) (a non-Western course is recommended)

#### *American government (15 s.h.)*

POLS 110s Introduction to American Politics (3)  
 POLS 216Ps Political Behavior: Political Participation, Elections, and Media (3)  
 POLS 217Ps American Political Institutions I (3)  
 POLS 218Ps American Political Institutions II (3)  
 POLS 361t American Political Philosophy (3)  
     or POLS 215s The Politics of State and Local Governments (3)

*Note: POLS-216, 217 and 218 will not be offered beginning 2009-10. Contact the program director for assistance in finding alternative courses.*

#### *Economics (15 s.h.)*

ECON 112s Principles of Microeconomics (3)  
 ECON 113Ps Principles of Macroeconomics (3)  
 ECON 212Pms Intermediate Microeconomics (3)  
     or ECON 213Ps Intermediate Macroeconomics (3)  
 Two 200-level or above ECON electives (6 s.h. total), *excluding* ECON 281Pm

#### *Psychology (15 s.h.)*

PSYC 122s General Psychology (3)  
 PSYC 210s Elementary Principles of Behavior (3)  
 PSYC 220Ps Psychology Investigations (3)  
 PSYC 231Ps Psychopathology (3)  
 PSYC 334Ps Social Psychology (3)

*Sociology (15 s.h.)*

SOC	120s	Principles of Sociology (3)
SOC	225Ps	Social Problems (3)
SOC	236Pns	Minority Groups (3)
SOC	241Ps	Crime and Delinquency (3)
SOC	242Ps	Sociology of the Family (3)

**Communication skills endorsement**

Two Central foundations (“F”) courses must be passed with a grade of B- or better. In addition, the student and major advisor will develop from one or more upper-level courses in the major a course portfolio that reflects successful demonstration of skills in reading, listening and speaking.

# SOCIOLOGY

*Behavioral Sciences Division  
Sociology/Anthropology Department*

## Faculty

Dale De Wild (chair), Dawn Reece, Jon Witt

## Statement of philosophy

The sociology/anthropology department offers students the option of choosing between a major in sociology and a major in cultural anthropology.

Sociology seeks to understand society and the many ways people organize their social interactions around recurring patterns. The basic questions of the discipline of sociology are 1) why do people act the way they act? and 2) why do people think the way they think? The answers to these questions are guided by the theories and methods (interpersonal and societal; qualitative and quantitative) appropriate to the discipline. Society is the context of everything we experience including ourselves. The vast majority of our thoughts, feelings and interactions revolve around other people, both as individuals and as groups.

The ability to understand how societies are ordered, maintained and changed will better equip students to live in a rapidly changing, increasingly diversified and sometimes chaotic world. Rather than focusing narrowly on career preparation in a limited number of skills, we believe that the ability to apply general principles of analysis will provide students with greater flexibility for career options.

## Study abroad opportunities

In an increasingly global economy, skills in cross-cultural analysis and understanding are increasingly valuable. The department strongly encourages sociology and anthropology students to take advantage of Central College's study abroad programs. Our students frequently chose London, Wales or Mexico.

## Communication skills endorsement

The department begins to evaluate each student's reading, writing and speaking skills one semester after the student declares his/her intention to major in sociology. All available evidence will be used including results of tests, grades received in courses and information supplied by department members. Students may be required to demonstrate communication proficiency either by providing a portfolio of their writing or by writing an essay on a broad topic of sociological significance. Students will receive either a departmental endorsement or an outline of procedures that may include taking composition courses, developmental reading or speaking courses and working with the skills center.

## Sociology Major Requirements (35 s.h.)

### 1. Complete all of the following:

SOC	120s	Principles of Sociology (3)
MATH	105m	Introduction to Statistics (4) <i>or</i> PSYC 335Pm <i>Fundamentals of Statistics</i> (4)
SOC	350Ps	Methods of Social Research (4) <i>or</i> POLS 250Ps <i>Methods of Political Research</i> (4)
SOC	450Ps	Sociological Theory (3)
SOC	485P	Senior Seminar (3)

### 2. Complete an additional 18 s.h. of sociology (SOC) or anthropology (ANTH) elective courses (at least 3 of these 18 s.h. must be at the 300-400 level)

*Note: SOC 397PI does not count toward the major*

*Note: All 200-level SOC courses are open to freshmen*

### 3. Complete all requirements for the Communication Skills Endorsement

## Typical sequence of major courses for the sociology major

### *Freshman year*

SOC 120s Principles of Sociology  
 SOC/ANTH electives-200 level

### *Sophomore year*

SOC/ANTH electives 200-300 level  
 Study abroad

### *Junior year*

MATH 105m Introduction to Statistics  
 SOC 350Ps Methods of Social Research  
*(Note: the above two courses should be taken in the same year.)*  
 SOC/ANTH 200-400 level electives

### *Senior year*

SOC 397PI Internship  
 SOC 450Ps Sociological Theory  
 SOC/ANTH 300-400 level electives  
 SOC 485P Senior Seminar

## Sociology Minor Requirements (18 s.h.)

Complete 18 s.h. of SOC and/or ANTH courses, with at least 6 s.h. at the 300-400 level.

# SPANISH

*Cross-Cultural Studies Division  
Modern Languages Department*

## Faculty

Kathleen Korcheck, Allison Krogstad, Erik Ladner, Samuel Mate-Kodjo, Oscar Reynaga

## Departmental statement of philosophy

The department of modern languages believes that the ability to communicate (listen, speak, read and write) in another language is fundamental for attaining an understanding of the many cultures that make up the world. For significant intercultural understanding, students must also learn what members of other cultures consider worth talking about: their historical, artistic and literary heritage; their contemporary political, social and economic problems; and their basic customs and values.

Modern language course offerings are intended to build basic communication skills and insight into important topics in literature and culture. All on-campus courses include laboratory sessions with native-speakers or advanced speakers of the target language and are supported by co-curricular activities in the language, including the language house program and social activities. All courses aim to increase language proficiency and cultural awareness as well as to prepare students for an extended, off-campus immersion in a culture where the target language is spoken.

## Study abroad opportunities

All majors in the department of modern languages (especially those seeking secondary teaching licensure) are expected to spend one year – or at least one semester – in one of Central’s programs in Granada, Spain; Merida, Mexico; Paris, France; or Vienna, Austria. Before departure, students should review with their advisor those courses offered abroad that can be used to meet major requirements, and file a preliminary plan of study with the advisor. Students must make effective use of their time and experience abroad in order to reach the proficiency levels required of the major. Students seeking a minor in the department are encouraged to study abroad as well.

## Teaching licensure

Students seeking teaching licensure must secure information from the department of modern languages and the department of education concerning departmental and state requirements.

## Foreign language credit by proficiency

For information on earning credit by proficiency in a foreign language, please see the “Credit by Proficiency” section of this catalog.

## Spanish major statement of philosophy

Spanish majors are expected to spend at least a semester with Central’s program in Granada, Spain; Merida, Mexico; or in an equivalent, approved program. Here the student builds on the foundation established on campus, improves language proficiency and enhances cultural understanding. All majors must demonstrate their proficiency on an oral examination in Spanish to be administered by departmental members during the senior year. The goal is to achieve the equivalent of an advanced rating according to the scale established by the American Council on the Teaching of Foreign Languages.

## Spanish Major Requirements (30-46 semester hours)

### 1. Complete:

- ♦ 30 s.h. of SPAN courses numbered 321 or higher on the Pella campus (or 30 s.h. of SPAN courses at the 700 level or higher in Spain); *or*
- ♦ 34 s.h. of SPAN courses numbered 222 or higher; *or*
- ♦ 42 s.h. of SPAN courses numbered 122 or higher

### 2. Included in the hours taken above must be all of the following:

- ♦ SPAN 323Pct Introduction to Hispanic Literature (3) or its equivalent
- ♦ A minimum of 3 s.h. in civilization or culture taught in Spanish
- ♦ A minimum of 3 s.h. in peninsular literature (Spain)
- ♦ A minimum of 3 s.h. in Spanish American literature
- ♦ A 3 s.h. 400-level senior seminar course taken on the Pella campus upon return from studying abroad

### 3. Achieve the equivalent of the advanced level in all skills (ACTFL scale) as demonstrated in an oral exam

### 4. Complete all requirements for the Communication Skills Endorsement

### **Communication skills endorsement**

All students at Central College are expected to demonstrate communication skills appropriate for their major(s). In addition to modern language skills, students in the department are expected to offer evidence of a high level of proficiency in English. Students should satisfy this requirement as soon as they declare their major, if at all possible before the end of the sophomore year. Approved oral and written work in English prepared for, or in connection with, courses in the major may be used to document skills. Each language area has at least one faculty member designated to certify communication skills for the department and to prescribe remediation when necessary.

### **Typical sequence of courses for the Spanish major**

#### ***Freshman year***

Begin at highest level of proficiency by placement.

SPAN 121c Beginning Spanish I

SPAN 122Pc Beginning Spanish II

or

SPAN 221Pc Intermediate Spanish I

SPAN 222Pc Intermediate Spanish II

or

SPAN 321Pc Advanced Spanish: Grammar, Composition and Conversation I

SPAN 322Pc Advanced Spanish: Grammar, Composition and Conversation II

SPAN 323Pct Introduction to Hispanic Literature

#### ***Sophomore year***

Continue the next highest level.

SPAN 221Pc Intermediate Spanish I

SPAN 222Pc Intermediate Spanish II

or

SPAN 321Pc Advanced Spanish: Grammar, Composition and Conversation I

SPAN 322Pc Advanced Spanish: Grammar, Composition and Conversation II

SPAN 323Pct Introduction to Hispanic Literature

#### ***Junior year***

SPAN 321Pc Advanced Spanish: Grammar, Composition and Conversation I

SPAN 322Pc Advanced Spanish: Grammar, Composition and Conversation II

SPAN 323Pct Introduction to Hispanic Literature

or study abroad

#### ***Senior year***

Study abroad

and/or senior capstone course

### **Spanish Minor Requirements**

1. Complete at least two SPAN courses at the 300 level or above
2. Achieve the equivalent of intermediate-high proficiency in all skills as demonstrated in an oral exam with a faculty member (ACTFL scale)

#### **Additional information**

Departmental offerings that meet graduation requirements: students may meet the language proficiency requirement by scoring at the intermediate low level on the ACTFL proficiency scale, or by placing at the intermediate (SPAN 221) level on the Spanish placement exam or by completing SPAN 122Pc with a grade of C or better. Non-Spanish majors may earn up to 6 credits for the cultural awareness Core requirement with any Spanish courses numbered 121 or higher.



# THEATRE

*Fine Arts Division  
Theatre Department*

## Departmental faculty

Mary Jo Sodd (chair), Tom Thatcher, Ann Wilkinson, Greg Gillette (guest Artist-in-Residence)

## Statement of philosophy

The theatre major offers a broad preparation in theatre arts. Students complete required courses in acting, directing, design, stagecraft and theatre history/literature, any of which can become the starting place for further exploration and study. Students also have the opportunity to earn practicum credit through acting or design/technology and pursue independent study projects in any of the areas of study. Opportunities are available for student creative production work. Students are also encouraged to seek off-campus internships in their area of interest and to study abroad at least one semester.

## Theatre Major Requirements (40 s.h. minimum)

*Note: Students who plan to major or minor in theatre will be expected to participate in co-curricular theatre programs. Education majors desiring a theatre endorsement will have the same expectation.*

### 1. Complete all of the following:

THEA 140fa	Introduction to Theatre (3)
THEA 150a	Acting (3)
THEA 163	Stagecraft (4)
THEA 165	Stage Management (1)
THEA 258PI	Directing I (4)

### 2. Complete one of the following:

THEA 240ht	Ancient to Medieval: Theatre History and Dramatic Literature (3)
THEA 241ht	Renaissance to Modernism: Theatre History and Dramatic Literature (3)

### 3. Complete one of the following:

THEA 248a	Costume Design and Construction (3)
THEA 260a	Scene Design (3)
THEA 264a	Lighting Design (4)

### 4. Complete at least 2 s.h. of the following:

THEA 292I	Practicum in Theatre (Arr)
THEA 494I	Practicum in Theatre (Arr)

### 5. Complete at least 17 s.h. of THEA elective courses

### 6. Complete all requirements for the Communications Skills Endorsement

#### Communication skills endorsement

Oral and written skills are evaluated at the time students declare their intent to major through discussion with an advisor in the department. Progress is reviewed at the end of each year by departmental faculty. Students are also encouraged to take supplemental courses in other departments that enhance their skills and major.

Assessment will be based on writing samples, script analysis test, classroom presentations for organization and speaking skills, and organization and collaboration skills important to the field assessed through production work.

## Typical sequence of major courses for the theatre major

### *Freshman year*

THEA 140fa Introduction to Theatre  
 THEA 150a Acting  
 THEA 163 Stagecraft  
 THEA 165 Stage Management

### *Sophomore year*

THEA 258P Directing I  
 THEA 240ht, THEA 241ht  
 THEA 292I Practicum in Theatre  
 THEA 248a or THEA 260a or THEA 264a

### *Junior year*

THEA 292I Practicum in Theatre  
 THEA electives  
 A semester studying abroad is recommended

### *Senior year*

THEA 494I Practicum in Theatre  
 THEA electives

## Theatre Minor Requirements (20 s.h.)

1. Complete a minimum of 20 s.h. of THEA courses that have been approved by the department. At least 3 semester hours must be at the 300-400 level.

# COURSES OF INSTRUCTION

## Accounting

### **ACCT 201P Introduction to Not-for-Profit and Government Accounting (3)**

Prerequisites: BEHS 285, BMGT 251P, or instructor's permission. Introduces how accounting information is processed, the financial reporting required, and how accounting information is used to make managerial decisions in not-for-profit and governmental entities. Designed for students with no prior accounting knowledge. Does not count toward the accounting or business management major or minor.

### **ACCT 241 Introduction to Financial Accounting (3)**

Examines the financial accounting function of business entities. Develops an understanding of the financial information in published financial statements (income statement, balance sheet, cash flow statement, and equity statement). Examines the role of financial data in the decision-making process of "investors" and other "outsiders" of the business entity. Computer applications including electronic spreadsheets and financial statements retrieved from online sources are emphasized.

### **ACCT 242Pm Introduction to Management Accounting (3)**

Prerequisites: ACCT 241 and ECON 112s. Pre- or corequisite: BMGT 251P. Focuses on providing information useful for internal decision-making in production, merchandising, government and service-oriented enterprises. Primary emphasis given to understanding of costs and cost behavior and the use of cost information for planning, controlling, decision-making performance evaluation and product costing. Introduces recent developments in management accounting, such as activity-based costing (ABC) and Just-in-Time (JIT). Development and use of electronic spreadsheets is emphasized.

### **ACCT 341P Intermediate Financial Accounting I (3)**

Prerequisite: ACCT 241 (grade of B or better recommended). Examines the current state of financial accounting theory, standards, principles and practices. Studies theoretical and practical problems of measurement and valuation related to the determination of net income, revenue recognition, cash flow and presentation of financial position. Emphasizes the asset and liability sections of the balance sheet.

### **ACCT 342P Intermediate Financial Accounting II (3)**

Prerequisite: ACCT 341P. Examines the current state of financial accounting theory, standards, principles and practices. Studies theoretical and practical problems with emphasis on special topics: long-term debt, capital stock, leases, pensions and other post employment/retirement benefits, deferred tax, accounting changes/error corrections, cash flow statement and financial statement disclosures.

### **ACCT 343Pm Advanced Management Accounting (3)**

Prerequisites: ACCT 242Pm and MATH 105m. Examines the nature of accounting data as related to managerial functions of planning, controlling, decision-making, performance evaluation, and product costing. Major topics include cost accumulation, analysis, allocation and estimation (including statistical methods), budgeting and standard costing with variance analysis.

### **ACCT 344P Individual Tax Accounting (3)**

Prerequisite: ACCT 241. Studies the general framework of the determination of income tax for an individual.

### **ACCT 345P Advanced Taxation (3)**

Prerequisites: ACCT 241 and ACCT 344P. Studies the specific tax code for corporations, estates and trusts. Relates the process of converting financial GAAP accounting to reporting under the IRS code.

### **ACCT 346P Government and Non-Business Accounting (3)**

Prerequisite: ACCT 242Pm. Studies the accounting procedures and financial reporting of governments and non-business entities. Examines the state and local government entities under the control of the GASB. Examines the financial reporting requirements of not-for-profit entities under the control of FASB, including: colleges and universities, hospitals and health care organizations, charities (501c2 and 501c3), and other non-profit entities.

### **ACCT 347P Accounting Information Systems (3)**

Prerequisite: COSC 106 or COSC 110m. Pre- or corequisite: ACCT 242Pm. Introduces students to the role information systems play in accomplishing the objectives of financial accounting, managerial accounting, tax accounting and auditing. Students study the principles of systems design, relational databases, and the controls in accounting information systems; the flows of information through the various accounting cycles and the corresponding internal controls; the information flows using the traditional accounting model with an emphasis on the use of current database technology, including data modeling.

### **ACCT 390I Topics (Arr)**

Prerequisite: instructor's permission. Selected topics in accounting may be offered, depending upon student and staff interest.

### **ACCT 397PI Internship (Arr)**

Prerequisites: BMGT 251P, ACCT 242Pm, junior standing and instructor's permission. Available only to students who have declared a major in the department. The seminar attempts to sensitize the student to work experience and provide communication with other students to discuss their mutual experience. May be repeated for a maximum of 9 semester hours total. Pass/no record basis.

**ACCT 441P Advanced Financial Accounting (3)**

Pre- or corequisite: ACCT 342P. Studies specialized financial reporting problems, including those related to investments in financial and derivative assets, the equity method of accounting, the entity concept (consolidated financial statements and international accounting operations), and non-corporate business reporting.

**ACCT 442P Auditing (3)**

Prerequisites: ACCT 341P. Examines public accounting, the attest function, internal control and internal auditing. Emphasizes generally accepted auditing standards, professional ethics and legal responsibilities of the auditor. Studies the auditing environment, planning and performance of the audit, and the reporting standards.

**ACCT 485P Accounting Research Seminar (1)**

Prerequisite: senior standing and declared Accounting major. Students conduct research on a substantive accounting topic in the areas of financial, managerial, tax, auditing, consolidations, international, information systems, not-for-profit, or governmental. A formal presentation to accounting faculty and senior majors is required. Pass/no record basis.

**ACCT 496PI Co-Op (Arr)**

Prerequisites: junior standing, instructor's permission, and declared department major with ECON 112s, 113Ps, ACCT 241, 242Pm and BMGT 251P completed. Full-time, off-campus work experience for students meeting competitive selection criteria established by the Co-op organization. The Co-op training program, lasting four to twelve months, must be approved by the department. A list of approved programs is available from the Department Chair. Credit arranged from 1 to 12 semester hours. Pass/no record (awarded upon completion of the Co-op program).

**ACCT 499I Independent Study (Arr)**

Prerequisite: instructor's permission. An independent research experience for senior majors.

## Anthropology

**ANTH 120ns Introduction to Cultural Anthropology (3)**

Introduction to the field of cultural anthropology. Students will explore human cultural diversity from small-scale hunter-gatherer societies to large-scale industrial societies. Areas covered include ethnicity, gender roles, religion, warfare and the environment. Special attention is given to the way anthropologists gather and analyze information on different cultures.

**ANTH 161n African-American Culture and History (3)**

Surveys the history and culture of the African-American people. Includes the African experience, African-Americans in North America and current issues for African-Americans.

**ANTH 222ns Culture Through Film (3)**

Films depicting the life ways, values, and beliefs of people from around the world have played an important role in conveying the diversity of human cultures since the inception of cultural anthropology. This course will expose students to a variety of cultures through the analysis of anthropological films and written ethnographic accounts.

**ANTH 250ns Cultures of the Middle East (3)**

An introduction to the various peoples and cultures of the Middle East, with special attention given to countries of particular importance, such as Israel, Iraq, and Afghanistan.

**ANTH 255ns: Cultures of Latin America (3)**

Provides a general introduction to contemporary Latin American cultures and societies. Topics covered include Latin American racial ideologies, indigenous groups, religion, politics, gender roles, sexuality, sports, and immigration to the United States.

**ANTH 260ns Medical Anthropology (3)**

Explores how disease and illness are understood differently across cultures and examines a range of healing practices in non-Western cultures. Also examines various cultural aspects of contemporary Western biomedicine.

**ANTH 264s Archaeology (3)**

Introduces the methods and findings of archaeology. Hands-on experience in excavation techniques will complement classroom study.

**ANTH 265cs Ethnicity and Nationalism (3)**

We live in a world today where ethnic tensions and conflict have become the norm rather than the exception. Virtually all countries are multi-ethnic in nature, and therefore are susceptible to group mobilization along ethnic lines. This course is a cross-cultural, comparative study of the causes of both ethnic conflict and cooperation. Various theories of ethnic conflict/cooperation will be examined using case studies from different parts of the world.

**ANTH 266n North American Indians (3)**

A survey of the native cultures of North America. Region-by-region analysis will consider ecological adaptations of the American Indians, as well as their modes of social organization and belief systems.

**ANTH 267Pxcs Ethnic Encounter (3)**

Prerequisite: ANTH 120ns or instructor's permission. In consultation with the professor, students will plan, research, carry out, analyze and produce a final projects resulting from a face-to-face interaction with members of an ethnic minority group in the United States.

**ANTH 350Ins Readings in Cultures of the Middle East (3)**

Prerequisite: instructor's permission. Offered jointly with ANTH 250ns, covering the same topics, but with additional assignments and readings, along with expectations for advanced discussion and research. Students cannot receive credit for both ANTH 250ns and ANTH 350Ins.

**ANTH 365Ics Readings in Ethnicity and Nationalism (3)**

Prerequisite: instructor's permission. Offered jointly with ANTH 265cs, covering the same topics but with some separate assignments, sessions, and expectations for advanced discussion and research. Students cannot receive credit for both ANTH 265cs and ANTH 365Ics.

**ANTH 366Pc Ethnographic Field Methods (3)**

Prerequisite: ANTH 120ns or instructor's permission. Surveys field methods used by cultural anthropologists, encompassing readings, discussion, and practicum. Methods include interview, participant observation, survey, mapping, archival research, life history and others.

**ANTH 367Pn Anthropology of Religion (3)**

Prerequisite: ANTH 120ns or instructor's permission. Examines the ways in which religion continues to flourish as a dynamic part of the fabric of single cultures and as an intercultural force, with the power to both unite and divide people. By exploring oral, textual, and state versions of religion, the course will consider how this cultural "universal" is practiced and experienced by local communities around the world. The course will examine how some of the big questions – Who are we? Where did we come from? What is our place in the world? Where are we going? – are answered within and across particular communities and cultural contexts.

**ANTH 397/497PI Internship (Arr)**

Prerequisite: departmental approval and instructor's permission. An applied experience in the major, requiring a minimum number of hours of work per credit hour. Includes conferences with the on-campus instructor and an evaluation by the job supervisor. Pass/No record basis.

**ANTH 462Pcs Culture Theory (3)**

Prerequisite: ANTH 120ns or instructor's permission. An examination of the history and development of anthropological theory, with emphasis on the contributions of prominent theorists.

**ANTH 465Ps Applied Anthropology (4)**

Prerequisite: ANTH 120 and junior standing. Provides students with opportunity to apply anthropological understanding outside of the classroom as researchers, interns or volunteers in community and/or organizations. Readings and weekly meetings will provide insight and depth into students' experiences.

**ANTH 485P Seminar in Cultural Anthropology (3)**

Prerequisite: Anthropology major or instructor's permission. The capstone course designed for cultural anthropology majors. Students will explore issues related to the four fields of American anthropology: physical anthropology, archaeology, linguistic anthropology, and sociocultural anthropology.

**ANTH 498 Research in Anthropology (Arr)**

Students plan, carry out, and write up original anthropological research projects in an off-campus location, for example, the Basque Ethnographic Research Project.

**ANTH 499I Independent Study: Anthropology (Arr)**

Designed to permit students to pursue their interest in specialized areas of anthropology in greater depth than is possible in other courses offered by the department. Restricted to upper-class majors.

**Art****ART 101fa Introduction to the Visual Arts (3)**

Does not count toward an art major or minor. Analyzes the elements and principles of art by considering an array of works. The primary goal of the course is to gain an appreciation of varied works in diverse media by artists working in different cultural and geographic environments. Promotes college-level skills with emphasis on writing and speaking. Includes field trips to local and regional art museums.

**ART 130a Drawing I (3)**

A challenging workshop exploring the fundamental theory and practice of traditional and contemporary drawing which includes critical analysis and interpretation. Students will be working from direct observation applying a variety of technical and conceptual approaches. Group and individual critiques will supplement the studio practice. No previous experience in drawing required.

**ART 135a Introduction to Visual Language (3)**

A challenging workshop introducing the fundamental theory and practice of studio art. This course will examine creative problem solving, visual communication, critical analysis and interpretation in a variety of media. Group and individual critiques will supplement the studio practice. Open to art majors and non-majors; no previous experience in art required.

**ART 137a 3-D Design (3)**

A foundation studio art course emphasizing three dimensional design elements and principles. Teaches basic three dimensional studio techniques, visual composition, and critical skills including art vocabulary sufficient to analyze art works.

**ART 210 Elementary School Art (3)**

Discusses various theories concerning children's art and the importance of art education. Prepares students to teach by formulating goals, designing curriculum and examining teaching methods.

**ART 221ah History of Art: Ancient through Medieval (3)**

A survey of Western art from prehistoric times through the Gothic period.

**ART 222ah History of Art: Renaissance through Modern (3)**

A survey of Western art from the 13th century through modern times.

**ART 230Pa Printmaking I (3)**

Prerequisite: ART 130a or ART 135a. A challenging workshop exploring the fundamental materials and techniques of intaglio, relief and digital printmaking which includes critical analysis and interpretation. This course will examine a variety of traditional and contemporary approaches. Group and individual critiques will supplement the studio practice. No previous experience in printmaking required.

**ART 231Pa Painting I (3)**

Prerequisite: ART 130a or ART 135a. A challenging workshop exploring the fundamental theory and practice of traditional and contemporary painting which includes critical analysis and interpretation. This course will examine the properties of color, color theory and the unique characteristics of the medium from a variety of technical and conceptual approaches. Group and individual critiques will supplement the studio practice. No previous experience in painting required.

**ART 232Pa Ceramics I (3)**

Prerequisite: ART 137a or instructor's permission. An introduction to clay as an art medium through a variety of fundamental forming, surface decoration, and firing techniques commonly used by potters and sculptors.

**ART 233a Sculpture I (3)**

An introduction to the materials, processes, and techniques of sculpture. The range of materials could include wood, metal, paper products, and found objects.

**ART 234Ia Glassblowing I (3)**

Prerequisite: instructor's permission. An introduction to the techniques of off-hand glassblowing. Emphasis will be on the development of skills of working with the plastic and spontaneous qualities of molten glass.

**ART 235a Metalsmithing I (3)**

An introduction to the design and fabrication of three-dimensional forms for jewelry, holloware, flatware, and small sculpture.

**ART 236Pa Drawing II (3)**

Prerequisite: ART 130a. An advanced workshop focusing on conceptual and thematic approaches while expanding upon the techniques and materials covered in Drawing I. Critical analysis, interpretation and regular critiques will continue as an integral part of the studio practice.

**ART 238P Graphic Design (3)**

Prerequisite: ART 130a or ART 135a or instructor's permission. An introduction to the history and practice of graphic design including logos, posters, advertising design, illustration and their historical significance in visual culture.

**ART 245na Pre-Columbian Art (3)**

An introductory survey of the artistic traditions of the ancient cultures of Mesoamerica. Examines primarily the art and architecture of the Olmecs, Zapotecs, Mayans, Teotihuacanos, Aztecs, and Toltecs.

**ART 246na Native American Art (3)**

An introductory survey of the pre-contact, historic, and contemporary arts of the indigenous peoples of North America.

**ART 247na African Art (3)**

An introductory survey of the traditional and non-traditional arts of Africa with special emphasis on the arts of West and Central Africa.

**ART 275PIa Contemporary Arts in the City (3)**

Prerequisites: sophomore standing and instructor's permission. An extensive exploration of the architecture, dance, drama, music, visual arts and other art forms influenced by and available in the city. Uses a broad range of field experiences supported by reading classroom discussion and presentations by recognized authorities. Offered in major cities.

**ART 295I Practicum in Gallery Management (1)**

Prerequisite: instructor's permission. Offers experience in art gallery management including organizing and installing exhibitions, docent duties, and marketing of the gallery. May include some graphic design work. May be repeated. Pass/no record basis.

**ART 325ah History of Modern Art (3)**

Concentrates on the modern and contemporary period in Western painting beginning in Europe with Impressionism and proceeding to the present.

**ART 330Pa Printmaking II (3)**

Prerequisite: ART 230Pa. An advanced workshop focusing on conceptual and thematic approaches while expanding upon the techniques and materials covered in Printmaking I. Critical analysis, interpretation and regular critiques will continue as an integral part of the studio practice.

**ART 332Pa Ceramics II (3)**

Prerequisite: ART 232Pa. A continuation of Ceramics I with the addition of developing glazes and more experience in the firing procedures. Emphasis on developing a more personal approach to the medium.

**ART 333Pa Sculpture II (3)**

Prerequisite: ART 233a. A continuation of ART 233a with both individually arranged and structured projects in advanced sculptural concepts and techniques.

**ART 334PIa Glassblowing II (3)**

Prerequisite: ART 234I and instructor's permission. A continuation of working with molten glass as a medium of expression. Emphasis will be on developing a more personal style while continuing to improve technical skills and understanding of the processes.

**ART 335Pa Painting II (3)**

Prerequisite: ART 231Pa. An advanced workshop focusing on conceptual and thematic approaches while expanding upon the techniques and materials covered in Painting I. Critical analysis, interpretation and regular critiques will continue as an integral part of the studio practice.

**ART 337Pa Metalsmithing II (3)**

Prerequisite: ART 235Pa. A continuation of ART 235Pa with both individually arranged and structured projects in advanced metalsmithing techniques and concepts. Emphasizes exploration of metal as a medium of personal aesthetic expression.

**ART 340PI Advanced Studio (3)**

Prerequisite: Any 300-level studio course and instructor permission. A studio course that provides students an opportunity to explore individual advanced problems in art. Emphasis on developing a successful body of artwork. Stresses work presentation and portfolio development.

**ART 345na Readings in Pre-Columbian Art (3)**

Offered jointly with ART 245na, but with some separate readings, sessions, and expectations for advanced discussion and research. Students cannot receive credit for both ART 245na and ART 345na.

**ART 346na Readings in Native American Art (3)**

Offered jointly with ART 246na, but with some separate readings, sessions, and expectations for advanced discussion and research. Students cannot receive credit for both ART 246na and ART 346na.

**ART 347na Readings in African Art (3)**

Offered jointly with ART 247na, but with some separate readings, sessions, and expectations for advanced discussion and research. Students cannot receive credit for both ART 247na and ART 347na.

**ART 397I Internship in Art (Arr)**

Prerequisite: instructor's permission. The internship provides an opportunity for the student to explore a career option in the major field of study. Pass/No record basis.

**ART 399PI Independent Study (Arr)**

Prerequisite: junior standing, several art courses and instructor's permission. Provides an opportunity for students to explore individual problems in art. May be repeated for a maximum of 6 semester hours.

**ART 425P Art Theory and Criticism (3)**

Prerequisite: ART 325ah. A study of contemporary artistic theory and practice focusing on the ideas and issues that have informed art criticism of the past 30 years.

**ART 430P Senior Seminar in Art (3)**

Prerequisite: senior standing and art major. This course is the art major capstone experience. Emphasizes professional presentation and stresses advanced work. A mature body of work is created through the course of the semester and presented during the senior exhibit. Team-taught by art faculty.

## Athletic Training

**AT 223P Level 1: Clinical Rotation 1 (1)**

Prerequisites: Admission to ATEP, BIOL 111Pq, EXSC 149f and EXSC 151, or instructor permission. The course will cover a variety of topics from Basic First Aid, Professional Rescuer CPR, AED and an assortment of administrative issues. The material covered is vital for an entry level ATS. Rotations are designed to expose students to fall sports in a structured environment. Students will spend a maximum of three weeks with each sport. During that time students need to familiarize themselves with the rules, equipment and idiosyncrasies of each sport.

**AT 224P Level 1: Clinical Rotation 2 (1)**

Prerequisites: AT 223P or instructor permission. The purpose of this course is to further students' clinical skills and to expose them to spring sports in a structured environment. Students will spend a minimum of three weeks with each sport. During that time students need to familiarize themselves with the rules, equipment and idiosyncrasies of each sport.

**AT 272P Athletic Injury Assessment: Lower (3)**

Prerequisite: EXSC 151. Provides the student with the knowledge and skills to evaluate common injuries occurring in lower extremities of the musculoskeletal system. Initial treatment, rehabilitation and taping techniques are explored.

**AT 273P Athletic Injury Assessment: Upper (3)**

Prerequisite: EXSC 151. Provides the student with the knowledge and skills to evaluate common injuries occurring in upper extremities of the musculoskeletal system. Initial treatment, rehabilitation and taping techniques are explored.

**AT 323P Level 2: Clinical Rotation 1 (1)**

Prerequisites: AT 223P, 224P, 272P and 273P or instructor permission. The purpose of this course is to provide athletic training students a fall clinical rotation assignment in a controlled and supervised environment. The students will be expected to practice, demonstrate, refine and apply competencies gained in previous settings. The students will attend practices and events as assigned; assist in pre- and post-practice treatment and care of injuries; provide practice supervision; evaluate and provide treatment and rehabilitation of injuries. The students will also demonstrate appropriate communication skills with other health care professionals working with their team.

**AT 324P Level 2: Clinical Rotation 2 (1)**

Prerequisites: AT 223P, 224P, 272P and 273P, or instructor permission. The purpose of this course is to provide athletic training students a spring clinical rotation assignment in a controlled and supervised environment. The students will be expected to practice, demonstrate, refine and apply competencies gained in previous settings. The student will attend practices and events as assigned; assist in pre- and post-practice treatment and care of injuries; provide practice supervision; evaluate and provide treatment and rehabilitation of injuries. The students will also demonstrate appropriate communication skills with other health care professionals working with their team.

**AT 377P Therapeutic Modalities (3)**

Prerequisites: EXSC 151, AT 272P, and AT 273P. Applies the most common therapeutic modalities used in the rehabilitative setting. Discusses documentation in depth, patient safety, phases of rehabilitation, the inflammation process as it relates to therapeutic modalities, wound repair, thermal agents, hydrotherapy, electrotherapy and other contemporary therapeutic modalities. Indications, contra-indications and actual use will be discussed and practiced. Classroom and laboratory time will be combined to provide the student with a more complete understanding of therapeutic modalities.

**AT 378P Therapeutic Exercise (3)**

Prerequisites: EXSC 151, AT 272P and 273P. Develops individual exercise programs used in injury rehabilitation. Discusses range of motion, resistance exercise, aerobic exercise, stretching, and joint mobilization for all major regions of the body. Special populations will also be considered. Includes the physiological effects, indications and contra-indications for use of exercise in a rehabilitative setting. Classroom and laboratory time will be combined to provide a balanced look at the use of exercise in rehabilitation.

**AT 423P Level 3: Clinical Rotation 1 (2)**

Prerequisites: AT 323P, EXSC 324P, AT 377P and 378P, or instructor permission. Senior level review and evaluation of clinical competencies and proficiencies. Extensive content in organization and administration of athletic training programs.

**AT 424P Level 3: Clinical Rotation 2 (2)**

Prerequisites: AT 323P, EXSC 324P, AT 377P and 378P, or instructor permission. Senior level review and evaluation of clinical competencies and proficiencies. Extensive content in organization and administration of athletic training programs.

**AT 472P General Medical Conditions for the Athletic Trainer (3)**

Prerequisites: AT 272P and AT 273P. Designed to address the common general medical conditions encountered by athletic trainers. The recognition, evaluation, and referral of these conditions will be covered.

## Behavioral Science

**BEHS 285 Not-for-Profit Seminar (1)**

An examination and discussion of not-for-profit management in the United States for students interested in possible careers in this field. Meets once a week with each session devoted to a different aspect of the field. Each topic is explored jointly by students, faculty, and practitioners.

**BEHS 397P Internship in Not-for-Profit Management (3)**

## Biology

**BIOL 111Pq Survey of Human Anatomy and Physiology I with Lab (4)**

Pre- or corequisite: EXSC 149f or EXSC 151. First of a two-course sequence surveying the structure and function of the human body; designed for Exercise Science majors. Includes body organization, tissues and systems. Involves significant laboratory experience including fetal pig dissection, examination of histological specimens, preserved organs and anatomical models. Includes one three-hour lab per week.

**BIOL 112Pq Survey of Human Anatomy and Physiology II with Lab(4)**

Prerequisites: BIOL 111Pq and either EXSC 149f or EXSC 151. Prerequisites: BIOL 111Pq and either EXSC 149f or EXSC 151. Second of a two-course sequence surveying the structure and function of the human body; designed for Exercise Science majors. Continued study of body systems. Concludes with pre- and neonatal development and physiology. Involves significant laboratory experience including fetal pig dissection, examination of histological specimens, preserved organs and anatomical models. Includes one three-hour lab per week.



**BIOL 123q Natural History of the Great Plains with Lab (4)**

An overview of the natural history of the Great Plains for non-biology majors. Topics will include climate, geology, soils and the ecology of local prairies, woodlands and wetlands. Studies common plants and animals of this region and local ecological problems. This course includes one three-hour laboratory per week that will involve several field trips. A weekend field trip may be offered.

**BIOL 130q Diversity of Life with Lab (4)**

An exploration of the major groups of organisms and of evolution as the source of biological diversity and the unifying principle of the biological sciences. The coverage of biological diversity includes basic structure and function, ecology and behavior. Laboratories allow students to experience the diversity of life firsthand with living examples of many groups. Includes one three-hour lab per week.

**BIOL 131Pq Introduction to Cells with Lab (4)**

Prerequisite: High school chemistry. An introduction to the cellular basis for life; includes the chemical building blocks of life, cell structure, membrane function, cellular energetics, cell reproduction and heredity and the elements of molecular genetics. Includes one three-hour lab per week.

**BIOL 221Pq Genetics with Lab (4)**

Prerequisites: BIOL 130q and BIOL 131Pq. An introduction to genetic analysis including coverage of classical and molecular genetics in the following areas: Mendelian analysis, linkage, mutation, changes in chromosome structure and number, the relationship between genetics and the central dogma, gene expression, sex determination, population genetics and speciation. Laboratory will use both classical and molecular techniques to illustrate key concepts. Includes one three-hour lab per week.

**BIOL 223Pq Vertebrate Natural History with Lab (4)**

Prerequisite: BIOL 130q. An overview of vertebrate biology. Lectures will concentrate on the various morphological, physiological and behavioral adaptations vertebrates have for their environments, and the laboratories will cover the structure and identification of the vertebrate groups, with emphasis on local species. Laboratories also include field trips for the observation and collection of local vertebrates; one lab will cover specimen preparation. Includes one three-hour lab per week.

**BIOL 229Pq Principles of Ecology with Lab (4)**

Prerequisites: BIOL 130q and BIOL 131Pq. Analyzes the patterns present, and processes operating, in ecological populations, communities and ecosystems. Emphasis on processes that influence the distribution and abundance of species. Laboratories introduce students to field methods and computer simulations, and allow students to conduct research, analyze data and present their results. Includes one three-hour lab per week.

**BIOL 310Pq Tropical Ecology (1-4)**

Prerequisite: BIOL 130q or instructor's permission. Introduces students to marine and terrestrial ecosystems in the tropics. Meets once a week for two hours during the semester and during a 16 day trip to Belize and Costa Rica or other tropical regions during winter break to explore several different ecosystems including coral reefs, tropical dry forests, cloud forests, and tropical lowland forests. Students are required to attend both the trip and the lectures to receive credit. Students enrolling in this course must pay an additional fee and pay for airline tickets and other expenses.

**BIOL 320Pq Evolution with Lab (4)**

Prerequisite: BIOL 221Pq and BIOL 229Pq. An overview of evolution as the unifying principle of the biological sciences, with coverage of the origins of evolutionary thought, population genetics, systematics and paleobiology. Includes laboratory projects on topics such as population genetics, morphometrics and phylogeny reconstruction. Includes one three-hour lab per week.

**BIOL 321Pq Comparative Vertebrate Anatomy with Lab (4)**

Prerequisite: BIOL 130q. A comparative analysis of vertebrate structure, with morphology interpreted in a phylogenetic context. Emphasis on the major morphological changes that have occurred during the half-billion years of vertebrate evolution. Laboratories involve dissection of the dogfish shark and the mink, as well as examination of much additional vertebrate material. Includes one three-hour lab per week.

**BIOL 324Pq Field Botany with Lab (4)**

Prerequisites: BIOL 130q and 131Pq. An examination of the ecology, evolution and systematics of plants. Emphasis on the evolutionary relationships and natural history of the flora of Iowa. Extensive laboratory and field work will introduce the students to methods of plant identification, taxonomy and botanical field studies. Includes one three-hour lab per week.

**BIOL 335Pq Functional Histology with Lab (4)**

Prerequisite: BIOL 131Pq. A systematic survey, including structure and function, of the major animal cells and tissue types, followed by an in-depth, microscopic study of the major organ systems. Students learn the relationship between form and function, develop histological microtechniques and an understanding of health and disease as it relates to changes in tissue.

**BIOL 341Pq Human Physiology with Lab (4)**

Prerequisites: BIOL 131Pq and CHEM 235Pq. Description of the anatomical structure and analysis of the molecular mechanisms of action of each of the vertebrate organ systems, including their nervous and hormonal control. Emphasis given to human systems but contrasting mechanisms from other vertebrate classes are included where possible and appropriate. Laboratory may include some experimentation with living tissue. Includes one three-hour lab per week.

**BIOL 342Pq Mammalogy with Lab (4)**

Prerequisite: BIOL 130q or instructor's permission. Topics to be covered include anatomy, physiology, behavior, ecology, evolution, identification and conservation. Lab will include numerous field trips (some outside of regular class time) to capture bats and other mammals. Students will be required to attend a pre-semester field trip to a more distant site. Labs emphasize anatomy, field biology and identification of mammals, as well as census and capture techniques.

**BIOL 343Pq Ornithology with Lab (4)**

Prerequisite: BIOL 130q or instructor's permission. Provides an overview of the biology of birds including their anatomy, evolution, behavior, reproduction, ecology, and conservation. Introduces students to techniques of identifying birds, focusing on species commonly found in the Midwest. The lab will be heavily field-oriented in the early mornings, so students must be prepared to be outside in all weather conditions, and willing to be quiet during observation of birds. Students are required to attend all field trips. The class may also include an optional weekend field trip.

**BIOL 345Pq Limnology with Lab (4)**

Prerequisite: BIOL 229Pq or instructor's permission. A comparative study of inland waters, including streams, ponds, lakes and wetlands. Examines the geology, biology, chemistry, physics and management of aquatic systems. Laboratory and field work, including a weekend field trip, will introduce students to the techniques of sampling and analysis. Includes one three-hour lab per week.

**BIOL 360P Human Anatomy with Lab (4)**

Prerequisite: BIOL 131Pq. Provides students with knowledge of the structure of the human body and illustrates the connections between structure and function. Follows a systems approach with review of the fundamentals of cell biology, an introduction to tissues, developmental biology, and nomenclature and conventions used to study human anatomy. Systems covered include the integumentary, musculoskeletal, cardiovascular, lymphatic and immune, nervous, endocrine, respiratory, digestive, urinary and reproductive.

**BIOL 361Pq Microbiology with Lab (4)**

Prerequisites: BIOL 130q and 131Pq or instructor's permission. The morphology, physiology and taxonomy of bacteria, fungi and viruses. The focus of this course is on prokaryotes although it includes the interaction of microbes with their hosts, with emphasis on the role of microbes as agents of disease. Laboratory includes techniques in culturing, staining and identifying microorganisms. Includes one three-hour lab per week.

**BIOL 385P Junior Seminar (1)**

Prerequisite: BIOL 221Pq. Students (usually juniors) assist the presentation and discussion of a biological topic of the instructor's choice as a context in which the communication skills of the students are evaluated and developed. Meets concurrently with BIOL 485P.

**BIOL 386PI Research Seminar (1)**

Prerequisite: instructor's permission. For students planning to do independent research. Students choose research topics, perform background reading and writing and defend a research proposal. Also includes discussion of scientific writing and presenting papers at scientific meetings. Typically taken spring semester of the junior year.

**BIOL 397PI Internship in Biology (Arr)**

Prerequisite: BIOL 130q, 131Pq and instructor's permission. Students work under supervision of professional biologists in practical application of biological principles. Students considering an internship should confer with the department chair after obtaining the consent of one of the department staff to serve as supervising professor. Offered on demand. Pass/no record basis.

**BIOL 485P Senior Seminar (1)**

Prerequisite: BIOL 385P. Students (usually seniors) assist the presentation and discussion of a biological topic of the instructor's choice as a context in which the communication skills of the students are developed, evaluated and certified for graduation.

**BIOL 499PI Independent Study in Biology (1-4)**

Prerequisite: BIOL 386P and instructor's permission. A research-oriented experience designed to focus on a well-defined problem identified in BIOL 386P. Conduct of the research, analysis of the data and writing of the senior thesis are done in consultation with a supervising professor. No more than 4 semester hours may be taken pursuant to the major without approval of the department chair.

## Business Management

**BMGT 251P Principles of Management (3)**

Prerequisite: sophomore standing. Explores the skills utilized in management, focusing on the six key functions: planning, organizing, leading, controlling, decision-making and staffing. Concepts and methods used in managing people and organizations are examined.

**BMGT 331P Business Law I (3)**

Prerequisite: junior standing. Studies the legal process and the public and private law relating to business. Examines the underlying principles most closely connected with ordinary business transactions: introduction to the law, agency, contracts, sales and commercial paper.

**BMGT 332P Business Law II (3)**

Prerequisite: BMGT 331P. Continues study of the legal process and the public and private law relating to business. Focuses on partnerships, corporations, real property, fiduciaries (estates and trusts) and bankruptcy.

**BMGT 335P Not-for-Profit Management (3)**

Prerequisites: BEHS 285, BMGT 251P, BMGT 371P, and ACCT 201P or ACCT 241, or instructor's permission. A course in which students utilize analytical skills to make managerial decisions in not-for-profit organizations. Emphasizes marketing and fund-raising plans.

**BMGT 350Px Managing and Valuing Cultural Diversity (3)**

Prerequisites: BMGT 251P and junior standing. Emphasizes development of an increased awareness, enhanced skills and increased knowledge about working with people of many differences: race, gender, culture, age, religion, sexual orientation, disability and others.

**BMGT 351Ps Organizational Behavior (3)**

Prerequisites: BMGT 251P and junior standing. Emphasizes understanding of the behaviors and attitudes of individuals and groups within organizations. Special topics include leadership, motivation, communication, interpersonal relations and teams.

**BMGT 352P Human Resource Management (3)**

Prerequisites: BMGT 251P and junior standing. Concentrates on the human resource management functions of selection, performance appraisal, training and development and compensation. Focuses on the laws and current issues related to these functions. Special topics include equal employment opportunity, Affirmative Action, sexual harassment and discrimination.

**BMGT 353P Leading From Within (3)**

Prerequisite: junior or senior standing. Introduces students to a holistic model based on self-insight. Explores leadership through the lenses of theory, research, and practice. Students learn to evaluate their strengths, opportunities for improvement, and explore how they want to lead themselves and others.

**BMGT 354P Issues in Human Resource Management (3)**

Pre-requisite: BMGT 352P. Explores issues related to such topics as recruitment and selection, performance evaluation, training and development, compensation, industrial relations, and international human resource management. A major objective of the course is to acquaint students with important developments and current trends in the area of human resources. The course can be repeated with a different issue.

**BMGT 355P Legal and Ethical Environment of Human Resource Management (3)**

Pre-requisite: BMGT 352P. Examines the legal framework impacting human resource management systems and practices, and explores the ethical implications of those systems and practices. Topics include: the employment relationship, definitions of fairness in employment practices, compensation structures and practices, working conditions, wrongful discharge, plant closing and downsizing.

**BMGT 361Pm Corporate Finance (3)**

Prerequisites: ECON 112s and ECON 113Ps, ACCT 241 and 242Pm, MATH 105m, and junior standing. Introduces financial management with emphasis on the basic tools employed in corporate financial decision-making. Concentrates on topics such as the financing and management of working capital, financial statement analysis, time value of money, valuation concepts and capital budgeting decisions.

**BMGT 362P Principles of Investment (3)**

Prerequisites: BMGT 361P and junior standing. Concentrates on capital markets, security analysis and portfolio management. Classical and contemporary theories concerning optimum portfolio construction and asset allocation will be emphasized.

**BMGT 363P Advanced Financial Management (3)**

Prerequisites: BMGT 361P and junior standing. Focuses on modern theory of corporate finance and its application to financial decisions. Topics such as leasing, the investment banking process, convertible securities and warrants, mergers and divestiture, leveraged buyouts and international financial management will be thoroughly examined.

**BMGT 370P International Business (3)**

Prerequisites: ECON 112s, ECON 113Ps, ACCT 241, ACCT 242Pm, BMGT 251P. Exposes students to the historical, social, economic, and political background of international business. Examines the role international organizations play in global trade and investment. Other major topics discussed in this course include trade barriers such as tariffs, quotas, sanctions, and embargoes and economic integration and free trade agreements. Journal articles, case studies, and field trips will be utilized to integrate the realities of international business and investment into the course.

**BMGT 371P Principles of Marketing (3)**

Prerequisites: BMGT 251P and junior standing. Emphasizes a theoretical and practical understanding of the role of marketing in society. Focuses on managerial decision-making regarding markets, products and services, promotion, distribution and pricing to satisfy customer needs and organizational goals.

**BMGT 372Ps Consumer Behavior (3)**

Prerequisites: BMGT 371P and junior standing. Analyzes personal and interpersonal influences on buyer behavior. Topics include perception, dissonance, imagery, lifestyle, culture, social class, the family and marketing communications.

**BMGT 373P Marketing Management (3)**

Prerequisites: BMGT 371P and junior standing. Studies marketing issues in an ever-changing global economy. Emphasizes the marketing manager's role in developing, implementing and analyzing goal-oriented strategies in both profit and nonprofit organizations. Major topics include marketing research; promotion, pricing and distribution strategies; and new product development.

**BMGT 375P Marketing Research (3)**

Prerequisites: ECON 281Pm, BMGT 371P and junior standing, or instructor's permission. An introduction to the methodology and analysis of marketing research. Explores the uses of marketing research in management decision making. Students will design, conduct, analyze and present the results of a marketing research projects. Topics include research design, data acquisition and analysis, creation of research reports and research ethics.

**BMGT 381Pm Operations Management (3)**

Prerequisites: ECON 281Pm and junior standing, or instructor's permission. Investigates the production and operations function of the firm and the decision-making framework related to the function. Emphasizes quantitative models useful in production and operations.

**BMGT 390I/490I Topics (Arr)**

Prerequisite: instructor's permission. Selected topics in management may be offered, depending upon student and staff interest.

**BMGT 397PI Internship (Arr)**

Prerequisites: BMGT 251P, ACCT 242Pm, junior standing and instructor's permission. Available only to students who have declared a major in the department. May be repeated for a maximum of 12 semester hours total. Pass/no record basis.

**BMGT 451P Strategic Management (3)**

Prerequisites: BMGT 351Ps, BMGT 361Pm, BMGT 371P, BMGT 381Pm, and senior standing. A capstone course that utilizes analytical skills to make managerial decisions that determine the long-run performance of an organization in a complex global economy. Includes analysis of business environment, strategy formulation, strategy implementation and evaluation and control.

**BMGT 453PI Global Strategic Management (3)**

Prerequisite: Completion of all other courses in the major, senior standing and instructor's permission. A capstone course that focuses on the integration of knowledge gained from other courses in the business management and international management programs. Deals primarily with the issues of strategy formulation and implementation in the international arena.

**BMGT 455P Small Business and Entrepreneurship (3)**

Prerequisites: BMGT 351Ps, BMGT 361Pm, BMGT 371P, BMGT 381Pm and senior standing. A capstone course that focuses on the integration and application of knowledge gained from previous courses in business management. Emphasizes analysis of the business environment and use of strategic processes (strategy formulation, implementation, evaluation and control) to create new ventures and to manage small businesses.

**BMGT 496PI Co-Op (Arr)**

Prerequisites: junior standing, instructor's permission, and declared department major with ECON 112s, 113Ps, ACCT 241, 242Pm and BMGT 251P completed. Full-time, off-campus work experience for students meeting competitive selection criteria established by the Co-op organization. The Co-op training program, lasting four to twelve months, must be approved by the department. A list of approved programs is available from the Department Chair. Credit arranged from 1 to 12 semester hours. Pass/no record (awarded upon completion of the Co-op program).

**BMGT 499I Independent Study (Arr)**

Prerequisite: instructor's permission. An independent research experience for senior majors.

## Chemistry

**CHEM 108fq Chemistry in Context with Lab (4)**

Introduction to the basic principles of chemistry with an emphasis on applications relevant to environmental and other current issues. Recommended for students with no high school chemistry. Develops college-level problem solving, analytical thinking, reading, writing and listening skills. Does not substitute for CHEM 131fq. One two-hour lab per week.

**CHEM 131fq General Chemistry with Lab(5)**

Prerequisite: High school algebra or Math 103P. Introduces the principles of chemistry for understanding chemical problems and for advanced work in the department. Develops college-level problem solving, analytical thinking, collaborative learning, writing and reading skills. One three-hour lab per week.

**CHEM 235Pq Organic Chemistry I with Lab (4)**

Prerequisite: CHEM 131fq. Initiates the study of carbon chemistry by examining the structure and reactivity of organic functional groups with an emphasis on reaction mechanisms. One 3-hour lab per week. The laboratory will focus on basic techniques used in preparative organic chemistry.

**CHEM 236Pq Organic Chemistry II with Lab (4)**

Prerequisite: CHEM 235Pq. Continues the examination of the theoretical aspects of carbon chemistry. Synthesis and structure determination by spectroscopy are also introduced. The laboratory continues to teach the basic techniques of preparative organic chemistry. In addition, more sophisticated analysis and synthesis are incorporated. One three-hour lab per week.

**CHEM 241Pq Analytical Chemistry with Lab (4)**

Prerequisite: CHEM 131fq. An introduction to analytical chemistry, including acid-base equilibria, complexation, uv-vis spectroscopy and electrochemistry. One three-hour lab per week.

**CHEM 251Pq Inorganic Chemistry with Lab (4)**

Prerequisite: CHEM 131fq. An introduction to inorganic chemistry including descriptive chemistry, chemical bonding, solubilities, and coordination chemistry. Two three-hour labs per week.

**CHEM 275 Research Forum (1)**

Research is a collaborative effort. The purpose of this class is to allow for more collaboration between student researchers. It will put an emphasis on reading and discussing current chemical literature. It will serve as a forum for presenting student research and for brainstorming research problems with other students and professors engaged in research on campus. This course is taken in conjunction with CHEM 299. May be repeated with different topics.

**CHEM 320P Biochemistry with Lab (4)**

Prerequisites: BIOL 131Pq and CHEM 236Pq. Introduces the chemistry and metabolic processes of living organisms. One three-hour lab per week.

**CHEM 361P Physical Chemistry I (3)**

Prerequisites: CHEM 241Pq and MATH 132Pm. An introduction to thermodynamics in a chemistry context. Examines matter in various states. CHEM 361, CHEM 362 and CHEM 363 can be taken in any order.

**CHEM 362P Physical Chemistry II (3)**

Prerequisite: CHEM 241Pq and MATH 132Pm. An introduction to quantum chemistry, chemical spectroscopy, and atomic and molecular structure.

**CHEM363P Physical Chemistry Lab: Kinetics (1)**

Prerequisite: CHEM 241Pq and MATH 132Pm. An introduction to chemical kinetics. Writing formal research papers in chemistry will be emphasized. Meets as one three-hour lab per week.

**CHEM364P Physical Chemistry Lab: Advanced (1)**

Prerequisite: CHEM 361P and pre- or co-requisite CHEM 363P. An exploration of more advanced areas of physical chemistry and/or physical chemistry lab techniques through the use of independent laboratory projects. Formal oral presentations to a chemistry audience will be emphasized. Meets as one three-hour lab per week.

**CHEM 430P Advanced Organic Chemistry with Lab (3)**

Corequisite: CHEM 362P. Theory and practice of synthesis and identification of organic compounds, with an emphasis on selected advanced methodology and techniques. Laboratory focuses on molecular modeling and multi-step synthesis. One three-hour lab per week. Usually offered in alternate years.

**CHEM 446P Chemistry Seminar (1)**

Discussion of special topics in chemistry, including speakers from graduate and professional schools. Meets once a week for the entire semester. Usually offered in alternate years.

**CHEM 447P Instrumental Analysis with Lab (4)**

Prerequisite: CHEM 361P. An introduction to methods associated with and experience with major types of analytical instrumentation. Includes spectroscopy, chromatography and electrochemistry. Also covers sampling and sample preparation, signal modification and signal to noise ratios. Two lectures and two laboratories per week.

**CHEM 452P Advanced Inorganic Chemistry with Lab (3)**

Prerequisites: CHEM 251Pq and CHEM 362P. An advanced study of modern theories concerning chemical bonding, bioinorganic and organometallic chemistry. One three-hour lab per week. Usually offered in alternate years.

**CHEM 463P Advanced Physical Chemistry (3)**

Prerequisite: CHEM 362P. Advanced topics in Physical Chemistry based on instructor interest and students' needs. Usually offered in alternate years.

**CHEM 475 Research Forum (1)**

Research is a collaborative effort. The purpose of this class is to allow for more collaboration between student researchers. It will put an emphasis on reading and discussing current chemical literature. It will serve as a forum for presenting student research and for brainstorming research problems with other students and professors engaged in research on campus. This course is taken in conjunction with CHEM 499. May be repeated with different topics.

**CHEM 199I, 299I, 399I Independent Study in Chemistry (Arr)**

Prerequisite: instructor's permission. Designed for the student who has demonstrated unusual ability in the area of chemistry. The studies will be in the current research areas of the members of the chemistry staff.

**CHEM 397PI/497PI Internship (Arr)**

Prerequisite: departmental approval and instructor's permission. An applied experience in the major, requiring a minimum number of hours of work per credit hour. Includes conferences with the on-campus instructor and an evaluation by the job supervisor. Pass/no record basis.

**CHEM 498P Research (Arr)**

Prerequisites: CHEM 362P or instructor's permission. Intensive introduction to research. Research will be conducted in close collaboration with a member of the staff and will reflect his or her current research interests.

## Chinese

**CHIN 121n Beginning Chinese I (4)**

Introduces the fundamentals of vocabulary and grammar necessary for the development of reading, writing and conversation skills. Establishes the foundation for the development of basic communicative skills and introduces students to the Chinese world. Formerly numbered CRCL 131. Students may not receive credit for both CHIN 121 and CRCL 131.

**CHIN 122Pn Beginning Chinese II (4)**

Prerequisite: CHIN 121n (formerly CRCL 131). A consolidation of the foundations established in CHIN 121n. Continues work in pronunciation, grammar, character writing, sentence structure and vocabulary. Further develops basic communicative skills and a greater cultural awareness of the Chinese world. Formerly numbered CRCL 132. Students may not receive credit for both CHIN 122 and CRCL 132.

**CHIN 221Pn Intermediate Chinese I (4)**

Prerequisite: CHIN 121n or CHIN 122Pn (formerly CRCL 132). A consolidation of the foundations established in CRCL 131n. Continues work in pronunciation, grammar, character writing, sentence structure and vocabulary. Goals include the achievement of better communicative skills and the development of a greater cultural awareness of the Chinese world. Formerly numbered CRCL 231. Students may not receive credit for both CHIN 221 and CRCL 231.

**CHIN 222Pn Intermediate Chinese II (4)**

Prerequisite: CHIN 221Pn (formerly CRCL 231) or two of the following: CHIN 121n, CHIN 122Pn, and CHIN 221Pn. A consolidation of the foundations established in CRCL 131n, 132Pn, and 231Pn. Continues work in pronunciation, grammar, character writing, sentence structure and vocabulary. Enables students to achieve better communicative skills and a greater cultural awareness of the Chinese world. Formerly numbered CRCL 232. Students may not receive credit for both CHIN 222 and CRCL 232.

**CHIN 399I Independent Study: Advanced Chinese I or II (4)**

Prerequisite: Instructor permission. The continued study of the Chinese language and culture at an advanced level. May be taken before or after study in China.

**College (non-departmental courses)****COLL 104 Introduction to College Success (1)**

Examines skills required to maximize the college experience within the liberal arts framework. Examines learning styles, critical thinking, personal responsibility and use of resources. Limited to first-semester students.

**COLL 108 Exploring Experience (1)**

Intended for exploring freshmen and sophomores. Discussion of career anxiety, uncertainty and vocational indecision. Focuses on career development as a combined process of self discovery and occupational investigation. Examines personal interests, strengths and values as they relate to specific majors and the world of work. Varied opportunities to research requirements and rewards of career fields and to critically reflect on one's compatibility in a number of vocational directions.

**COLL 110f Intersections (3)**

Intersections is an interdisciplinary seminar that all first-year students take in the fall semester. It is an exploration of the "intersections" at which disciplines, ideas and events converge, connect and collide. All sections share a common topic and many common readings and experiences, while each instructor adds a unique emphasis. The contributions of varied fields – natural sciences, behavioral sciences, fine arts, humanities – are included. Because this is a Central Foundations (f) course, students are introduced to college-level skills of reading, writing, speaking, listening, critical thinking and information literacy.

**COLL 111 Introduction to Computer Applications (1)**

Open to freshmen, sophomores or transfers. Reviews word processing, database and electronic spreadsheet. Topics include creating and saving files, editing and formatting text, creating data definitions, sorting and selecting data, defining data formulas, graphing, printing and copying and linking information between applications. Pass/no record basis.

**COLL 115 Introduction to Desktop Publishing (1)**

An introduction to using desktop publishing computer software. Topics include layout, typography and software operation. Several sample projects are included. Assumes familiarity with Macintosh or Windows software. Pass/no record basis.

**COLL 116P Introduction to the Web and Web Research (1)**

Prerequisite: freshman or sophomore standing, or instructor's permission. Introduces students to a variety of resources and skills for effective use of the Web. Topics include acceptable uses, security, listservs, browsers, search engines, Web editing software as well as locating, evaluating and ethically using electronic information in a scholarly environment on the Web.

**COLL 117 Introduction to the Internet: Technical Issues (1)**

An introduction to technical issues related to using the Internet. May not be taken with COLL 116P. Tools include e-mail, Internet browsers, searching devices, and Web page creation software. Topics include network security and safety, finding Internet resources, logging into remote computers, locating and downloading software, decompression techniques, Web page design, links, sound and motion, and connectivity options.

**COLL 118 Introduction to Electronic Presentations (1)**

In-depth exploration of electronic presentation software. Projects include creating and presenting slide show presentations using graphics, charts, embedded objects and hyperlinks to the Internet. Covers projection equipment and hardware troubleshooting techniques. Pass/no record basis.

**COLL 210P Research Strategies (1)**

Prerequisite: sophomore standing or above. Advanced study of print and electronic information sources. Students learn about the organization of information in their field, and they become proficient with the core resources in their area of study. Includes thesis development, search strategy formulation, advanced search skills appropriate to their field, critical evaluation, and ethical and legal uses of information.

**COLL 214 Mock Trial (1)**

Students study the American judicial process and argue a simulated civil or criminal case in multiple intercollegiate competitions sponsored under the auspices of the American Mock Trial Association. Focuses on the development of critical thinking and oral communication skills. May be repeated.

**COLL 285HP Honors Seminar (1)**

Prerequisites: honors-eligible status. A seminar designed for honors-eligible students to explore a specific topic or issue. May be repeated for credit.

**COLL 292I Library Practicum (Arr)**

Prerequisite: instructor's permission. Involves individualized projects related to library practices, research, technology training or other related areas. May be repeated. Pass/no record basis.

**COLL 293 Interdisciplinary Practicum (Arr)****COLL 385Cs Metropolitan Seminar (3)**

An introduction to the Chicago metropolitan area. Investigates themes of unity and diversity in the city – particularly the relationship between Chicago's position in the global economy on one hand, and Chicago's mosaic of racial and ethnic groups on the other. This graded seminar is taken only on the Chicago Semester program.

**COLL 389D Washington Center Seminar (3)**

Courses in a variety of disciplines taken in conjunction with internships in Washington, D.C. under the auspices of the Washington Center.

**COLL 397CI Chicago Internship (9)**

Prerequisite: instructor's permission. Students are given several choices of agencies or companies in which to intern, based on application materials and career interests. Taken only on the Chicago Semester program. Pass/no record basis.

**COLL 497 Interdisciplinary Internship (Arr)****Communication Studies****COMM 140 Photography (3)**

Instruction in the basics of photographic arts, including the operation of the camera and photo lab. Emphasis on photojournalism.

**COMM 160f Introduction to Communication Studies (3)**

Introduces students to basic assumptions and theories of the communication studies discipline. Surveys fundamental communication contexts, including interpersonal communication, small group communication, public communication, and mass communication. Emphasis on the development of reading, writing, and oral communication skills. Limited to freshman and sophomores.

**COMM 242 Introduction to Journalism (3)**

Provides experience in the fundamentals of gathering, writing, and reporting the news. Research skills, interview strategies, Associated Press style, and journalistic ethics are emphasized. Requires concurrent enrollment in laboratory component COMM 295I Practicum in Journalism.

**COMM 262Ps Interpersonal Communication (3)**

Prerequisite: sophomore standing or instructor's permission. Examines one-to-one communication encounters including friendships, intimates, family, and work relationships. Applies theoretical concepts related to human perception, language, nonverbal communication, conflict resolution, listening, and gender dynamics.

**COMM 264a Oral Interpretation (3)**

Studies aesthetic texts through the solo performance context. Emphasizes the adaptation process used to communicate a textual interpretation through a carefully prepared performance.

**COMM 266a Readers Theatre (3)**

Studies aesthetic texts through a group performance context; emphasizes the adaptation process a director utilizes in communicating a textual interpretation through a carefully prepared group performance. Students direct and perform in a variety of group performances.

**COMM 268c Intercultural Communication (3)**

Cultural universals and their expressions within specific cultures are examined through a series of case studies. Cross-cultural and Intercultural theories highlight the intersection of cultures at the local level and increase understanding of Native American, Hispanic, Asian, European, and Middle Eastern cultural experiences. Experiential ("x") credit can be obtained concurrently by arrangement with the instructor.

**COMM 270 Public Speaking (3)**

Examines principles of effective public discourse while providing the opportunity to improve research skills, develop analytical abilities, increase confidence when giving oral presentations, and acquire proficiency in the use of computer graphics software. Emphasizes the discovery, organization, delivery, and evaluation of information communicated within a public context. Includes both informative and persuasive speeches.

**COMM 280P Communication Theory and Research (3)**

Prerequisite: sophomore standing or instructor's permission. Probes significant theories of the communication discipline and introduces research methods used in the study of human symbolic interaction. Includes primary research culminating in a proposal for an original study of human communication. Designed for students who are or intend to be majors.

**COMM 292I Practicum in Communication Services (Arr)**

Prerequisite: instructor's permission. Offers experience working with college communication centers: college relations, alumni, development, admission, and media center. Student must also have the permission of the appropriate college official. May be repeated. Pass/no record basis.

**COMM 294I Practicum in Broadcasting (Arr)**

Prerequisite: instructor's permission. Involves individualized projects in various phases of broadcasting using the campus student radio station (KCUJ) as a laboratory. May be repeated. Pass/no record basis

**COMM 295I Practicum in Journalism (Arr)**

Prerequisite: instructor's permission. Offers experience in news writing, reporting, editing, and layout design using the campus print and online student newspapers as laboratory. May be repeated. Pass/no record basis.

**COMM 296I Practicum in Video Production (Arr)**

Prerequisite: instructor's permission. Offers experience in video production and editing, both on and off campus. May be repeated. Pass/no record basis.

**COMM 330P Media Criticism (3)**

Prerequisite: junior standing or instructor's permission. Surveys significant theories of mediated communication while investigating the historical, socio-cultural, aesthetic, ethical, legal, and economic dimensions of mass media. Involves reading and writing case studies that examine the influence of newspapers, magazines, radio, television, cinema, and the internet.

**COMM 332P Advanced Journalism (3)**

Prerequisite: junior standing and COMM 242, or instructor's permission. Emphasizes in-depth feature writing, analysis and composition of editorials and opinion pieces, and writing and editing for online publication. Requires concurrent enrollment in laboratory component COMM 295I Practicum in Journalism.

**COMM 340P Public Relations (4)**

Prerequisite: junior standing or instructor's permission. Focuses on the fundamental communication processes involved in public relations. Basic theories of identity formation, persuasion, and social influence are examined. Applied areas of emphasis include planning and implementing campaigns, as well as public relations writing, crisis response, and information management. This course includes a service learning component.

**COMM 342P Communication in Organizations (3)**

Prerequisite: junior standing or instructor's permission. Examines how organizations function through communication. Presents and applies theories of communication and decision-making. Content areas include creative decision making, forming and functioning within work teams, formal project planning, presentations in organizations, and the creation of organizational reports and information materials.

**COMM 360P Communication Ethics (3)**

Prerequisite: junior standing or instructor's permission. Explores the pervasive and complex nature of ethical issues embedded in human communication encounters. Analyzes the principles and perspectives underlying ethical judgments, and examines the communication strategies used to relate these judgments to others. A variety of communication contexts is explored, including interpersonal, organizational, public, and mass mediated.

**COMM 362P Environmental Communication (3)**

Prerequisite: junior standing or instructor permission. A survey of communication related to environmental issues including: environmental movement persuasion; public participation in environmental decisions; media coverage of the environment; advocacy for environmental justice; green marketing and corporate campaigns; and the use of science for symbolic legitimacy. Involves reading and writing case studies that further understanding of environmental discourse.

**COMM 364P Argumentation (3)**

Prerequisite: junior standing or instructor's permission. Focuses on theory and practice of argumentation (reason giving) in various contexts, including legal disputes, political policy deliberations, and organizational problem solving. The role of narrative in argumentation receives special attention. Includes participation in formal academic debate.

**COMM 366P Persuasion (3)**

Prerequisite: junior standing or instructor's permission. Surveys history of the study of rhetoric (persuasion) and how it relates to the development of human thought. Introduces and applies critical methods used for the systematic investigation and explanation of persuasive communication. Involves reading and writing case studies that examine advertising and political discourse as representative types of persuasion.

**COMM 497P Internship in Communication (Arr)**

Prerequisites: declared major or minor in Communication Studies; completion of a minimum of 12 semester hours in Communication Studies courses; cumulative GPA of 2.5 or higher; and departmental approval. An off-campus applied professional experience in communication-related fields. Includes midterm and final evaluations by site supervisor; conferences during and after internship with supervising faculty member; and submission of an acceptable internship analysis paper. May be repeated for a maximum of 10 credit hours applied to the major. Pass/no record basis.

**COMM 499I Independent Study (Arr)**

Prerequisites: declared major or minor in Communication Studies; completion of a minimum of 12 semester hours in Communication Studies courses; cumulative GPA of 2.5 or higher; and departmental approval. An off-campus applied professional experience in communication-related fields. Includes midterm and final evaluations by site supervisor, conferences during and after internship with supervising faculty member, and submission of an acceptable internship analysis paper. May be repeated for a maximum of 10 credit hours applied to the major. Pass/no record basis.



## Computer Science

### **COSC 106 Introduction to Web Programming (3)**

An introduction to programming and web technology. HTML and Web page structure will be introduced. In addition, introductory programming ideas such as sequence, selection, and repetition will be covered. This course is intended for students interested in exploring computer science who do not have a significant quantitative background. Does not count toward the COSC major.

### **COSC109 Introduction to Information Management (3)**

An introduction to fundamental principles, concepts and techniques that providers of information use to organize their data. Also studies techniques for using information effectively in decision making. Basic networking, web, database, spreadsheet and programming concepts will be covered. This course does not count towards computer science, mathematics or information systems major or minor requirements.

### **COSC 110m Introduction to Computer Science (3)**

Recommended: math placement at pre-calculus or above, or COSC 106. Introduction to the fundamental ideas and techniques of computer science. Introductory programming topics such as variables, sequence, selection, repetition, and objects will be covered. Students will spend a significant amount of time out of class writing and debugging code in a programming language.

### **COSC 115Pm Scientific Programming (3)**

Prerequisite: MATH 131Pm. An introduction to fundamental programming concepts within the context of scientific applications. Programming structures such as selection, repetition, arrays/collections and functions/methods are covered as well as introductory numerical computation topics. This course is intended for students who are interested in exploring computer science and its application to science and mathematics.

### **COSC 130Pm Data Structures (3)**

Prerequisite: COSC 110m or COSC 115Pm. Studies the implementation of common data structures such as stacks, queues, linked lists, and trees. Intermediate programming topics such as recursion, analysis of algorithms, and other topics will be introduced. Students will spend a significant amount of time out of class designing, writing, collaborating on, and debugging classes and programs.

### **COSC 220Pm Software Design (3)**

Prerequisite: COSC 130Pm. Introduces current design methodologies for developing computer programs. Object-oriented programming concepts will be covered. Designing classes and interaction between objects will be emphasized. In addition, APIs for common data structures will be included. Students will spend a significant amount of time out of class designing, writing, collaborating on, and debugging classes and programs in an object-oriented programming language.

### **COSC 235Pm Discrete Structures (3)**

Prerequisite: COSC 110m. An introduction to the mathematical ideas that are most often used in computer science. Topics covered include recursion and induction, graphs and trees, counting techniques and discrete probability, and propositional and digital logic.

### **COSC 245Pm Computer Organization and Architecture (4)**

Prerequisite: COSC 130Pm. A study of the internal organization and design of computing devices. The machine will be examined at different levels such as digital logic, microprogramming, conventional machine and assembly language. Advanced architectures such as RISC and parallel machines will be explored.

### **COSC 255P Programming: "Language" (2)**

Prerequisite: COSC 130Pm. A study of a selected programming language not covered in other Computer Science courses. This course may be repeated with a different language.

### **COSC 260P Web Application Development (3)**

Prerequisite: COSC 130Pm and experience with HTML. Studies the tools and techniques used in developing client server applications for the World Wide Web. Topics include the client server application paradigm, scripting and other browser (client) side application tools, CGI and other server side application tools. Offered alternate years.

### **COSC 320P Advanced Software Design (3)**

Prerequisite: COSC 220Pm. Studies the principles and techniques for methodical construction of quality software.

### **COSC 330Pm Algorithms (3)**

Prerequisite: COSC 130Pm. A survey of many advanced programming algorithms. Topics include sorting and searching, string, geometric and graph algorithms. Students will spend a significant amount of time out of class designing, writing and debugging computer programs in programming languages such as Java or C++.

### **COSC 355Pm Programming Language Concepts (3)**

Prerequisite: COSC 220Pm. A study of the organization of programming languages including syntax, semantics, data typing, data structuring facilities, exception handling and sequence control. The different language paradigms will be examined; imperative, functional, object-oriented and logic. Offered alternate years.

### **COSC 360P Database Systems (3)**

Prerequisite: COSC 130Pm. An introduction to the design and theory of database systems. Topics include the entity-relationship model, relational database model, query languages, procedural and nonprocedural paradigms, normal forms, security, distributed databases, and recovery techniques.

**COSC 362Pm Computer Graphics (3)**

Prerequisite: COSC 130Pm. Introduction to the principles and techniques of computer graphics programming. Offered alternate years.

**COSC 370Pm Numerical Analysis (3)**

Prerequisites: MATH 132Pm and prerequisite/corequisite MATH 210Pm. A treatment of solutions of equations, interpolation and approximations, numerical differentiation and integration, matrix methods and numerical solutions to ordinary differential equations. Cross-listed as MATH 370Pm.

**COSC 372P Computer Networks (3)**

Prerequisite: COSC 130Pm. A study of local and wide area networks, their design and implementation, digital data communication techniques, protocols and architectures.

**COSC 375P Introduction to Operating Systems (3)**

Prerequisite: COSC 130Pm. Introduces fundamental concepts and principles inherent in operating systems, such as processes, concurrency and parallelism, storage management, security and distributed systems. Offered alternate years.

**COSC 385P Mathematics/Computer Science Junior Seminar (2)**

Prerequisites: junior standing and a declared major in the mathematics and computer science department. An introduction to the research, reading, and presentation of advanced material in computer science. Cross-listed as MATH 385P.

**COSC 390P/490P Topics: Computer Science (Arr)**

Prerequisite: COSC 220Pm. Various topics in computer science can be studied depending upon the interest of the students. Some possible areas of study are advanced programming techniques and systems analysis.

**COSC 485P Mathematics/Computer Science Senior Seminar (1)**

Prerequisites: senior standing and a declared major in the mathematics and computer science department. Students research and present (orally and in writing) an advanced topic of their choice in computer science. Cross-listed as MATH 485P.

## Cross-cultural Studies

**CRCL 121c Beginning Dutch I (4)**

The course develops skills in speaking, reading, writing and understanding Dutch at the novice-high level on the ACTFL scale. Cultural material focuses on the historical and contemporary low countries.

**CRCL 122Pc Beginning Dutch II (4)**

Prerequisite: CRCL 121c or equivalent. A continuation of the introductory course, with development of speaking, reading, writing and comprehension skills at the intermediate- low level on the ACTFL scale, and further familiarization with the culture of the low countries.

**CRCL 210c Introduction to International Studies (3)**

Introduction to the complexities and diversity of political, economic, social and cultural interactions of nations and peoples. Prepares students for study abroad and further work in international studies.

**CRCL 220cx The Immigrant Experience (3)**

An overview of patterns and issues in immigration and in the acculturation of immigrants to American society. Primary, but not exclusive, focus on Iowa. Includes case study, personal investigation of and contact with an immigrant individual, family or group.

**CRCL 225 Pre-Departure Seminar (.5)**

This course will explore what we mean by the term "culture," how culture affects the way we perceive the world around us and examine, more closely, specific culture(s) of your program country. Pass/no record basis.

**CRCL 283Ix Experiential Module (1-2)**

Prerequisite: instructor's permission. Provides for individualized experiential opportunity in an approved off-campus cross-cultural experience. Requires consultation with a faculty member, preparation and approval of a proposal that specifies a required bibliography on the target culture, the type of reflection that will take place, the format of the final product and the presentation of a final product. Requires a minimum of 15 hours of direct contact for each hour of credit requested. Also requires participation in diversity training and orientation seminar unless previously completed. Pass/no record. May be repeated.

## Economics

**ECON 112s Principles of Microeconomics (3)**

Introduces the major concepts and applications of microeconomic theory. Examines the decision making of individuals and firms and explores market mechanisms within the context of scarce resources.

**ECON 113Ps Principles of Macroeconomics (3)**

Prerequisite: ECON 112s. Introduces the major concepts and applications of macroeconomics theory. Evaluates various policies designed to address the macroeconomic problems of inflation and unemployment.

**ECON 212Pms Intermediate Microeconomics (3)**

Prerequisites: ECON 112s and MATH 131Pm. Studies the theoretical foundations of economics; examines the behavior of individuals, firms and markets. Includes indifference analysis, production theory, factor markets and general equilibrium theory.

**ECON 213Ps Intermediate Macroeconomics (3)**

Prerequisite: ECON 113Ps. Discusses aggregate measures of economic activity; presents and contrasts the theoretical approaches to the macroeconomy; examines policy issues related to inflation, unemployment and economic growth.

**ECON 281Pm Research Methods in Economics (3)**

Prerequisites: MATH 105m and ECON 113Ps, or instructor's consent. An in-depth analysis of the role of inferential statistics in economics. Emphasizes univariate and multivariate hypotheses testing, simple and multiple regression, and 1- and 2-way ANOVA along with other relevant topics.

**ECON 321Ps Environmental Economics (3)**

Prerequisite: ECON 112s. Economic analysis of natural resources and environmental goods. Topics include optimal consumption of depletable resources, analysis of environmental policy, theory of common property resources, public goods, and external costs and benefits, as they apply to environmental resources.

**ECON 322Ps International Economics (3)**

Prerequisite: ECON 113Ps. Studies theoretical explanations of international trade and the economic effects of trade policies. Examines the macroeconomic effects of participating in an international capital market.

**ECON 323Ps Labor Economics (3)**

Prerequisite: ECON 281Pm. Concentrates on the theoretical and empirical foundations of the demand for and supply of labor. Analyzes issues specific to labor markets including labor unions, human capital investments and discrimination. Also considers policy issues related to labor markets, including child care and welfare programs.

**ECON 324Ps Monetary Theory and the Financial System (3)**

Prerequisite: ECON 113Ps. Examines the theoretical debate over the role of money in the economy and the ability of the central bank to affect economic activity. Reviews the commercial banking system and other financial markets. Offered alternate years.

**ECON 325Ps Public Finance (3)**

Prerequisite: ECON 281Pm. Analyzes federal, state, and local taxes as to economic content. Classifications of expenditures, processes of budgeting and debt management are also examined.

**ECON 326P Public Choice (3)**

Prerequisites: ECON 113Ps and MATH 131Pm, or instructor's permission. Economic theory of voting and political processes. Topics include club goods, public goods, voting mechanisms and political party behavior, rent seeking and interest group effects on social welfare. Emphasis on game-theoretic outcomes of political behavior.

**ECON 327Ps International Finance (3)**

Prerequisite: ECON 113Ps. Describes foreign exchange markets, international banking and international capital markets. Economic models of foreign exchange, macroeconomic policy in an international environment and exchange rate policies are examined. The history of exchange rate systems is discussed.

**ECON 329Ps Economic Development (3)**

Prerequisite: ECON 113Ps. Discusses a variety of economic theories of development and analyzes various economic and social issues occurring in low-income countries, including their economic relationships with more advantaged countries.

**ECON 330h Economic History (3)**

Focuses on the development of economic systems throughout history from the perspective of significant historical events and figures. Emphasis will be placed on both western and eastern civilizations.

**ECON 390I Topics (Arr)**

Prerequisite: instructor's permission. Selected topics in economics may be offered, depending upon student and staff interest.

**ECON 397PI Internship (Arr)**

Prerequisites: ECON 212Pms, ECON 213Pm, junior standing and instructor's permission. Available only to students who have declared a major in the department. The seminar attempts to sensitize the student to work experience and provide communication with other students to discuss their mutual experience. May be repeated for a maximum of 9 semester hours total. Does not count toward the economics major. Pass/no record basis.

**ECON 485P Economics Research Seminar (3)**

Prerequisites: ECON 212Pms, ECON 213Pm, ECON 281Pm and senior standing in the department. Requires students to conduct a research project grounded in economic theory and utilizing statistical methodologies. Typically the research project is a continuation and extension of a project begun in ECON 281Pm or another upper-level course. There is an emphasis on close collaboration between student and department faculty.

**ECON 496PI Co-Op (Arr)**

Prerequisites: junior standing, instructor's permission, and declared department major with 12 semester hours of Economics and Statistics completed. Full-time, off-campus work experience for students meeting competitive selection criteria established by the Co-op organization. The Co-op training program, lasting four to twelve months, must be approved by the department. A list of approved programs is available from the Department Chair. Credit arranged from 1 to 12 semester hours. Pass/no record (awarded upon completion of the Co-op program).

**ECON 499I Independent Study (Arr)**

Prerequisite: instructor's permission. An independent research experience for senior majors.

## Education

### **EDUC 110f Foundations of Education (3)**

Focuses on the relationship between education and culture, the development of schools in American society, and issues related to philosophy, curricula, governance, finance, law, ethics, professionalism, and teaching as a career. Emphasizes active student learning and development of college level reading, writing, listening, speaking and research skills. Field experience includes observation at the elementary, middle and high schools. This course is required for admission to the teacher education program.

### **EDUC 215Px Human Relations (2)**

Prerequisite: admission to the teacher education program. Surveys issues in education related to culture, gender, ethnicity, socio-economic status, and language diversity. Intended to increase awareness of and sensitivity to the diverse groups that make up the student population in schools today. The field experience and cultural exchange will provide opportunities to study and interact with students of diverse cultures and exceptionalities. Taken concurrently with EDUC 250P.

### **EDUC 220P Language Development and Learning (4)**

Prerequisite: admission to the teacher education program. Focuses on understanding the development of language in the child from birth to age 12. This study includes phonology, pragmatics, lexicons, syntax, semantics, and language delays. A variety of language modes, including oral, written, and non-verbal language are considered. Particular emphasis is placed on developing communicative competence in school settings. Observation of young children is incorporated in the field experience.

### **EDUC 233P Social Studies Curriculum and Methods (3)**

Prerequisite: admission to the teacher education program. Introduces students to a wide variety of teaching methods in elementary social studies. Students will be exposed to sound educational philosophy, research and experiences, which can be implemented in the social studies classroom. A variety of instructional approaches and the meaningful integration of technology will be stressed. Includes a field experience. Designed for students seeking K-6 licensure.

### **EDUC 235Ps Exceptional Children (3)**

Prerequisite: admission to the teacher education program. Presents an overview of many types of exceptionalities in children and adolescents including gifted and talented, developmentally disabled, learning disabled, behavior disorders, physical and health impaired, etc.

### **EDUC 239P Psychology in Elementary Education (3)**

Prerequisite: admission to the teacher education program. Examines the fundamental concepts of learning, motivation and behavior in relation to educational practices. The student will also examine the tools and techniques of test construction, measurement and evaluation by the teacher. Field experience is included.

### **EDUC 240P Family, School, and Community Relationships (3)**

Prerequisite: admission to the teacher education program. Studies interpersonal relationships within the family. Examines external factors affecting the child and family, including the impact of schools, community agencies and other elements in society on developing communicative competence in school settings. Observation of young children is incorporated as part of the course field experience.

### **EDUC 244P Introduction to Students with Mild/Moderate Disabilities (3)**

Prerequisite: EDUC 235Ps. Introduction to the causes and characteristics of specific learning disabilities, mental disabilities, and behavior disorders. Includes an historical perspective of treatment and overview of current trends in educational programming.

### **EDUC 250P Introduction to Instructional Technology (1)**

Prerequisite: admission to the teacher education program. This course will introduce teacher preparation students to instructional technologies. An introductory course, the focus will be on the tools of instructional technology and on learning how these strategies are integrated into teaching in K-12 classrooms. Designed for students seeking K-12 teaching licensure.

### **EDUC 270Ps Child Development (3)**

Prerequisite: admission to the teacher education program or instructor's permission. A study of principles of growth and development of a child from conception to early adolescence. Application of principles of development related to the cognitive, socioemotional, and physical development of the child, with emphasis on application of theories of development in educational and parenting situations. Students are required to take either EDUC 270Ps, or EDUC 281Ps, or PSYC 382Ps and will only receive credit for one of the classes.

### **EDUC 275P Health, Safety and Nutrition (3)**

Prerequisite: admission to the teacher education program or instructor's permission. Focuses on concepts, policies and programs related to the health, safety and nutrition of children. Emphasizes assessment, implementation and management of health, safety and nutrition practices.

### **EDUC 281Ps Developmental Psychology (3)**

Prerequisite: admission to the teacher education program or instructor's permission. Focus is on basic theories and concepts related to the physical, cognitive and psychosocial development of children and adolescents. Students are required to take either EDUC 270Ps, or EDUC 281Ps, or PSYC 382Ps and will only receive credit for one of the classes.

### **EDUC 290 Selected Topics (Arr)**

Varying topics determined by the interest of students and staff. (Does not count toward the major).

**EDUC 294I Practicum in Education (Arr)**

Prerequisite: instructor's permission. Open to early level students with limited previous experience. A practical experience or project usually involving an educational-type setting.

**EDUC 299I Independent Study in Education (Arr)**

Prerequisite: instructor's permission. Designed to permit students to pursue special interest to supplement the scheduled departmental offerings.

**EDUC 320P Middle School Methods and Curriculum (3)**

Prerequisite: admission to the teacher education program. This course is designed to assist future middle school teachers to become better informed about teaching at the middle school level. Identifies important characteristics of a quality middle school, and the curricular development in middle level education. Students will prepare interdisciplinary instructional materials. Field experiences to exemplary middle school sites are included.

**EDUC 322P Early Adolescent Development (3)**

Prerequisite: admission to the teacher education program. Focuses on significant theories and concepts related to the physical, cognitive, and psychosocial development of youth from ages 10 to 15.

**EDUC 330P Diagnosis and Assessment of Exceptional Learners (3)**

Prerequisite: EDUC 235Ps. Methods for collection and use of academic and behavioral data for the educational diagnosis, assessment and evaluation of special education pupils.

**EDUC 332P Teaching Children with Mild and Moderate Disabilities (2)**

Prerequisite: EDUC 244P. Examines appropriate management techniques, teaching strategies, and curriculum development for elementary learning disabled and behavior disordered students.

**EDUC 333P Science and Technology Curriculum and Methods (3)**

Prerequisite: completion of teacher education block 1 (EDUC 215Px and EDUC 250P). Introduces students to a wide variety of teaching strategies and methods in elementary science and will highlight methods of meaningfully integrating technology in the elementary curriculum. Students will be exposed to sound educational philosophy, research and experiences, which can be implemented in the science classroom. Hands-on laboratory experiences and integration of technology will be stressed. Designed for students seeking K-6 licensure.

**EDUC 337P Teaching Language Arts and Reading (3)**

Prerequisite: admission to the teacher education program. A process approach for developing teaching methods that integrate listening, speaking, writing and reading throughout the curriculum. Emphasis will be placed on the interactive nature of language arts and reading. Field experience is included. Taken concurrently with EDUC 333P and ENGL 208P.

**EDUC 352P Teaching of Reading (3)**

Prerequisite: admission to the teacher education program. A study of elementary school reading instruction that is defined as integrating theories of learning, language, and literacy. Methods and materials for a comprehensive reading program, techniques of assessment and recent research are examined and evaluated. Field experience included. Taken concurrently with EDUC 354P.

**EDUC 354P Teaching of Mathematics (3)**

Prerequisite: admission to the teacher education program. Presents methods and materials for teaching elementary school mathematics. Conceptually oriented, the course involves actively doing math, emphasizes development of math thinking and reasoning skills, math applications and a broad range of content. Field experience included. Taken concurrently with EDUC 352P.

**EDUC 360P Methods for Instructional Strategist 1: Mild and Moderate (2)**

Prerequisite: EDUC 235Ps. A K-6 methods and strategies course covering models for providing curricular and instructional methodologies to educate students with mild disabilities.

**EDUC 362P Consultation Strategies (2)**

Prerequisite: EDUC 235Ps. Methods and strategies for working with parents, regular classroom teachers, paraprofessionals, support personnel and others involved in special education.

**EDUC 374P Behavior and Classroom Management (2-3)**

Prerequisite: EDUC 235Ps. Focuses on strategies in behavior and classroom management, including applied behavioral analysis, for working with groups and individuals on academic, behavioral, or social skills. Addresses classroom management strategies appropriate for all children, including those with special educational needs. The two-hour portion is required of all students in the teacher education program. The additional one-hour portion is required for all special education endorsements and is recommended for all prospective teachers.

**EDUC 383P Field Experience in Special Education (1)**

Prerequisites: Admission to teacher education program and instructor's permission. This experience is designed as an introduction to working with children with an individualized education program. The primary focus is on service delivery models and instructional methods unique to those in special education. This field experience is required for the special education endorsement. This one-credit course may be completed up to three times in different settings.

**EDUC 384PI Field Experience in Secondary Education (1)**

Prerequisite: admission to the teacher education program and instructor's permission. Students will explore classroom observation techniques and basic theories of communication, tutoring, and planning and will participate in a meaningful field experience that complements their program coursework and provides a broad application overview of the planning and teaching processes in secondary schools. Designed for students seeking secondary teacher licensure. Pass/no record basis.

**EDUC 397P Central Teacher Academy Internship (1)**

Prerequisite: instructor permission. Participants in the Central Teacher Academy collaborate with a mentor teacher and professional staff from Heartland Area Education agency to provide instructional services to students in the Pella Community Schools. Participants also engage in a variety of professional development activities sponsored by Heartland Area Agency and the Pella Community School District.

**EDUC 420P Early Childhood Education I (3)**

Prerequisite: admission to the teacher education program. Focus is on pre-kindergarten and kindergarten programs in the areas of organization, curriculum development, instructional planning, strategies and methods. Topics include guidance and evaluation of young children and assessment of program effectiveness. A pre-student teaching field experience is required. Taken concurrently with EDUC 421P.

**EDUC 421P Early Childhood Education II (3)**

Prerequisite: admission to the teacher education program. A continuation of the study of critical areas related to pre-kindergarten and kindergarten education that was initiated in EDUC 420P. The student teaching experience involves extensive opportunities for practical application of knowledge and skills. Close supervision is provided by experienced cooperating teachers and college supervisors. Taken concurrently with EDUC 420P.

**EDUC 425P Transitional/Vocational Collaboration for the Student With Special Education Needs (1)**

Prerequisite: admission to the teacher education program. Covers sources of services, organizations, and networks, including career, vocational and transitional support to post-school settings, for individuals with mild and moderate disabilities, to maximize opportunities for decision-making and full participation in the community.

**EDUC 436P Educational Services for Students with Mild and Moderate Disabilities (2)**

Prerequisite: EDUC 235Ps. A course on providing educational services to the student with mild disabilities. Includes current trends and issues, basic theoretical and practical approaches, educational alternatives, implication of federal and states statutes and the importance of the multidisciplinary team in providing educational programming.

**EDUC 438PI Reading Disabilities and Field Experience (6)**

Prerequisite: admission to the teacher education program. A study of reading disabilities dealing with the identification and remediation of specific reading deficiencies. The course includes the study of methods, materials and assessment for providing remedial reading instruction and includes a clinical field experience in reading disabilities.

**EDUC 440P Psychology in Secondary Education (2)**

Prerequisite: admission to the teacher education program and major department approval. Examines the fundamental concepts of learning, motivation and behavior modification in relation to education practices. The student will also examine the tools and techniques of test construction, measurement and evaluation by the teacher. Practicum experience is included. Taken concurrently with EDUC 442P and 374P.

**EDUC 442P Reading in the Content Area—Secondary (1)**

Prerequisite: admission to the teacher education program. Examines methods for teaching reading in subject-matter areas. Emphasis on learning specific instructional strategies to enhance secondary students' ability to learn from content assignments. Taken concurrently with EDUC 440P.

**EDUC 444P Literacy Strategies for Content Area Reading (3)**

Prerequisite: admission to the teacher education program. Examines reading, writing, listening and speaking strategies for teaching reading in subject-matter areas. Emphasis on how to embed strategies throughout the curriculum to enhance students' ability to learn content knowledge.

**EDUC 448P Elementary General Methods (2)**

Prerequisite: admission to the teacher education program and EDUC 239P. Intended for students who seek licensure only in K-6 Art, K-6 Music, or K-6 Physical Education. Instructional strategies and classroom methods appropriate to teachers of K-6 special areas will be analyzed. Upon completion of course, EDUC 464PI will be completed.

**EDUC 450P Secondary General Methods (2)**

Prerequisites: admission to the teacher education program and EDUC 440P. Introduces prospective teachers to the general methods of teaching in the middle and secondary grades. Specific skills are acquired in planning, implementing instructional strategies, providing for individual differences and evaluating student performance. Field experiences are included.

**EDUC 451P Secondary Special Methods (1)**

Prerequisites: admission to the teacher education program and EDUC 440P. Introduces prospective teachers to the methods and curriculum in the specialized subject areas in the middle and secondary grades. Specific skills are acquired in planning, implementing instructional strategies, providing for individual differences and evaluating student performance. Taken concurrently with student teaching and EDUC 486P.

**EDUC 453P Advanced Integration of Technology in Education-Elementary (1)**

Prerequisite: admission to the teacher education program. A continuation of EDUC 250P for elementary education. Focuses on instructional technology strategies, educational pedagogy, educational philosophy and research, and a wide variety of instructional technologies. Emphasis on learning how to plan, design, and integrate technologies into teaching and learning. The ethical and equitable use of instructional technology is discussed and demonstrated by students. Designed for students seeking K-6 licensure. Taken concurrently with EDUC 460P.

**EDUC 455P Advanced Integration of Technology in Education-Secondary (1)**

Prerequisite: admission to the teacher education program. A continuation of EDUC 250P for secondary education. Focuses on instructional technology strategies, educational pedagogy, educational philosophy and research, and a wide variety of instructional technologies. Emphasis on learning how to plan, design, and integrate technologies into teaching and learning. The ethical and equitable use of instructional technology is discussed and demonstrated by students. Designed for students seeking 6-12 licensure. Taken concurrently with EDUC 450P.

**EDUC 458P Special Methods: Teaching Foreign Language in the Elementary School (1)**

Prerequisites: admission to the teacher education program and instructor permission. A pre-professional course designed to prepare elementary education majors to teach foreign language in grades K-6. Emphasis is on practice and analysis of performance. Offered in the fall only.

**EDUC 460P Elementary Student Teaching (12)**

Prerequisites: blocks 1, 2 and 3 and approval of the teacher education program. Students will observe, assist and teach in elementary school classrooms under the guidance of the classroom teacher, the school principal and the college supervisor. Taken concurrently with EDUC 485P. Pass/no record basis.

**EDUC 461P Elementary Intern Teaching (Arr)**

Prerequisites: blocks 1, 2 and 3 and approval of the teacher education committee. An experience as a teaching intern with close supervisory assistance from the local school district as well as from the college staff. Pass/no record basis.

**EDUC 462PI Elementary Student Teaching (6)**

Prerequisites: teacher education committee approval. Supervised observation and teaching in regular K-6 classroom. Taken concurrently with EDUC 468P. Pass/no record basis.

**EDUC 464P Elementary Student Teaching in Subject Area (12)**

Prerequisite: approval of the teacher education committee. Supervised observation and teaching experience for students who only seek endorsement in elementary art, music or physical education. Pass/no record basis.

**EDUC 466P Elementary Student Teaching in Subject Area (6)**

Prerequisite: approval of the teacher education committee. Supervised observation and teaching experience for students who seek endorsement in both elementary and secondary art, music or physical education. Taken concurrently with EDUC 476P. Pass/no record basis.

**EDUC 468PI K-6 Mild and Moderate Disabilities Student Teaching (6)**

Prerequisites: teacher education committee approval. Supervised observation and teaching in K-6 multicategorical resource room for students with mild disabilities. Taken concurrently with EDUC 462P and 485P. Pass/no record basis.

**EDUC 469PI 7-12 Mild and Moderate Disabilities Student Teaching (2)**

Prerequisites: teacher education committee approval. Supervised observation and teaching in 7-12 multicategorical resource room for students with mild disabilities. Taken concurrently with EDUC 462PI, 468PI and 485P. Pass/no record basis.

**EDUC 470P Secondary Student Teaching (12)**

Prerequisite: approval of the teacher education committee. Students observe, serve as teaching assistants and take responsibility for teaching in grades 7-12 under the guidance of their college supervisor, the classroom teacher and the school principal. Taken concurrently with EDUC 451P and 486P. Pass/no record basis.

**EDUC 471P Secondary Intern Teaching (Arr)**

Prerequisite: approval of the teacher education committee. An experience as a teaching intern with close supervisory assistance from the local school district as well as from the college staff. Pass/no record basis.

**EDUC 476P Secondary Student Teaching in Subject Area (6)**

Prerequisite: approval of the teacher education committee. Supervised observation and teaching experience for students who seek endorsement in both elementary and secondary art, music or physical education. Taken concurrently with EDUC 466P. Pass/no record basis.

**EDUC 485P Senior Seminar in Elementary Education (2)**

Prerequisite: approval of the teacher education committee. A capstone course integrating research, theory and application of concepts and skills in the field of education. Each student will develop and present a professional portfolio and an action research project at the conclusion of student teaching, and will engage in a variety of planned professional development opportunities. Taken concurrently with EDUC 460P or EDUC 462PI and EDUC 466P. Pass/no record basis.

**EDUC 486P Professional Development Seminar-Secondary (1)**

Prerequisite: approval of the teacher education committee. A capstone course integrating research, theory and application of concepts and skills in the field of education. Each student will develop and present a professional portfolio. This course is taken concurrently with student teaching. Pass/no record basis.

## English

**ENGL 100 Reading and Writing Strategies (4)**

An introduction to college-level reading and writing skills emphasizing their connections within academic contexts. Includes college-level reading strategies, expressive writing, expository writing, review of English grammar and rhetoric, and analysis of textbook and literary/historical sources. Meets three times per week with additional out-of-class instruction. Does not count toward the major.

**ENGL 101f Composition (3)**

Emphasizes essay writing, including argumentative and persuasive prose based on the critical reading of various texts. Promotes the development of college-level skills with emphasis on speaking, writing and analytical thinking. Does not count toward the major.

**ENGL 120Pft Introduction to Literature (3)**

Prerequisite: limited to freshmen and sophomores. Introduction to the study of literature through the examination of narration, drama, poetry, metaphor and intertextuality. Promotes college-level skills with emphasis on speaking, writing and analytical thinking.

**ENGL 200 Modes of Argument in Reading and Writing (2)**

Develops critical reading skills by analyzing argumentative and narrative prose. Emphasizes methods of evaluating arguments and writing arguments in response to reading selections. Does not count toward the major.

**ENGL 201P Technical Writing (3)**

Prerequisite: sophomore standing. Review of usage of English language. Instruction and practice writing summaries, letters, memoranda, reports and proposals. Emphasis on clarity and precision. Practice in collecting, organizing, and writing practical and theoretical information. Scientific or business background not necessary. Does not count toward the major.

**ENGL 208P Literature for Children (3)**

Prerequisite: Admission to the teacher education program or instructor's permission. Intended for students in the teacher education program. Furnishes a background of juvenile literature through wide reading in various types of materials both classic and modern. Includes principles of evaluation, selection and presentations of material. Stresses an appreciation for good literature. Does not count toward the major.

**ENGL 211nt Literature of India and the Pacific (3)**

Surveys major contemporary anglophone writers from India and/or the Pacific. Emphasis on Naipaul, Rushdie, Narayan, Desai, Ondaatje, Grace, White and Kenally.

**ENGL 212nt African and Caribbean Literature (3)**

Surveys major contemporary anglophone writers from Africa and/or the Caribbean. Emphasis on Achebe, Emecheta, Soyinka, Fugard, Gordimer, Kincaid and Walcott.

**ENGL 213t Nature Writing and Environmental Literature (3)**

Studies the literary tradition of nature as a source of inspiration for many poets, novelists and essayists. Explores writings and films concerned with the contemporary endangered environment. Readings include authors such as Wordsworth, Thoreau, Dickinson, Whitman, Burroughs, Muir, Carson, Krakauer, Abbey, Markandaya and Hertsgaard. Emphasis is placed on ecological literacy.

**ENGL 214t Literature by Women (3)**

Studies British, American and world literature by women, with attention to thematic and stylistic concerns of women's literary traditions. Includes writers such as C. Bronte, Chopin, Woolf, Hurston, Lessing, Rich, Morrison and Walker.

**ENGL 215nt African-American Literature (3)**

Explores the tradition of African-American writing, from slave narratives, to the experimental writings of the Harlem Renaissance, to the social realist novels of the 1940s and contemporary fiction and poetry. Emphasis on Douglass, Hughes and Morrison.

**ENGL 216nt American Ethnic Literature (3)**

Studies a variety of contemporary writings (fiction, non-fiction, drama and poetry) from American ethnic literary traditions such as African American, Asian American, Hispanic American and Native American.

**ENGL 222 Literature for Young Adults (1)**

Provides a background of literature for young adults through wide reading in various types of materials both classic and modern. Includes principles of evaluation, selection and presentations of material.

**ENGL 236t American Literature I: 1620-1890 (3)**

Studies major figures and movements of American literature from the origins through Realism. Emphasis on authors such as Hawthorne, Irving, Melville, Poe, Thoreau and Twain.

**ENGL 237t American Literature II: 1890-Present (3)**

Studies major figures and movements in American literature from Naturalism to the present. Emphasis on authors such as Crane, Faulkner, Fitzgerald, Hemingway, James and post-war novelists.

**ENGL 240a The Personal Essay (3)**

Instruction, practice and experimentation in the art of the personal essay. Readings include both contemporary and historical examples of the form.

**ENGL 241a Short Story Writing (3)**

Instruction, practice and experimentation in the short story with readings by 20th-century American authors.

**ENGL 242a Poetry Writing (3)**

A workshop course focusing on both formal and free styles of poetry writing. Readings include poetry and essays by contemporary poets.

**ENGL 245a British Novel (3)**

Analyzes the traits of style of major British novelists of the 18<sup>th</sup>, 19<sup>th</sup>, and 20<sup>th</sup> centuries. Emphasis on authors such as Fielding, Austen, Dickens and Woolf.



**ENGL 247t American Novel (3)**

Studies major novels of 19th- and 20th-century American writers such as Melville, Hawthorne, James, Cather, Faulkner and Morrison.

**ENGL 248t Comedy (3)**

Studies great plays from the history of comedy by writers such as Jonson, Molière, Sheridan, Shaw and Ionesco. In some semesters the topic may be tragedy instead.

**ENGL 249t Poetry (3)**

Focuses on longer, complete poetic works from a range of authors and time periods, and attempts to place these works in their critical, artistic and historical contexts.

**ENGL 251t British Literature I: 800-1660 (3)**

Studies major figures from the Beowulf poet to Milton. The major emphasis is on authors such as Chaucer, Spenser, Donne and Milton. In addition, students develop skills in reading, interpreting and criticizing literature, using secondary materials, writing critical papers and contributing to class discussions.

**ENGL 252t British Literature II: 1660-1850 (3)**

Studies major figures, excluding most novelists, from the Age of Reason, the Romantic period and the early Victorian era. Emphasis is on authors such as Swift, Pope, Wordsworth, Keats, Tennyson and Arnold.

**ENGL 253t British Literature III: 1850-Present (3)**

Studies major figures from the late Victorian period to the present day. Emphasis is on authors such as Hardy, Yeats, Joyce, Woolf and Lessing.

**ENGL 260ct Irish Literature (3)**

Studies the major literary artists in Ireland. Authors studied include Swift, Wilde, Shaw, Yeats, Joyce, Beckett, Heaney, Boland and McGuckian.

**ENGL 284I Field Methods in Linguistics (3)**

Prerequisite: instructor's permission. Methodology of the study of language directly from contact with a native speaker or speakers of a language not regularly offered in the college curriculum.

**ENGL 293PI Practicum in Technical Writing (2)**

Prerequisite: ENGL 201P and instructor's permission. Offers the student experience in writing for local companies and organizations. Incorporates advanced skills needed in the business world: writing press releases and annual reports, doing technical layout, and writing for advertising. Does not count toward major.

**ENGL 320 Teaching Writing (2)**

Focuses on both the theory and practice of teaching writing. In addition to becoming conscious of their own writing process, students will gain practical experience in helping others to write.

**ENGL 330 Principles of Linguistics (3)**

Presents the fundamentals of the science of linguistics and an overview of the major sub-fields of the discipline. The major focus is on the solution of problems in phonology and morphology, and on collateral work in areas selected with consideration for any special needs and interests of class members.

**ENGL 331h History of the English Language (3)**

Issues in the internal and external history of the English language are considered in light of larger patterns of interrelationship between language and society.

**ENGL 332 Advanced English Grammar (3)**

Studies intensively the theory and structure of English grammar and the changing views thereof. Designed primarily for those who plan to teach English or English as a second language in the elementary and secondary schools.

**ENGL 333 Phonetics and Phonemics (3)**

A detailed study of speech sounds, production mechanisms and the structuring of sounds in language. Ear training as well as practice in phonetic and phonemic transcription will be stressed. Field techniques will be considered.

**ENGL 335s Sociolinguistics (3)**

A survey of key issues in sociolinguistic inquiry based on case studies of topics such as language maintenance and shift, bilingualism and biculturalism, the language of ethnic and other minority groups, language contact and language conflict.

**ENGL 340Pa Writing Women's Lives (3)**

Prerequisite: sophomore standing or instructor's permission. A course open to all students with an interest in Women's Studies and nonfiction writing. Links instruction and experimentation in autobiographical narrative, biography, and the personal essay with discussion of issues in contemporary feminist thought. Readings focus on work by and about women, both famous and little-known.

**ENGL 342a Advanced Poetry Writing (3)**

Prerequisite: ENGL 242a is recommended. A course for students with experience in writing poetry that links writing to contemporary discussions in poetic thought. Readings focus on contemporary poetry and on essays of the craft and theory of poetry writing.

**ENGL 343PIa Travel Writing (3)**

Prerequisite: significant cross-cultural experience in domestic or foreign off-campus programs and instructor's permission. A course in nonfiction writing that studies strategies for writing the essay in general and the cross-cultural and travel essay in particular. Readings will include both historical and contemporary examples of the travel essay.

**ENGL 344 Writing for Non-Profit Organizations (3)**

Instruction in and practice of writing designed to extend the concept of community, and to incorporate "service learning." Students write for community organizations, social service agencies and other not-for-profit groups and associations.

**ENGL 346t Shakespeare (3)**

Studies the major comedies, histories and tragedies, with some background readings in Shakespeare's England as it affected the theatre.

**ENGL 360 Teaching English as a Second Language (3)**

An introduction to the theory and practice of teaching English as a second or foreign language. Designed for those who plan to teach English here or abroad.

**ENGL 361t World Literature I (3)**

Studies major figures of world literature from the Greeks to the Renaissance. Emphasis is on authors such as Homer, Sophocles and Dante. Excludes British and American writers.

**ENGL 362t World Literature II (3)**

Studies major figures of world literature from the Renaissance to the present day. Emphasis is on authors such as Moliere, Flaubert, Dostoevsky and Kafka. Excludes British and American writers.

**ENGL 371t Medieval Literature (3)**

Studies major works from the Middle English period such as *The Canterbury Tales*, *Sir Gawain and the Green Knight*, *Piers Plowman*, *Le Morte Darthur*; dramatic works such as the Wakefield and Chester cycles; *The Lais of Marie de France*; and collections of lyrics.

**ENGL 372t Renaissance Literature (3)**

Studies major figures and works from the English Renaissance such as *The Faerie Queen*, the metaphysical poets, non-Shakespearean drama and prose works such as *Utopia* and *Leviathan*.

**ENGL 373t Studies in 17th and 18th Century Literature (3)**

Studies major figures and works from Restoration and 18th-century literature such as Wycherly, Congreve, Dryden, Pope, Swift, Goldsmith, Johnson, Fielding and Sheridan.

**ENGL 374t Studies in 19th Century Literature (3)**

Studies major works by British Romantic and Victorian authors such as Wordsworth, Byron, P.B. and Mary Shelley, Charlotte and Emily Bronte and Tennyson.

**ENGL 375t Studies in 20th Century Literature (3)**

Studies works by major figures of 20th-century literature in English such as Conrad, Joyce, Woolf, Yeats, Auden, Faulkner, O'Connor, Wright, Lessing, Pynchon, Rich, Rushdie, Gordimer, Achebe and Walcott.

**ENGL 376t Literary Criticism (3)**

Studies various theoretical perspectives of literary criticism from mimetic to postmodern with practice in applied criticism.

**ENGL 392PI ESL Practicum (Arr)**

Prerequisites: ENGL 360 and instructor's permission. The ESL practicum is a pre-student teaching experience of observation, teaching and reflection on teaching English as a second language in the public school setting. The course requires 45 contact hours divided between both the primary and secondary levels, as well as group and individual discussion and research.

**ENGL 192I, 292I, 392I, 492I Practicum in English (Arr)****ENGL 397PI Internship: Teaching English as a Second Language (Arr)**

Prerequisite: ENGL 360 and permission of instructor. Students gain experience teaching English to non-native speakers of the language. The supervising instructor must approve internship site and student population. This course is not intended as a practicum for teaching licensure.

**ENGL 425t Seminar in American Literature (4)**

A specialized investigation into a specific and limited topic selected by the instructor. Each seminar will focus on the student's critical and research abilities to produce a major analytic project.

**ENGL 426t Seminar in British Literature (4)**

A specialized investigation into a specific and limited topic, such as Chaucer or Milton. Each seminar will focus on the student's critical and research abilities to produce a major analytic project.

**ENGL 497PI Internship in Writing (Arr)**

Prerequisite: junior standing and instructor's permission. Available only to English majors or majors with an emphasis in writing. An applied writing experience in a business, institutional or governmental setting. Includes conferences with on-campus staff, a portfolio of work written during the internship, and evaluation by the job supervisor. Pass/no record basis.

**ENGL 199I, 299I, 399I, 499I Independent Studies in English (Arr)**

Prerequisite: instructor's permission. Student-defined tutorial of readings and research. Each participant will submit a proposal to the department.

**Exercise Science****EXSC 110 Introduction to Stress Management (3)**

An in-depth exposure to stress management including psychological, physiological, emotional and behavioral dimensions. Emphasis will be placed on the holistic treatment of stress and on developing the skills to manage personal stress as well as to assist others.

**EXSC 123 Fundamentals of Dance (1)**

This course covers the popular and traditional dance forms. Students learn folk, square, country, Spanish and ballroom techniques. Learning to move to basic rhythmic patterns is emphasized.

**EXSC 124 Fundamentals of Golf (1)**

Intended for beginning and intermediate golfers. Students will learn the basic golf strokes, use of various clubs, strategies, rules and etiquette.

**EXSC 129 Fundamentals of Tennis (1)**

Introduces the basic skills of tennis with emphasis on the development of sound strokes and the knowledge of strategy, rules and etiquette necessary to play the game and enjoy it as a spectator.

**EXSC 134 Fundamentals of Racquetball (1)**

Intended for beginning and intermediate players. Course covers the basic strokes (forehand, backhand, volley, serve, overhead), rules and etiquette needed to play the game and enjoy it as a spectator.

**EXSC 135 Fundamentals of Cardiovascular Endurance (1)**

Development of a cardiovascular endurance program using a variety of aerobic training techniques and activities.

**EXSC 136 Fundamentals of Muscular Strength (1)**

Development of a muscular strength program using a variety of strength training techniques and activities.

**EXSC 149f Foundations of Health and Exercise Science (3)**

Introduction to physical education as health promotion and exercise science. Historical background, contemporary issues of the discipline, role of sports and health in society and trends for the future are topics covered.

**EXSC 151 First Aid and Sports Injuries (3)**

Introduces first-aid measures for typical work, athletic and school situations. Provides skills and theory in athletic training topics through lab, observation and lecture. Covers injury prevention, injury evaluation, primary care, education and rehabilitation along with equipment use and counseling common to the athletic setting. Provides American Red Cross Certification for Workplace First Aid and Adult CPR. Additional lab fee applies. See College Costs section of current Catalog.

**EXSC 160 Personal Health (3)**

Introduction to the multiconceptual approach to personal health. Encourages individuals to take self-responsibility through informed choices on a daily basis. Includes strategies to modify daily health habits.

**EXSC 210P Methods of Teaching Health and Physical Education for Elementary School (3)**

Prerequisite: sophomore standing or instructor's permission. Intended for elementary education majors. Acquaints students with physical activities for elementary school child, objectives and methods of organization of physical education, developmental characteristics of children, first aid, CPR, micro-teaching and curriculum development of health and physical education. May be used to meet one of the elementary education requirements for state licensure.

**EXSC 212P Adapted Physical Education (3)**

Prerequisite: sophomore standing. Considers developmental, remedial and corrective programs in physical education; emphasizes adaptation to special needs beyond the regular physical education program.

**EXSC 213 Principles of Coaching (3)**

Prepares students for the problems, challenges, expectations and demands of coaching in several settings including high school, junior high school and other youth and recreational venues.

**EXSC 214P Methods of Teaching Health and Physical Fitness Skills for Secondary Schools (3)**

Prerequisite: sophomore standing. Presents a variety of methods aimed at teaching both individual and team sports. Students learn basic methods and strategies essential to the teaching of these activities to students in a class setting. Activities covered may include: archery, badminton, racquetball, outdoor recreational activities, soccer, softball, flag football, basketball and volleyball.

**EXSC 215I Introduction to Angling (1)**

Prerequisite: instructor's permission. Introduces the basic skills, theory and equipment necessary for the development of lifelong angling skills. Topics include fish characteristics/biology, water quality and testing, habitat design and build, knots, fly fishing, ice fishing, and others determined by the class. A current Iowa fishing license is required. Additional fees may be required to facilitate field experience and acquire necessary tackle. Students are encouraged to use their own equipment. Fundamentals and theory instruction and participation will take place in a safe environment.

**EXSC 216P Applied Sports Psychology (3)**

Prerequisite: PSYC 122s. Focuses on human behavior in certain types of situations-namely, sport and exercise settings. Examines what motivates people, what angers them, and what scares them; how they regulate their thoughts, feelings, and emotions; and how their behaviors can become more effective..

**EXSC 217I CPR for the Professional Rescuer (1)**

Prerequisite: instructor's permission. Provides the professional rescuer with the knowledge and skills necessary in an emergency to help sustain life, reduce pain, and minimize the consequences of respiratory and cardiac emergencies until more advanced medical help can arrive. Pass/no record. Additional lab fee applies. See College Costs section of current Catalog.

**EXSC 234P Sports Nutrition (3)**

Prerequisite: BIOL 111Pq. An introduction to sports nutrition concepts, analysis of functions, deficiencies, sources and utilization of nutrients, current controversies and fads. Application of nutrition principles to specific health needs and to sports performance.

**EXSC 241P Fundamentals and Theory of Baseball and Softball (3)**

Prerequisite: sophomore standing. Covers basic offensive and defensive skills, theory, strategy, rules and psychology of coaching baseball and softball.

**EXSC 242P Fundamentals and Theory of Track and Field (3)**

Prerequisite: sophomore standing. Studies the methods for teaching the mechanics of track & field events; examines the training concepts and theories for various events; and deals with the organization and operation of a track meet.

**EXSC 243P Fundamentals and Theory of Basketball (3)**

Prerequisite: sophomore standing. Basketball skills and strategies appropriate for coaching basketball. Students will learn the basic fundamentals of the game of basketball both offensively and defensively. Also includes fundamental theory, offensive and defensive plays, game strategy, rules, conditioning and psychology of coaching basketball.

**EXSC 244P Fundamentals and Theory of Football (3)**

Prerequisite: sophomore standing. Studies the basic fundamentals and techniques for each position in the game of football. This will be followed by an overview of the different offensive and defensive philosophies of modern day football plus game strategy. The psychology of coaching football will also be covered along with the development of a conditioning program.

**EXSC 246P Fundamentals and Theory of Coaching Soccer (3)**

Prerequisite: sophomore standing. Teaches basic skills of competitive soccer including game strategies and rules. Students perform skills and learn methods of teaching and coaching.

**EXSC 248P Fundamentals and Theory of Volleyball (3)**

Prerequisite: sophomore standing. Covers basic skills, theory, strategy, rules and psychology of coaching volleyball through lab and lecture.

**EXSC 254P Human Anatomy and Kinesiology (4)**

Prerequisite: BIOL 111Pq or BIOL 130q or BIOL 131Pq or CHEM 131fq. Examines the structure and function of the skeletal, muscular, and articular systems of the body.

**EXSC 260 Substance Abuse (3)**

Studies the sociological, psychological and legal dimensions of alcohol and drug dependency. Focus on the interrelational nature of substance abuse in American culture.

**EXSC 261 Community and Consumer Health (3)**

Reviews current complex health issues in community and consumer health models at the local, state, national and international levels.

**EXSC 265P Group Exercise Leadership (2)**

Prerequisites: EXSC 135 and EXSC 136. Provides students with an overview of the educational concepts, performance techniques, program design, and leadership skills needed to teach group-led exercise programs and design group led training programs. The course will include basic analysis and application of safe and effective exercise procedures for all fitness levels.

**EXSC 283PI Field Experience: Exercise Science (Arr)**

Prerequisites: sophomore standing and instructor's permission. A practical experience under the direct supervision of a certified individual.

**EXSC 284PI Field Experience: Coaching (Arr)**

Prerequisite: instructor's permission. Practical experience under the direct daily supervision of a certified coach.

**EXSC 293PI Practicum in Strength and Conditioning I (3)**

Prerequisites: EXSC 136 and instructor's permission. Entry-level study of Olympic lifts, torso training, functional warm-ups and speed drills. Discussions related to applications and concepts in strength and conditioning will be emphasized. Allows the student to develop basic knowledge to be able to assist the strength and conditioning staff to perform, instruct and correct basic lifting technique. Pass/no record basis.

**EXSC 342 Outdoor Pursuits (3)**

Explore concepts and activities consistent with life in Iowa and the local Pella area. Introduce a wide variety of outdoor activities of interest to the students, through student directed learning. Encourage safe activity by promoting lifelong learning in a positive learning environment. Additional lab fee applies. See College Costs section of current Catalog.

**EXSC 345P Theory and Research Methods of Health and Exercise Science (3)**

Prerequisite: EXSC 149f and junior standing. Examines basic research design and involves students in a common research experience and communication of research results.

**EXSC 356P Operations and Management of Exercise and Sports Medicine Facilities (3)**

Prerequisite: junior standing and EXSC 149f. Offers an in-depth study of the administration and management of exercise and sports medicine facilities. Specific areas of inquiry include health promotion, athletics, intramurals, physical education and athletic training.

**EXSC 357P Fitness Assessment and Exercise Prescription (4)**

Prerequisite: junior standing, EXSC 135 or EXSC 136. Assessment of physiological fitness levels and development of individualized exercise prescriptions.

**EXSC 358P Principles of Personal Training (3)**

Prerequisites: EXSC 135, EXSC 136, and EXSC 357P. Explains individualized fitness programs, business and legal issues for personal trainers and develops personality and communication attributes of trainers.

**EXSC 361P Biomechanics (4)**

Prerequisite: junior standing. Synthesis of biology and mechanics that seeks to explain human movement in terms of space, time, direction and forces. Involves application of mechanics for the expressed purpose of analyzing/improving performance and locating the mechanical cause of faults observed in performance.

**EXSC 363P Human Sexuality (3)**

Prerequisite: junior standing. Explores the physiological, psychological and sociological dimensions of human sexuality, focusing on how sexuality influences the quality of life throughout the human lifespan. Offered alternate years.

**EXSC 372P Principles and Theories of Strength and Conditioning (4)**

Prerequisites: EXSC 253 (or 255) and 357. Advanced study of the scientific principles and theories related to strength and conditioning. Discussions related to applications and concepts in the exercise sciences, testing and evaluation, program design, and strength and conditioning administration and facility organization will be emphasized.

**EXSC 379P Epidemiology of Physical Activity (3)**

Prerequisite: EXSC 357. Examines the relationship between physical activity and exercise on various diseases and conditions. Various methods for epidemiological assessment will be discussed as well as current research regarding the association between physical activity and chronic disease and chronic disease risk factors. Recommendations for physical activity of those with chronic disease will be highlighted.

**EXSC 380P Worksite Program Planning and Evaluation (3)**

Prerequisite: EXSC 357. Focuses on health promotion program planning, assessment, and evaluation procedures used in community and other settings with emphasis on health promotion program evaluation. Students will increase their knowledge of planning and evaluation theories, models, and implementation strategies for health promotion programs

**EXSC 390I Topics (Arr)**

Prerequisite: instructor's permission. Offered as needed to cover the interest of staff and students when these cannot be accommodated by regular offerings.

**EXSC 393PI Practicum in Strength and Conditioning II (3)**

Prerequisites: EXSC 136 and instructor's permission. Advanced study of implementation of Olympic lifts, core training, functional warm-ups, functional rehabilitation, functional training and warm-up methodology. Discussions related to applications and concepts in strength and conditioning will be emphasized. The students will be expected to practice, demonstrate, refine and apply competencies gained in previous setting. The students will also demonstrate appropriate communication skills with other professionals working with their team. Pass/no record basis.

**EXSC 399I Independent Study (Arr)**

Prerequisite: instructor's permission. Designed to permit students to pursue individual interests in specialized areas of physical education.

**EXSC 417I Concepts of CPR/AED/FA and BBP (1)**

Prerequisite: instructor's permission. Provides the citizen responder with the basic knowledge and skills necessary in an emergency to help sustain life, reduce pain, minimize the consequences of respiratory and cardiac emergencies and protect themselves from diseases until more advanced medical help can arrive. Course content and activities will prepare participants to make appropriate decisions about the care to provide in an emergency. Teaches the skills a citizen responder needs to act as a crucial link in the emergency medical services (EMS) system. Additional lab fee applies. See College Costs section of current Catalog.

**EXSC 432P Fitness After Fifty (3)**

Prerequisite: junior or senior standing. Presents the information needed to develop safe and effective physical activity programs for older adults.

**EXSC 460P Exercise Physiology (3)**

Prerequisites: junior standing and a biology lab course. Examines principles of physiology involved with both the acute and chronic effects of exercise.

**EXSC 461P Exercise Physiology Lab (2)**

Prerequisite or corequisite: EXSC 460P. A lab-oriented class that helps put exercise physiology theories into practice.

**EXSC 462P Motor Learning (3)**

Prerequisite: junior standing. Examines principles of skill acquisition related to motor skill performance; includes teaching and coaching methods.

**EXSC 487I Senior Research (1-3)**

Prerequisite: instructor's permission. Students prepare and present a research proposal that includes a written report and an oral presentation and discussion of their work.

**EXSC 493PI Practicum in Strength and Conditioning III (3)**

Prerequisites: EXSC 136 and instructor's permission. Senior level review and evaluation of practicum competencies and proficiencies. Extensive content in organization and administration of Strength and Conditioning programs. Discussions related to applications and concepts in strength and conditioning will be emphasized. Preparation for the National Strength and Conditioning Association's Certified Strength and Conditioning Specialist examination will occur. The students will be expected to practice, demonstrate, refine and apply competencies gained in previous setting. The students will also demonstrate appropriate communication skills with other professionals working with their team. Pass/no record basis.

**EXSC 397/497PI Internship (Arr)**

Prerequisite: departmental approval and instructor's permission. An applied experience in the major, requiring a minimum number of hours of work per credit hour. Includes conferences with the on-campus instructor and an evaluation by the job supervisor. Pass/no record basis.

## Fine Arts

**FA 200Ca Fine Arts Seminar (3)**

An intensive exploration of the architecture, dance, drama, music, visual arts and other art forms influenced by and available in the city. Uses a broad range of field experiences supported by reading, classroom discussion and presentations by recognized authorities. Offered in Chicago only.

## French

*Note: Courses offered by the department of modern languages are calibrated to the nationally recognized target levels of proficiency defined by the American Council on the Teaching of Foreign Languages. Details are available from the department.*

**FREN 105 French Phonetics and Phonics (2)**

Taught in French but open to all students. Intensive ear and speech training and work with the International Phonetic Alphabet to improve pronunciation.

**FREN 106t French Film: An Introduction (3)**

Films that have defined and shaped French culture are analyzed as texts. Films are subtitled and course is taught in English. Emphasizes speaking and writing. Does not count toward the French major or minor.

**FREN 121c Beginning French I (4)**

A broad-based course developing skill in speaking, reading, writing and understanding spoken French. The cultural element stresses contemporary France.

**FREN 122Pc Beginning French II (4)**

Prerequisite: FREN 121c. A continuation of the introductory course. Offers further development of skills in all areas and study of contemporary France.

**FREN 221Pc Intermediate French I (4)**

Prerequisites: FREN 122Pc, placement. A continuation of FREN 122Pc. Carries the students in French closer to mastery of the skills of understanding, speaking, reading and writing the language. Includes a study of selected aspects of French culture.

**FREN 222Pc Intermediate French II (4)**

Prerequisite: FREN 221Pc or instructor's permission. A continuation of FREN 221Pc. Carries the students in French closer to mastery of the skills of understanding, speaking, reading and writing the language, with emphasis on increasing reading skills. Includes a study of selected aspects of French culture.

**FREN 309Pc French Conversation (1)**

Prerequisite: FREN 222Pc or instructor's permission. Does not count toward the major. An opportunity for students to maintain speaking skills. Small groups discuss articles and clips from contemporary media.

**FREN 310Pc Listening Comprehension (1)**

Prerequisite: FREN 222Pc or instructor's permission. Students develop or maintain listening comprehension skills in language lab setting, using authentic aural documents from French culture.

**FREN 321Pc Advanced Conversation and Composition I (4)**

Prerequisite: FREN 222Pc, placement, or instructor's permission. Develops a solid understanding of the syntax of oral and written French. Stresses growth in reading, writing and speaking skills, while providing some background on contemporary French life and culture.

**FREN 322Pc Advanced Conversation and Composition II (4)**

Prerequisite: FREN 321Pc or instructor's permission. Primary stress is on perfecting French language skills. Includes an introduction to literature as well as relevant culture and civilization topics.

**FREN 326Pt Reading in French Film (4)**

Prerequisite: FREN 322Pc. Offered jointly with FREN 106t, which is taught in English. Students in FREN326Pt will conduct their discussions, write their papers, and do supplementary readings in French. The course content is the analysis of a number of French films that have defined and shaped French culture. Discussion and writing are emphasized.

**FREN 330Pc The Language House Experience (.5)**

Prerequisite: departmental approval to live in the French House. Credit awarded each semester for students living in the language houses who complete departmental requirements. May be repeated up to 4 times for a maximum of 2 credits.

**FREN 333Pch French Civilization (3)**

Prerequisite: FREN 322Pc or instructor's permission. Study of the development of French civilization, the ways and customs of the French people from their origins to the 20th century.

**FREN 343Pct Early French Literature: Middle Ages and Renaissance (4)**

Prerequisite: FREN 322Pc or instructor's permission. Study of representative excerpts and texts from the Medieval and Renaissance periods by authors such as Marie de France, Chrétien de Troyes, François Villon, Rabelais, Montaigne and Ronsard. Offered alternate years.

**FREN 344Pct French Literature of the 17th and 18th Centuries (4)**

Prerequisite: FREN 322Pc or instructor's permission. Study of representative excerpts and texts from the 17th and 18th centuries by authors such as Descartes, Molière, Madame de Sévigné, Montesquieu, Voltaire and Rousseau. Offered alternate years.

**FREN 345Pct 19th Century French Literature (3)**

Prerequisite: FREN 322Pc or instructor's permission. Study of representative texts from the 19th century by authors such as Chateaubriand, Hugo, Balzac, Flaubert, Zola, Baudelaire and Mallarmé. Offered alternate years.

**FREN 346Pct 20th Century French Literature (3)**

Prerequisite: FREN 322Pc or instructor's permission. Study of representative texts from the 20th century by authors such as Valéry, Ionesco, Camus, Sartre, Sarraute, Le Clézio and Ernaux. Offered alternate years.

**FREN 352Pc French for Business (3)**

Prerequisite: FREN 322Pc or instructor's permission. Introduction to the language of French business and economics, including a contrastive study of the cultural and methodological aspects of business in France and the United States. Credit cannot be received for both this course and FREN 862F or FREN 864F (Business French) in Paris.

**FREN 353Pt Translation-French (3)**

Prerequisite: FREN 322Pc or instructor's permission. Introduction to the theory and techniques of translation. Translation of contemporary literary and non-literary texts from English to French and French to English.

**FREN 410P Advanced French Grammar (1)**

Prerequisite: Enrollment in or completion of one college-level French literature course. Review of grammar through written exercises.

**FREN 489P Senior Capstone in French (1)**

Prerequisite: completion of study abroad or instructor's permission. Normally taken during the student's last semester on campus. The student will collaborate with an advisor to prepare and deliver a formal presentation in French before a jury. At this time the student will demonstrate skills, knowledge and dispositions appropriate for the major.

**FREN 490Pct Topics in Francophone Literatures and Civilization (4)**

Prerequisite: study in Paris or instructor's permission. Study of the francophone cultures and literatures through analysis of texts and films of Québec, the French West Indies and North and West Africa.

**FREN 494 Language Teaching Practicum (6-9)**

Offers opportunity to apply second-language teaching methodology in small-group setting. Emphasis on oral skill development. Will be supervised by a faculty member.

**FREN 497PI Internship-French (Arr)**

Prerequisite: Completion of a year of study on the Paris program with a minimum GPA of 3.00 and instructor's permission. The internship provides an opportunity for the student to explore a career option in the major field of study. Pass/no record basis.

**FREN 499PI Independent Study-French (Arr)**

Prerequisite: one literature course and instructor's permission. Designed for majors who wish to investigate some area of individual interest not covered by courses offered in the department. Number of credits determined by the scope of the study undertaken. Offered any semester with the permission of the head of the department.

## Geography

### **GEOG 210s Human Geography (3)**

Examines and analyzes changing interconnections among places by exploring dynamic processes and patterns worldwide, including the distribution and diffusion of people, their religions, customs, and economic means, providing an understanding of spatial and functional (space and scale) patterns of the cultural, social, political, and economic processes that shape the geography of the world.

## German Studies

*Note: Courses offered by the department of modern languages are calibrated to the nationally recognized target levels of proficiency defined by the American Council on the Teaching of Foreign Languages. Details are available from the department.*

### **GERM 121c Beginning German I (4)**

Training in understanding the spoken language, reading and the fundamentals of grammar. Includes an introduction to aspects of the culture(s) of German-speaking countries.

### **GERM 122Pc Beginning German II (4)**

Prerequisite: GERM 121c or equivalent. Continued training in understanding the spoken language, reading and the fundamentals of grammar. Includes an introduction to more aspects of the culture(s) of German-speaking countries.

### **GERM 221Pc Intermediate German I (4)**

Prerequisite: GERM 122Pc or equivalent. Offers intensive practice in spoken and written language, reading in a variety of texts and review of grammar. Background material on contemporary German life and culture.

### **GERM 222Pc Intermediate German II: Composition/Conversation (4)**

Prerequisite: GERM 221Pc or equivalent. Offers intensive practice in spoken and written language, reading in a variety of texts and review of grammar. Background material on contemporary German life and culture. Special emphasis on composition and conversation.

### **GERM 321Pc Advanced German I (4)**

Prerequisite: GERM 222Pc or equivalent. Intensive review and practice of all fluency skills, combined with a broad introductory survey of the German cultural and literary heritage.

### **GERM 322Pc Advanced German II (4)**

Prerequisite: GERM 321Pc or equivalent. A continuation of GERM 321Pc. Continued intensive review and practice of all fluency skills, combined with a broad introductory survey of the German cultural and literary heritage.

### **GERM 330Pc The Language House Experience (.5)**

Prerequisite: departmental approval to live in the German House. Credit awarded each semester for students living in the language houses who complete departmental requirements. May be repeated up to 4 times for a maximum of 2 credits.

### **GERM 331ct Introduction to German Literature (3)**

An introductory survey of German literary works, authors, terminology, genre and the development of the literary heritage. Taught in English, with appropriate assignments for students wishing to count this course toward the German Studies major.

### **GERM 332ct Masterworks of German Literature (3)**

Studies a selection of major authors representing the main periods and genres. Taught in English, with appropriate assignments for students wishing to count this course toward the German Studies major.

### **GERM 342ct Literary Analysis (3)**

An in-depth study of distinctive works of various genres of German literature. Taught in English, with appropriate assignments for students wishing to count this course toward the German Studies major.

### **GERM 351Pc Advanced German Grammar (3)**

Prerequisite: Adequate proficiency in German. Historical perspectives on the development of German grammar, an overview of techniques for analysis of the language and application of the systematic patterns that characterize the current language. Taught in English, with appropriate assignments for students wishing to count this course toward the German Studies major.

### **GERM 352Pc German for Business (3)**

Prerequisite: GERM 322Pc or instructor's permission. Introduction to the language of German business and economics, including a comparative/contrastive overview of various German and American business systems, and domestic and international aspects. Emphasis on business language proficiency.

### **GERM 353Pc History of the German Language (3)**

Prerequisite: Adequate proficiency in German. Development of the German language is considered in light of larger patterns of interrelationship between language and society. Texts of cultural-historical significance are used to illustrate evolving patterns of language change. Taught in English, with appropriate assignments for students wishing to count this course toward the German Studies major.



**GERM 361ch German Cultural History (3)**

Advanced study of German civilization, emphasizing developments in language, literature, philosophy, the arts, traditions, institutions and customs from the early stages to the present. Taught in English, with appropriate assignments for students wishing to count this course toward the German Studies major. Taught concurrently with HIST 261ch. Students cannot receive credit for both GERM 361ch and HIST 261ch.

**GERM 390 Topics in German (3)**

Offered as needed to meet student needs and interests when these cannot be accommodated by regular offerings. Taught in English, with appropriate assignments for students wishing to count this course toward the German Studies major. May be repeated for credit when the course focuses on a different topic.

**GERM 494 Language Teaching Practicum (6-9)**

Offers opportunity to apply second-language teaching methodology in small-group setting. Emphasis on oral skill development. Will be supervised by a faculty member. May be repeated. Pass/no record basis.

**GERM 497I Internship in German (Arr)**

The German internship program is designed for the German language student who wants to broaden his/her classroom studies with an actual work experience in a German language environment. Pass/no record basis.

**GERM 499I Independent Study-German (Arr)**

Open to qualified students with departmental approval.

## History

**HIST 110fh Early Western Civilization (3)**

Provides an overview of Western civilization from approximately 4000 B.C. to 1789 with particular emphasis on the nature of historical interpretation and the question of continuity and change in western history. Promotes the development of college-level skills, with emphasis on writing and analytical thinking based on careful reading of some of the classics of the western intellectual tradition.

**HIST 111fh Modern Western Civilization (3)**

Provides an overview of Western civilization from approximately 1789 to present with particular emphasis on the nature of historical interpretation and the question of continuity and change in western history. Promotes the development of college-level skills with emphasis on writing and analytical thinking based on the careful reading of some of the classics of the western intellectual tradition.

**HIST 130h United States to 1877 (3)**

A survey of American history from European exploration and discovery through the Civil War and Reconstruction emphasizing political, economic, social and cultural development. The process of emerging problems and solutions will be analyzed.

**HIST 131h United States Since 1877 (3)**

A survey of American history from the last quarter of the nineteenth century until the Present emphasizing continued national development in political, economic, social and cultural arenas. The process of emerging problems and solutions will be analyzed.

**HIST 132fh Issues in American History (3)**

Addresses the changing interpretations of various topics in American history, as chosen by the instructor, from the colonial period to the present. Promotes the development of analytical thinking and writing and engages in dynamic learning with group discussions and individual presentations. May be repeated with different topics.

**HIST 150h Latin American Civilization (3)**

Provides an overview of Latin American civilization from 1400AD to the present, with special attention paid to the processes of colonization, the struggle for independence, and modernization. The course focuses on the roles of the institutions of church, state, and the military in each of those processes.

**HIST 170nh Early East Asian Civilization (3)**

Explores the historical foundations of Asian civilization from the earliest times to the 15th century with special emphasis on China and Japan.

**HIST 171nh Modern East Asian Civilization (3)**

Explores the development of Asian civilization from the 15th century to the present with special emphasis on comparing the histories of China and Japan.

**HIST 180nh Modern African Civilization (3)**

An interdisciplinary survey of cultures and life in modern Africa. Emphasis on sub-Saharan African history, art, political economy, women, development and society.

**HIST 211h Readings in European History (3)**

Designed to permit the student to select one of four countries—Spain, England, Germany or France—for intensive study through a program of reading and small group discussion. Some knowledge of European history is useful but not essential for taking this course. May be repeated with a different topic.

**HIST 212h World War and the Shaping of the 20<sup>th</sup> Century (3)**

A detailed examination of World War I and World War II. The causes and actual combat of both wars will be discussed and, for World War II, careful attention will be paid to the rise of Nazism, the Holocaust, and the Nuremberg trials. The ultimate goal is to investigate how these two wars shaped the twentieth century.

**HIST 213h The USSR (3)**

A political and social history, beginning with the prelude to the 1917 revolution, discussing the continuities and discontinuities in the development of the Soviet state and society and ending with the dissolution of the Soviet Union in 1989.

**HIST 214ch German Cultural History (3)**

A study of German cultural history emphasizing developments in literature, philosophy, the arts, institutions and customs from the early stages to the present. Taught concurrently with GERM 361ch. Students cannot receive credit for both GERM 361ch and HIST 261ch.

**HIST 220nh Middle Eastern Civilization (3)**

Studies the history of Middle Eastern Civilization from antiquity to the present through an examination of the major political events of the region in both the ancient and modern worlds and with particular interest in its three main religions, Judaism, Christianity and Islam. The course also examines the history of the recovery and reformulation of Classical Greek philosophy and science in the Arab world and studies the influence of Arabic philosophy on the medieval and modern political situation in the Middle East and Europe.

**HIST 221h Biblical Archaeology (3)**

Examines the history and culture of the Bible lands through the medium of archaeology. Introduces basic archaeological theory and field methods and surveys the archaeological periods of ancient Israel and Palestine from the first permanent settlements in the Neolithic era to the destruction of the first temple in 586 B.C.E.

**HIST 230h Foundations of American Nationalism (3)**

Examines the major influences in the development of national values and institutions from the Age of Discovery and Exploration and the Colonial Period through the American Revolution and the drafting of the Constitution in 1787.

**HIST 231h The Emerging United States: 1787-1877 (3)**

An examination of the major political, social, economic and cultural trends in the United States from its constitutional beginnings through Reconstruction. Major topics will include early national development, Jacksonian Democracy, Manifest Destiny and expansion, and slavery and the sectional crisis leading to the Civil War.

**HIST 232h The Origins of Modern America: 1877-1945 (3)**

Examines the transformation of the United States from Reconstruction through World War II when the nation evolved from isolation and pre-industrial values and institutions to a modern country characterized by industrialization, immigration, urbanization and international diplomacy and warfare.

**HIST 233h Post-Modern United States History: The Fifties and The Sixties 1945-1975**

An examination of the major political, economic, social, cultural, and diplomatic trends from World War II through the end of the Vietnam War and Richard Nixon's presidency. Major areas of consideration will include the Cold War at home and abroad, the Civil Rights Movement, Vietnam, the New Left and the Counterculture, the Women's Movement, and Nixon's presidency.

**HIST 234h Recent United States (3)**

An examination of the major political, economic, social, cultural, and diplomatic trends from the post-Watergate era through the present. Major areas of consideration will include the rise of the New Right in politics and culture, the limits of the American economy, Carter diplomacy, the impact of the Middle East Hostage Crisis, Ronald Reagan and the Cold War, the end of the Cold War, the New World Order, the computer and communications technology revolution, the 2000 presidential election, the impact of 9/11/01, and the wars with Iraq.

**HIST 240hs The U.S. in World Affairs (3)**

An examination of the historical evolution of major U.S. foreign policy-making institutions and processes, with emphasis on the post-1945 era. Analysis of guiding principles and patterns in U.S. foreign diplomatic, economic and military relations since 1898. Cross-listed as POLS 235hs.

**HIST 241h Oral History in Iowa (3)**

An introduction to the methodology of oral history, this course teaches students to record life history interviews with narrators of their choice, and to transcribe, index and obtain approval so they can be archived for the purposes of public and local history in Iowa. Course context is provided by a survey of Iowa history and field trips to oral history archives and museums in the state. Students have the opportunity to participate in existing oral history projects.

**HIST 244Ch History of Religion in Urban America (3)**

Offered only at the Chicago Metropolitan Center. Previous course work in American history is helpful but not required. Analyses various approaches to religious social engagement in American urban history from the Colonial era to the present, and the changing social context and the relationship between that context and the social engagement of religious people. Topics include religious responses to the market economy, race relations, gender roles and the relationship of church and state.

**HIST 271nh History of Modern China (3)**

Surveys the history of China from the Qing Dynasty to the present with special emphasis on social, economic, political, and cultural issues in Modern China.

**HIST 272nh History of Chinese Minorities (3)**

Examines the relationship of Han-Chinese and non-Han minorities, comparing their societies and governments. Discusses the contributions of northern and southern minorities. Explores the problems in present-day Chinese society and politics. Offered alternate years.

**HIST 275nh History of Modern Japan (3)**

Studies Japan's development toward modern statehood in the 19th century and continues with the economic, social, cultural and political life of 20th-century Japan.

**HIST 280nh African History (3)**

An introductory survey of African history from ancient Egypt to the present, with emphasis on the period between 1450 and 1960.

**HIST 310h Studies in World History (3)**

Addresses the changing interpretations of various topics in world history, as chosen by the instructor, from ancient times to the present. Promotes the development of analytical thinking and writing and engages in dynamic learning with group discussion and individual presentation. May be repeated with different topics.

**HIST 330h Studies in American History (3)**

Addresses the changing interpretation of various topics in American history, as chosen by the instructor, from the colonial period to the present. Promotes the development of analytical thinking and writing and engages in dynamic learning with group discussions and individual presentation. May be repeated with different topics.

**HIST 385I Seminar I-History (4)**

Prerequisites: history major and instructor's permission. Examines the nature of historical inquiry and methodology.

**HIST 386I Public History Seminar (4)**

Prerequisites: history major and instructor's permission. Examines the various fields of public history including archival theory and practice, documentary editing, historic preservation and restoration, museology, administration, oral, community and corporate history. Open to majors only, students should complete an appropriate number of history courses before enrolling in this seminar, which is normally offered fall semester of the junior or senior years.

**HIST 497I Internship: Public History (Arr)**

Prerequisite: instructor's permission. These are off-campus experiences designed to enrich a student's education through supervised practical experience in the field of public history. This can include work in the area of museum studies, archival theory and practice, historical preservation, oral history and local history. Pass/no record basis.

**HIST 499I Independent Study-History (Arr)**

Prerequisite: instructor's permission.

## Humanities

**HUM 101P Introduction to American Language and Civilization (4 or 8)**

Open only to international students. Presents principles and provides extensive practice in American patterns of written and oral expression, offers practice in the reading laboratory and directs an extensive program of readings and discussion on selected topics in American Civilization. Required of all entering international students.

**HUM 102P Introduction to American Language and Civilization II (4 or 8)**

A continuation of HUM 101P. Open only to international students. Presents principles and provides extensive practice in American patterns of written and oral expression, offers practice in the reading laboratory and directs an extensive program of readings and discussion on selected topics in American Civilization. Required of all entering international students.

**HUM 105c Adjusting to U.S. Culture (2)**

Open only to international students. Designed to help students examine and discuss their own experiences in the US and discover aspects of US life that underlie them. Experiences will be supplemented with readings, group discussions, journal writings, and excursions to explore various aspects of US culture, specifically Midwestern culture and college life, including history, politics, geography and cultural identity. Key aspects also include relationship issues with peers, faculty and administration, as students will understand US social interactions within the educational system. Offered pass/no record basis only.

## Mathematics

**MATH 102m Contemporary Mathematics (3)**

A non-technical survey of applications of contemporary mathematics, including topics such as networks, voting theory, probability, statistics and methods of counting. Explores the use of mathematics to better understand the world. Does not count toward the major.

**MATH 103P College Algebra (3)**

Prerequisite: two years of high school math at the algebra and above level. Essentials of algebra, including linear and quadratic equations and inequalities, polynomial functions and graphing. Does not count toward the major. Designed solely to prepare students for MATH 109Pm Pre-Calculus.

**MATH 105m Introduction to Statistics (4)**

Methods of organization, analysis, representation and the interpretation of data with applications to various fields. Does not count toward the major.

**MATH 107m Introduction to Finite Mathematics (3)**

Prerequisite: two years of high school mathematics. Graphing of equations and inequalities, elementary treatment of vectors and matrices, introduction to linear programming, selected applied topics. This course is designed for business management majors and does not count toward the mathematics major.

**MATH 109Pm Pre-Calculus (3)**

Prerequisite: MATH 103P or equivalent. Continuation of some college algebra topics and the study of functions, graphs, and their properties, including exponential, logarithmic and trigonometric functions. Does not count toward the major.

**MATH 115Pm Mathematical Concepts (3)**

Prerequisite/corequisite: EDUC 110f. Studies sets, logic, and the basic structure of the number systems. Particularly designated for the preparation of elementary teachers. Does not count toward the mathematics major.

**MATH 125m Historical Topics in Mathematics (3)**

Studies integers, rational numbers, algebraic ideas, measurement and geometry. Students will explore the invention of mathematics through the historical development of mathematics. Does not count towards the major.

**MATH 131Pm Calculus I (4)**

Prerequisite: usually, 4 years of college bound mathematics or MATH 109Pm. An introduction to differential calculus of functions of one variable. Covers concepts, mechanics, and applications of the derivative with an introduction to integral calculus.

**MATH 132Pm Calculus II (4)**

Prerequisite: MATH 131Pm. An introduction to integral calculus of functions of one variable. Covers the definite integral, techniques of integration, and applications of the integral, as well as sequences, series, and polynomial approximations of functions.

**MATH 210Pm Introduction to a Computer Algebra System (1)**

Prerequisite: MATH 131Pm (MATH 132Pm and COSC 110m recommended). Topics include the interface to the operating systems, basic syntax, use of the built-in functions, writing functions, graphics and programming in the language of the computer algebra system. Pass/no record basis.

**MATH 215Pm Applied Statistics (3)**

Prerequisite: MATH 109 or placement at the MATH 131 level (or above), or instructor permission. Introduces fundamental concepts of methods of statistics. Key ideas to be studied include data collection strategies and their scope of conclusion, the role of randomness in collecting data and drawing conclusions, graphical and numerical summaries of data, assessing statistical significance and estimating with confidence. Students may not receive credit for both MATH 105 and MATH 215.

**MATH 221Pm Foundations of Mathematics (3)**

Prerequisites: MATH 131Pm. Studies fundamental mathematical methods and objects: introductory logic, methods of proof, sets, functions, relations and infinities.

**MATH 231Pm Multivariable Calculus (3)**

Prerequisite: MATH 132Pm. Studies the principles, methods and applications of calculus in 3 or more dimensions.

**MATH 240Pm Linear Algebra (4)**

Prerequisite: MATH 131Pm. Studies matrices, vector spaces and linear mappings.

**MATH 250Pm Differential Equations (3)**

Prerequisites: MATH 132Pm. Solution of ordinary differential equations and systems of first order linear equations, qualitative analysis of differential equations and introduction to numerical techniques.

**MATH 260P Mathematical Questions from the Classroom (1)**

Corequisite: EDUC 451P (mathematics section). Develops connections between school and collegiate mathematics; develops pedagogy by addressing mathematical questions that arise in middle and high school classrooms. Explores middle school mathematics, introductory through advanced algebra, geometry, trigonometry, functions, probability, and calculus.

**MATH 310Pm Geometry (3)**

Prerequisites: MATH 221Pm. An emphasis will be placed on the axiomatic approach to geometry. Geometries considered may include finite, Euclidean, non-Euclidean and projective.

**MATH 330Pm Mathematical Modeling (3)**

Prerequisites: MATH 132Pm. Studies techniques for developing and interpreting mathematical models in several contexts such as: graphical models, proportionality, optimization, dynamic systems, probability, simulation and Markov processes.

**MATH 341Pm Probability (3)**

Prerequisites: MATH 132Pm. Includes axiomatic approach to probability, sample spaces and the study of distribution functions

**MATH 342Pm Statistics (3)**

Prerequisite: MATH 341Pm (MATH 231Pm recommended). Study of distribution functions, estimation techniques and hypothesis testing.

**MATH 370Pm Numerical Analysis (3)**

Prerequisites: MATH 132Pm. A treatment of solutions of equations, interpolation and approximations, numerical differentiation and integration, matrix methods and numerical solutions to ordinary differential equations. Cross-listed as COSC 370Pm.

**MATH 385P Mathematics/Computer Science Junior Seminar (2)**

Prerequisites: junior standing and a declared major in the mathematics and computer science department. An introduction to the research, reading, and presentation of advanced material in mathematics. Cross-listed as COSC 385P.

**MATH 390/490 Topics: Mathematics (Arr)**

Various topics in mathematics can be studied depending upon the interest and demand shown by students. The student's transcript will indicate the topic studied.

**MATH 396I Co-op Internship: Math/Computer Science (Arr)**

Prerequisite: instructor's permission. The internship provides an opportunity for the student to explore a career option in the major field of study. Pass/no record basis.

**MATH 397I Internship: Math/Computer Science (Arr)**

Prerequisite: instructor's permission. The internship provides an opportunity for the student to explore a career option in the major field of study. Pass/no record basis.

**MATH 421Pm Abstract Algebra I (3)**

Prerequisites: MATH 221Pm (MATH 240Pm recommended).. Introduction to abstract mathematical systems, groups, rings and fields.

**MATH 422Pm Abstract Algebra II (3)**

Prerequisite: MATH 421Pm. Continues the study of abstract mathematical systems, groups rings and fields.

**MATH 431Pm Real Analysis I (3)**

Prerequisites: MATH 221Pm. A theoretical study of functions of a real variable with emphasis on precise definitions and rigorous proofs.

**MATH 432Pm Real Analysis II (3)**

Prerequisites: MATH 431Pm. A continuation of MATH 431Pm. Continues the study of functions of a real variable with emphasis on precise definitions and rigorous proofs.

**MATH 485P Mathematics/Computer Science Senior Seminar (1)**

Prerequisites: senior standing and a declared major in the mathematics and computer science department. Students research and present (orally and in writing) an advanced topic of their choice in mathematics. Cross-listed as COSC 485P.

## Music

**MUS 102 Introduction to Singing (1)**

An introduction to singing and to the basic elements of music. Features exercises to develop skill in the use of the singing voice, as well as exercises in musical notation (pitch and rhythm) and the ability to recognize and sing melodic intervals, the "building blocks" of melody. No previous singing or music-reading experience required.

**MUS 108na Studies in Music (1)**

A study of music for the general student with a non-Western, minority, and/or indigenous focus. No prior knowledge of music is necessary.

**MUS 109xa Studies in Music (1)**

A study of music for the general student with an experiential component. No prior knowledge of music is necessary.

**MUS 110ca Studies in Music (1)**

A study of one aspect of music, such as a particular genre, composer or historical style. Designed for the general student. No prior knowledge of music is necessary.

**MUS 111a Music in Time (3)**

An introduction to the study of music through exploring a particular style or historical period, including social and cultural influences on the music. This course is designed primarily for the non-music major as an introduction to creative listening. Offered occasionally at instructor's discretion in lieu of MUS 112.

**MUS 112fa Art of Music (3)**

A study of art music in the Western tradition with an emphasis on developing listening skills. Extensive writing is incorporated. Emphasizes the creative process; students respond to music through listening to live performances and recorded musical works both independently and in class.

**MUS 114na World Music (3)**

Explores the music of world cultures that are not normally addressed in traditional western European-based courses in music. Includes music of India, Africa, Latin America, the Middle East and other world cultures.

**MUS 120 Theory and Aural Skills I (5)**

A study of the relationships of rhythm, harmony, and melody. Class activities include writing and performing music, sight singing, and exercises in keyboard harmony, score reading and ear training. A one or two hour keyboard lab per week is required, based on level of keyboard proficiency.

**MUS 125P Theory and Aural Skills II (5)**

Prerequisite: MUS 120. A continuation of MUS 120. A one or two hour keyboard lab per week is required, based on level of keyboard proficiency.

**MUS 130I Jazz Theory I (2)**

Prerequisite: instructor permission. Addresses chord construction and notation, scales, chord function and substitution and tune analysis. Keyboard skills and ear training in jazz progressions will be included. Offered alternate years.

**MUS 211a Music History I (3)**

The study of musical development from pre-Christian antiquity to 1750, with emphasis on the Middle Ages, Renaissance and Baroque.

**MUS 212a Music History II (3)**

The study of musical development from 1750 to the present, with emphasis on the Classical, Romantic, Impressionistic and Modern periods.

**MUS 217I Intermediate Keyboard I (1)**

Prerequisite: instructor's permission. Furthers the student's progress in acquiring fundamentals of playing a keyboard instrument, including sight-reading, harmonization, transposition, aural development, repertoire and technique.

**MUS 218I Intermediate Keyboard II (1)**

Prerequisite: instructor's permission. Furthers the student's progress to acquire fundamentals of playing a keyboard instrument, including sight-reading, harmonization, transposition, aural development, technique, ensemble playing, repertoire and hymn-playing.

**MUS 220P Theory and Aural Skills III (4)**

Prerequisite: MUS 125P. A continuation of Theory and Aural Skills II.

**MUS 225 Italian Diction (.5)**

Principles of Italian pronunciation for singers, using the International Phonetic Alphabet to represent the sounds of Italian. Singing and piano accompanying are integral components of the course. No prior study of Italian is required. Offered alternate years.

**MUS 226 German Diction (.5)**

Principles of German pronunciation for singers, using the International Phonetic Alphabet to represent the sounds of German. Singing and piano accompanying are integral components of the course. No prior study of German is required. Offered alternate years.

**MUS 227 French Diction (.5)**

Principles of French pronunciation for singers, including using the International Phonetic Alphabet to represent the sounds of French. Singing and piano accompanying are integral components of the course. No prior study of French is required. Offered alternate years.

**MUS 228I Introduction to Piano Pedagogy (2)**

Prerequisite: instructor's permission. An introduction to the teaching of piano, including both a study of methodology and practical observation and supervised teaching.

**MUS 230PI Jazz Theory II (2)**

Prerequisite: MUS 130I and instructor permission. Continues content and skill development of Jazz Theory I. Offered alternate years.

**MUS 235P Theory and Aural Skills IV (4)**

Prerequisite: MUS 220P. A study of contemporary theory derived from jazz and popular music. Includes composition and improvisation in a variety of styles, as well as basic arranging techniques.

**MUS 240 Music Technology (1)**

An introduction to computer software available for the music idiom.

**MUS 241 Elementary School Music (2)**

Presents basic music skills for the general classroom teacher. Provides insight into the methodology of Orff and Kodály through participation. Emphasis on the cultural and social values of music that can enhance the general classroom environment.

**MUS 317a Church Music (1)**

A study of the heritage and scope of church music through readings, discussions and performances. Hymnody is a strong component. Available to non-music majors without prerequisite. Offered alternate years.

**MUS 323P Orchestration (1)**

Prerequisite: MUS 220P. Studies the techniques of arranging music for instrumental ensembles. Offered alternate years.

**MUS 324I Methods and Materials of Instrumental Literature (1)**

Prerequisites: Instructor permission. Primarily for instrumental music education majors this course provides a survey of instrumental literature for elementary through professional levels. Particular emphasis is placed on literature for the school instrumental music director. Offered alternate years.

**MUS 328I Methods and Materials of Choral Literature (1)**

Prerequisites: Instructor permission. Primarily for vocal music education students, this course provides a study of the various choral music forms and representative works of particular use to school choral music directors.

**MUS 330P Advanced Literature Seminar (2)**

Prerequisites: MUS 235P, MUS 211a, MUS 212a. Provides the opportunity for upper-level music students to research and present selected topics from the literature of genres such as orchestral, chamber, symphonic, concerto, art song, opera and oratorio.

**MUS 331P Conducting (2)**

Prerequisites: MUS 125P. A study of fundamental conducting techniques, both choral and instrumental.

**MUS 332P Advanced Choral Conducting (2)**

Prerequisite: MUS 331P. Advanced conducting with emphasis on choral music and techniques of choir development.

**MUS 333PI Advanced Instrumental Conducting (2)**

Prerequisites: MUS 331P and instructor's permission. Advanced conducting with emphasis on instrumental music and ensemble development.

**MUS 334 Marching Band Techniques (1)**

Studies the materials, organization and methods for charting marching band shows for school programs. Offered alternate years.

**MUS 335 Jazz Band Techniques (1)**

Studies the materials, organization and methods for teaching improvisation to musicians in jazz programs. Offered alternate years.

**MUS 341P Vocal Pedagogy (3)**

Prerequisite: two semesters of private voice study, or instructor's permission. An introduction to the teaching of singing. Topics covered include the structure and function of the vocal mechanism; principles of good vocal technique; methods of teaching voice, and sources of repertoire for beginning voice students. During the final six weeks of the semester, class members will give lessons to two beginning voice students with supervision and feedback. Offered alternate years.

**MUS 342P Methods for Elementary Music (3)**

Prerequisites: MUS 125P. Meets the requirement for professional teaching certification for elementary music education majors or minors. Systematic methodology is based primarily on the principles of Orff and Kodály. Includes recorder instruction. Offered alternate years.

**MUS 349 Instrumental Methods: Percussion (1)**

Designed as a basic methods course for prospective instrumental music teachers. Each student in the class learns to play the instruments included in the course and the basic techniques of teaching the instruments. Other information relating to effective teaching (e.g., history of the instruments, selection of instruments, repertoire) is also addressed. Offered alternate years. Offered alternate years.

**MUS 350 Instrumental Methods: Woodwinds (1)**

Designed as a basic methods course for prospective instrumental music teachers. Each student in the class learns to play the instruments included in the course and the basic techniques of teaching the instruments. Other information relating to effective teaching (e.g., history of the instruments, selection of instruments, repertoire) is also addressed.

**MUS 351 Instrumental Methods: Brass (1)**

Designed as a basic methods course for prospective instrumental music teachers. Each student in the class learns to play the instruments included in the course and the basic techniques of teaching the instruments. Other information relating to effective teaching (e.g., history of the instruments, selection of instruments, repertoire) is also addressed.

**MUS 352 Instrumental Methods: Strings (1)**

Designed as a basic methods course for prospective instrumental music teachers. Each student in the class learns to play the instruments included in the course and the basic techniques of teaching the instruments. Other information relating to effective teaching (e.g., history of the instruments, selection of instruments, repertoire) is also addressed.

**MUS 481PI Church Music Field Experience (1)**

Prerequisites: Appropriate number of applied lessons in the primary performance field, MUS 317a, and instructor's permission. Consists of supervised service playing and/or choral conducting in an area church, the site to be chosen collaboratively between the student and the supervising music faculty member. Offered on request.

**MUS 484P Elementary Music Field Experience (1)**

Prerequisite: MUS 342P. A practicum for providing actual teaching experience in a supervised environment along with a weekly seminar. Offered alternate years.

**MUS 397/497PI Internship (Arr)**

Prerequisite: Departmental approval and instructor's approval. An applied experience in the major, requiring a minimum number of hours of work per credit hour. Includes conferences with the on-campus instructor and an evaluation by the job supervisor. Pass/no record basis. Offered on request.

**MUS 499I Independent Study (Arr)**

Prerequisite: instructor's permission. Research in approved topics. May be repeated on demand. Offered on request.

## Music (groups/ensembles)

### **MUSG 220Ia Central College-Community Chorus (.5)**

Prerequisite: instructor's permission. Students, faculty and local area vocalists are eligible for membership. Two concerts featuring major choral works are presented each year.

### **MUSG 221a Central College-Community Band (.5)**

Open to all woodwind, brass, and percussionists without audition, performs concerts annually. Repertoire includes different classical style periods as well as popular band music. Ensemble includes community members. Students, faculty and local area instrumentalists are eligible for membership.

### **MUSG 222Ia A Cappella Choir (.5)**

Prerequisite: instructor's permission. Members are admitted after auditions at the discretion of the director. Repertoire includes works of many styles and periods. The choir sings on a number of occasions throughout the school year and makes a concert tour each spring.

### **MUSG 223Ia Symphonic Wind Ensemble (.5)**

Prerequisite: instructor's permission. The Symphonic Wind Ensemble is open to all students by audition. Emphasis is on the performance of quality wind band literature. Performances include on-campus concerts, a concert tour each spring and a concert preceding the annual commencement exercises in May.

### **MUSG 224Ia Central College-Community Orchestra (.5)**

Prerequisite: instructor's permission. The orchestra includes students, faculty, local and area musicians and guest artists. Several concerts featuring a variety of excellent literature are performed throughout the school year.

### **MUSG 225Ia Jazz Ensemble (.5)**

Prerequisite: instructor's permission. The group is organized to study and perform music of the American jazz idiom with emphasis on both individual improvisation and ensemble playing. Students are chosen by audition.

### **MUSG 226Ia Chamber Ensemble (.5)**

Prerequisite: instructor's permission. Devoted to the study and performance of chamber music literature, the course culminates in a public, department-sponsored performance. Students are chosen by audition from members of the primary ensemble appropriate for their instrument.

### **MUSG 227Ia Chamber Singers (.5)**

Prerequisite: instructor's permission. Specializing in music for the small vocal ensemble, the group is chosen by audition from the A Cappella Choir membership. Performances include the spring tour, Christmas candlelight concerts, and occasional music theatre productions.

### **MUSG 228Ia Ensemble: Accompanying (.5)**

Prerequisite: instructor's permission. Primary keyboard ensemble in the music department. Gives keyboard students the opportunity to develop their skills as piano accompanists, under the supervision of a keyboard instructor.

### **MUSG 229Ia Piano Ensemble (.5)**

Prerequisite: instructor's permission. Open by audition to pianists accompanying through the music department. Offered during spring semester, the ensemble culminates in a concert of piano ensemble literature. Offered alternate years.

## Music Lessons (Private instruction)

### **MUSL 1xx Applied Lessons (1)**

Private applied lessons at the 100-level provide the student with individualized instruction of one half-hour per week in the registered instrumental or vocal area. The course includes the study of musicianship, technique and performance appropriate to the student's level and ability. Over the course of several semesters, the student will study works from all major historical styles applicable to a particular performance medium. The student is required to attend a departmental recital and performance once per semester or Music Major Seminar. For beginning voice students, music reading ability is normally a prerequisite. Beginning piano students take MUS 117I, 118I, 219I and 218I. Private applied lessons are available in the areas of voice, brass, keyboard, percussion, strings, woodwinds, and jazz improvisation. Class lessons are available at the discretion of the instructor; a minimum of three persons is necessary to constitute a class, which meets for 50 minutes per week at 1 semester hour credit.

### **MUSL 3xxI Applied Lessons (2)**

Prerequisite: instructor's permission. Private applied lessons at the MUSL 300 level provide the student with individualized instruction of one hour per week in the registered instrumental or vocal area. The course includes intensive study of musicianship, technique and performance. Over the course of several semesters, the student will study works from all major historical styles applicable to a particular performance medium. Students are required to attend a departmental recital and performance once per semester or Music Major Seminar. Private applied lessons are available in the areas of voice, brass, keyboard, percussion, strings, woodwinds, and jazz improvisation.

## Natural Science

### **NASC 100q Nature of Science (3)**

Interdisciplinary course. No laboratory. Designed for students who plan to concentrate in disciplines other than the natural sciences. The approach to problem-solving that has developed in the physical and biological sciences and the relation of science to other human experiences are explored through reading and discussion of a variety of source publications. Emphasis depends on instructor.



**NASC 110Pq Concepts in Natural Science with Lab (4)**

Prerequisites: Admission to the teacher education program. A study of the process of science and the knowledge accumulated by this process. A unified approach to selected topics in science: includes physical, biological and earth sciences. One lab per week.

**NASC 120q Introduction to Environmental Science with Lab (4)**

Introduction to the structure and function of ecosystems and how they are altered by human activity. Surveys various environmental issues such as human population problems, endangered species and habitats, land and food resources, human health and the environment, water and energy resources, and air pollution. One 3-hour lab per week.

**NASC 125q Geology with Lab (3)**

Introduction to the elementary principles of physical geology, including identification of minerals and the major rock types as well as the processes forming them through tectonic activity and geomorphic agents. Examines natural hazards in their geological context, reviews events over geologic time and the geologic history of Iowa. Includes a 3-hour lab and field trips.

**NASC 210q Introduction to GIS with Lab (3)**

Introduces students to the basic concepts of GIS and its applications to natural resource management, marketing, and disaster preparedness. Covers the fundamental components of Geographic Information Systems including types of spatial data, entry, analysis and display into a GIS, as well as creating and managing GIS projects. One two-hour lab per week.

**NASC 222Iq Field Studies (3)**

Prerequisite: instructor's permission. An extended field trip to explore the natural history, science or environment of another geographic region. Examines the natural and socio-cultural conditions, including extensive outdoor fieldwork. Can be repeated for credit if a different location is visited. NASC 222Iq and NASC 322Iq cannot be taken at the same geographical location.

**NASC 237q Physical Geography with Lab (4)**

Explores how the earth's natural systems work (climatic, hydrosphere, biosphere, soils and land forming), their interrelationships and how they work to create natural regions.

**NASC 299PI Independent Study (Arr)**

Prerequisite: a previous course in the natural sciences. An introduction to research focusing on a well-defined topic in the natural sciences. Research will be supervised by a professor in the division.

**NASC 315P Computational Science Methods (4)**

Prerequisites: MATH 132Pm, COSC 130Pm, and either BIOL 131Pq, CHEM 235Pq, or PHYS 112Pmq. Studies methods of computational science including simulation, visualization, high performance computing, and numerical techniques. Emphasis is placed on the application of these methods to research projects.

**NASC 322PIq Advanced Field Studies (3)**

Prerequisite: Any BIOL, CHEM, NASSC, or PHYS course numbered 110 or higher and instructor's permission. An extended field trip to explore the natural history, science or environment of another geographic region. Examines the natural and socio-cultural conditions, including extensive outdoor field work. Students will conduct an experimental investigation and present a research report. Can be repeated for credit if a different location is visited. NASC 222Iq and NASC 322Iq cannot be taken at the same geographic location.

**NASC 335Pq Surface and Groundwater Resources with Lab (3)**

Prerequisite: NASC 125q or NASC 237q, or instructor's permission. Introduces basic principles of hydrogeology and hydrology that are of relevance to a wide array of problems in environmental science and resource management. Topics such as hydrologic budget, mechanics of surface and groundwater movement, water resource assessment and allocation, causes and abatement of pollution and of consequences of human activities on hydrologic systems are emphasized.

**NASC 380P Environmental Studies Seminar (1)**

Prerequisite NASC 120 or instructor permission. Examines current environmental issues from an interdisciplinary perspective, through readings and discussion of environmental literature. Students will be required to present and communicate effectively on topics at hand. Specific topics will depend on the interests of the students and instructor(s).

**NASC 480PI Environmental Studies Senior Seminar (1)**

Prerequisite: NASC 380P or instructor permission. Examines current environmental issues from an interdisciplinary perspective. Students will be required to present and communicate effectively on topics at hand. Specific topics will depend on the interests of the students and instructor(s).

## Philosophy

**PHIL 120ft Introduction to Philosophy (3)**

An examination of four significant philosophical issues, typically including one social issue (e.g., the morality of capital punishment), ethical relativism and objectivity, relationship between human freedom and the scientific outlook, and rationality of belief in God). Develops analytical thinking, critical reading and writing and sensitivity to argumentation.

**PHIL 121ft Ethics (3)**

The course examines two questions that have exercised moral philosophers in the West at least since the time of Plato: Are assessments of moral right and wrong any more than expressions of personal or group preferences? What is the proper relation between morality and the law in a society that values highly the rights and interests of individuals? The course promotes college-level skills especially writing and analytical reading.

**PHIL 122f Social Issues (3)**

Addresses issues that create conflicts and controversies in contemporary society such as the legality and morality of abortion, the death penalty, homosexuality, and pornographic material. Promotes college-level skills, especially writing and analytical reading.

**PHIL 125m General Logic (3)**

Introduces the analysis of arguments, including such topics as the uses of language, definitions, fallacies, and the rules of valid deductive inference in syllogistic arguments. Designed to help students with reasoning processes.

**PHIL 126ft Aesthetics (3)**

Can aesthetic assessments be true or false? Or are such assessments merely expressions of individual preferences? This course examines the nature and importance of aesthetic judgment. It draws on established classics and contemporary efforts by philosophers, artists, critics, among others. Promotes college-level skills, especially writing and analytical reading.

**PHIL 127ft Meaning of Life (3)**

Explores the concept of the meaning of life through alternative theories of the basis of value; nihilist, existentialist, rationalist, religious and naturalist selections are studied. Emphasizes critical reading and thinking, presentation and assessment of arguments in speech and on paper.

**PHIL 128nt Philosophies in the Far East: China and Japan in Comparison (3)**

Introduces the philosophical development of China and Japan from the same Confucian tradition. Explores the different interpretation and dynamics of East Asian traditional thought that have influenced modern China and modern Japan. Discusses Western viewpoints on East Asian philosophy.

**PHIL 221t Classical Thought (3)**

A study of the major classical thinkers in Western philosophy, from the pre-Socratics through the Middle Ages, with emphasis on Plato, Aristotle and Aquinas.

**PHIL 222t Modern Thought (3)**

A study of selected thinkers and movements shaping the modern western tradition. The focus will be on the work of Descartes, Locke, Berkeley Hume and Kant.

**PHIL 223t Contemporary Philosophy (3)**

An examination of recent thinkers and trends in philosophy. The philosophical schools and movements studied may include Existentialism, Pragmatism, Postmodernism, Deconstructionism, and Feminism. Topics will vary but may include the nature of the self, bases of ethics, and our relationship to society and God. At least one prior course in philosophy is recommended.

**PHIL 225t Modern Continental Philosophy (3)**

A survey of the history of continental philosophy from Hegel to the present, with emphasis on Hegel, Nietzsche, Heidegger, and the post-Heideggerians. No formal prerequisites.

**PHIL 228nt Asian Philosophy (3)**

A survey of the major streams of thought in the Asian tradition including Confucianism, Taoism, Hinduism and Buddhism. Key philosophical concepts such as reality, knowledge, self and ethics will be examined and compared with traditional Western viewpoints.

**PHIL 240t Political Philosophy (3)**

A historical survey of Western political thinkers from Plato to the present, with emphasis on changing cultural/historical contexts.

**PHIL 244t Business Ethics (3)**

Applied philosophy focusing on issues especially relevant to the business world such as affirmative action; product liability; obligations of advertisers; whistle-blowing; the social responsibility of business; privacy; sex discrimination.

**PHIL 245t Environmental Ethics (3)**

Examines a variety of moral and social issues regarding the relationship between human beings and non-human nature. Issues include the rights of non-humans, ecological obligations to future generations, the value of diversity of life, land use and vegetarianism, obligations to feed the world, and dominion vs. stewardship.

**PHIL 247t Existentialism (3)**

Explores the intellectual and cultural movement known as Existentialism through a variety of key literary and philosophical texts. Authors whose works may be considered include Dostoevsky, Nietzsche, Kierkegaard, Kafka, Unamuno, Beckett, Beauvoir, Sartre, Camus, and Percy.

**PHIL 255Pt Feminist Philosophy (3)**

Prerequisite: junior standing or instructor's permission. Surveys recent developments in feminist philosophy and feminist theory. Topics covered may include feminist critiques of the traditional canon, gender differences and identity, feminist epistemology, the ethics of care, and feminist critiques of racism, sexism, and homophobia.

**PHIL 260t Metaphysics (3)**

This course explores the extent to which the distinctions we draw have any basis independent of us (e.g. mind and body, person and world, causes and non-causes, etc.).

**PHIL 261t Moral Philosophy (3)**

A survey of major theories of normative ethics, principally concerning the nature of the basis of moral judgments. Aristotelian, Kantian and utilitarian traditions will be studied.

**PHIL 262 Philosophy of the Sciences (3)**

Discusses philosophical problems raised by modern science, technology and human freedom. Concerns the fundamental shifts that have taken place in the understanding of physical, biological, social and historical sciences, social and historical sciences, social responsibility and the sciences.

**PHIL 264t Theory of Knowledge (3)**

Drawing on classical sources, the course will focus on philosophical attempts to describe the nature of ordinary everyday knowledge, religious knowledge, moral knowledge, and scientific knowledge, and the differences that distinguish them.

**PHIL 265t Philosophy of Mind (3)**

Examines philosophical attempts to understand the nature of the mind. Considers a variety of efforts to explain how mental phenomena fit into a physical universe. Examines theories including dualism, behaviorism, functionalism, and identity theory. At least one prior course in philosophy is recommended.

**PHIL 286Ct Values and Vocations (3)**

Field work in contemporary values issues and discussions of their moral, aesthetic and religious implications for a life and world view. To be taken in Chicago.

**PHIL 323t Readings in Contemporary Philosophy (4)**

Offer jointly with PHIL 223t and covering the same topics but with some separate assignments, sessions and expectations for advanced discussion and research. Students cannot receive credit for both PHIL 223t and PHIL 323t.

**PHIL 347t Readings in Existentialism (4)**

Offered jointly with PHIL 247t and covering the same topics but with some separate assignments, sessions and expectations for advanced discussion and research. Students cannot receive credit for both PHIL 247t and PHIL 347t.

**PHIL 360It Readings in Metaphysics (4)**

Offered jointly with PHIL 260t and covering the same topics but with some separate assignments, sessions and expectations for advanced discussion and research. Students cannot receive credit for both 260t and 360It.

**PHIL 361It Readings in Moral Philosophy (4)**

Offered jointly with PHIL 261t and covering the same topics but with some separate assignments, sessions and expectations for advanced discussion and research. Students cannot receive credit for both PHIL 261t and 361It.

**PHIL 362It Readings in Philosophy of the Sciences (3)**

Offered jointly with PHIL 262t and covering the same topics but with some separate assignments, sessions and expectations for advanced discussion and research. Students cannot receive credit for both PHIL 262t and 362It.

**PHIL 390 Topics in Philosophy (Arr)**

Varying topics determined by the interests of students and the staff. May be repeated for credit.

**PHIL 399I Independent Study (Arr)****PHIL 397/497PI Internship (Arr)**

Prerequisite: departmental approval and instructor approval. An applied experience in the major, requiring a minimum number of hours of work per credit hour. Includes conferences with the on-campus instructor and an evaluation by the job supervisor. Pass/no record basis.

## Physics

**PHYS 101Pmq Introductory Physics I with Lab (4)**

Prerequisite: high school algebra. A thorough basic course studying fundamental physics and laboratory techniques necessary for understanding science and its relation to everyday experiences. One three-hour lab per week.

**PHYS 102Pmq Introductory Physics II with Lab (4)**

Prerequisite: PHYS 101Pmq. A continuation of PHYS 101Pmq. One three-hour lab per week.

**PHYS 106Pq Introductory Astronomy (3)**

Prerequisite: high school algebra. A descriptive course dealing with the celestial sphere, the solar system, stars and galaxies. It presents the astronomical phenomena of the universe in the context of physical science and examines related laws in the context of current issues in planetary and space sciences. This course is open to all students who desire a basic understanding of their astronomical environment. Of value to future teachers and anyone interested in how mathematics is integrated into science. Night viewing sessions are required.

**PHYS 111Pmq General Physics I with Lab (5)**

Co-requisite: MATH 131Pm. A thorough basic course in all major branches of classical physics with an emphasis on mathematical analysis. Designed for physics, chemistry, and engineering majors. Required for advanced physics courses. One three-hour lab per week.

**PHYS 112Pmq General Physics II with Lab (5)**

Prerequisite: PHYS 111Pmq; Co-requisite: MATH 132Pm. A continuation of PHYS 111Pmq. Designed for physics, chemistry, and engineering majors. Required for advanced physics courses. One three-hour lab per week.

**PHYS 204Pq Energy and Environment (3)**

Prerequisite: sophomore standing. An examination of energy-related problems both ecological and social from a physical science perspective. Investigation is made of the historical origins of these problems, a description is given of the problems as they exist in various cultures today, and some policies of energy usage are examined, followed by a scenario of outcomes as a result of implementation of various policies. Emphasis is placed on the natural principles underlying the problems and evaluations of the problems in this light. Does not count toward the major.

**PHYS 211Pq Analog Electronics with Lab (3)**

Prerequisite: PHYS 112Pmq. Topics covered include voltage dividers, filters, diodes, rectifiers, bipolar and FET transistors and related circuits, operational amplifiers and related circuits, oscillators, and power supplies. Another goal of this course is to enable students to use modern electronic laboratory instruments with a basic understanding of how they work. Three hours of lab per week.

**PHYS 212Pq Digital Electronics with Lab (3)**

Prerequisite: PHYS 211P or instructor's permission. Topics covered include gates and combinational circuits, flip-flops, counters and other sequential circuits, memories, digital-to-analog conversion and analog-to-digital conversion, and CPUs. The final series of labs, in which a microcomputer gradually takes form from the chip level, draws together every one of the several circuit elements met earlier. The CPU's assembly language is used to run programs on the microcomputer. Three hours of lab per week.

**PHYS 221Pq Modern Physics I (3)**

Prerequisite: PHYS 112Pmq. Special theory of relativity, quantization of electromagnetic waves and photons, wave properties of matter, structure of the atom, and introductory quantum mechanics.

**PHYS 222Pq Modern Physics II (3)**

Prerequisite: PHYS 221Pq. Continuation of PHYS 221. Applications of introductory quantum theory to the subjects of solid state physics and nuclear physics. An introduction to sub-atomic particles called quarks and leptons.

**PHYS 321Pq Electricity and Magnetism I (3)**

Prerequisites: PHYS 112Pmq; Pre- or co-requisite: MATH 231Pm or instructor permission. Electrostatics, electric fields in matter, magnetostatics, and magnetic fields in matter.

**PHYS 322Pq Optics (3)**

Prerequisite: PHYS 112Pmq; Co-requisite: MATH 231Pm or instructor's permission. Light as an electromagnetic wave, propagation of light, geometrical optics, polarization, interference, diffraction, and their applications.

**PHYS 324P Thermodynamics (3)**

Prerequisites: PHYS 112Pmq; Pre- or co-requisite: MATH 231Pm or instructor permission. First and second laws of thermodynamics, thermodynamic potentials, and an introduction to kinetic theory and statistical mechanics.

**PHYS 326Pq Analytical Mechanics (4)**

Prerequisites: PHYS 112Pmq; Pre- or co-requisite: MATH 231Pm or instructor permission. Dynamics of a single particle, oscillations, noninertial reference frames, central forces, gravitation, Kepler's laws, dynamics of systems of particles, mechanics of rigid bodies, and Lagrangian mechanics.

**PHYS 328PI Engineering Problems (4)**

Prerequisites: MATH 231Pm and PHYS 112Pmq and instructor's permission. Series solutions of differential equations, Bessel's equation, Legendre's equation; orthogonal functions; the Laplace transform and applications; differential and integral calculus; Fourier series; solutions of partial differential equations of mathematical physics.

**PHYS 331P Advanced Laboratories (2)**

Corequisites: PHYS 221Pq and junior standing. A laboratory investigation of all major branches of physics with an emphasis on experimental design and procedures, precise data collection, quantitative data analysis, and professional written reports in a research atmosphere of independent thinking. Two semesters required for a major.

**PHYS 412P Quantum Mechanics (4)**

Prerequisites: PHYS 221Pq; Pre- or co-requisite: MATH 231Pm or instructor permission. The Schrodinger equation, hydrogen atom, simple harmonic oscillator, expectation values, eigenvalues, eigenfunctions, operators.

**PHYS 421P Electricity and Magnetism II (3)**

Prerequisite: PHYS 321Pq. A continuation of PHYS 321Pq. Electric currents, electromagnetic induction, Maxwell's equations, energy, momentum and angular momentum of electromagnetic fields and their conservation, electromagnetic waves, fields of moving charges, and radiation of electromagnetic waves.

**PHYS 397/497PI Internship (Arr)**

Prerequisites: departmental approval and instructor's permission. An applied experience in the major, requiring a minimum number of hours of work per credit hour. Includes conferences with the on-campus instructor and an evaluation by the job supervisor. Pass/no record basis.

**PHYS 498I Tutorial Research (Arr)**

Prerequisites: PHYS 222Pq and instructor's permission. Intensive library and laboratory or theoretical research in topics of special interest to advanced students.

## Political Science

*Note: Some courses may be taken at either the 200 or 300 level. Majors and potential majors should enroll at the 300 level. For all such courses the 300-level version requires separate readings, sessions, and expectations for advanced discussion and research. Students cannot receive 200- and 300-level credit for the same course.*

### **POLS 110s Introduction to American Politics (3)**

An examination of political life in the United States with attention to the environment in which politics takes place and the traditional institutions that comprise the federal government. This course may be used for teacher certification

### **POLS 140fs Introduction to International Politics (3)**

Basic survey of the contemporary international political system with emphasis on key concepts of power, sovereignty, and national interest; studies global patterns and trends in relations between major state and non-state actors. Special attention is devoted to sources and consequences of conflicts, global politics of transnational problems of environment, development, and international political economy. Promotes development of critical thinking, analytical reading and writing, research skills and collaborative learning.

### **POLS 212s: Congress (3)**

An examination of parliamentary and legislative behavior focusing on the U.S. Congress. Discussion will focus on the implications of legislative behavior on the formation of public policy, why institutional rules and procedures matter, and how American political institutions help maintain our democratic form of government.

### **POLS 213s: Courts (3)**

An examination of judicial behavior focusing on the U.S. court system. Discussion will focus on the implications of judicial behavior on the formation of public policy, why institutional rules and procedures matter, and how American political institutions help maintain our democratic form of government.

### **POLS 214s The Presidency (3)**

An examination of executive behavior focusing on the U.S. presidency. Discussion will focus on the implications of executive behavior on the formation of public policy, why institutional rules and procedures matter, and how American political institutions help maintain our democratic form of government.

### **POLS 215s The Politics of State and Local Governments (3)**

An examination of government and politics at the state and local level. Topics covered will include state-level institutions and processes, local-level institutions and processes, urban politics, and Iowa politics. Emphasis will be placed on how state and local governments fit into the American political system. Formerly numbered POLS 354.

### **POLS 216Ps Political Behavior: Political Participation, Elections, and Media (3)**

An examination of the major topics in political behavior, including political participation, voting behavior, elections, and media. Discussion will be directed toward assessing the impact of the aforementioned upon the formation of public policy, implications for political institutions, and the maintenance of democratic government.

### **POLS 222nhs African Politics Since 1935 (3)**

A comparative historical analysis of African countries' political institutions and processes, from the early nationalist period to the present. Special focus on political, economic, and foreign policy problems and strategies of independent African countries. Cross-listed as HIST 222nhs.

### **POLS 223hs Contemporary Europe (3)**

A survey of European history and politics since WWII, with emphasis on the process of political economic and cultural integration within the European Union. Special attention is paid to political and socioeconomic change in Great Britain, France and Germany in the context of the development of the European Union. Students also analyze postwar political and socioeconomic development in a European country of personal interest. Cross-listed as HIST 223hs.

### **POLS 225hs Modern Latin America (3)**

A cross-national comparison of political, socioeconomic and cultural development in Latin America from 1870 to the present. Countries of focus are Brazil, Argentina, Chile, Mexico, and Cuba. Studies the cycles of dictatorship and democracy, economic boom and bust, and political and social economic liberalization since the mid-1980s. Cross-listed as HIST 225hs.

### **POLS 230nhs Africa, Asia, and Latin America in World Affairs (3)**

A comparative historical and institutional analysis of post-1945 African, Asian, and Latin American states' foreign policies. Special attention given to the colonial roots of post-independence, foreign economic, diplomatic, and military policies of each case. Focus will be on domestic sources of foreign policy. Cross-listed as HIST 230nhs.

### **POLS 231nhs The Middle East in World Affairs (3)**

A comparative historical and institutional analysis of post-colonial foreign policies of selected state and non-state actors in the Middle East, including Israel, its Arab neighbors, and Iran. Special attention is given to the historical roots of major contemporary regional conflicts and domestic social, economic, political, and religious influences shaping contemporary external relations. Cross-listed as HIST 231nhs.

### **POLS 233hs American Environmental History and Policy (3)**

Investigates the history and politics of American environmental issues from Colonial times to the present. Introduces major governmental and non-governmental actors and policy-making bodies in the environmental arena at the national, state, and local levels. Analyzes major environmental policies. Cross-listed as HIST 233hs.

**POLS 235hs The U.S. in World Affairs (3)**

An examination of the historical evolution of major U.S. foreign policy-making institutions and processes, with emphasis on the post-1945 era. Analysis of guiding principles and patterns in U.S. foreign diplomatic, economic and military relations since 1898. Cross-listed as HIST 235hs.

**POLS 241s International Political Economy (3)**

Provides analysis of the politics of international trade and finance. Focuses on political institutions such as the World Bank, the International Monetary Fund and the World Trade Organization (WTO). Topics include growth and development in China, the North American Free Trade Agreement, international migration, the fair trade movement and global poverty.

**POLS 242s Global Sustainability (3)**

A policy-oriented overview of selected global sustainability issues drawn from across the political, economic, and social justice realms. Examines roles of key international, governmental, and non-governmental actors. Opportunities for participation in campus and community outreach sustainability projects are included.

**POLS 250Ps Methods of Political Research (4)**

Prerequisite: a course in social and behavioral inquiry. Students learn to define a research problem and to formulate and test hypotheses using a variety of methods. To successfully complete the course students must submit a proposal for a research project that includes a thorough literature review on a topic in political science, a set of well-formulated hypotheses based on the literature review, and a defensible research design to test those hypotheses with adequate data and appropriate methods. In addition, students will complete a one-hour lab component to learn the basics of applied statistical analysis in SPSS.

**POLS 285P Pre-Law Seminar (2)**

Prerequisite: junior standing or instructor's permission. An examination and discussion of the Law School Admissions process. Sessions are devoted to particular aspects of the Law School Admissions process, including LSAT preparation, navigating the LSDAS process, writing the personnel statement, and completing the Law School application process. Pass/no record basis.

**POLS 286 Seminar: Foreign Service in Government (Arr)**

Intended to give students interested in foreign service exposure to specific paths such interests might take. Preparation for the Foreign Service Examination included.

**POLS 326s Political Violence and Terrorism (3)**

Students learn about different types of political violence (terrorism and counter terrorism, insurgency, assassinations and coups, genocide). Focuses on particular case studies as well as general theories of human estrangement, non-conformity, rebellion and revolution.

**POLS 344Ps International Law and Organizations (3)**

A prior course in Political Science; POLS-140 strongly recommended. Examines major international legal principles and organizations in a changing global system. Emphasis on the United Nations system, European Union system, and other selected political, economic, environmental, and military security organizations. Examines the role of non-governmental organizations (NGOs) in world politics. Also examines issues of peace and conflict resolution. Formerly numbered POLS-244.

**POLS 355Ps Seminar in Public Policy (3)**

Examination of the formulation, implementation, and analysis of public policy in the United States. Discussion will focus on the implications of institutional behavior on the public policy process, the role of procedures and rules in the policy process, and the role of the policy-making process within our democratic form of government. In addition, students will gain firsthand experience in a particular policy domain through a service-learning experience. Course is x-optional.

**POLS 361t American Political Philosophy (3)**

An examination of the contribution of American thinkers to the literature of political philosophy. Emphasis will be upon the "founding fathers," but concern will be given to developing themes, ideas and topics relevant to citizens today. Formerly numbered POLS-261.

**POLS 390 Topics: Political Science (3)**

Offered as needed to cover the interests of staff and students when these cannot be accommodated by regular offerings. The student's transcript will carry an indication of the topic pursued.

**POLS 396I Co-op (Arr)**

Off-campus work experience with governmental, legal, and business organizations. Each co-op must have prior approval of the department or pre-law advisor. No more than 3 semester hours may count toward a major or minor in political science. Pass/no record basis.

**POLS 397D Washington Center Internship (8 for summer; 12 for fall or spring)**

Professional work experiences in Washington, D.C., designed to enrich a student's education through supervised practical experience in a civic, governmental or business institution.

**POLS 397I Internship: Political Science (Arr)**

These are off-campus experiences designed to enrich a student's education through supervised practical experience in a civic, governmental, or business institution. Three structured programs are currently available: The Washington Center in Washington, D.C.; the Intern Program in Des Moines; and the Chicago Semester Program. Approved independent programs are also available. Unsupervised political activity does not qualify. Total credit for full time internship may not exceed 15 hours per semester; no more than 3 semester hours may count toward a major or minor in political science. Pass/No record basis.

**POLS 398I Participant Research (Arr)**

May be taken only in conjunction with POLS 396I, 397I or 496I. Credit is earned upon completion of a supervised research project undertaken during an approved intern program. This course should be taken by political science major doing internships. Students in other departments may arrange research credit in those departments.

**POLS 399I Independent Study (Arr)**

Offered on an individual basis to those students who demonstrate that their interest cannot be met by scheduled offerings. Students seeking to enroll must consult the staff member involved the semester beforehand and obtain approval of their projects.

**POLS 489Ps Research Seminar (3)**

Prerequisite: POLS 250Ps, SOC 350Ps or ANTH 366. Designed to give junior and senior political science majors an opportunity to develop research skills and pursue the substantive interests acquired throughout their studies in the discipline—a capstone course. The seminar will be student led, with each student taking responsibility for one week of the course. Students will compile a bibliography of the major works in their topic of interest, assign readings in that topic for the rest of the class and then lead the seminar discussion of that topic. In addition, students will build on skills acquired in the methods course by developing or redesigning a research project on their topic of interest.

**POLS 497PI Legal Internship (Arr)**

Prerequisites: POLS 285, POLS 313. For senior pre-law students only, usually taken in the summer between the junior and senior years or during the senior year. Each intern works in the setting that reflects his or her interests in law. Each internship must have the prior approval of the pre-law advisor. No more than 3 semester hours may count toward a major or minor in political science. Pass/no record basis.

## Psychology

**PSYC 122s General Psychology (3)**

Surveys the field of psychology. Emphasizes the scientific study of behavior and mental processes and challenges students to critically analyze the major findings, theories and applications in areas such as sensation and perception; development, learning, memory and cognition; motivation and emotion; , psychopathology and social psychology.

**PSYC 210s Elementary Principles of Behavior (3)**

Presents the basic principles of behavior derived from the experimental analysis of behavior. Illustrations and applications of the principles are considered in detail at the individual, group and cultural levels.

**PSYC 220Ps Psychological Investigations (3)**

Prerequisite: PSYC 122s or 210s and limited to freshmen and sophomores, or instructor's permission. Introduces students to major assumptions, values, and questions addressed by psychologists, and presents basic concepts and methods of psychological inquiry. Special emphasis is given to individual and class research projects, data analysis and research report writing.

**PSYC 225Ps Theories of Personality (3)**

Prerequisite: sophomore standing and PSYC 122s, or 210s. Surveys major personality theories including their theoretical assumptions, historical development, and empirical support. Contrasts the main theoretical approaches to understanding the individual.

**PSYC 231Ps Psychopathology (3)**

Prerequisite: sophomore standing and PSYC 122s, or 210s. Surveys psychological disorders and abnormal behaviors including symptoms, causes, and treatments. Integrates biological, psychological, and social influences. Introduces diagnostic criteria for major disorders.

**PSYC 239Ps The Brain and Behavior (3)**

Prerequisite: PSYC 122s, or 210s or instructor's permission. Presents an in-depth overview of the basic concepts of neuropsychology. Areas of study include philosophical and scientific antecedents of neuropsychology, origins of contemporary neuropsychology, evolutionary psychology, perception, memory, language, the neuron (synapse and neuropharmacology), human behavioral neuropsychology, brain development and plasticity, clinical neuroscience and ethical considerations.

**PSYC 240Ps Psychology of Women (3)**

Prerequisites: PSYC 122s and sophomore standing, or instructor's permission. Examines contemporary theories about women's psychological development across lifespan. Explores women's common and diverse experiences in personal, relational and societal contexts. Requires participation in service-learning to help students integrate course content with experience.

**PSYC 250Ps Health Psychology (3)**

Prerequisite: sophomore standing and PSYC 122s, or 210s or instructor's permission. Examines current data and theory about the interplay of physiological, psychological and social factors in physical health and illness.

**PSYC 283PIx Service-Learning in Psychology (1)**

Prerequisite: PSYC 122s, or 210s and permission of instructor. Students engage in course-related service activities in the community. Both written and oral reflection exercises will be used to help students integrate experience with course content. Students may earn up to 3 semester hours of combined 283PIx/284PI credit. Requires participation in diversity training and orientation seminar unless previously completed. Can be taken as PSYC 284PI without the "x" component.

**PSYC 330Pns Multicultural Issues in Psychology (3)**

Prerequisites: PYSC 122s and junior standing, or instructor's permission. Examines psychological variables in a multicultural context. Presents a broad definition of multiculturalism, including ethnicity, socioeconomic class, gender, sexual orientation and ability. Relates historical and current theories to individuals and to the dominant U.S. society. Requires participation in service-learning to help students integrate course content with experience.

**PSYC 334Ps Social Psychology (3)**

Prerequisites: junior standing or instructor's permission and PSYC 122s, or 210s. Examines contemporary theories and data about the relationships between social and cultural factors, individual psychological processes, and behavior; topics include person perception, social cognition, attitude formation and change, persuasion, conformity, obedience, aggression, friendship and love, altruism and conflict resolution.

**PSYC 335m Fundamentals of Statistics (4)**

Introduces students to the statistical techniques typically used in psychology, sociology, education, communication and related areas. Topics and procedures include: Grouping, graphical representation of data, measures of central tendency and variability effect size, probability, hypothesis testing, correlation, tests of differences, several models of analysis of variance, and nonparametric alternatives, including chi square.

**PSYC 336P SPSS for Psychological Research (1)**

Corequisite: concurrent enrollment in PSYC 480PI. Students learn how to use the Statistical Package for the Social Sciences (SPSS) to input data, save and retrieve data, make data transformation, conduct analyses, manipulate and understand output, and create and edit graphs. Pass/no record basis.

**PSYC 340P Cognitive Psychology (3)**

Prerequisites: junior standing or instructor's permission and PSYC 122s, or 210s; PSYC 220Ps recommended. Introduces students to the theories and methods of cognitive psychology and cognitive science. Topics include attention, perception, memory, language, knowledge representation, problem solving, computer modeling and everyday cognition.

**PSYC 348P Experimental Psychology (3)**

Prerequisites: junior standing or instructor's permission, PSYC 220Ps and previous or concurrent enrollment in PSYC 335m, or instructor's permission. Covers basic principles of research design with a focus on experimentation. Surveys theory and research in various domains of experimental psychology, including perception, learning, memory, problem solving, social influences, individual differences, development, environmental psychology and human factors.

**PSYC 381P Psychology of Parenting and Teaching (3)**

Prerequisites: junior standing or instructor's permission. Considers the application of psychological principles in education and childrearing practices. Emphasis is placed on examining the factors that promote and interfere with psychological health. Particular attention is given to the consequences of strategies involving reinforcement and punishment, and to issues of freedom and responsibility.

**PSYC 382Ps Child & Adolescent Development (3)**

Prerequisites: junior standing or instructor's permission and PSYC 122s, or 210s; cannot receive credit for this course and EDUC 270Ps or 281Ps. Covers theory and research on physical, cognitive, social, and emotional development from conception through adolescence. Requires participation in service-learning to help students integrate course content with experience.

**PSYC 384Ps Adult Development & Aging (3)**

Prerequisites: junior standing or instructor's permission and PSYC 122s, or 210s. Covers theory and research on physical, cognitive, social, and identity development from early through late adulthood. Includes issues related to work, family, relationships, sexuality, death & grieving, and social policy. Requires participation in service-learning to help students integrate course content with experience.

**PSYC 385P Principles of Counseling (3)**

Prerequisites: junior standing and PSYC 225Ps or 231Ps or instructor's permission. An exploration of the therapy process, with emphasis on the impact of the therapist's values and beliefs, the importance of the therapist's self knowledge, discussion of ethical issues and supervised role-play of basic counseling skills.

**PSYC 397PI Internship: Psychology (Arr)**

Prerequisites: junior standing and instructor's permission. Students work under professional supervision in a situation involving application of psychological principles. Emphasis is on learning by observing and practicing. Amount of credit is determined according to the extent of the experiences, not to exceed 6 semester hours in the 35 semester hour minimum. Students considering an internship should confer with the department to receive consultation and guidelines. Pass/no record basis.

**PSYC 457P History and Systems of Psychology (4)**

Prerequisites: junior standing and PSYC 122s or instructor's permission. Traces the history of the development of basic concepts and approaches in modern psychology. Presents an overview of historical systems and theories, as well as contemporary trends in the field.

**PSYC 480PI Advanced Research in Psychology (3)**

Prerequisites: PSYC 335m, PSYC 348P or instructor's permission. Students design and implement individual research projects on cognitive, cultural, developmental, personality, gender, multicultural, or social psychology topics. As part of this capstone research experience, students collect and analyze data, and present research results both orally and as manuscripts written in accordance with American Psychological Association standards. This course may be repeated.

**PSYC 486P Psychological Tests and Assessment (4)**

Prerequisite: Senior standing, PSYC 335m or comparable background in statistics, or instructor's permission. Studies basic psychometric principles, including reliability, validity and score interpretation. Considers tests of intelligence, creativity, interest and personality in an assessment context.



**PSYC 199I, PSYC 299I, PSYC 399I, PSYC 499I Independent Study (Arr)**

Permission must be secured prior to registration. Designed to permit students to pursue individual interests in specialized area of psychology to supplement scheduled course offerings.

**Religion****REL 110fr Old Testament History and Religion (3)**

Examines the Old Testament/Hebrew Bible in its original ancient Near Eastern cultural and historical context as a library of theological literature. Considers the modern relevance of the Old Testament as scripture for Christianity and Judaism as well as theological questions arising from the Scriptural texts. Develops critical reading and listening abilities, writing skills and verbal self-expression.

**REL 111r New Testament and Early Christianity (3)**

This course introduces students to early Christian thought and experience from the New Testament through the fourth century. The emphasis is on the development of Christianity from its earliest Jewish form to the classical form attained in the late Roman Empire.

**REL 112fr The Christian Heritage (3)**

Offers an understanding of the evolution of Christianity in response to various historical and cultural settings. Students examine liturgy, theology, hymns, art and architecture. Promotes development of college-level skills, especially writing and analytical reading.

**REL 210r The Prophets (3)**

Studies selected passages from the second division of the Old Testament (Tanakh in Judaism), consisting of Joshua through II Kings, Isaiah, Jeremiah, Ezekiel and the Twelve Minor Prophets. Through a careful study of selected texts, the course explores the significance of these books for an understanding of the history of ancient Israel and for the history and teachings of Judaism and Christianity.

**REL 211r The Writings (3)**

Studies selected passages from the third division of the Old Testament (Tanakh in Judaism), consisting of the books of Job, Psalms, Proverbs, Ecclesiastes, Song of Songs, Ruth, Lamentations, Esther, Daniel, Ezra, Nehemiah, and I and II Chronicles. Through careful study of selected texts, the course explores the purposes of this diverse material for an understanding of Biblical history and religion.

**REL 216r The Gospels and Jesus (3)**

Introduces modern Christian perspectives on Jesus. Studies the traditions about Jesus in the pre-gospel period, the portrayals of Jesus and salvation in the New Testament gospels, and the modern so-called "quest for the historical Jesus".

**REL 217r Revelation and the General Epistles (3)**

Introduces students to the New Testament book of Revelation and the General Epistles (including Hebrews, James 1 and 2, Peter, and Jude). Through a critical examination of the texts, this course will explore the significance of these works within their historical contexts as well as how they continue to affect contemporary Christian thought and practice.

**REL 220r Christian Worship (3)**

Introduces the student to the origins and history of Christian worship from the Old Testament period to the present. Examines various aspects of worship, including orders of service, church architecture and music, reflecting on their historical and theological dimensions. Includes field trips to observe religious services.

**REL 222r Spirituality in the Christian Tradition (3)**

Introduces the student to influential voices and movements in Christian spirituality from different historical eras and from both the Eastern and Western tradition. Examines fundamental themes in the Christian contemplative tradition and engages primary sources in their contexts.

**REL 230nr Asian Religions (3)**

Focuses on four religions from South and East Asia: Hinduism, Buddhism, Taoism and Confucianism, with some attention to other Asian traditions. Readings demonstrate the vigor of Asian religious ideas and practices to the present. Discusses the interaction between religion, culture and politics.

**REL 233nr The Jewish Experience (3)**

The meaning of the Jewish experience is studied through its expression in the prayers, rituals and religious reflections of Jews throughout history. Topics considered will include the meaning of Torah, the confrontation of tradition and modernity, the significance of the Holocaust and Zionism.

**REL 235nr Islam (3)**

General introduction to Islam dealing with three main topics: (a) the life of Muhammad and the origins of Islam; (b) the diversity of Muslim religious beliefs and cultural forms throughout Islamic history to the present; (c) the rise of militant, fundamentalist Islam as a political force.

**REL 236hr Islam and the West (3)**

Studies the religion of Islam from its beginnings to modern times with particular interest in the history of Islam in the Maghreb (Morocco, Algeria, Tunisia, and Libya) and in Spain. Explores the religious, political and philosophical aspects of medieval Islam in these geographical regions as a context for understanding the relation of Islam to modern political thought. Reflects on the emergence of liberalism and its relation to Islam in both colonial and modern times.

**REL 250hr American Religious Thought (3)**

Studies the historical development of religious and ethical thought in America. The course will focus on such issues as Puritanism, church-state separation, the Social Gospel, Fundamentalism, liberation theologies, modern evangelicalism. Cross-listed as HIST 250hr.

**REL 252hr The Reformation (3)**

Studies the religious movements in 16th-century Europe that shaped modern Protestantism and Catholicism. Religious ideas will be examined in relation to their political, social and intellectual setting, as well as to the broader Christian tradition. Cross-listed as HIST 252hr.

**REL 253hr Medieval Christendom (3)**

Explores the idea of a Christian society (Christendom) that emerged in the European Middle Ages. Topics will include: the rise of the papacy and its conflicts with secular rulers; the Crusades; chivalric and monastic ideals; theology; religious art and architecture; heresy and dissent. Cross-listed as HIST 253hr.

**REL 254hr The Early Church (3)**

Studies the history of the early church within the context of ancient Judaism and the Roman Empire through the middle of the fifth century A.D. Particular attention is given to the development of a Christian “orthodoxy” from the diversity of early Christian thought. Cross-listed as HIST 254hr.

**REL 255r Christian Ethics (3)**

An examination of Christian ethical thought and its application to contemporary moral issues. After a survey of contemporary ethical theory, we will focus on concepts specific to Christian ethics (Jesus, Scripture, salvation), and then on concrete areas of moral concern (sexuality, marriage, abortion, euthanasia).

**REL 270r Christianity and Culture (3)**

Explores the problem of the Christian’s responsibility to and impact on culture. After examining the wide variety of responses to this problem in the Christian tradition, we will investigate contemporary Christian responses to selected social, political and cultural issues.

**REL 272r Modern Christian Thought (3)**

Studies leading trends in modern Christian thought using a comparative approach.

**REL 274r World Christianity (3)**

Examines the encounters of the church with new cultures and civilizations, especially during critical periods of expansion and adaptation. Considers issues faced by contemporary Christianity in non-Western settings: missions, relations with indigenous religions, inculturation, religious pluralism, and political participation.

**REL 285PI The Pre-Ministerial Seminar (Arr)**

Prerequisite: one course in religion at the 100 level and instructor’s permission. An introduction to the pre-ministerial program will be taught and coordinated by the director. The seminar is designed to introduce students to the wide variety of types of ministry and is taught by people working as professionals in the various fields of ministry.

**REL 286P Doctrines and Ministry (3)**

Prerequisite: one course in Bible or Christianity or instructor’s permission. Studies the doctrinal statements of representative Christian denominations with attention to the nature and practice of ministry. Designed for students who are contemplating professional Christian service. The course serves as a vital link between the practical and the intellectual training that is necessary to conduct ministry.

**REL 310Ir Readings in The Prophets (4)**

Prerequisite: instructor’s permission. Offered jointly with REL 210r and covering the same topics, but with some separate assignments, sessions and expectations for advanced discussion and research. Students cannot receive credit for both 210r and 310Ir.

**REL 311Ir Readings in The Writings (4)**

Prerequisite: instructor’s permission. Offered jointly with REL 211r and covering the same topics, but with some separate assignments, sessions and expectations for advanced discussion and research. Students cannot receive credit for both 211r and 311Ir.

**REL 316Ir Readings in The Gospels and Jesus (4)**

Prerequisite: instructor’s permission. Offered jointly with REL 216 and covering the same topics, but with some separate assignments, session and expectations for advanced discussion and research. Students cannot receive credit for both 216r and 316Ir.

**REL 327Ir Readings in Revelation and the General Epistles (4)**

Prerequisite: Instructor permission. Offered jointly with REL 217 and covering the same topics, but with some separate assignments and expectations for advanced discussion and research. Students cannot receive credit for both REL 217 and REL 317.

**REL 330Inr Readings in Asian Religions (4)**

Prerequisite: instructor’s permission. Offered jointly with REL 230r and covering the same topics, but with some separate assignments, sessions and expectations for advanced discussion and research. Students cannot receive credit for both 230nr and 330Inr.

**REL 335Inr Readings in Islam (4)**

Prerequisite: instructor’s permission. Offered jointly with REL 235r and covering the same topics, but with some separate assignments, sessions and expectations for advanced discussion and research. Students cannot receive credit for both 235nr and 335Inr.

**REL 336Ihnr Readings in Islam and the West (4)**

Prerequisite: Instructor permission. Offered jointly with REL 236nr and covering the same topics, but with some separate assignments and expectations for advanced discussion and research. Students cannot receive credit for both REL 236 and REL 336.

**REL 355Ir Readings in Christian Ethics (4)**

Prerequisite: instructor's permission. Offered jointly with REL 255r and covering the same topics but with some separate assignments, sessions and expectations for advanced discussion and research. Students cannot receive credit for both 255r and 355Ir.

**REL 370Ir Readings in Christianity and Culture (4)**

Prerequisite: instructor's permission. Offered jointly with REL 270r and covering the same topics but with some separate assignments, sessions and expectations for advanced discussion and research. Students cannot receive credit for both 270r and 370Ir.

**REL 372Ir Readings in Modern Christian Thought (4)**

Prerequisite: instructor's permission. Offered jointly with REL 272r and covering the same topics, but with some separate assignments, sessions and expectations for advanced discussion and research. Students cannot receive credit for both 272r and 372Ir.

**REL 374Ir Readings in World Christianity (4)**

Prerequisite: instructor's permission. Offered jointly with REL 274r and covering the same topics but with some separate assignments, sessions and expectations for advanced discussion and research. Students cannot receive credit for both 274r and 374Ir.

**REL 390 Topics in Religious Studies (Arr)**

Varying topics determined by the interests of students and the staff. May be repeated for credit.

**REL 397PI The Ministry Internship (Arr)**

Prerequisites: two courses in religion with at least one at the 200-300 level and instructor's permission. The ministry internship is a supervised work experience that exposes the student to some aspect of ministry. Ideally it occurs in the summer between the junior and senior years, or perhaps a weekend assignment during a semester. The internship gives the student on-the-job experience in the area of service interest, under the supervision of an established minister, who works closely with the preministerial program director on campus. Pass/no record basis.

**REL 398PIx Cross-Cultural Ministry Internship (2)**

Prerequisites: two courses in religion with at least one at the 200-300 level and instructor's permission. This course is similar to REL 397 except that the supervised work experience will expose the student to a culture or subculture different from the student's. The student will be asked to write about the cross-cultural aspects of the ministry experience.

**REL 497I Internship in Religion (Arr)**

Prerequisite: instructor's permission. The internship provides an opportunity for the student to explore a career option in the major field of study. Pass/no record basis.

**REL 499I Independent Study (Arr)**

Prerequisite: instructor's permission. Designed to give an opportunity for the major or interdisciplinary concentration student to do extensive research and reading in an area of choice. The study includes a project in which the student integrates research and reading with learning as a whole. Offered any semester with the permission of the chair of the department.

## Sociology

**SOC 120s Principles of Sociology (3)**

Presents key basic concepts and principles of the discipline. Designed to introduce students to how sociologists use these tools to analyze society, including social and cultural change.

**SOC 225Ps Social Problems (3)**

Prerequisite: SOC 120s or instructor's permission. Explores contemporary social issues, such as poverty, race, gender, including analysis of the breadth and depth of the problems, the causes of the problems and some potential responses to them. The focus is on understanding the dimensions of the problems that can then be used to analyze and critique contemporary society.

**SOC 234Ps Urban Sociology (3)**

Prerequisite: SOC 120s or instructor's permission. As the international marketplace and economic competition continue to cause cities to sprawl and change, large segments of the urban population in every country struggle to survive. This course will consider some of the cultural, organizational, social psychological, political and economic causes and consequences of urbanization.

**SOC 236Pns Minority Groups (3)**

Prerequisite: SOC 120s or instructor's permission. Examines the relationship between American racial and ethnic minority groups and the dominant society. Gives special attention to the particular histories and demographics of minority groups and social theories that have been used to explain majority/minority relations in the United States.

**SOC 240P The Criminal Justice System (3)**

Prerequisite: SOC 120s. An examination of the criminal justice system in America. Offers an overview of the structure and functions of law enforcement, courts and corrections with a focus on legal, structural and social issues that confront the criminal justice system today.

**SOC 241Ps Crime and Delinquency (3)**

Prerequisite: SOC 120s or instructor's permission. A theoretical overview of the causes of crime, and an examination of issues that are being debated by scholars and public officials regarding criminal justice and corrections policies.

**SOC 242Ps Sociology of the Family (3)**

Prerequisite: SOC 120s or instructor's permission. Examines the interaction of family with conditions and structures in society. Surveys the social history of the family and examines factors bringing about changes. Explores some contemporary family topics and looks at available alternatives.

**SOC 250Ps Introduction to Social Work (3)**

Prerequisite: SOC 120s or instructor's permission. Provides an overview of the applied field of social work. Explores the various theories and approaches used by social workers to help improve the quality of their clients' lives. Highlights the range of human service organizations operating in today's society.

**SOC 310Ps Science, Technology and Society (3)**

Prerequisite: SOC 120s or instructor's permission. Provides an overview of research on the sociological analysis of science as a social institution. Focus will be on how scientific claims are established as fact, on the impact of science and technology in the modern world, and on their impact on social relationships.

**SOC 320Ps Sociology of Gender (3)**

Prerequisite: SOC 120s or equivalent. Examines ways in which society and culture shape gender expectations. Focuses on the impact of gender on identity, life-long socialization, work and violence. Also covers the dynamics of race and gender.

**SOC 325Ps Social Movements (3)**

Prerequisite: SOC 120s or instructor's permission. Exploration of protest movements of various types—political, ethnic, religious, cultural or moral. Focus will be on common social dynamics among such movements. Offered alternate years.

**SOC 336Ps Status and Inequality in Social Life (3)**

Prerequisite: SOC 120s or instructor's permission. An examination of the distribution of economic, social and cultural resources such as income, wealth, education, social networks, etc. The analysis will include how possession of such resources determines status in society, including both opportunities for and obstacles to social mobility.

**SOC 342Ps Sociology of Religion (3)**

Prerequisite: SOC 120s or instructor's permission. Examines the impact that religious belief and practice have upon contemporary life in the U.S. and abroad. The course also investigates how religious institutions are affected by other forms of social life. Offered alternate years.

**SOC 344s Conflict Resolution (4)**

An analysis of the escalation of interpersonal and intergroup conflict and an application of the principles and practices that assist in transforming conflicts away from destructive, win/lose battles and toward a problem-solving process that is more likely to yield win/win, jointly-determined outcomes.

**SOC 350Ps Methods of Social Research (4)**

Prerequisites: MATH 105m or its equivalent; SOC 120s or instructor's permission. Focuses on the major consecutive steps involved in a scientific inquiry into social relations, and, in addition, deals with problems particularly characteristic of social scientific research. Special emphasis on group research projects, questionnaire construction, data analysis and data presentation.

**SOC 397PI Internship: Sociology (Arr)**

Prerequisite: instructor's permission. Students will work under supervision of professionals in one of several areas, e.g., corrections, social work, hospital, school, adoption agency, etc. for a semester. Focus will be on learning by observing and practicing. Does not count toward the 35 semester hours required for the major. Pass/no record basis.

**SOC 450Ps Sociological Theory (3)**

Prerequisite: five courses in the department. Provides analysis of the major theorists of sociology (Marx, Weber, Durkheim, etc.) and the major questions they ask. The focus will be on learning the content of various theoretical models and on application of such models to critique contemporary society.

**SOC 485P Senior Seminar-Sociology (3)**

Prerequisites: SOC 350Ps and 450Ps or instructor's permission. Capstone course that involves students in applied research, as well as guided discussion and written analysis, to consolidate and apply their sociology and liberal-arts course work to the analysis of real world social problems.

**SOC 499I Independent Study: Sociology (Arr)**

Prerequisite: instructor's permission. Designed to permit students to pursue their interests in specialized areas of sociology in greater depth than is possible in other courses offered by the department. This course is not a substitute for other department courses. Restricted to majors with departmental approval.

## Spanish

*Note: Courses offered by the department of modern languages are calibrated to the nationally recognized target levels of proficiency defined by the American Council on the Teaching of Foreign Languages. Details are available from the department.*

**SPAN 121c Beginning Spanish I (4)**

Includes essential grammar and vocabulary. Foundation for the development of listening comprehension, conversation, reading and cross-cultural skills at the equivalent of the novice-high level of the ACTFL scale.

**SPAN 122Pc Beginning Spanish II (4)**

Prerequisites: SPAN 121c, placement or instructor's permission. Includes essential grammar and vocabulary. Foundation for the development of listening comprehension, conversation, reading and cross-cultural skills at the equivalent of the intermediate-low level of the ACTFL scale.

**SPAN 221Pc Intermediate Spanish I (4)**

Prerequisite: successful completion of SPAN 122Pc or equivalent or placement. Continues development of reading, writing, speaking and listening comprehension skills, with particular emphasis on the development of oral proficiency at the equivalent of intermediate low to mid level. Includes an introduction to Spanish and Latin American life and culture.

**SPAN 222Pc Intermediate Spanish II (4)**

Prerequisite: successful completion of SPAN 221Pc or equivalent, or instructor's permission. Continues development of reading, writing, speaking and listening comprehension skills, with particular emphasis on the development of oral proficiency at the equivalent of intermediate-mid level. Includes a study of aspects of Spanish and Latin American life and culture and an introduction to the reading of short literary and non-literary selections.

**SPAN 321Pc Advanced Spanish: Grammar, Composition & Conversation I (4)**

Prerequisite: successful completion of SPAN 222Pc or equivalent, or placement. Continues development of reading, writing, speaking and listening comprehension skills. Aims to have students attain intermediate high on the ACTFL scale for all four language skills by the end of the next course in the advanced sequence. Entry course for the Spanish major.

**SPAN 322Pc Advanced Spanish: Grammar, Composition & Conversation II (4)**

Prerequisite: successful completion of SPAN 321Pc or equivalent or instructor's permission. Continues development of reading, writing, speaking and listening comprehension skills. Students must attain intermediate high on the ACTFL scale for all four language skills by the end of the course.

**SPAN 323Pct Introduction to Hispanic Literature (3)**

Prerequisite: successful completion of SPAN 321Pc or equivalent, or instructor's permission. May be taken concurrently with **SPAN 322Pc**. Designed for beginning Spanish majors. Studies selected poems and short stories and importance of cultural context for full comprehension of each work. Students will write short critical papers in Spanish. By the end of the course, students are expected to reach intermediate high on the ACTFL scale for the four language skills. Required for Spanish major.

**SPAN 330Pc The Language House Experience (.5)**

Prerequisite: departmental approval to live in the Spanish House. Credit awarded each semester for students living in the language houses who complete departmental requirements. May be repeated up to 4 times for a maximum of 2 credits.

**SPAN 332Pct Modern Spanish Literature (3)**

Prerequisite: SPAN 323Pc or equivalent. Focuses on various authors and genres in the modern literature of Spain, and the culture that produced that literature. Requirements include extensive reading, class discussion and short essays. Continues to develop the student's language skills toward the proficiency goals required of all majors. May be taken twice with different genres/authors. Offered alternate years.

**SPAN 342Pnt Modern Spanish American Literature (3)**

Prerequisite: SPAN 323 or equivalent. Focuses on various authors and genres in the modern literature of Spanish America, and the cultures that produced that literature. Requirements include extensive reading, class discussion and short essays. Continues to develop the student's language skills toward the proficiency goals required of all majors. May be taken twice with different genres/authors. Offered alternate years.

**SPAN 343Pn Civilization of Hispanic America (3)**

Prerequisite: successful completion of SPAN 323Pct or equivalent, placement or instructor's permission. Conducted in Spanish. Surveys various topics from the history and culture of the Latin American peoples. May include daily life, cultural values, political, social and economic issues, art, music, literature and film. Also continues to develop students' language skills toward the proficiency goals required of all majors. Offered alternate years.

**SPAN 350Pn Hispanics/Latinos in the United States (3)**

Prerequisite: successful completion of SPAN 323Pct or equivalent, placement or instructor's permission. Conducted in Spanish. Studies the culture, history, and social, economic and political situation of the Hispanic/Latino population in the United States through its literature, film and music, and through current articles on the subject. Readings in Spanish and English. Also continues to develop student's language skills toward the proficiency goals required of all majors. Offered alternate years.

**SPAN 361Pct Studies in Hispanic Literature (3)**

Prerequisite: SPAN 323Pct or equivalent, or instructor's permission. Offered occasionally to meet student needs and interests in the literature of the Spanish-speaking world. Continues to develop the students' language skills in order to meet the proficiency goals required of all majors.

**SPAN 425Pc Topics in Hispanic Culture and Civilization (3)**

Prerequisite: SPAN 323Pct or instructor's permission. Offered occasionally to meet students' needs and interests in the cultures of Spain or Latin America. This course will allow students to explore current issues, history, film or other topics of interest while continuing to develop language skills toward the proficiency required of all majors.

**SPAN 485Pct Seminar: Spanish Literature (3)**

Prerequisites: two Spanish courses numbered 332 or higher. Emphasizes selected Spanish authors. Achievement of departmental proficiency requirements for majors must be demonstrated by the end of the course. Offered alternate years.

**SPAN 486Pnt Seminar: Spanish American Literature (3)**

Prerequisites: Two Spanish courses at the 332 level or higher. Study and analysis of literary works by selected Spanish American authors. Requirements include student-led discussions, oral presentations and a research paper or equivalent. Achievement of departmental proficiency requirements for majors must be demonstrated by the end of the course. Offered alternate years.

**SPAN 494 Language Teaching Practicum (6-9)**

Offers opportunity to apply second-language teaching methodology in small-group setting. Emphasis on oral skill development. Will be supervised by a faculty member.

**SPAN 499PI Independent Study (Arr)**

Prerequisite: completion of advanced courses offered on campus with instructor's permission. For majors who have completed all advanced courses on campus, and who wish to investigate some area of individual interest.

## Theatre

**THEA 140fa Introduction to Theatre (3)**

Surveys the arts of the theatre with emphasis on the role of the playwright, director, actor, designer and producer. Promotes the development of college-level writing, reading, listening and speaking skills.

**THEA 142 Introduction to Film (?)**

Develops a greater understanding and appreciation for the art and history of film as it examines contemporary American and international cinema in historical and cultural contexts. Enhances the better understanding of film and filmmakers' intentions through analysis.

**THEA 150a Acting (3)**

Examines the theories and practices of acting from a Western perspective. Students practice basic aesthetic judgments, professional ethics, and physical and vocal training through theatre games, improvisation and introduction to scene study.

**THEA 163 Stagecraft (4)**

An introduction to the rudimentary skills involved with planning, constructing, painting, rigging and lighting of stage scenery.

**THEA 165 Stage Management (1)**

Introduces students to the process and responsibilities of stage management focusing on production duties, rehearsal responsibilities and production obligations.

**THEA 173fa Introduction to Theatrical Design (3)**

An introduction to theatrical design concentrating on the creative process in developing the design of the set, lighting, costumes, as well as the presentation of the design idea. This course examines the role of the designer and how the design supports the ideas of a play in a visual way. Promotes the development of college-level writing, reading, listening and speaking skills.

**THEA 180 Play Production (1)**

Open to all students who wish to become involved in any technical, acting or administrative aspects of the current play. Some positions limited by auditor or instructor permission. May be repeated.

**THEA 221 Voice and Movement (3)**

Broadens the expressive range of the actor through the introduction to and exploration of various methods of vocal, physical and improvisational work to connect the body, voice and emotional life of the actor, creating a more articulate physical instrument.

**THEA 230 Arts Management (4)**

An overview of the fundamentals of arts management. Topics include planning, board development, volunteer management, fund raising, budgeting and financial control, marketing/public relations, arts law and arts programming. Students will be introduced to the skills required to become a working artist and/or manage their own company.

**THEA 240ht Ancient to Medieval: Theatre History and Dramatic Literature (3)**

Surveys the theatre history and dramatic literature of the ancient world through medieval times, with particular emphasis on the development of theatre and performance. Takes into account developments outside of western tradition. Promotes critical and analytical thinking and considers the place of performance in the historical political, social and aesthetic development of the world cultures. Playwrights included in the course range from Sophocles and Aristophanes to Zeami and the Wakefield Master.

**THEA 241ht Renaissance to Modernism: Theatre History and Dramatic Literature (3)**

Surveys the theatre history and dramatic literature of the renaissance world through modern times, with particular emphasis on the development of theatre and performance. Takes into account developments outside of western tradition. Promotes critical and analytical thinking and considers the place of performance in the historical political, social and aesthetic development of the world cultures. Playwrights included in the course range from Machiavelli and Moliere to Strindberg and contemporary trends.

**THEA 248a Costume Design and Construction (3)**

Studies the art and craft of costume design. Includes research, design and methods of costume construction. No prior knowledge of sewing necessary.

**THEA 250a Improvisation As An Art (3)**

Explores the basic principles, techniques and processes of improvisation for rehearsal and performance through structured game playing, discussion, research, and writing exercises. Draws upon the work of many innovators in the art of improvisation, including; Viola Spolin, Paul Sills, Second City, Andy Goldberg, Charna Halpern and Augusto Boal.

**THEA 258PI Directing I (4)**

Prerequisites: THEA 140fa, THEA 150 and instructor's permission. A study of the theory and practice of directing. Each student will direct a one act play.

**THEA 260a Scene Design (3)**

Emphasizes the art of scene design through the study and process of creating sets. Includes the design process from script analysis and research to presentation of final design ideas. Both model making and rendering will be covered.

**THEA 264a Lighting Design (4)**

Studies the aesthetics, theory and execution of stage lighting as an art form. Includes the mechanics of stage lighting, the process of lighting a production, drafting the plot, and executing the design. Lab work is required.

**THEA 266 Makeup Design (3)**

Teaches the application of various types of makeup materials, how to plan a makeup plot for any given play and how to create individual makeup in a variety of styles. Includes some three-dimensional work.

**THEA 290I Topics (Arr)**

Prerequisite: instructor's permission. Exploration of specialized fields and/or issues in theatre. May be repeated. Variable credit.

**THEA 292I Practicum in Theatre (Arr)**

Prerequisite: instructor's permission. Provides an opportunity for students to put into practice what they have learned in the classroom. Consists of administrative/supervisory work in all areas of theatrical production. May be repeated.

**THEA 350a Classical Acting (3)**

Explores the process of acting through course lectures, discussions, films, and observance of live performance(s). The art of acting is a life-long process and this course will assist the student with the first steps of that process and specifically, how to speak the words of Shakespeare. Materials for this class have been chosen to demonstrate how classical techniques and texts influence contemporary theatre.

**THEA 351a Children's Theatre (3)**

Explores the world of young people's and children's theatre through its literature and creative process. We will consider how this art form is created, distributed and performed within communities and the amateur/professional theatre world.

**THEA 352 Acting for the Camera (3)**

Introduces the actor to the fundamentals and techniques required for commercial, film and television performance. Through cold readings, scene work, on camera auditions, video playback and discussions, we will explore the basic skills necessary for the beginning professional to have a successful start in the business. Topics include obtaining an agent, booking the job, and creating natural, believable performances on the set.

**THEA 358P Directing II (4)**

Prerequisite: THEA 258PI. An exploration of theories and techniques for directing plays based upon historical and 20th century materials. Students will direct a full production, an act from a play or a one act as a final project.

**THEA 397I Internship in Theatre (Arr)**

Prerequisites: 3.0 departmental GPA and instructor's permission. An applied experience in a communication and/or theatre-related setting requiring a minimum of 30 hours for each credit hour. Includes conferences with on-campus staff, portfolio of work performed and evaluation by job supervisor. May be repeated for a maximum of 10 credit hours applied to the major. Pass/no record basis.

**THEA 442PtA Theory and Criticism: Classicism to Contemporary (3)**

Prerequisite: THEA 140fa. Examines dramatic literature included in the canon of world literature and the theories and practitioners (directors, designers, playwrights and critics) who have influenced modern productions. Many of the chosen plays represent cultures usually not included in the occidental canon; these plays are topical within current debates about the role of performance, design, directing and playwrights. This course will consider the constant shift within the canon of theatre literature and theory because of recent events and trends in production.

**THEA 448Pa Advanced Costume Design and Construction (3)**

Prerequisite: THEA 248a. A continuation at an advanced level of the art and craft of costume design. Includes research, design and methods of costume construction.

**THEA 460Pa Advanced Scene Design (3)**

Prerequisite: THEA 260a. A continuation at an advanced level of the art of scene design through the study and process of creating sets. Includes the design process from script analysis and research to presentation of final design ideas. Both model making and rendering techniques will be covered.

**THEA 464Pa Advanced Lighting Design (4)**

Prerequisite: THEA 264a. A course studying the aesthetics, theory and execution of stage lighting as an art form. Both the mechanics of stage lighting and the process of lighting a production including drafting the plot and executing the design are covered. Lab work is required.

**THEA 490I Topics: Theatre (Arr)**

Prerequisite: instructor's permission. Study supervised by staff members in one of four areas: Acting, directing, design and management. Includes a formal presentation. May be repeated.

**THEA 494I Practicum in Theatre (Arr)**

Prerequisite: instructor's permission. Offers the creative student opportunity to design a unique practicum, using the department, college or community as a laboratory. This practicum is reserved for the most promising seniors in the department. May be repeated. Pass/no record basis.

**THEA 499I Independent Study (Arr)**

Prerequisite: instructor's permission. A course allowing students to probe more deeply into an area for which they have been prepared, but in which there are no further advanced courses offered. Prior to registration the student must present the proposed study to the department for approval. May be repeated.



## UPWARD BOUND PROGRAM COURSES

The following courses are offered through the Central College's Upward Bound program during the summer to provide high school juniors and seniors an opportunity to sample college courses and earn college credit. Two or three courses are offered each summer. These courses have been approved for college credit as electives.

### **BIO 100 Issues in Human Biology (1.5)**

A special course offering for the Upward Bound program comprising a brief survey of the human body's organ systems, laboratory examination of their tissues and discussion of current issues in human health.

### **ENG 103 Improving Reading in the Content Areas (2)**

This course is designed to teach students a variety of techniques for comprehending nonfiction material. Students will learn reading strategies and have opportunities to apply those strategies. The objective for each student is to be able to identify the format of a given text and utilize the most effective strategy based on the selection's design and the purpose for reading.

### **ENG 105 Contemporary Literature (1.5)**

A general introduction to the analysis and appreciation of literature. Examines various themes of human concern using contemporary literature as the medium.

### **PE 110 Introduction to Stress Management (1.5)**

An applied stress management course that studies psychological, physiological, emotional and behavioral dimensions. The focus is on the development of skills and knowledge necessary to cope as gracefully as possible in a difficult world.

### **PSY 100 Psychology of the Self (1.5)**

An introduction to basic issues in inter- and intra-personal growth and encounter, with an emphasis on the development of feelings, attitudes and values within a societal framework.

### **CRC 105 Sexism and Racism in America (1.5)**

An interdisciplinary examination of the roles of minorities and women in American society, past and present. Develops students' abilities to overcome bias in schools.

## CHICAGO SEMESTER COURSES

The following courses are offered to Central students studying in Chicago through the Chicago Semester Program, which serves students from a consortium of colleges and universities.

### **COLL 385Cs Metropolitan Seminar (3)**

An introduction to the Chicago metropolitan area. Investigates themes of unity and diversity in the city – particularly the relationship between Chicago's position in the global economy on one hand, and Chicago's mosaic of racial and ethnic groups on the other. This graded seminar is taken only on the Chicago Semester program.

### **COLL 397CI Chicago Internship (9)**

Prerequisite: instructor's permission. Students are given several choices of agencies or companies in which to intern, based on application materials and career interests. Taken only on the Chicago Semester program. Pass/no record basis.

### **FA 200Ca Fine Arts Seminar (3)**

An intensive exploration of the architecture, dance, drama, music, visual arts and other art forms influenced by and available in the city of Chicago. Uses a broad range of field experiences supported by reading, classroom discussion and presentations by recognized authorities.

### **HIST 244Ch History of Religion in Urban America (3)**

Analyzes various approaches to religious social engagement in American urban history from the colonial era to the present, and the changing social context and the relationship between that context and the social engagement of religious people. Topics include religious responses to market economies, race relations, gender roles and the relationship of church and state.

### **PHIL 286Ct Values and Vocations (3)**

Field work in contemporary values issues and discussions of their moral, aesthetic and religious implications for a life and world view. To be taken in Chicago.

## WASHINGTON CENTER COURSES

The following courses are offered to Central students studying in Washington, D.C., through the Washington Center Program, which serves students from a consortium of colleges and universities.

### **COLL 389D Washington Center Seminar (3)**

Courses in a variety of disciplines taken in conjunction with internships in Washington, D.C., under the auspices of the Washington Center.

### **POLS 397D Washington Center Internship (8 for summer; 12 for fall or spring)**

Professional work experiences in Washington, D.C., designed to enrich a student's education through supervised practical experience in a civic, governmental or business institution.

# ACADEMIC RESOURCES

## Great Start Program

“Great Start” is an admission designation used to identify Central College students who may need additional guidance during their first year of college. Through personalized assistance from the advisor in selecting appropriate courses, and from referral to additional support services, the student will have the opportunity for successful academic achievement.

Great Start students’ schedules are arranged to include courses in composition, reading, communication processes, and other introductory courses as electives.

## Student Support Services

Student Support Services (SSS) is a federally funded program available to 200 eligible Central students. It is the purpose of SSS to assist students in achieving their educational goals and to enhance the college experience by providing opportunities for social, emotional and cultural growth. All eligible students are assured equal access to programs, with the eventual outcome being successful graduation from college. The program provides the following support services:

1. College success course to assist freshmen with the college transition.
2. Cultural enrichment outings in Pella and surrounding areas.
3. The center for academic excellence, which offers assistance in basic skills and tutoring in numerous content areas.
4. Academic accommodations for students with physical or learning disabilities.
5. Supplemental instruction for students who want to improve their understanding of historically difficult classes.
6. Private or small group tutoring for special needs.
7. Professional counseling by staff for academic, career and personal issues.
8. Laptop check out.

These student assistance and support services are provided free to Central College students who qualify for the program.

## The Center for Academic Excellence (Tutoring)

The Center for Academic Excellence (CAE) provides free individual peer tutoring, group tutoring, and Supplemental Instruction (SI). Trained student tutors offer their assistance on a drop-in or appointment basis. CAE services are designed to enhance the academic performance of all students, retain/graduate them, develop student leadership skills in academic support, and foster a campus-wide climate encouraging lifelong learning.

## Geisler Library

Geisler Library's mission is to provide students with the information they need to achieve their highest academic potential and to help them acquire research skills necessary to lifelong learning. Library staff and services are highly respected and the library is well integrated into learning programs as a result. Librarians are committed to teaching. They assist students with class assignments and research projects. Instruction on locating, evaluating and using information is available one-on-one, and through classroom activities, special seminars, online guides and research courses taught by librarians. All first year students work with librarians to acquire information literacy competencies in the context of the course *Intersections*. Librarians teach both basic and advanced library research skills using the latest technologies including the library's online catalog and research guides and extensive databases including the EBSCO*host* suite of databases, ProjectMUSE, Lexis-Nexis Academic, Newsbank, JSTOR Arts & Sciences, OCLC FirstSearch, Congressional Quarterly online, Annual Reviews online, the American Chemical Society's complete electronic journal archives, and the ACM's Virtual Library.

The library resides in an award winning building that seats nearly one-fourth of the student body. This welcoming and well-equipped, wireless facility is heavily used by students in all majors and programs. Library resources include individual and small group study areas, and a growing collection of 225,000 volumes, 10,000 audio/visual items, access to over 20,000 full-text journals, magazines and newspapers online or in print. The ground floor houses a cozy Café where students can use their meal plan throughout the day. The second floor houses the library reference, many computer workstations, circulation, reserves, interlibrary loan, and current periodicals. A third floor houses the main book collection, Archives, a Curriculum Library of 5,000 items supporting teacher education programs, a Music Library containing 4,000 music scores and anthologies, and private study and seminar rooms. The Alice Lammers Archives offers original documents describing the early settlement of Pella by the Dutch and records pertinent to the history of the college. In addition to the main collection in Geisler Library, a chemistry library in Vermeer Science Center contains 1,000 volumes. The Library's Media Center provides students with audio/visual materials and a range of equipment. Staff assist with the development instructional materials in both linear and digital formats.

The library's Web Page serves as an entry point to all library services and electronic collections. For information, visit [www.central.edu/library/libhome.htm](http://www.central.edu/library/libhome.htm). A state of the art public access Web catalog provides information about all library books, journals, music, and videos. Students can search the library's catalog and full-text electronic resources from the library, their residences on campus or at home, labs or any computer connected to the internet. Circulation of library materials is linked to the online catalog and provides users with instant information about the availability of library materials and media equipment.

Geisler Library offers enhanced access to resources not owned by the library through membership in the international cataloging and interlibrary loan network OCLC.

All books, periodicals, reserves, audio-visuals and media equipment circulate. The library is open seven days a week for 92 hours of service during the academic year. The Media Center is open 70 hours a week. Longer study and research hours are maintained prior

to exam periods.

To round out library programs, a Writers Reading Series was established in 1987 to promote an appreciation of books and their authors. The series features locally, nationally and internationally known writers reading and discussing their works. Recent guests have included Jonathan Franzen, James Alan McPherson, Marilyn Robinson, Ted Kooser, Patricia Hampl, Rekha Basu, Maxine Kumin, Dr. Danielle Ofri and Carol Bly as well as Central College faculty and student writers. Geisler Library offers an outstanding learning environment that combines the best of traditional collections with advanced information technologies to prepare students for lifelong learning.

## Information Technology

Computing at Central is accomplished through a variety of personal and centralized computer systems, interconnected by a state-of-the-art campus computer network. 700 computers serve the academic program and are distributed across campus in classrooms, laboratories and faculty offices. Of these, nearly 500 computers are specifically reserved for student use. Academic computers are used for applications such as multimedia, modeling and simulation, collection of scientific laboratory data, programming languages and word processing – all incorporated into the curriculum of a variety of disciplines.

Centralized campus server systems provide access to e-mail, the Internet, and file and print services. Central's World Wide Web site is accessible across campus and around the world at [www.central.edu](http://www.central.edu).

These computing resources, as well as the online library catalog, are available everywhere on campus including in residential rooms through a state of the art 11n wireless network installed in 2008. Every campus residential room is also equipped with high-speed, dedicated network connections (ethernet) as well as television and voice mail service.

Central incorporates technology use into classroom instruction, and every classroom is equipped with high tech equipment. A new lecture capture system installed in 2009 allows playback of class sessions from 13 classrooms for later review of the information presented in class.

# PRE-PROFESSIONAL PROGRAMS

## Pre-health

The pre-health professions program is designed to serve the needs of students who plan to attend professional or graduate schools in a variety of health-related fields (including but not limited to medical school, veterinary school, dental school, optometry school, physical therapy school and occupational therapy school). Because of the diversity of academic preparation required by the various health professional and graduate schools, the pre-health program is designed as a supplemental advising program meant to complement any major. Students participating in the pre-health program will have, in addition to their major advisor, a supplemental advisor associated with the pre-health program. As students identify specific professions or areas of interest, they should contact the pre-health professions program coordinator, Dr. Glenn Barnett. The program coordinator will then direct the student to a pre-health advisor with advising expertise appropriate to the student's interests. The role of the pre-health advisor is to guide the student in identifying appropriate graduate or professional schools and their admission requirements and to assist the student in designing curricular sequences to meet the individual professional school requirement.

## Pre-law

By design, Central does not offer a pre-law major. Law schools regularly accept students from all majors. Pre-law advisors, law school admissions directors, the American Bar Association, American Association of Law Schools – and attorneys – indicate that developing and sharpening key skills and values are the best preparation for the study and practice of law. All strongly agree on the value of a well-rounded liberal arts education.

Choose a major that you are interested in or that fits with your personal and professional life goals. Increasingly, law schools are admitting students from a wide range of majors, including the social sciences, natural sciences, and the arts. Law schools are interested in demonstrated academic success and skill development, not in a specific list of courses taken or a particular major. They are also generally unimpressed by double majors or minors. During your undergraduate years, work towards achieving the strongest possible academic record you can and enroll in courses that will enhance the skills necessary to be successful in law school.

The American Bar Association Committee on Pre-Law Education and Iowa law schools recommend that you consider the following key skills areas when choosing courses:

- Writing Skills
- Analytical Reasoning Skills
- Logical Thinking and Problem Solving Skills
- Critical Reading Skills
- Oral Communication and Listening Skills
- Research and Information Literacy Skills
- Task Organization and Management Skills
- Values of Serving Faithfully the Interests of Others While Promoting Justice
- A Healthy Respect for History

Developing and sharpening these skills and values will increase your potential for success in the very rigorous, demanding study and practice of law. Attorneys – and law students – must be able to analyze complex and sometimes conflicting cases and statutes, while expressing their legal reasoning with clarity, logic, and precision. Choose courses that are designed to prepare you to write well and think logically. Take challenging courses, with challenging requirements, which force you to continuously improve your writing, analytical, and research skills.

Central's pre-law program is an advising based program. Central does not offer a major or certificate/endorsement in pre-law, but works with students, in partnership with their academic advisor(s), to choose courses that will maximize their skills prior to applying for law school. Central also has a pre-law seminar, offered in the Spring semester of each academic year. The pre-law seminar, taken during the student's junior year, provides an overall examination of the law school application process, including several weeks of LSAT preparation. Finally, if you are interested in pre-law, please become a member of the Pre-Law society, a co-curricular organization that will provide opportunities to explore a legal career outside of the classroom.

### **Pre-ministry**

Central College continues the emphasis of the Christian tradition in general, and the Reformed tradition in particular, to prepare students for a life of service to God and community, and to prepare some students for a vocation in the ministry.

The chaplaincy and the religion faculty work together to provide a period of reflection and discernment for students who are considering ministry, whether this be lay ministry (such as missions, church-related teaching, or para-church service) or ordained ministry that requires further graduate or seminary study. In addition to pastoral and vocational counseling by the chaplain, the director of the Christian ministries emphasis of the religion major, and other faculty members, there are three courses designed specifically for students who are considering vocations in the ministry. These courses are REL 285PI Pre-Ministerial Seminar, REL 220r Christian Worship, and REL 286P Doctrines and Ministry. In addition, pre-ministerial students usually complete either a major or a minor in religion in order to give them adequate grounding in scriptural studies, in church history, theology, and ethics, and in at least one world religion other than Christianity. The students also have an opportunity to do ministry internships in churches and church-related organizations either locally or through some type of internship program conducted elsewhere. Students may also choose to receive spiritual discipling from a designated mentor.

The variety of denominations represented by the faculty, students, and staff at Central College provides students with a rich exposure to various formulations of Christian teachings and practices. Although our aim is to provide students with an opportunity to study various church teachings besides their own, we also focus a particular student's study on the church teaching to which he or she is most accustomed. As parts of an educational institution, the chaplaincy, the Christian ministries emphasis, and the religion major encourage students to develop a strong sense of the centrality of education to ministry. We foster an integration of faith with training of intellectual qualities of mind in order to establish a student's vocation on the best that is thought and known in Christian teaching and ministry.

### **Pre-engineering**

Central's dual degree engineering program is an excellent way for students to obtain both an engineering degree and a liberal-arts degree. This program leads to a B.A. from Central and a B.S. in engineering from either Washington University (St. Louis), The University of Iowa or Iowa State University. Students obtain a strong liberal-arts education. A broad background in the liberal arts, as well as our emphasis on communication skills, helps students to establish themselves as thoughtful, creative, productive engineers. The transition from high school to a demanding course of study such as engineering can be difficult. Students are helped by small classes taught by extremely well-qualified, experienced teachers committed primarily to their teaching.

Typically, a student enrolls at Central College and chooses a science major closely allied with an engineering field of interest (usually physics, chemistry, mathematics or computer science). After three years of full-time study at Central (with least 90 s.h. of credit completed, including all Core requirements and all major requirements), the student leaves Central and enrolls at either Washington University, The University of Iowa or Iowa State University. Upon completion of one year of engineering study at Washington University, The University of Iowa or Iowa State University, appropriate credits are transferred back to Central, enabling the student to graduate with a B.A. degree from Central. The student will then earn a B.S. in engineering from the cooperating institution after an additional one to two years of engineering study.

Prior to the start of the first semester of classes in the first year at Central, interested students must formally declare to Central's pre-engineering program director their intent to participate in order to graduate in the time frame mentioned above. They must also complete specific courses at specific points in their academic programs to remain eligible for continued participation. Careful consultation with the appropriate faculty advisors makes this cooperative program successful.

This dual degree program also enables students to complete a full four years of study and the B.A. degree at Central. Students opting to do so may then take advantage of their advanced standing toward the fulfillment of B.S. in Engineering requirements at any of the cooperating institutions. Students pursuing this option must declare their intent prior to the start of their second year at Central.

# SPECIAL PROGRAMS

## Honors program

The honors program at Central College encourages student creativity, intellectual engagement and leadership. Beginning broadly, the program gradually focuses by helping students move toward greater independence, more advanced work in a discipline and increased leadership responsibilities. First-year students with an ACT score of 28 and either a high school grade point average of 3.75 or a ranking in the top five percent of their class are honors-eligible. Students who have a minimum cumulative grade point average of 3.5 at Central are honors-eligible.

### Goals of the honors program

1. To foster intellectual curiosity, to promote academic excellence throughout Central College and to sustain this community of scholars;
2. to provide an avenue for those with significant leadership potential to serve both the college and the community at large;
3. to foster mentoring relationships between students and faculty;
4. to make students aware of alternative career paths, courses of study, and programs that engage their individual gifts and talents; and
5. to help students prepare for graduate and professional school, academic fellowships and scholarships.

### Main features

Honors-eligible students have the following features of the Honors program available to them:

- **Honors seminars.** Honors seminars group higher level students together to explore topics at an advanced level. Included in these are honors seminars for first-year students taking *Intersections*.
- **Honors enrichment credits.** Honors-eligible students may opt to add enrichment credit to courses in which they have special interest. In doing so, the student has the opportunity to work closely with a professor and pursue a topic in the course at a more advanced level.
- **A senior honors thesis.** The thesis is carried out within the student's major department and culminates in a public presentation.

Those honors-eligible students completing a senior honors thesis will be awarded an honors designation on their transcript.

The honors program at Central College is coordinated by the honors committee, a three-member faculty committee with one student representative. For more information, contact the assistant academic dean's office.

## Exploring program

In the spirit of the liberal arts, the exploring program provides the opportunity for students to engage in classes and experience a variety of content areas before declaring a major. Throughout the first two years, students explore courses that not only fulfill the Core requirements, but also provide insight into a variety of disciplines. Central's exploring program is comprised of academic and administrative services, special events, and academic courses all designed to help students better understand themselves, better understand what their interests and skills are, and better understand what academic courses/programs and professional avenues are available and suitable to pursue. The network of services and programming include

- Exploring-related academic advising
- Interest and skills inventories and assessments
- Individualized career planning assistance, including internships, job shadowing, and service-learning
- Seminars and on-line tools to explore academic majors and career options
- Presentations by alumni representing a multitude of academic and professional backgrounds
- Credit-bearing course (*COLL 108: The Exploring Experience*) designed to help students explore their own interests, personalities values and skills

## Athletic training

Central College offers opportunities to work learn as an athletic training student under the direct supervision of Board of Certification (BOC) certified athletic trainers and clinical instructors. Central College athletic training students gain practical experience working with the college's athletic teams, in off-campus clinical sites and in a wide variety of internships. To be Eligible for certification, students must successfully complete the Commission on Accrediting of Athletic Training Education (CAATE) accredited educational program at Central College. and complete an examination as administered by the BOC.

Central College is accredited by the CAATE.

## Internships

All Central College students are strongly encouraged to participate in an internship during their junior or senior year, or during the summer break. Internships are short-term, supervised learning experiences in practical work settings, under the direction of a professional in the field, and overseen by a faculty member or Central representative. Students can receive college credit for internships related to their major or career interests.

Three contributors work together so that an optimum learning experience occurs: the student intern, the faculty supervisor and the employment supervisor. Students are active participants in every aspect of the internship including identifying and investigating sites, securing faculty supervision, applying for and being accepted for the internship, registering for credit, setting goals and objectives for the internship, performing the work in a professional manner, and evaluating the experience at the end.

The internship coordinator at the career center provides career counseling, site investigation, assistance with the application process, and guidance regarding evaluation. Internships are clearly invaluable in providing students with firsthand experience in professional work environments.

## The Washington Center (TWC)

Through a formal partnership with TWC, Central students are able to participate in internships in the nation's capital. Art students may work at the National Gallery, biology students with the National Institutes of Health, language students with the state department or a foreign embassy – there are opportunities for every major. Costs are comparable to study on Central's campus. Semester and summer programs are available. Participation is limited to selected upperclassmen with a GPA of at least 3.0. Students may receive graded seminar credit as well as pass-no record credit for the internship through the program. Students who are interested must obtain application information from the career center, rather than applying directly to TWC.

For the semester, students can receive 15 academic credits by enrolling in COLL 289 D *Washington Center Seminar* (3) and POLS 397 D *Washington Center Internship* (12). For the summer, students receive 11 credits, 3 for the seminar and 8 for the internship. For additional information: [www.twc.edu](http://www.twc.edu)

## Chicago Semester

Chicago Semester is a consortium program offering internships or student teaching in a major U.S. city, Chicago, during fall or spring semesters. Students participating in internships take two seminar courses taught by Chicago Semester staff. Students attend fine arts and cultural events, take field trips, navigate metro transportation and live in apartments in downtown Chicago with 2-3 participants. Students planning to intern in Chicago will typically register for COLL 397CI *Chicago Internship* (9), and two of the following: COLL 385Cs *Metropolitan Seminar* (3); FA 200Ca *Fine Arts Seminar* (3); HIST 244Ch *History of Religion in Urban America* (3); or PHIL 286Ct *Values and Vocations* (3). Application information for Chicago Semester is available at the career center. The Chicago Semester web site is: [www.chicagosemester.org](http://www.chicagosemester.org).

# CENTRAL COLLEGE ABROAD

## Study abroad programs

Study abroad is an integral part of the identity of Central College and its goals are reflected in the mission statement, strategic plan, and philosophy of the college. Students are actively encouraged to develop cross-cultural awareness and the ability to communicate as well as to understand, live and work in culturally diverse environments. The international education experience also strives to challenge students to understand empathetically, live cooperatively and act responsibly in a changing and intricately connected world. To accomplish these goals, Central College promotes study opportunities at eight study abroad programs located on three different continents. There are language immersion and English-based programs available. More than 10,000 students from Central and other colleges and universities have participated in Central College abroad programs over the past 40 years.

Central College Abroad programs have distinct features. Each site has an on-site program director, whose role includes advising students, leading excursions, and teaching the required cross-cultural course. Program directors also assist students in adapting to the new environment and educational systems. All of the programs place a continued emphasis on cross-cultural experiential learning, which includes internships and service-learning opportunities (offered for credit).

Foreign language programs in Vienna, Austria; Paris, France; and Granada, Spain are designed for students wishing to immerse themselves in another language and culture while being involved in cross-cultural experiential learning. These language programs are designed to accommodate students at any proficiency level, from introductory to advanced speaker. In addition to language and literature courses, students may enroll in a variety of humanities, business and science courses taught in the host country language. The Mérida, Mexico program also has options for students looking for language and cultural immersion opportunities.

English-based programs are located in London, England; Bangor, Wales; Leiden, the Netherlands; Mérida, Mexico; and Hangzhou, China. Students enrolled in the Wales program may choose to take a Welsh language course. Students in the Netherlands, China and Mexico programs have one required language course with the remaining courses taught in English.

All students, particularly those enrolled in the language study programs, are strongly encouraged to spend an academic year abroad. One-semester options with non-sequential course offerings are available for those unable to attend year-long programs. Summer programs are also available. Extensive information regarding each program is available on the Central College website under "Study Abroad." Please call or visit the study abroad office on Central's campus for more information. A brief synopsis of each program is listed below.

## Language Immersion Programs

### Vienna, Austria

The Central College program in Austria is designed for students at any language level. Those at the lower levels enroll in an intensive German language program while students at higher levels study the German language along with courses in almost any discipline at the University of Vienna and through Central College Abroad (taught by local faculty). Internships are also available for all language levels. Students live in Austrian student residence halls.

The program begins in Schwäbisch Hall, Germany, at the Goethe Institute with a one- or two-month intensive program to refine language skills. Cultural activities and excursions are included in the program.

### Paris, France

In Paris, language instruction is offered at all levels including introductory, regular, and advanced. Beginning to advanced language courses are offered at the Institut Catholique de Paris. Students with an intermediate level or above can enroll in the Sorbonne (Cours des Civilisation de Français) or do the business language and internship program through the Chamber of Commerce and Industry of Paris. In addition, a community service project for academic credit is available for those students who wish to have a unique opportunity to observe and participate in Paris public service organizations.

A language and culture orientation program is held for students prior to the beginning of the Paris program for both the fall and spring semesters. The program is organized through the Institut de Touraine in Tours, near the Loire Valley. Students are housed with families during the Tours program.

In Paris, students are housed throughout the city in residence halls. Excursions are organized to various points of interest not only in Paris but also throughout France.

### Granada, Spain

The Granada program offers the opportunity for students to study Spanish at all language levels: introductory, intermediate, advanced and superior. The program begins with a three-week language and cultural orientation prior to the start of the semester courses. Students enroll at the Center for Modern Languages at the University of Granada and may choose between an intensive language program or language courses plus course work in the humanities, social sciences and business. The Granada program offers extensive opportunities for service-learning projects organized by the program director in cooperation with a local charitable organization. Internships are available for upper-level students.

Students live with host families on the Granada program, where they are provided three meals per day.

## English and Language and Culture Programs

Central College is firmly committed to the philosophy that a study abroad experience can be valuable for those who do not have a mastery of a second language. Students may spend a semester or full academic year on the programs listed below.

### London, England

The London program provides students the opportunity to study British culture and society through Central College courses (taught by local faculty) in history, art, and theatre, among others. Students may also choose from a wide selection of course offerings from London Metropolitan University, Morley College, London College of Fashion and the City Lit Center for Adult Learning. Internships are also an integral part of the London program with more than 100 internship placements available. Students live in central London at Vandon House located within walking distance of Buckingham Palace, Westminster Abbey and Victoria Station.

### Leiden, the Netherlands

Leiden is a vibrant university town, a modern business center and gateway to mainland Europe. The Leiden program is an excellent option for a student wishing to take anything from courses on European politics, to art history and graphic design. Course work opportunities are available in art and architecture, studio art, Dutch studies and language, history, international business, politics, psychology, amongst others. In addition to enrolling in Central College courses (taught by local faculty), students may also take courses at both Leiden University and Webster University. The Leiden program is also ideal for education majors who can intern at The American School of The Hague, which has both a Dutch and an international baccalaureate curricula.

Internship placements are more readily available for full-year students, but any well-qualified student should inquire about this possibility.

Organized excursions include field trips to sites such as The Hague, Amsterdam and Brussels with an optional trip to the Frisian Islands.

### Bangor, Wales

The program in Wales provides an exceptional opportunity for students to immerse themselves in a unique and fascinating culture through a guided exploration of the country, history and identity of Wales. Students attend classes at The University of Wales in Bangor, where they can take any course that is offered, including anything from marine biology to music.

The required cross-cultural course provides a thorough introduction to the country and culture through classroom lectures and many field trips and excursions, including both a tour of Wales and a tour of Ireland. The Outdoor Pursuits course offers kayaking, rock climbing, caving, hiking and camping activities.

Central students have many opportunities to meet and interact with their Welsh, Irish and English peers on campus. For those interested in further involvement with the Welsh community there are optional home stays as well as community service learning projects for credit.

### **Mérida, Mexico**

The Mérida program, located in the unique region of Mexico that is the Yucatán, is especially designed to give students a firsthand experience of Yucatecan and Mexican culture through formal course work and cross-cultural experiences. The program is open to students regardless of their Spanish language skills. Students looking for language immersion and with a high intermediate level of Spanish can take courses at one of the local universities. Other students take one required Spanish course and fill in with the remaining courses in English, or a combination of English and Spanish. Central College course offerings focus on social, political, historical and cultural issues within Mexico, between Mexico and the U.S. and, in particular, the Yucatán. Organized trips and excursions share this focus and may include destinations such as Mayan ruin sites, the rain forest and local villages.

Language courses and electives in Spanish for students at the high intermediate level or above are offered through Marista University, Modelo University, and the Autonomous University of the Yucatan (UADY).

Students looking for more of an immersion experience can opt for a home stay. Other students live in the Central College house in a residential district of Mérida.

### **Hangzhou, China**

Central College offers students the opportunity to participate in a semester or year abroad in a non-western culture. The city of Hangzhou is located near the coast of the East China Sea, about 100 miles south of Shanghai, and is known in particular for the beauty of its West Lake park and gardens.

Central students live in an international residence hall at Zhejiang University. All students enroll in Chinese language courses, for either a half or a whole semester. Additional courses are taught in English in the areas of the arts, business and history through Central College Abroad. Students can also take electives in Chinese through Zhejiang University. Students of all majors are actively encouraged to participate in an internship.

Program excursions and activities may include visits to Beijing, Shanghai, Shaoxing and field trips to places of interest in Hangzhou.

## **Summer Programs Abroad**

### **Granada, Spain**

This six-week intensive language program is open to students of all levels, including beginners, who wish to concentrate on improving their reading, writing, listening and speaking abilities in Spanish. Students live with host families.

### **London, England**

The Central College summer internship program in London utilizes the successful internship options that form a part of our fall and spring semester programs. Internship offerings have been in disciplines such as art, business, politics, communications and theatre.

### **Leiden, the Netherlands**

The summer art and culture program in Leiden, the Netherlands provides students the opportunity take courses in photography, drawing and graphic design. Along with classroom lectures, coursework is based mainly on field trips to Amsterdam, Rotterdam, the Hague and Utrecht. City walks, museum visits and art galleries provide an art-historic background to the program.

### **Ethnographic Research Projects**

Ethnographic research programs, directed by Central College faculty, are offered on a regular basis. Research sites are Wales and the Basque country of Spain. More information on these programs is available on the Web site.

## **Non-Central study abroad programs**

Central students seeking to enroll in a non-Central study abroad program are advised of the following:

1. There is no guarantee that Central College will accept in transfer any academic credit earned on such a program or that any accepted credit will meet particular academic requirements (i.e., core, major, minor).
2. There is no guarantee that Central College financial aid will be applied to pay for any portion of such a program. Students must formally request a review of potential transfer credit from such a program, as well as submit an application for financial aid one year in advance of the semester of intended study. Details are available in the financial aid, academic records and registration, and international education offices on campus.



## 2009-10 Study Abroad Program Fees

Airfare is not included in the program fees. Please check with the Central College Abroad office for the most current pricing.

### BANGOR, WALES

Bangor, Fall or Spring Semester	\$ 16,900
Bangor, Year	\$ 33,800
Summer 2009 Outdoor Pursuits	\$ 3,905
<i>(No meal plan is included in program fees.)</i>	

### GRANADA, SPAIN

Granada, Fall regular and Intensive Language	\$ 12,975
Granada Spring Reg. Semester	\$ 13,200
Granada Spring Intensive Language	\$ 14,600
Granada Year	\$ 25,950
<i>(Full board plan is included in Granada program fees.)</i>	
Summer 2009 Intensive Language	\$ 3,850

### HANGZHOU, CHINA

China, Fall Semester	\$ 11,170
China, Spring Semester	\$ 11,340
Academic Year	\$ 23,240
Summer 2010 ESL Internship	\$ TBA

### LEIDEN, THE NETHERLANDS

Leiden, Fall or Spring Semester	\$ 14,900
Leiden, Year	\$ 29,650
Summer 2009 Art & Culture	\$ 2,925
<i>(No meal plan is included in Leiden program fees.)</i>	

### LONDON, ENGLAND

London, Fall or Spring Semester	\$ 16,600
London, Year	\$ 32,600
<i>(Includes daily breakfast.)</i>	
Summer 2009 Internship Program Fee	\$ 6,335

### MERIDA, MEXICO

Yucatan, Fall or Spring Semester	\$ 13,200
Yucatan Academic Year	\$ 26,400
Summer 2009 Language & Culture	\$ 2,700
<i>(Full board Mon. – Fri and Sat. brunch is included in Mérida program.)</i>	

### PARIS, FRANCE

Paris Sorbonne Fall Semester	\$ 20,300
Paris Sorbonne Spring Semester	\$ 18,675
Paris Sorbonne/Chamber of Commerce, Year	\$ 35,790
Paris Chamber of Commerce, Spring Semester	\$ 20,125
Paris Catholic Institute Fall Semester (Dec.)	\$ 18,700
Paris Catholic Institute Fall Semester (Jan.)	\$ 21,500
Paris Catholic Institute Spring Semester	\$ 21,000
Paris Catholic Institute/Chamber of Commerce, Year	\$ 36,250
Paris Sorbonne Year	\$ 33,970
Paris Catholic Institute Year	\$ 36,250
Summer 2010 French Language & Culture	\$ TBA
<i>(Partial board plan is included in Paris program fees.)</i>	

### VIENNA, AUSTRIA

Two mos. Goethe+ Vienna Fall or Spring Semester	\$ 20,680
One mo. Goethe + Vienna Fall or Spring Semester	\$ 18,200
Two mos. Goethe + Vienna, Year	\$ 34,630
One mo. Goethe + Vienna, Year	\$ 32,150
Vienna Only, Fall or Spring Semester	\$ 15,910
Vienna Only, Year	\$ 29,000
<i>(10 weekday meals are included at the Goethe Institute. No board plan is included in Vienna program fees.)</i>	

# AWARDS

## Academic and leadership awards

### All-college awards

#### Alpha Zeta Mu

These Greek letters symbolize leadership, living and learning. The society publicly recognizes academic excellence as evidenced by potential members of the organization and promotes intellectual and creative activity among Central students. Membership is awarded to those full-time students who are within 60 semester hours of graduation, have completed at least three semesters at Central and have achieved a minimum cumulative grade point average of 3.8.

#### John Allen Writing Award

All Central College students are eligible for the John Allen Writing Awards regardless of major or class standing. Professors from all disciplines are encouraged to submit student papers that exhibit superior rhetorical competence, high levels of readability, originality and insight. Papers are judged by an independent evaluator or committee who selects about 10 of the best papers to be published in the college's annual *Writing Anthology*. From these, the evaluators name two writers for the John Allen Writing Awards. The award, in the form of a commemorative book, honors the late John Allen, former Central English professor.

#### Maureen Danks Writing Award

All Central students are eligible for the Maureen Danks Writing Award, regardless of major or class standing. Papers that exhibit rhetorical competence, high levels of readability, originality and insight are submitted by professors in the sciences. The award, made in the form of a commemorative book, honors the late Maureen Danks, former biology professor at Central.

#### Henry G. Eggink Award

The Rev. Henry G. Eggink Award is given to deserving preministerial students preparing for the parish ministry. Grant recipients are encouraged to use the funds provided for the purchase of books that will become the nucleus for a theological library.

#### Marjorie Giles Student Life Leadership Award

The Marjorie Giles Student Life Leadership Award is given annually to a junior or senior who has demonstrated positive values through faith-based leadership in a variety of co-curricular activities, in addition to Central athletics as an athlete, trainer, student coach or related athletic role.

#### Graham Distinguished Scholar Award

The Graham Distinguished Scholar Award is given to students who are distinguished in both academic performance and in promise of future service to worldwide societies as revealed, in part, in personal perspectives that have been significantly enhanced by participation in an international education program. It is in honor of James Graham, former Dean, whose pivotal leadership catapulted Central's international programs to national prominence.

#### Prins Sportsmanship Award

The Prins Sportsmanship Award is given to honor the memory of Tunis W. and Harriet B. Prins. Together, they served Central College and the Pella community for a period of 24 years. Mr. Prins was Director of Athletics and Professor of Physical Education from 1938 until his untimely death in 1949 at which time Dr. T.G. Fultz presented a bronze plaque to the College in Prins' memory. In that same year Mrs. Prins became Residence Director of Graham Hall and later Dean of Women until her retirement in 1962. Tunis and Harriet Prins exemplified and encouraged good sportsmanship—in contests on the field and in all human relationships. Candidates for the award are recommended by members of the senior class and the faculty. From these recommendations, the award committee picks a student to receive the certificate of award and have his or her name engraved on the plaque.

The winner will be a student, athlete or non-athlete, who has demonstrated outstanding sportsmanship in dealing with fellow students on campus or in meeting life's challenges.

#### Ron Schipper Leadership Award

The Ron Schipper Leadership Award is presented annually to a senior who, in either formal or informal leadership roles, reflects the character, commitment and enthusiasm for Central College displayed by Coach Schipper during his 36 years of service to Central's students. The recipient must demonstrate a willingness to set lofty goals and the drive to achieve them, high ethical standards and strong Christian values, a joyous spirit, genuine concern for others and a deep, personal loyalty to Central College.

#### Julia Van Houweling Award

This award is given to the student who has completed a minimum of 12 semester hours each semester and earned the highest grade point average during the three preceding semesters. If two or more students have identical averages, the college honors committee will make the final selection. Previous winners are not eligible.

## Departmental Awards

### Athletic Training

#### Roslien Distinguished Athletic Training Student Award

This award was established in 1993 in recognition of John Roslien, the first full-time certified athletic trainer at Central College and his wife, Sheri. The Roslien Award honors a student in the program that epitomizes the Rosliens' dedication to the program, the profession and Central College.

### Biology

#### Biology Senior Award

This award is given to a top graduating senior who is entering graduate or professional school. The award consists of a cash award and a one-year membership in the Iowa Academy of Science.

#### John Bowles Award

This award is presented to a graduating senior in recognition of exemplary achievement or service in the areas of environmental, evolutionary, or field biology. The recipient will receive a book and cash award.

### Chemistry

#### Analytical Chemistry Award

The Analytical Chemistry Award is chosen by the analytical chemistry professor and given to a chemistry major. The gift, a one-year subscription to the *Journal of Analytical Chemistry*, is awarded based upon interest and ability.

#### Art Bosch Chemistry Award

This award, in honor of a long-time member of the chemistry faculty, may be given to a senior for outstanding service to the functioning of the department. The student is selected by the chemistry staff and receives a Merck Index.

#### Chemistry Senior Award

This award is given to an outstanding senior majoring in chemistry. The award includes membership and a subscription to *The Chemist*.

#### Freshman Award

This award is given to the freshman who has gained highest achievement in Chemistry 131 and 235. The student is selected by the professors in these courses and receives a CRC handbook.

### Communication Studies

#### Steve and Joyce Bell Excellence in Journalism Award

This award shall be open to a sophomore, junior or senior student who, over the course of an academic year, has demonstrated consistent excellence and integrity in journalistic reporting, writing, photography or video news packaging for campus publications, news broadcasts, on-line or new media news outlets. The same recipient is not eligible for the award in consecutive years. Nominations for the Bell award are solicited from student journalists, student editors of campus news outlets and their faculty advisors. The Communication Studies faculty selects from the nominations received.

#### C.A. and Frances L. DeBruin Award

Endowed by the Rev. C.A. DeBruin, the award goes to the junior or senior within the department of communication studies who has exhibited sound academic achievement, high moral character and who has made a significant contribution to the department. A monetary award is given.

### Economics/Accounting/Business management

#### Accounting Award

The award is given to the senior accounting major who has demonstrated excellence in accounting as determined by the department faculty. This award is given with the support of the Iowa Society of Certified Public Accountants to a student planning a career in accounting.

#### Butler Scholar in Economics Award

Named for a long-time member of the economics faculty, Dr. Donald Butler, this award is given to a senior economics major or a senior student who has completed a significant number of courses in economics and who has demonstrated the ability to handle abstract theoretical concepts, an interest in independent research, the desire to pursue a career in economics or a related field, the earned respect of his or her peers, evidence of intellectual growth, and superior academic performance. A cash award is given.

### **Economics, Accounting and Management Department Outstanding Leadership and Service Award**

This award is given to a senior Economics, Accounting, Business management, or International management major who has distinguished himself/herself by demonstrating outstanding leadership and service qualities to the department and its students.

Examples of such service and leadership qualities include, but are not limited to:

- Leadership role and active participation in student clubs
- Serving as a mentor or role model for other students in the department
- Assisting the department as student instructor or long-term tutor
- Assisting the department faculty with annual departmental activities, such as Advisory Council meetings, publication of *The Link* and other activities.

Qualification for this award includes a minimum cumulative GPA of 3.0.

### **Economics Award**

This award is presented to the senior economics major who has demonstrated the highest academic achievement in the economics major. The award winner must also have a sincere interest in an economics career and in furthering his or her education with graduate school experience. The recipient receives a subscription to a scholarly economics publication and has their name inscribed on a plaque in the Weller Center.

### **Institute of Management Accountants Award**

The award is given to the senior accounting major who has demonstrated excellence in accounting as determined by the department faculty. This award is given with the support of the Des Moines Chapter of the Institute of Management Accountants to a student planning a career in accounting.

### **Wall Street Journal Achievement Award**

The award is given to the senior management, international management or systems management major for outstanding achievement in scholarship, leadership and attitude as recognized by the department faculty. The recipient receives a one-year subscription.

### **Paul R. Winn Marketing Award**

This monetary award is given to the senior marketing major who has demonstrated high academic achievement as measured by grade point average. The award winner must also have a sincere interest in a marketing-related career and in furthering his or her education with graduate school experience.

## **Education**

### **Lee Collins Award for Excellence in Education**

This award is given to one or more upper class elementary education students who demonstrate ideals which were modeled by Professor Collins. Selection for the award is made by faculty members in the education department on the basis of academic achievement, commitment to the welfare of youth, and overall potential as a teacher, particularly in the areas of mathematics or natural science education.

### **Barbara Dieleman Award for Excellence in Education**

The award is made possible by an endowment established by former students and colleagues of Barbara Dieleman, a long-time member of the education faculty. The award is given annually to one or more upperclass education students who demonstrate ideals that were modeled by professor Dieleman in her teaching career. Selection for the award is made by the education department on the basis of academic achievement, commitment to teaching and learning, personal qualities such as caring, honesty, courtesy, morality and dependability, service to college and community and overall potential as an effective teacher.

### **Joyce Huizer Award for Excellence in Education**

This award is given to one or more upper class elementary education students who demonstrate ideals which were modeled by Professor Huizer. Selection for the award is made by faculty members in the education department on the basis of academic achievement, commitment to the welfare of youth, and overall potential as a teacher, particularly in the areas of language arts education.

## **English**

### **Calliope Award**

The Calliope Award is named for Muse Epic poetry and is awarded annually, at the department's discretion, to the English major who has demonstrated creativity and intellectual curiosity. The award is funded by members of the English department.

## Exercise science

### Taylor Brummel '08 Memorial Physical Education Award

The recipient(s) of the award shall be a senior exercise science student, focusing in the area of physical education. The recipient(s) shall also be of average academic standing but deemed by the faculty to have excellent promise in the area of physical education. If the student meets the above criterion, other consideration can include:

- Recipient plans to teach in levels 7-12
- Recipient transferred to Central College from another institution
- Recipient has received their coaching endorsement

### Verle Rinehart Exercise Science Award

The Verle Rinehart Exercise Science Award is awarded to an outstanding senior graduating with an exercise science degree. It is hoped this recognition will inspire the recipients to greater service to mankind in the tradition that was Verle Rinehart's. Selection is made by the exercise science faculty.

## Interdepartmental/Humanities

### Vander Lugt Scholarships and Prizes in the Humanities

The Vander Lugt Prize is given for excellence in the study of the humanities. Annually, the individual departments in the humanities division (English, history and philosophy/religion) choose one student from each department to receive a cash prize of \$100. Prize winners may major in any field and may be in any class so long as they have displayed excellence in their humanities division courses. The award is made in honor of Drs. Gerrit and William Vander Lugt. Dr. Gerrit Vander Lugt was Central College president from 1946-60 and Dr. William Vander Lugt was a professor of philosophy at Central from 1934-50.

## Interdepartmental/Pre-health Science

### Dr. Herman Vander Meulen Award

This award is given to an outstanding senior pre-health student who has been accepted into medical school. This monetary award is to be used to start a professional library.

## Interdepartmental/Pre-law

### MVP Award

This award is presented to an outstanding member of the Central College Mock Trial Team who has contributed to the overall success of the team during the course of the season.

## Mathematics/Computer Science

### Henry W. Pietenpol Award

Each year the department gives this award to one or two deserving juniors who have made significant contributions to the department through outstanding scholarship and other service. The award includes membership to the Mathematics Association of America or the Association for Computing Machinery and subscription to two journals.

## Modern Languages

### Denise Murray Award in French

### German Award

### Linguistics Award

### Jim Graham Award for Academic Excellence in Spanish

### Martha Betancourt Prize for Departmental Excellence and Service Within the Spanish Department

These language awards are given to outstanding language students who have performed at an equally excellent level on campus and abroad and who have promoted the study of language on our campus.

## Physics

### Richard J. Mentink Scholarship Award

An award endowed by gifts of friends and the Mentink family in memory of Richard J. Mentink, who was a student at Central, is given annually to a student who has demonstrated worthy achievement in the field of college physics.

## Political Science

### Pi Sigma Alpha Award

This award is given to an outstanding political science student, usually a senior, who has set an example of sustained excellence within the discipline through speaking, writing and critical thinking.

### Political Science Award

This award is given to an outstanding political science student who shows promise of excellence within the discipline through speaking, writing and critical thinking.

## **Sociology/Anthropology**

### **Gordon F. De Jong Senior Award**

This monetary award is given to an outstanding senior sociology student who shows potential for graduate study. The award is to be used to purchase books for a professional library or for graduate education-related expenses.

## **Theatre**

### **Mr. "B" Outstanding Performance Award**

Provided by former Central theatre director Robert Wegter in honor of Maurice Birdsall, director of theatre at Central from 1947-1977, the award goes to the student who made the most significant contribution to the theatre program and who has exhibited competent academic achievement.

## **Athletic awards**

### **All-sports**

#### **Senior Coaches' Award**

Presented to the senior female and male student-athletes who have achieved the highest grade point average during their college career and have earned a minimum of two varsity letters in one sport.

#### **Sterling Strength and Conditioning Athlete of the year Award**

Presented annually to the male student-athlete and female student-athlete who best demonstrate a burning passion to achieve their highest potential through strength and conditioning training; who display leadership in their workout programs; and who show significantly improved performance in their sports as a result of their training. The recipients are selected by the college's strength and conditioning coordinator and the exercise science department chair.

## **Baseball**

### **Defensive Player of the Year Award**

### **Offensive Player of the year Award**

### **Pitcher of the Year Award**

### **Most Valuable Player Award**

### **Most Valuable Newcomer**

### **Harold and Mansford Versteeg Award**

Given annually to the baseball player who best exemplifies scholarship, leadership, and sportsmanship as selected by the coaching staff.

## **Men's basketball**

### **Connie Muyskens Memorial MVP Award**

Established in honor of the late Rev. Cornelius P. Muyskens, the trophy is presented to the player making the best all-around performance in basketball. The record is based on ability and improvement during the season, scholastic standing, sportsmanship and faithfulness in training.

### **Wassenaar Coaches' Award**

Awarded by the coaches to the basketball player, whose playing time though limited, makes a positive contribution to the team through attitude and example.

### **Mentink Award**

Given in memory of the late Richard J. Mentink, this award is presented annually to the outstanding basketball player, who, by performance and example, both in varsity competition and in the classroom, provides inspiration and leadership to his team. This award is given by Drs. Maxine and D.M. Huffman.

### **Gary Dirksen Achievement Award**

Named for a Central graduate, long-time college administrator and ardent supporter of the Dutch men's basketball program, the award seeks to honor a varsity men's basketball player who has not only strived to achieve on the basketball court, but has also strived to achieve off the floor. Consideration is given to the candidate's efforts to achieve academic excellence, to achieve leadership roles in college clubs and organizations and to achieve a sense of community involvement in working with local organizations.

## **Women's basketball**

**Most Valuable Player Award**  
**Most Improved Player Award**  
**Hustle Award**  
**Best Supporting Player Award**  
**Top Defensive Player Award**  
**Top Offensive Player Award**  
**Coaches' Award**

## **Men's cross country**

**Most Valuable Performer Award**  
**Most Valuable Freshman Award**  
**Most Improved Performer Award**

## **Women's cross country**

**Most Valuable Performer Award**  
**Most Improved Performer Award**  
**Most Valuable Freshman Award**

## **Football**

### **Heerema-Schilder Memorial Blanket**

A "C" blanket is given in honor of the late Arie Schilder to the player making the best all-around performance in football. The record is based on ability and improvement during the season, scholastic standing, sportsmanship and faithfulness in training. The award is endowed by Lester Claussen, John Ver Heul and Martin Heerema.

### **Mentink Award**

The award is given in memory of the late Richard J. Mentink, a former player. It is given to that player, who, by performance and example, both on and off the field and in the classroom, provides inspiration and leadership to his team. The award is given by the Mentink family.

### **P.H. Kuyper Coaches' Award**

Awarded by the coaches to the senior football player, whose playing time though limited, makes a positive contribution to the team through attitude and example.

### **Borgman Award**

Given in honor of Worp Borgman to the senior football player who has achieved the highest cumulative grade point average and excelled on the field of play.

### **Les Claussen Coaches' Award**

Given in memory of Les Claussen to the student who improves as a football player and makes outstanding contributions to the total program.

### **Bruce Wendt Award**

Given in memory of former Central football player Bruce Wendt to the outstanding offensive lineman.

### **Dr. George H. Lankelma Award**

The award, a wrist watch, is presented annually to the underclassman who contributes the most to the football team.

### **Wagner Award**

Given in memory of former Central football player Kirk Wagner to the outstanding member of the offensive scout team.

### **Dagh Award**

Given in memory of former Central football player Ted Dagh to the outstanding member of the defensive scout team.

### **Brian O'Donnell Award**

Given in honor of Brian O'Donnell to the outstanding freshman football player.

### **Mel Ver Meer Loyalty Award**

Given in memory of Mel Ver Meer to the player who has demonstrated loyalty to the program.

## **Men's golf**

**Low Scoring Average Award**  
**Most Valuable Freshman Award**  
**Most Improved Player Award**  
**Ryerson MVP Award**

Given in memory of former coach Norman Ryerson, the award is presented to the most valuable player on the men's golf team.

### **Wagner Award**

Given in memory of former Central golf team member Kirk Wagner to the player, whose playing time though limited, makes outstanding contributions to the team through leadership and example on and off the golf course.

**Women's golf****Maurine Timmer Most Valuable Player Award**

Established in honor of Maurine Timmer, the first Central women's golf coach (1973-87), the award is presented to the player making the best all-around performance in women's golf. The record is based on ability and improvement during the season, scholastic standing, sportsmanship and team commitment.

**Most Dedicated Player Award****Most Improved Player Award****Most Valuable Freshman Award****Outstanding Attitude Award****Men's soccer****Most Valuable Player Award****Most Inspirational Player Award****Most Improved Player Award****Outstanding Newcomer Award****Women's soccer****Most Valuable Player Award****Most Improved Player Award****Hustle Award****Outstanding Freshman Award****Softball****LeRoy Timmer MVP Award**

Given annually to the outstanding member of the softball team.

**LeRoy Timmer Most Inspirational Player Award**

Presented to the player who through leadership, dedication, and example on and off the playing field, makes an outstanding contribution to the softball team.

**Hustle Award****Most Improved Player Award****Men's tennis****De Haan MVP Award**

Given annually to the outstanding member of the men's tennis team.

**Bogard Award**

Given annually to the team's most improved player. The award is given by W. Carl and Alice Bogard.

**Sportsmanship Award****Women's tennis****De Haan MVP Award**

Given annually to the outstanding member of the women's tennis team.

**Bogard Award**

Given annually to the team's most improved player. The award is given by W. Carl and Alice Bogard.

**Outstanding Sportsman Award****Men's track and field****Most Valuable Performer Award****Most Valuable Field Events Performer Award****Most Improved Performer Award****Most Valuable Freshman Award****Effort Award****Women's track and field****Most Valuable Performer Award****Most Improved Performer Award****Effort Award****Most Valuable Freshman Award****Most Valuable Field Events Performer Award**



## **Volleyball**

### **Jamie Hill MVP Award**

Established in memory of former coach Jamie Hill, the award is presented to the player who displays leadership, physical ability, a positive attitude, and hard work and effort. It recognizes the player who makes a genuine effort to contribute to the team and best exemplifies all of the above traits.

### **Mart & Elva May Heerema Achievement Award**

The purpose of this award is to honor a varsity volleyball player who has not only striven to achieve on the court but has also striven to achieve off the court.

### **Leadership Award**

### **Spirit Award**

### **Effort Award**

### **Most Improved Player Award**

### **Freshman of the Year Award**

### **Academic Award**

## **Wrestling**

### **Most Valuable Performer Award**

### **Lawrence Award**

Presented to the wrestler who best displays the dedication, intensity and work ethic exemplified by former team members Dale and Duane Lawrence.

### **Most Improved Performer Award**

### **Most Valuable Freshman Award**

# DIRECTORIES

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 J. Lanier Little, vice-chair  
 Sue Brandl, secretary

### EXECUTIVE COMMITTEE

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Tej Dhawan	Rick Ryan
Betsy Farver	Harry Smith
Terry Garvin	David Wesselink
Barbara Kniff-McCulla	Mary Worstell
J. Lanier Little	David Roe

### MEMBERS

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 Stephen Bell '59 (*emeritus trustee*), Professor of telecommunications, retired, Ball State University, Muncie, Indiana  
 Sue Brandl '65, Community volunteer, Pella, Iowa  
 Kenneth Braskamp '65, Consultant, Digital Sonics, LLC, Los Angeles, California  
 George Brown, Jr. '65, Associate dean and G.W. & Edie Haworth, professor of Christian education, Western Theological Seminary, Grand Rapids, Michigan  
 Jonathan Brown, Pastor, First Reformed Church, Oak Harbor, Washington  
 Peter Cartwright '82, First Vice President – Wealth Management, Senior Investment Management Consultant, Financial Planning Specialist, Smith Barney, Des Moines, Iowa  
 Mark DeCook '64 (*emeritus trustee*), President and Co-CEO, retired, Heritage Lace, Inc., Pella, Iowa  
 Vernon Den Herder '71, Farmer, Retired defensive end, Miami Dolphins, Sioux Center, Iowa  
 Tej Dhawan '91, President and owner, Advanced Technologies Group, West Des Moines, Iowa  
 Betsy Farver, National development officer, Betty Ford Center Foundation, Rancho Mirage, California  
 Joan Farver '88 H (*emeritus trustee*), Chair emeritus, Pella Corporation, Pella, Iowa  
 Shayla From, Community volunteer, West Des Moines, Iowa  
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 Emmitt George '72, Executive vice president & counsel, Geneva Energy LLC, Downers Grove, Illinois  
 Wesley Granberg-Michaelson (*honorary trustee*), General secretary, Reformed Church in America, Grand Rapids, Michigan  
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 Judith Grooters '60, Group controller, retired, Carreker Corporation, Dallas, Texas  
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 James Israel, President, John Deere Credit, Johnston, Iowa  
 Marlyn Klimstra '50 (*emeritus trustee*), Vice president of sales, retired, Pella Corporation, Pella, Iowa  
 Barbara Kniff-McCulla, CEO, KLK Construction, Pella, Iowa  
 Harold Kolenbrander '60 and '96 H, Senior consultant, Academic Search Consultation Service, Cincinnati, Ohio  
 Kevin Korver '77, Pastor, Third Reformed Church, Pella, Iowa  
 J. Lanier Little '74, Executive Vice President, First Niagara Financial Group, East Amherst, New York  
 Sophie Mathonnet-VanderWell, Pastor, Second Reformed Church, Pella, Iowa  
 Howard McKee '38 and '81 H (*emeritus trustee*), Attorney, retired, Barrington, Illinois  
 Frank Moore '49 (*emeritus trustee*), Senior research associate, retired, Yale University, Perry, Iowa  
 Charles Morris '70, Pastor, Ft. Washington Collegiate Church, New York, New York  
 Ed Ollie '93, Director of development, Stephen M. Ross School of Business, University of Michigan, Ann Arbor, Michigan  
 Michael Orr '69, President, financial services division, retired, Deere and Company, Monona, Wisconsin  
 Robert Pentico '64, President/owner, retired, Paradata, Inc., Bluffton, South Carolina  
 Karin Peterson, Vice President of Human Resources, Pella Corporation, Pella, Iowa  
 Barbara Pettitt '72, Chief of pediatric surgical services, Grady Health System/Children's Hospital of Atlanta, Stone Mountain, Georgia  
 Stan Poortinga, Chairman of the Board, Precision Pulley and Idler, Pella, Iowa  
 David Roe (*ex-officio*), President, Central College, Pella, Iowa

**Jean Rozenboom** (*emeritus trustee*), Managing director – investments, retired, Piper, Jaffray, New Sharon, Iowa  
**Rick Ryan '70**, Vice President, Drug Discovery Business Unit, Millipore Bioscience Division, Millipore Corporation, Ballwin, Missouri  
**John Schmidt**, Pastor, Second Reformed Church, Zeeland, Michigan  
**John Sikkink '62**, Mission advancement coordinator, Synod of the Heartland, Reformed Church in America, Apple Valley, Minnesota  
**Donna Smith '81**, Community volunteer, Pella, Iowa  
**Harry Smith '73**, CBS's "The Early Show" and Host of A & E's "Biography," New York, New York  
**Robert Vanderlinden '55** (*emeritus trustee*), President, retired, Seiferts, Pella, Iowa  
**Robert Vermeer '66**, CEO/chairman of the board, Vermeer Corporation, Pella, Iowa  
**Deanna Ver Steeg '94**, Headquarters controller, S.C. Johnson & Sons, Chicago, Illinois  
**Donald Vogel '61**, Senior vice president, retired, Spear, Leeds and Kellogg, St. Augustine, Florida  
**Judith Vogel '82**, Analyst, Principal Global Investors, Johnston, Iowa  
**David Wesselink '64**, Chairman and CEO, retired, Metris Companies, Inc., Northbrook, Illinois  
**Mary Worstell '73**, Director, Partner Relations Group, Office of External Affairs, Center for Medicare and Medicaid Service Department of Health and Human Services, Washington, D.C.

## Administrative staff

### Office of the President

*David H. Roe, president (1998), B.A., M.A., Ph.D.*  
 Betsy Roe, college ambassador and consultant (1999), B.A., B.A./M.A., J.D.  
 Ardith Sutphen, executive assistant to the president (1979)  
 Kenneth J. Weller, president emeritus (1969), A.B., M.B.A., Ph.D.

### Academic Affairs

*Paul Naour, provost/ dean of the faculty (2001), B.S., M.A., Ph.D.*  
 Cheri Doane, director of community-based learning (1998), B.A., M.S.  
 Robert D. Franks interim chief academic officer, professor of computer science (1988), B.S., M.S., Ph.D  
 Stephanie Henning, registrar (2008), B.S.  
 Lyn Isaacson, assistant academic dean (1998), B.A., M.A.  
 Eric Jones, director of academic support services (2006), B.S., M.A  
 Gwendolyn Krueger, laboratory materials manager/science center environmental compliance officer (2001), B.S.  
 Treva Reimer, interim faculty director of cultural affairs programming and interim Mills Gallery director (1983), B.A., M.F.A.  
 Vivian Rippentrop, assistant vice president for institutional planning (1974), B.S., M.A.  
 Thomas Thatcher, technical director (2003), B.F.A., M.F.A.  
 Marilyn Vrban, executive assistant to the chief academic officer (1997)

### Admission and Student Enrollment Services

*Carol Williamson, dean of admission (2000), B.A.*  
 Melissa Anderson, assistant director of admission (2004), B.A.  
 Melissa Brock, assistant director of admission (2006), B.A.  
 Theresa Crumley, director of admission (2000), B.A., M.A., D.M.A.  
 Chevy Freiburger, associate director of admission (2003), B.A.  
 Alicia O'Brien, coordinator of transfer students (2006), B.A., M.S.  
 Zachary Pfantz, admission representative/football recruitment coordinator (2007), B.A., M.A.  
 Shea Stamp, assistant director or admission (2006), B.A.  
 Steffanie Tomlinson, admission representative (2006), B.A.  
 Ann Van Hemert, associate director of admission (2002), B.A.  
 Dee Van Zee, coordinator of special event programming (1978)  
 Jason Zastrow, admission representative (2008)

## Athletic Department

*Al Dorenkamp, director of athletics (1998), B.A., M.A.*

Jacob Anderson, strength and conditioning coordinator/fitness center director (2003), B.S., M.A.

Michael Boschee, head men's basketball coach (2003), B.A., M.A.

Dustin Briggs, assistant athletic trainer (2007), B.A., M.S.

Kent Clayberg, head women's volleyball coach (1998), B.A.

Leslie Duinink, head athletic trainer (1999), B.A., M.S.

Joseph Dunham, head men's/women's track coach (2008), B.A., M.A.

John Edwards, special assistant to the director of athletics (1972), B.A.

Charles Estabrook, head men's golf coach and athletic events coordinator/sports club director (1997)

Reid Evans, assistant football coach (2008), B.A.

Kyle Halfpop, assistant men's soccer and community soccer liaison (2008), B.A.

Kyle Johnson, assistant strength and conditioning coach (2008), B.A., M.Ed

Colin Kuchy, head women's soccer coach (2007), B.A., M.A.

Garry Laidlaw, head men's soccer coach/academic advisor (1998), B.S., M.S.

Jeffrey McMartin, head football coach (2004), B.A., M.A.

Guy Mosher, associate head track coach (1998), B.S.

Jerry Nikkel, head women's basketball coach (2005), B.A., M.A.

Alicia O'Brien, associate head women's softball coach (2006), B.A., M.S.

Jodee Schaben, head women's golf coach (2004), B.A., M.S., Ph.D.

Joe Steinkamp, assistant director of intramurals & assistant men's basketball coach (2004), B.A., M.A.

Adam Stevens, head baseball coach and director of intramurals (2003), B.S., M.A.

Brandon Townsend, assistant baseball coach (2006), B.A.

Stephen Tyler, head men's and women's tennis coach (2008), B.A., M.A.

Eric Van Kley, head wrestling coach (2007), B.S., M.S.

Christopher Viessleman, assistant athletic trainer (2005), B.S., M.E.d.

George Wares, head softball coach (1985), B.A., M.S.

Jason Zastrow, assistant wrestling coach (2008), B.A.

## Business and Finance

*Barbara M. Bowzer, chief financial officer (1972), B.S., M.B.A., C.P.A.*

Beth Andersen, employment coordinator (2007)

Anthony Bethards, director of catering (1986)

Lindy Brandt, staff accountant (2007), B.A.

Debra Bruxvoort, director of academic computing (1999), B.A.

Thomas DeYoung, trades manager (1987) B.A.

Janine Fontana, facilities planning management operations manager (2000)

Carol Geil, graphic designer/campus services coordinator (2006), B.A.

Ashley Gritters, Perkins loan officer (2007)

Sharon Haning, associate director of human resources (1997) B.A.

Connie Henle, staff accountant/payroll specialist (1990), B.A.

J. Mark Howard, director of dining services (1999), B.S.

Sheryl Kamerick, controller (1968), B.A.

Bob Klucas, energy sustainability manager (1997)

Mike Lubberden, director of facilities planning and management (1978)

Sara McMahan, student staffing manager of Central Market (2006)

Donna Newendorp, associate director, counseling services financial aid (2002)

Lowell Olivier, conference coordinator (2000), A.A.

Keith Pothoven, director of administrative computing (2002), B.A., M.S.

Dianne Redden, accountant/technical services specialist (1999), B.A.

Debra Rooda, computer support specialist (1988)

Mona Roozeboom, director of human resources (1997), B.A.

Jeff Sanger, staff accountant (2003), B.A.

Jenna Stalzer, dietary manager (2007), B.S.

Lynne Steenhoek, manager central market (2001), B.A.

Terri Vander Molen, director of campus services and affirmative action officer (1989)

Jean Vander Wert, director of financial aid (1989), B.A.

Lee Vande Voort, chief information officer (1980), B.A., M.B.A.

Carol Van Weelden, senior systems analyst (1982), B.A.

Sandra Verhoef, software training and support specialist (1997), B.A.

Lee Weers, assistant director network services (2004), B.S.

Matthew Wenrick, systems analyst/administrator (2007), B.S.

Beth Wood, director of student accounts and accounts receivable (2007), B.A.

## Campus Ministry

*Joe Brummel, chaplain (2000), B.A., M.Div.*

## Central College Abroad

*Brian Zylstra, manager of on-campus relations (2000), B.A., M.I.M*

*Annique Kiel, director of institutional relations (2005), B.A., M.A.*

Claudina Castillo de Losa, facility manager, Yucatan program (2000)

Shelley Cavaness, director of Central College in Paris (2006), M.A., D.E.A.

Sade Dada, accounts manager, London program (2002)

Steef Eman, director of Central College in Leiden (1998), B.A., M.A.

Valerie Grimsley, director of Central College in Merida (2008), B.A., M.S., D.H.A.

Maria Hickle, territory representative for Central College Abroad (2008), B.A.

Jennifer Larson, coordinator of institutional relations (2008), B.A.

Victoria Kacheche, hotel manager, London program (2008)

Jessica Klyn-de Novela, senior coordinator of institutional relations (2005), B.A.

Verónica García Montero, director of Central College in Granada (1999), B.A.

Lauren Spalding, assistant director of London program (2007)

Eric Sneddon, director of European Operations for Central College abroad (2001), M.A., P.G.C.E.

Marie Trapp, associate director of Central College in Vienna (2004), B.A., M.A.

Tecwyn Vaughan Jones, director of Central College in Wales (2000), B.A., M.A.

Ruth Verweijen, director of Central College in Vienna (2000), A.A., M.A., M.I.I.M.

## College Advancement/Development and Alumni Relations

*David Sutphen, vice president of advancement (2000), B.A.*

Susan Canfield, director of events/grant writing/communications coordinator (1998), B.A.

Sunny Eighmy, director of alumni relations (2003), B.A.

Paul Jones, director of development (2006), B.A.

Connie Marlow, coordinator of prospect research (1997), B.A.

Donald Morrison, director of planned giving (1993), B.A.

Kristin Sullivan, coordinator of Reformed Church in America relations (2007), B.A.

Kathleen Thompson, director of the annual fund (2008)

Mary Vande Hoef, assistant director of alumni relations (2007), B.A., M.S.

Peggy Van Den Berg, database specialist/endowment scholarship coordinator (1989), B.A.

## Marketing & Media Relations

*Carol Williamson, dean of admission (2000), B.A.*

Cyndi Atkins, director of publications (1995), B.A., M.A.

Brianna Blake, graphic designer (2007), B.S.

Connie Cross, director of marketing and media relations (2000), B.A.

Reid Evans, marketing web programmer (2004), B.A.

Abby Gonzales, news and marketing writer (2003), B.A.

Larry Happel, associate director of marketing & media relations and sports information director (1979), B.A.

Jacob Oyen, marketing web manager (2005), B.A.

## Student Life

*JoNes VanHecke, dean of student life (2006), Ph.D.*

Jill Batten, assistant director of student activities (2008), B.A., M.Ed

Cynthia Boertje, tutoring coordinator (2003)

Ellie Burns, assistant director of educational talent search (2007), B.S., M.S.

George Clark, counselor (2008), B.A., M.A.

Jaelyn Coultas, Upward Bound & Upward Bound math science coordinator (2008), B.A.

Bonnie Dahlke, director of student involvement and orientation (2004), B.A., M.A.E.

Matt Diehl, student support services program coordinator (1991), B.A., M.S.

Karen Eilers, assistant director of the career center (2007), B.A., M.S.

Louise Esveld, director of pre-college programs (1998), B.A., M.A.E., Ed.D.

David Garsow, director of residence life (2007), B.S., M.A.

Paul Gibbins, assistant director of upward bound math and science (2008), B.A.

Julie Heineman, educational talent search coordinator (2007), B.A., M.S.

Michelle Kellar, director of counseling (1999), B.S., M.S.

Patricia Joachim Kitzman, director of career center (1988), B.A., M.S.

Kelly Kowzan, assistant director of upward bound (2001), B.A., M.A.

Nancy Kroese, director of student support services/disability service coordinator (1995), B.A., M.A.

Mary Robertson, accommodations/program coordinator for student support services (2003), B.A.  
Ryan Roy, educational talent search coordinator (2006), B.A.  
Kaleen Schmidt, residence hall director (2008), B.A., M.E.  
Melissa Sharkey, assistant director of residence life (2005), B.A.  
Andrew Sikkink, residence hall director (2007), B.A.  
Dean Thompson, director of campus security (2005), A.A.  
Julia Tjeedsma, educational talent search coordinator (2007), B.A.  
Erin Valerio-Garsow, Upward Bound coordinator (2008), B.A., MSED  
Ashley Weets, residence hall director (2008), B.A., M.S.  
Brandyn Woodward, director of intercultural life (2006), B.A., M.A.  
Marge Zondervan, director of health services (1987), R.N.

## Faculty

- Mark Babcock – B.A., Central College; M.M., Westminster Choir College. 1999 – Associate professor of music
- Mark C. Barloon – B.A., Iowa State University; M.A., The University of Iowa; Ph.D., University of North Texas. 2001 – Assistant professor of history
- Glenn R. Barnett – B.A., California State University; M.S., Ph.D., Cornell University. 1993 – Associate professor of biochemistry
- Jeffrey D. Bass – B.A., Sarah Lawrence College; M.A., University of Chicago; Ph.D., University of California, San Diego. 2007 – Assistant professor of anthropology
- Lori D. Bell – B.A., M.L.S., Ph.D., University of Oklahoma. 2008 – Assistant professor of economics
- Russell A. Benedict – B.A., M.S., University of Nebraska, Omaha; Ph.D., University of Nebraska, Lincoln. 2002 – Associate professor of biology
- Debela Birru – A.A., Grand View College; B.S., M.B.A., Northwest Missouri State University. 1989 – Associate professor of management
- Linda Blatt – B.A., Queens College; M.A., Niagara University. 1989 – Language arts associate, associate professor of English
- Richard L. Bowzer – B.A., Central College; M.A., Michigan State University. 1968 – Associate professor of exercise science
- Carol lei Breckenridge – B.M., M.M., University of North Carolina; D.M.A., University of Iowa. 1978 – M. Joan Kuyper Farver Professor of Music, professor of music
- Dustin J. Briggs – B.A., University of Northern Iowa; M.S., University of Kentucky. 2008 – Clinical instructor of exercise science, assistant athletic trainer
- Anya Z. Butt – B.A., Mount Holyoke; M.Sc., University of Toronto; Ph.D., University of Nevada. 2002 – Associate professor of biology
- Andrew B. Campbell – B.S.E., M.B.A., University of Iowa. 2008 – Instructor of management, assistant women's basketball coach
- Walter W. Cannon – B.S., University of Nebraska; M.A., Ph.D., Marquette University. 1979 – Professor of English
- Stanley E. Dahl – B.M., Iowa State University; M.M., Arizona State University. 2001 – Musical arts associate, assistant professor of music
- Christine L. Day – B.S.E., M.S.E., Ed.S., Drake University. 2006 – Instructor of education
- Dale W. De Wild – B.A., Hope College; M.A., Wayne State University; Ph.D., Florida State University. 1989 – Professor of sociology
- Jennifer A. Diers – B.A., University of Northern Iowa; M.Ed., University of North Carolina; Ph.D., Iowa State University. 2008 – Assistant professor of education
- Cynthia K. Doggett – B.M., University of Wisconsin – Stevens Point; M.M., Kent State University; D.M.A., University of Wisconsin – Madison. 2005 – Assistant professor of music
- Joshua A. Dolezal – B.A., King College; M.A., Ph.D., University of Nebraska-Lincoln. 2005 – Assistant professor of English
- Dennis M. Doyle – B.A., University of Northern Iowa; M.S., North Texas State University; Ph.D., Southern Illinois University. 1989 – Professor of communication studies
- Alida J. Droppert – B.A., Open University, United Kingdom; M.A., Ph.D., Michigan State University. 2007 – Assistant professor of education
- Leslie Duinink – B.A., Central College; M.S., Indiana State University. 1999 – Assistant professor of exercise science, head athletic trainer
- Ellen J. DuPré – B.S., Mankato State University; Ph.D., Wright State University. 2001 – Associate professor of biology
- Gabriel Espinosa – B.A., Central College; M.M., University of Northern Texas. 1996 – Associate professor of music
- Louise E. Esveld – B.A., Central College; M.A.E., Ed.D., University of Northern Iowa. 1998 – Director of pre-college programs, assistant professor of education
- Patrice R. Ewoldt – B.A., University of Northern Iowa; M.M., The Cleveland Institute of Music; D.M.A., University of Maryland of College Park. 2009 – Assistant Professor of Music
- Marguerite A. Fitch – B.A., Stephens College; M.A., University of Maryland; Ph.D., University of Kansas. 1992 – Kenneth J. Weller Distinguished Professor of the Liberal Arts, Professor of psychology
- Rachel Fleming – B.A., Grinnell College; M.A., University of Missouri-Columbia. 2006 – Assistant professor of library science
- Robert D. Franks – B.S., Northwest Missouri State University; M.S., Ph.D., Iowa State University. 1988 – Professor of computer science, interim chief academic officer
- Jann E. Freed – B.A., Central College; M.B.A., Drake University; Ph.D., Iowa State University. 1981 – Mark and Kay DeCook Endowed Chair in Character and Leadership Development, professor of management
- Stephen A. Fyfe – B.A., Central College; M.S., Ph.D., Iowa State University. 1998 – Associate professor of computer science
- Philip C. George – B.A., Vanderbilt University; M.A.T., University of Florida; Ph.D., George Peabody College for Teachers of Vanderbilt University. 1987 – Chair of division of applied arts, professor of education
- Russell E. Goodman – B.S., M.S., University of Texas, Arlington; Ph.D., University of Oklahoma. 2002 – Associate professor of mathematics/computer science
- Andrew D. Green – B.A., Wartburg College; M.A., Ph.D., University of California – Riverside. 2005 – Assistant professor of political science
- Michael T. Harris – B.A., Tulane University; M.A., Ph.D., Indiana University; Fulbright Award (1998-99). 1990 – Professor of English
- Catherine A. Haustein – B.A., Central College; M.S., M.F.A., Ph.D., University of Iowa. 1983 – Professor of chemistry
- Allen C. Hibbard – B.A., Saint John's University; M.S., Ph.D., University of Notre Dame. 1989 – Professor of mathematics

- Natalie H. Hutchinson – B.M.E. Drake University; M.S., University of Illinois. 2008 – Associate professor of library science, director of Geisler Library
- Arthur W. Johnson – B.S., Iowa State University; M.S., University of Wisconsin. 1968 – Associate professor of English
- Mark J. Johnson – B.A., St. Olaf College; M.A., Ph.D., University of Wisconsin, Madison. 1994 – Ruth and Marvin Denekas Endowed Chair in Science and Humanities, professor of mathematics and computer science
- Keith T. Jones – B.A., University of Northern Iowa; M.A., Ph.D., West Virginia University. 2006 – Associate professor of psychology
- Nicole Kaplan – B.A., M.A., Ph.D., The University of North Carolina at Chapel Hill. 2002 – Associate professor of French
- Mathew R. Kelly – B.F.A., University of New Hampshire; M.F.A., Syracuse University. 2006 – Assistant professor of art
- Kris A. Kilibarda – B.A., M.A., Ed.D., Drake University. 2004 – Assistant professor of education
- Yeon Kyeong Kim – B.A., KyungHee University; M.A., University of Missouri-Columbia. 2009 – Instructor of Communication Studies
- Terence J. Kleven – B.A., University of Calgary; M.A., Ph.D., McMaster University. 1996 – Chair of division of humanities, Professor of religion
- Timothy J. Knickerbocker – B.A., Bethel College; M.A., Ph.D., University of California, San Diego. 2003 – Assistant professor of anthropology
- Kathleen E. Korcheck – B.S.E., M.A., Kent State University. 2007 – Assistant professor of Spanish
- Kimberly A. Koza – B.A., Colby College; M.A., Ph.D., Indiana University. 2002 – Associate professor of English
- Allison Krogstad – B.A., North Central College; M.A., Ph.D., University of Minnesota. 1999 – Associate professor of Spanish
- Erik C. Ladner – B.A., M.A., University of Northern Iowa; Ph.D., University of Texas at Austin. 2007 – Assistant professor of Spanish
- Linda Laine – B.A., Abilene Christian University; M.A., Ph.D., University of Florida. 2004 – Associate professor of communication studies
- Paula T. Lee – B.S., University of Iowa; B.S., M.S., Iowa State University. 2005 – Coordinator of elementary field experience, instructor of education
- Thomas Linton – B.A., St. Olaf College; M.A., Ph.D., University of Wisconsin-Madison. 1999 – Associate professor of mathematics and computer science
- Mitchell B. Lutch – B.M., University of Lowell; M.M., New England Conservatory of Music; Ph.D., University of Washington. 2005 – Assistant professor of music, director of bands.
- Viktor Martisovits – RNDr., Comenius University; M.S., Ph.D., Ohio State University. 1999 – Associate professor of physics
- Samuel E. Mate-Kodjo – B.A., University of Ghana Leson; Ph.D., Ohio State University. 1995 – Associate professor of Spanish
- Robert J. Maurer – B.S., B.A., Rockhurst College; M.B.A., Indiana University. 1968 – Chair of division of behavioral sciences, associate professor of accounting
- Richard B. McGrath – B.A., M.A., San Francisco State University; Ph.D., Indiana University. 1994 – Associate professor of communication studies
- Elizabeth E. McMahon – B.A., Antioch College; M.A., Ohio State University; M.L.I.S., Kent State University. 2006 – Assistant professor of library science/reference and instruction librarian
- Paulina A. Mena – L.B., Universidad Católica de Valparaíso. 2009 – Instructor of biology
- Mark Mills – B.S., University of Nebraska-Lincoln; M.S., Ph.D., Iowa State University. 1999 – Associate professor of mathematics
- Michael J. Murray – B.S., University of Wisconsin – LaCrosse; M.A., University of Missouri – Kansas City. 2009 – Instructor of economics
- Peter T. Myers – B.F.A., Indiana University of Pennsylvania; M.M., University of Oklahoma. 2008 – Instructor of music, director of orchestra
- Paul J. Naour – B.S., M.A., Ph.D., Ohio State University. 2001 – Provost/dean of faculty, professor of psychology
- Chia Ning – B.A., Beijing Normal University; M.A., Illinois State University; M.A., Ph.D., Johns Hopkins University. 1991 – Professor of history
- Kelli M. O'Neil – B.A., Central College; M.A., University of Iowa. 2009 – Instructor of exercise science
- Jane M. Owens – B.S., Williams Smith College; Ph.D. University of Illinois at Urbana/Champaign. 2008 – Assistant professor of chemistry
- Nicole M. Palenske – B.S., M.S., Emporia State University; Ph.D., University of North Texas. 2009 – Assistant professor of biology
- Michael A. Patzia – B.A., Westmont; M.Div., Fuller Theological Seminary; Ph.D., Vanderbilt University. 2002 – Associate professor of philosophy
- David J. Pavlat – B.S., Iowa State University; M.P.E., University of Nebraska-Lincoln; Ed.D., University of Northern Colorado. 1998 – Associate professor of exercise science
- Brian Peterson – B.S., University of Dayton in Ohio; M.A., Ph.D., Indiana University. 2004 – Associate professor of economics
- Anne M. Petrie – B.Mus., M.Mus., University of Illinois; D.M.A., University of Oklahoma. 1986 – Chair of division of fine arts, professor of music
- Chad T. Pierce – B.A., Calvin College; M.A., Jerusalem University College; M.Div., Western Theological Seminary. 2008 – Instructor of Religion
- Alexey Pronin – B.S., M.S., Saint-Petersburg State University; Ph.D., Virginia Tech. 2008 – Assistant professor of physics
- Joy E. Prothero – B.A., William Penn College; M.S.E., Ed. D., Ed.S., Drake University. 1998 – Associate professor of education
- David P. Purnell – B.A., Wittenberg; M.A., Ph.D., Indiana University of Pennsylvania. 2002 – Associate professor of English
- Keith A. Ratzlaff – B.A., Bethel College; M.F.A., Indiana University. 1989 – Professor of English



- A. Chadwick Ray – B.A., Yale University; Ph.D., Northwestern University. 1976 – Dr. Jacob and Gela Schnucker Sessler Chair in Philosophy and Religion, professor of philosophy
- Dawn R. Reece – B.A., Central College; M.A., Ph.D., Iowa State University. 1997 – Associate professor of sociology
- Treva S. Reimer – B.A., Bethel College; M.F.A., Indiana University. 1983 – Interim faculty director of cultural affairs programming, interim Mills Gallery director, professor of theatre
- Oscar S. Reynaga – B.A., University of California Berkeley; M.A., University of Iowa. 2007 – Modern languages associate, instructor of Spanish
- Pamela E. Richards – B.S., East Stroudsburg State College; M.S., Pennsylvania State University; Ed.D., University of Northern Colorado. 1984 – Associate professor of exercise science
- Vivian R. Rippentrop – B.S., Iowa State University; M.A., Central Michigan University. 1974 – Assistant vice president for institutional planning, assistant professor of home economics
- Brian M. Roberts – B.A., Central College; M.A., Iowa State University; M.F.A., Miami University. 2002 – Associate professor of art
- John Roslien – B.S., University of Iowa; M.S., Western Illinois University. 1986 – Associate professor of exercise science, athletic training education program director
- Jaelyn J. Rundle – B.S., University of Maryland; M.A., New Mexico State University; Ph.D., University of Utah. 2000 – Associate professor of business management
- Jodee Schaben – B.A., University of Wisconsin – Stevens Point; M.S., Ph.D., Iowa State University. 2007 – Assistant professor of exercise science, head women's golf coach
- Michael H. Schrier – B.S., M.A., University of Iowa; Ph.D., University of Virginia. 1975 – Associate professor of history
- K. Rex Shahriari – A.B., M.S., Saint Francis College; Ed.D., Ball State University. 1982 – Professor of education
- James A. Shriver – B.S., M.S., West Virginia University; Ph.D., University of Texas at Austin. 2003 – Associate professor of chemistry
- Kristin L. Siewert – B.A., University of Northern Iowa; M.S., Iowa State University. 2004 – Instructor of biology
- Mary Jo Sodt – B.A., College of St. Catherine; M.A., University of Minnesota; Ph.D., University of Colorado, Boulder. 1996 – Professor of theatre
- Mary V. Stark – B.S., Iowa State University; M.A., University of Northern Iowa; Ph.D., University of Iowa. 1980 – John and Anna Poole Endowed Chair in the Humanities, professor of English
- Esther Streed – B.A., University of Northern Iowa; M.A., University of South Dakota; Ed.S., Ed.D., Drake University. 1998 – Associate professor of education
- David E. Timmer – A.B., Calvin College; Ph.D., University of Notre Dame. 1980 – Professor of religion
- Soo Yun Uhm – B.A., University of Maryland, College Park; M.A., Ph.D., University of California, Santa Barbara. 2007 – Assistant professor of psychology
- JoNes VanHecke – B.A., Gustavus Adolphus College; M.S., Indiana University; Ph.D., University of Michigan. 2006 – Dean of students, assistant professor of education
- Christopher P. Viesselman – B.S., Iowa State University; M.Ed., Plymouth State University. 2005 – Clinical instructor of exercise science, assistant athletic trainer
- Elena Vishnevskaya – B.A., M.Div., Gardner-Webb University; M.Phil, Ph.D., Drew University/Caspersen School of Graduate Studies. 2006 – Assistant professor of religion
- Philip E. Webber – A.B., Earlham College; M.A., University of Chicago; Ph.D., Bryn Mawr College. 1976 – Professor of German and linguistics
- Wendy Weber – B.A., College of Saint Benedict; M.A., Ph.D., University of Kentucky. 1999 – Associate professor of mathematics
- Paul E. Weihe – A.A., Schoolcraft Community College; B.S., University of Michigan-Dearborn; M.S., Eastern Michigan University; Ph.D., Ohio State University. 1998 – Associate professor of biology
- Ann E. Wilkinson – B.A., Knox College. 2005 – Theatre arts associate, instructor of theatre
- Edmond E. Willis – B.A., M.A., San Jose State College; Ph.D., Iowa State University. 1967 – Professor of psychology
- Sherry L. Wilson – B.A., M.A., Iowa State University. 2009 – Visiting assistant professor of accounting
- Kyle D. Winward – B.S., Missouri Southern State University; M.A., University of Missouri. 2008 – Assistant professor of library science
- Jonathan L. Witt – B.A., Trinity College; M.A., Ph.D., Loyola University. 1993 – Professor of sociology
- Lori L. Witt – B.A., Trinity College; M.A., Ph.D., Loyola University Chicago. 2001 – Associate professor of history
- Keith M. Yanner – B.A., Southern Illinois University, Edwardsville; Ph.D., Washington University. 1991 – Professor of political science
- Rangsook Yoon – B.A., Korea University; M.A., Cleveland State University; Ph.D., New York University. 2008 – Assistant professor of art
- Amy D. Young – B.A., Simpson College; M.A., Bowling Green State University; Ph.D., University of Nebraska. 2008 – Assistant professor of German
- James J. Zaffiro – B.A., Marquette University; M.A., Ph.D., University of Wisconsin; Fulbright Award (1985). 1983 – Professor of political science

## **Endowed faculty appointments**

### **Mark and Kay DeCook Endowed Chair in Character and Leadership Development**

Established in 2005, The Mark and Kay DeCook Endowed Chair in Character and Leadership Development advances and promotes teaching, learning, service and research related to the development of character and leadership skills and attributes in Central's students. Benefactors Mark and Kay DeCook are both Central graduates committed to the College's mission to graduate students of high character and who assume and develop in leadership roles in their personal, professional, community and civic lives.

### **Ruth and Marvin Denekas Endowed Chair in Science and Humanities**

Established in 2006, the Ruth and Marvin Denekas Endowed Chair in Science and Humanities memorializes in perpetuity the lives of Ruth and Marvin Denekas. The Denekas Chair offers the college an opportunity to acknowledge and reinforce, in so significant a fashion, our institutional commitment to the liberal arts. Benefactors are Marvin Denekas, a Central graduate, and his wife Ruth, a nurse, who graduated from the Ohio State University and Frances Payne Bolton School of Nursing, Cleveland, Ohio.

The faculty member assigned to the chair must hold the doctoral degree, be recognized as a faculty member who has demonstrated exemplary teaching and scholarship, and the ability to cross disciplinary boundaries. The faculty member should personify the Denekas' wishes to foster excellence in the education of Central students.

### **M. Joan Kuyper Farver Endowed Chair in Music**

Established in 1988, the M. Joan Kuyper Farver Endowed Chair in Music advances and promotes the education program of Central College. It honors in perpetuity the contributions of M. Joan Kuyper Farver to the economic and cultural life of Central College and the people of Pella. It represents a firm commitment to the arts and the belief that music is a vital part of the Central experience.

The member of the faculty assigned to this chair is known as the M. Joan Kuyper Farver Professor of Music. The assignee must have earned the doctoral degree, be recognized in the profession and have an established reputation as an excellent teacher.

### **Martin Heerema Endowed Chair in Business Entrepreneurship**

Established in 2007, the Martin Heerema Endowed Chair in Business and Entrepreneurship memorializes in perpetuity the contributions, life and work of Martin Heerema, a distinguished graduate of Central College. It will serve as a continual reminder of his commitment and to advance and promote the educational program of Central College.

The member of the faculty assigned to this chair will be known as the Martin Heerema Professor of Business Entrepreneurship. The assignee must have a minimum of ten years of experience in entrepreneurship or senior management, and a minimum of a Master's degree in any field. The holder of this chair will have three major responsibilities: teaching, campus outreach and community outreach.

### **Frank and Grace Moore Endowed Chair in Anthropology**

Established in 2000, the Frank and Grace Moore Endowed Chair in Anthropology recognizes and perpetuates the Moore's support for the teaching of anthropology at Central College. Benefactors Frank Moore, a Central graduate, and his wife Grace, an anthropologist, believe that extensive knowledge of the origins and development of human societies will lead to a greater understanding of present-day cultural relationships; this endowed chair is the embodiment of that belief manifested in support of the faculty and curriculum at Central.

### **John and Anna Poole Endowed Chair in Humanities**

Established in 2007, the John and Anna Poole Endowed Chair in Humanities memorializes the exceptional achievements of John and Anna Poole and endows the continuing availability of quality instruction in the disciplines of English, philosophy, history, linguistics or religion.

The Chair will serve as a reminder of John and Anna Poole's high standards, firm principles and uncompromising values. The named professor will embody a passion for liberal learning and demonstrate success inspiring that disposition in students, exhibit compassion and concern for others, will show the importance of being a widely read and well-rounded citizen, will guide students' understanding of cultural heritage, and advance student achievements in logical intellectual pursuit and creative productivity.

The faculty member assigned to the chair must hold the doctoral degree, be recognized within their profession, achieved the rank of associate professor or professor with tenure, and have a well-established record as an exceptional teacher. Candidates who have provided significant support to students who aspire to careers in the helping and public service professions will be given preference – a preference given to recognize the legacy of the Poole's three children who gave years of dedicated service as a teacher, a judge and a nurse. The member of the faculty assigned to this chair is known as the John and Anna Poole Professor of Humanities.

### **Dr. Jacob and Gela Schnucker Sessler Chair in Philosophy and Religion**

Established in 2002, the Dr. Jacob and Gela Schnucker Sessler Chair in Philosophy and Religion memorializes in perpetuity the life and work of Jacob and Gela Schnucker Sessler, distinguished alumni of Central College. The chair serves as a continual reminder of their high standards, principles, and expectations for teaching and scholarship. On behalf of the donors, it will provide testimony to the generous and meaningful benefaction toward the financial stability of Central College.

The faculty member assigned to the chair must hold the doctoral degree, be recognized in the profession, and have an established reputation as an excellent teacher. He or she must also have attained the rank of professor or associate professor and have an appointment with tenure.

### **Kenneth J. Weller Distinguished Professorship of the Liberal Arts**

Established in 1990, the Kenneth J. Weller Distinguished Professorship of the Liberal Arts honors the contributions of Kenneth J. Weller, former president of Central College (1969-1990), to the people of the college and the community of Pella. It serves as a continuing reminder of his commitment and as an effective stimulus to the traditional liberal arts component of the educational objectives and program of the college.

The Weller Professor must have earned the doctoral or equivalent degree, be an acknowledged competent professional, have an established reputation as an excellent teacher, have attained tenure and be in the rank of professor or associate professor.

The assignee should be recognized among students and professors as one of the college's outstanding teachers; be particularly known for an invitational approach to teaching that inspires in students an unusual level of intellectual curiosity and enthusiasm for learning; demonstrate excellence in performance and a sense of fulfillment in the teaching of those lower level courses that enroll students from a wide diversity of departments; and should be a force within the faculty for promotion of the college's general objectives, including advocacy of innovative teaching, academic excellence, the honors programs, cross-cultural emphases, interdisciplinary courses, co-curricular activities, etc.

### **Faculty emeriti**

- Agnes Andreassian – A.A., Aleppo College; B.S., M.S., M.A., American University of Beirut; M.Sc., University of British Columbia; M.Sc., University of Washington; Ph.D., University of Oregon. 1979 – Professor emerita of mathematics/computer science
- Mina Baker-Roelofs – B.S., M.S., Iowa State University. 1946 – Associate professor emerita of home economics
- Martha Betancourt – B.A., University of Havana; M.A., University of Northern Iowa; Ph.D., The University of Iowa. 1970 – Associate professor emerita of Spanish
- Gary E. Boeyink – B.A., Central College; M.A., Colorado State College. 1967 – Associate professor emeritus of exercise science
- Arthur J. Bosch – B.A., Central College; M.S., Ph.D., University of Wisconsin. 1958 – Professor emeritus of chemistry
- Dorothy K. Bosch – B.A., Hope College; M.S., University of Wisconsin. 1972 – Assistant professor emerita of developmental reading
- John B. Bowles – B.A., Earlham College; M.S., University of Washington; Ph.D., University of Kansas. 1969 – Professor emeritus of biology
- Bette L. Brunsting – B.A., Central College; M.A., Northwestern University. 1964 – Associate professor emerita of communication
- Ronald Byers – B.S., Ph.D., Washington State University. 1970 – Associate professor emeritus of physics
- Lee J. Collins – B.A., College of Wooster; M.Ed., University of Pittsburgh; Ed.D., Rutgers University. 1979 – Professor emerita of education
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