

CENTRAL COLLEGE

..... COURSE CATALOG 2019-20



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2019-20

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.

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2019-2020 ACADEMIC CALENDAR

Dates are subject to change. For current calendar information go to www.central.edu

June 2019

- 3 Summer 5 and 10-Week Classes Begin
- 5 Last Day to Drop or Add a 5- week Class
- 10 Upward Bound Classes Begin
- 10 Bridge Classes Begin
- 12 Last Day to Drop or Add a 10-week Class
- 12 New Student Orientation Session #1
- 13 New Student Orientation Session #2
- 14 New Student Orientation Session #3
- 26 Last Day to Withdraw from a 5-week Class
- 28 Bridge Classes End
- 28 Upward Bound Classes End

JULY

- 4-5 Independence Day *(no classes/ college closed)*
- 5 Summer 5- Week Classes End
- 15 New Student Orientation Session #4
- 17 Last Day to Withdraw from a 10-Week Class

August

- 9 Summer 10-Week Classes End
- 19-20 International Students Arrive
- 19-21 New Faculty Workshops
- 21-23 New International Student Orientation
- 21 Chairs Workshop
- 22-23 All Faculty Workshops
- 24 New Students Arrive
- 24 Welcome Week Begins
- 26 Returning Students Arrive
- 27 Enrollment Confirmation Day
- 28 Fall Semester Classes Begin (Wed.)
(Add/Drop Period: Aug. 28 – Sept.6)

September

- 2 Labor Day *(no classes/ college closed)*
- 6 Last Day to Drop or Add a Course
- 27-29 Homecoming

October

- 14-15 Fall Break (Mon.- Tues.)
- 16 Classes Resume
- 17 Spring 2020 Advising Begins
- 18 Midterm
- 22 Midterm Grade Due (Noon)
- 25-26 Board of Trustees Meeting
- 29 Service Day

November

- 2 Central College Scholar Day
- 4 Spring 2020 Registration Begins
- 9 Central College Scholar Day
- 15 Last Day to Withdraw From a Course
- 27-29 Thanksgiving Break (Wed. – Sun.)

December

- 2 Classes Resume
- 2 Registration for Guest Students Begins
- 13 Last Day of Fall Semester Classes (Fri.)
- 16 College-Wide Study Day
- 16-19 Final Exams
- 20 Residence Halls Closed

January 2020

- 2 Fall Semester Final Grades Due (Noon)
- 17 Faculty Workshop
- 18 New Student Welcome Day/Orientation
- 19 Returning Students Arrive
- 20 Spring Semester Classes Begin
(Add/Drop Period: Jan. 20-31)
- 25 Central College Scholar Day
- 31 Last Day to Drop or Add a Course

February

- 1 Central College Scholar Day

March

- 13 Midterm
- 16-20 Spring Break (Mon.-Sun.)
- 17 Midterm Grades Due (Noon)
- 23 Classes Resume
- 23 Fall 2020 Advising Begins

April

- 6 Fall 2020 Registration Begins
- 9 Last Day to Withdraw From a Course
- 10-13 Easter Break
- 14 Classes Resume (Tues.)
- 24-25 Board of Trustees Meeting

May

- 7-9 Tulip Time
- 8 Last day of Spring Semester Courses
- 8 Last day to add Summer 2020 independent coursework
- 11 College-Wide Study Day
- 12-14 Final Exams
- 15 Senior Grades Due (Noon)
- 15 Residence Halls Closed
- 16 Baccalaureate/Commencement
- 19 Final Grades Due (Noon)

June

- 1 Summer 5 and 10-Week Classes Begin
- 3 Last Day to Drop or Add a 5- week Class
- 10 Last Day to Drop or Add a 10-week Class
- 24 Last Day to Withdraw from a 5-week Class
- July 15 Last Day to Withdraw from a 10-week Class

CENTRAL . . . BRIEFLY

- ◆ Located in Pella, Iowa - 40 minutes southeast of Des Moines
- ◆ Founded in 1853
- ◆ Campus includes nearly 50 major buildings on 169 acres
 - ◆ The newly renovated Douwstra Auditorium has been a gathering place for concerts, lectures, convocation and baccalaureate.
 - ◆ The Roe Center is a platinum LEED-rated (Leadership in Energy and Environmental Design) building and houses education, psychology and communication studies departments and community-based learning.
 - ◆ Vermeer Science Center earned Iowa's first LEED rating, a silver medal, from the U.S. Green Building Council.
 - ◆ Maytag Student Center features a fireside lounge, fitness center, Fred's café and Central College Spirit Shoppe.
 - ◆ Howard McKee Hall, an apartment-style residence hall, earned Central's second LEED rating, a gold medal.
 - ◆ Scholte Hall is Central's largest residence hall.
 - ◆ Weller Center for Business and International Studies features many environmentally-friendly elements.
 - ◆ The Central Market is Iowa's most original dining hall with a unique European marketplace design.
 - ◆ Ron Schipper Fitness Center is a state-of-the-art fitness center available to all students.
 - ◆ Geisler Library holds 230,000 volumes and worldwide electronic access.
 - ◆ Global Café offers espresso, coffee, snacks and wireless Internet.
 - ◆ Kruidenier Center for Theatre hosts numerous performances.
 - ◆ Lubbers Center for the Visual Arts includes one of only two teaching glassblowing studios in Iowa.
 - ◆ The Chapel is home to Central's Campus Ministries program, which is open to all.
- ◆ Central College is nationally recognized for its study abroad programs around the world, as well as programs in major U.S. cities.
- ◆ Recognized:
 - ◆ Central's actuarial science program has been ranked as one of the Best Bachelor's in Actuarial Science by College Choice.
 - ◆ Central's the 9th best ranked college of Iowa colleges and universities on the Wall Street Journal/ Times Higher Education College Rankings 2019. Niche.com named Central #4 "Safest colleges in Iowa."
 - ◆ Ranked in the top 10 colleges and universities in Iowa by WalletHub.
 - ◆ "Best Colleges for Your Money" by Money Magazine 2018.
- ◆ Accredited by the Higher Learning Commission; member of the North Central Association of Colleges and Schools (www.hlcommission.org; 800-621-7440)
- ◆ Also accredited by the State of Iowa Board of Education, National Association of Schools of Music, Commission on Accreditation of Athletic Training Education and certified by the American Chemical Society

Students

- ◆ Total enrollment: 1117
- ◆ Number of states represented in student body: 25
- ◆ Foreign countries represented in student body: 4
- ◆ Average aid (including scholarships, grants, work study and loans) awarded to all incoming freshman in 2018-19: \$33,519
- ◆ 6-year graduation rate: 69%

Faculty

- ◆ Total full-time and part-time faculty: 105
- ◆ Ph.D. degree or terminal degree: 86 percent
- ◆ Faculty-student ratio: 11:1
- ◆ Average class size: 15

New, first-year student admission profile (Fall 2018)

- ◆ Total applications: 2,772 total acceptances: 1,940; final enrollment: 278 (132 men; 146 women)
- ◆ Reformed Church in America students: 14
- ◆ Percent in top 10 percent of high school class: 26 percent
- ◆ ACT composite score average: 24
- ◆ Average HS GPA: 3.62
- ◆ Percentage entering with AP or college credit: 75 percent

Financial aid profile, entire student body

- ◆ Receiving need-based aid: 82 percent
- ◆ Receiving scholarship and grant aid: more than 99 percent

Music program

Central's music department is committed to providing both majors and non-majors a variety of musical performance opportunities: A Cappella Choir, Brass Ensemble, Chamber Singers, Clarinet Ensemble, 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, ALMA and Woodwind Ensemble.

Athletics program

- ♦ Central College is affiliated with the National Collegiate Athletic Association (Division III) and the American Rivers 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 captured 11 NCAA Division III championships, 33 NCAA Division III national individual titles, 181 conference championships, 76 national top-10 team finishes, 59 CoSIDA Academic All-America honors, 24 NCAA postgraduate scholarships and nine NCAA Division III player of the year awards.

A.N. Kuyper Athletics Complex includes:

- ♦ An ongoing facilities update initiative at the A.N. Kuyper Athletics Complex is underway, with a \$12 million expansion of P.H. Kuyper Gymnasium completed in early 2017, to be followed by a building renovation
- ♦ H.S. Kuyper Fieldhouse with indoor track, tennis and basketball court surface, Ron Schipper Fitness Center
- ♦ Ron and Joyce Schipper Stadium
- ♦ Competition soccer field with separate men's and women's practice fields
- ♦ Ryerson Golf Practice Range, one of the only golf practice facilities on a college campus in Iowa
- ♦ 8,000-meter cross country course on campus
- ♦ P.H. Kuyper Gymnasium
- ♦ Baseball and softball game fields

Central College

History and Tradition

Founded in 1853 by a determined group of pioneer settlers, Central College has, since its inception, been committed to the ideals of liberal education. Central was originally a Baptist institution, and its founders immigrated to central Iowa to escape religious tyranny in the Netherlands.

Central College officially opened 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, Dominic 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 became affiliated with the Reformed Church in America. As its academic reputation grew, Central attracted many more students from outside the denomination.

International study programs were introduced in 1965, strengthening an institutional emphasis on cross-cultural study. Today, Central continues to encourage students to develop a global perspective and operates study abroad programs around the world. By the time they graduate, 55 percent of Central students have had a meaningful international experience.

Today, Central College welcomes approximately 1,117 students each year from more than 25 states and four foreign countries. Before they graduate, about half of all students 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 more than 150,000 visitors.

Central's four-year liberal arts curriculum offers students an outstanding academic program with more than 70 academic programs offered on a two-semester calendar. The Dutch compete in 19 varsity sports and have earned 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 160 years ago, the college's facilities are modern and well-equipped. 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 the Vermeer Science Center (the first LEED-rated building in Iowa), Howard McKee Hall (the first gold-rated residential building in Iowa) and the Roe Center (which received the highest rating possible, platinum).

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, 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.

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 the registrar's office 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 the registrar's office, 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. The student should submit the request in writing to the registrar's 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. In addition, the college may also disclose education records to another school in which a student seeks or intends to enroll. 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. State and local education authorities ("Federal and State Authorities") may allow access to your records and personally identifiable information without your consent to any third party designated by a Federal or State Authority to evaluate a federal- or state-supported education program, as well as to researchers performing certain types of studies.
- 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 the registrar's office, Central Hall (2nd Floor), 641.628.5442 or registrar@central.edu. Additional information is also available at: <http://departments.central.edu/registrar/student-privacyferpa/>.

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)*. Central College does not release lists of directory information to any person or agency making unsolicited requests. 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, phone number (including cell phone), 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 the registrar's office (2nd 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 registrar's office.

For more information contact the registrar's office, Central Hall (2nd Floor), 641.628.5442 or registrar@central.edu.

Official Transcripts

Central College official transcripts are available through the registrar's office and are either printed on security paper with the registrar's signature and an embossed seal or electronically delivered (eTranscript) as a digitally certified PDF. Transcripts can be ordered by submitting a transcript request form online via the Parchment, Inc. ordering service. Electronic transcripts are only available through Parchment, Inc. 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.
- Paper/printed transcript requests are typically processed within 1-2 business days. Electronic transcripts are typically processed on the date received or the next business day.

Drug-free campus statement

Central College, in compliance with the Drug Free Workplace Act of 1988 and the federal Drug Free Schools and Communities Act of 1986 and its 1989 amendments, but also speaking to a strong philosophical belief, establishes the following policy which is applicable to all students and employees as well as volunteers acting in an official capacity for the college.*

- 1. To help ensure the safety and well-being of employees, volunteers, students, and the general public, the college is committed to maintaining a campus work and educational environment that is free of the illegal use of drugs and alcohol.**
 - a. The College prohibits its employees (including student workers) and volunteers from reporting to work or performing work for the college while impaired by, or under the influence of, illegal drugs, misused/abused prescription medication, or alcohol.
 - b. The illegal use, possession, dispensation, distribution, manufacture or sale of alcohol, drugs and/or drug paraphernalia by an employee/volunteer in the workplace, on campus, or while the employee/volunteer is on duty or official college business; or by a student and/or a guest on campus or during any College-sponsored on-campus and off-campus activities is prohibited. This policy includes the misuse/abuse of prescription medication.
- 2. No one may possess, use, manufacture, distribute, sell, trade and/or offer for sale, or auction alcoholic beverages on college property or at college-sponsored events except in accordance with the College's State of Iowa liquor license, the College's banquet permit/special event license procedure, or applicable college regulations.**
 - a. The on-campus use, possession, dispensation, distribution, manufacture or sale of alcohol by a student and/or a guest, regardless of age, is prohibited except as permitted by the Central College President for specific College-sponsored events/functions.
 - b. Alcoholic beverages may not, under any circumstances, be used by, possessed by, consumed by, or distributed to any person under 21 years of age on campus or during any College-sponsored on-campus and off-campus activities.
 - c. Alcohol is prohibited in any on campus or College-owned/managed residential housing unit for residents and guests.
 - d. Items used for the purpose or promotion of high risk drinking (beer pong tables, beer bong, etc.) are prohibited on campus.
- 3. Students and employees/volunteers of the college who violate the laws underlying this policy are subject to arrest and conviction under the applicable criminal laws of Pella, Marion County, the State of Iowa, and/or the United States.**
 - a. Federal law contains further prohibitions against the manufacture, possession with the intent to distribute, or distribution of controlled substances, including, but not limited to narcotic drugs, marijuana, depressant or stimulant substances.
 - b. Iowa law prohibits the manufacture, delivery, possession with the intent to manufacture or deliver and possession of controlled substances. Local and state laws prohibit possession of open containers of alcoholic beverages outside of a residence or licensed liquor establishment. Possession of alcoholic beverages is prohibited for persons under the age of 21. Operating a motor vehicle while intoxicated is also prohibited.

The College recognizes all these regulations in its commitment to maintaining a healthy campus and workplace. The College recognizes that chemical dependency is a major threat to wholeness of personal health. The College is therefore committed to seeing that all its students and employees understand that: (a) the use of alcohol and/or illegal drugs can interfere physically, mentally, socially and spiritually with the ability to perform important functions (i.e., work performance, increased accidents, time lost for employees; and

lower grades, reduced participation in College activities for students); (b) these drugs impair physical coordination and mental alertness and may damage the immune system, resulting in irreversible health problems and death; and (c) social behavior following use of alcohol or illegal drugs may be destructive to relationships.

Violations of the standards of conduct described in this policy may result in, among other things:

1. Disciplinary sanctions, up to and including dismissal/termination; and/or
2. A requirement to successfully complete a drug and alcohol abuse evaluation and/or rehabilitation program.

Violators of this policy can also anticipate that the College may file a formal complaint with the legal authorities resulting in the appropriate legal sanctions, including monetary fines and/or imprisonment. Although the severity of the infraction will determine the nature of the College's response, whenever possible the College will respond educationally rather than punitively to the illegal or improper use of drugs and/or alcohol by a survivor of sexual or relationship misconduct. The seriousness of sexual or relationship misconduct is a major concern and the College does not want any of the circumstances (e.g., drug or alcohol use) to inhibit the reporting of a violation of the [Sexual and Relationship Misconduct Policy](#).

For students, the College Counseling Service provides evaluation and counseling for abuse of alcohol and drugs; see the Counseling Services webpage for information on how to schedule an appointment from [on-campus](#) or [off-campus](#). Employees are encouraged to take advantage of the Employee Assistance Program; refer to the Human Resources page on [my.central.edu](#) for information about these services.

Students who have questions regarding this policy should contact the Dean of Students. Faculty should contact the Associate Dean for Curriculum and Faculty Development. Staff should contact their supervisor or the Office of Human Resources.

Definitions

1. "Illegal drugs" is defined as a substance or substances defined and regulated under the provisions of the Federal Controlled Substances Act and Iowa Statutes, and includes but is not limited to CNS depressants, CNS stimulants, THC, hallucinogens, other illegal drugs such as PCP (angel dust) and cocaine or crack.
2. "Alcohol" and "alcoholic beverages" include, but are not limited to beer, "near-beer"/low-alcohol beer, and malt beverages; wine and low-alcohol wine; distilled spirits such as whiskey, vodka, rum, gin, tequila; and liqueurs or fortified alcoholic beverages, that are consumed for non-medicinal purposes.
3. "On campus" means any building, facility, grounds or other property owned, leased or controlled by Central College.
4. "Official college/campus business" is defined as activity by an employee or volunteer that occurs in the performance of, or in the course of, assigned duties of College employment or business.
5. "College-sponsored off-campus events/functions/activities" include, but are not limited to, the following categories: (a) Academic-related (e.g., class excursions, laboratory field work, service-learning, internship); (b) professional preparation and/or development (e.g., conference, training); (c) service-related (e.g., mission trip, Central Service Day); (d) social (e.g., student organization cookout at West Market Park; residence life bowling activity); (e) official representation of Central College (e.g., music, theatre, admission, athletic competition).

*The Drug Free Workplace Act (1988) applies to employees of the College and students who are Pell Grant recipients. It requires the College to certify that a federal grantee will provide a drug-free workplace. The Drug Free Schools and Communities Act (1986) and Amendments (1989) require that as a condition of receiving funds or any other form of financial assistance under any federal program, an institution must certify that it has adopted and implemented a program to prevent the unlawful possession, use, distribution of illicit drugs and alcohol by students. While these are distinct regulations, the College is stating with this single policy its intent to comply with both.

The college's alcohol and drug policy is distributed to the campus community each year in the fall through written notification via email and/or campus mail. Residence life staff and orientation workers also lead sessions for students during the year which address college policy, individual decision making and ramifications of substance use/abuse on campus. Counseling services provides a wide variety of self-help information regarding alcohol and other drugs.

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 aid. 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 academic year (4:30 p.m. during the summer). From September through May, the office is also open on Saturdays from 8 a.m.-noon. Please see the admission website at www.central.edu/admission for a list of special visit events throughout the year.

For more information, contact Central's campus visit coordinator at 641-628-7616 or 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 or,
 - Applications are also available online at www.central.edu/apply
 - Request one directly by writing: Admission Office, Central College, Campus Box 5100, 812 University, Pella, IA 50219 or,
 - Call 641-628-7616.
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, a 197 on the computerized equivalent, or a 71 on the internet-based exam (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.

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 successfully 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.

A limited number of candidates may be admitted who do not meet the criteria for regular admission, but who demonstrate the potential and motivation to succeed at Central. Such candidates may be asked to provide the admission committee with additional information such as a seventh semester transcript, recommendation letters or personal statements. If admitted, students in this

category should expect to be placed in at least one prescribed course and are strongly encouraged to utilize additional academic support services available at the college.

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.

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 in writing 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 preparatory class can best speak to your potential to succeed in college (list name, department, address and telephone number)?

Notice of admission

Applications for admission and academic credentials are reviewed by the admission committee. Notification of the admission decision is made within two weeks after all official documents have been received, 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 credits or more) are required to submit an enrollment deposit of \$200, which is refundable until May 1.

Housing

Central College is an intentionally residential community and is committed to on-campus living as a vital component of an integrated learning environment.

As an intentionally residential community, all full-time students are required to live in college-owned housing unless married, of nontraditional age (23 years or older), a veteran, have a dependent child(ren) or enrolled part-time. Please be aware that financial aid will be adjusted for off-campus students.

College/Advanced Placement Credit

Credit earned at accredited colleges or universities will be accepted in transfer if grades of at least a "C" ("C-" is not acceptable) are earned in the courses, and if the courses can be applied toward a Central College degree. A maximum of 60 semester hours of transfer credit (including a maximum of 24 credits from AP, IB, PSEO, and dual enrollment) may be applied toward completion of a Central College degree. 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.

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; you apply on-line.
 - Apply on-line at www.central.edu
 - Request one directly by writing: Office of Admission, Central College, Campus Box 5100, 812 University, Pella, IA 50219 or
 - Call 641-628-7616.
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.

International student admission

Students who are not United States citizens or United States permanent residents are required to complete the international student application for admission. In addition to the application, all international students are required to supply the following documents:

- Official copies of transcripts with an *original* stamp, signature, or seal is required. The transcript should be in the original language of instruction, with a certified English translation if applicable.
- Official documentation of English proficiency (see specific English language requirements below).
- A clear photocopy of identity page of passport (to ensure correct spelling of applicant's name and verification of birthdate).
- Official and original results of any standardized tests, such as SAT and ACT examinations. SAT and ACT examinations are not required for international students but are highly recommended for consideration of merit scholarship eligibility.
- Optional additional supporting application documents include: letter(s) of recommendations and a personal statement.

English language proficiency requirement

Central College requires international student applicants to provide one of the following test scores to validate English language proficiency:

- A TOEFL score of 530 paper-based or a score of 71 on the internet-based (IBT) test.
- A band score of 6.0 on the IELTS with no sub score lower than a 5.5.
- SAT Critical Reading score of 420.

English language proficiency is also met in any of the following ways:

- Completion of 36 transferrable credits from an accredited US institution (required for transfer students).
- First-year students who have attended four years at a U.S. or international based high school where English was the primary method of instruction and grades of "C"/2.0 or better were earned in their English language courses.
- Successful completion of level 112 of the Intensive English for Academic Purposes Program from an ELS English Language Center. An official Academic Report and copy of the ELS Certificate must be sent directly from ELS to Central's office of admission.

International transfer student admission

International transfer students must complete the international student application. In addition to the above requirements transfer students are required to submit college or university credentials from all non-US institutions to a foreign credential evaluation agency for a course-by-course evaluation with a grade point average (GPA) calculation. Central College recommends that applicants use World Education Services, Inc. (WES) for their credential evaluation. The evaluation report must be sent directly from WES to Central College's office of admission.

Attendance at each post-secondary institution must be reported on the application regardless of whether you want to receive transfer credit or have it used in our admission decision.

INS requirements

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 U.S. visa.

Merit and need-based scholarships are available to international students, although the assistance offered does not cover the total cost of attendance.

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 the registrar's office, or online at <http://departments.central.edu/registrar/registration/guest-student-registration>.

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 ACT-PLAN. 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 ACT-PLAN. 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 admission office, and upon admission a guest registration form is available from the registrar's office. Admitted students may take up to nine semester hours of credit 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 or 641.628.5442.

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 inclusivity 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 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. Central College abides by Title IX of the Education Amendments of 1972 which prohibits sex-based discrimination in education programs or activities that receive Federal financial assistance. Specifically, Title IX states that:

No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance. http://www2.ed.gov/about/offices/list/ocr/docs/tix_dis.html

Inquiries about Title IX, including complaints about harassment or discrimination, may be directed to the Central College Title IX Coordinator and/or the Office for Civil Rights within the United States Department of Education.

Peggy Fitch, Title IX Coordinator
Roe Center 231D
812 University Avenue
Pella, IA 50219
(641) 628-5249
fitchp@central.edu

Office for Civil Rights
Regional #5 Office
500 West Madison, Suite 1475
Chicago, IL 60661
312-730-1560

*Language used with permission from the Grinnell College Office of Student Life

COLLEGE COSTS (2019-20)

(Please visit our Web site at 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 2019-20 will be charged tuition (based on a flat amount for 12-18 credits), room, board and fees. Students may choose the board plan that fits their needs.

The charges given in the table below are for 2019-20. Charges for 2020-21 will be determined in January 2020. For more information, call toll free 877-462-3687, and request a printed copy of Central's fees for 2019-20.

	1 st semester	2 nd semester	Total
Tuition (12-18 credits)	\$ 19,300.00	\$ 19,300.00	\$38,600.00
Board (Red-meal plan)	2,694.00	2,694.00	5,388.00
Board (Silver-meal plan)	2,566.00	2,566.00	5,132.00
Room (normal occupancy)	2,446.00	2,446.00	4,892.00
Totals (Red-meal plan)	\$ 24,440.00	\$ 24,440.00	\$48,880.00
(Silver-meal plan)	\$ 24,312.00	\$ 24,312.00	\$48,624.00

Tuition

Tuition is \$19,300.00 for 12 semester hours and \$1608.00 per 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 \$16,080.00 for tuition (10 x \$1,608.00). A full-time student who elects to carry 19 credits of non-tuition exempt credit (see overload policy below) will be charged \$20,908.00 (\$19,300.00 plus \$1,608.00) for the extra semester hour of credit.

Overload

Students who wish to register for more than 18 semester hours will need permission from the registrar's office unless they are enrolled in one or more of the following overload-exempt courses: group ensembles (MUSG courses), .5 credits study abroad pre-departure and re-entry courses (GENR-225), Mock Trial (GENR-214), 1-2 credits Central teachers academy internships (EDUC-397), honors enrichment courses, interdisciplinary honors seminar (GENR-285), senior honors thesis courses/projects, honors seminar (HONR-191/ HONR-391), Writing-293, private music instruction (MUSL courses; instructional fee still applies).

Room

The basic charge for all on-campus residence units is \$2,446 per semester. The general rule is two persons per room. An additional charge of \$454 per semester is assessed for a private single room and \$654 for a private double room.

Board

Two meal plans are offered: a Red-meal plan or a Silver-meal plan. The 2019-20 rate for the Red-19 meal plan is \$2,694 per semester; the Silver- 14 meal plan is \$2,566. A commuter meal plan is available for students living off campus. A commuter meal plan can be purchased for \$325 and includes 50 meals. The meal plan week runs from Saturday through Friday.

- 1) The Red-Meal Plan is \$2,694 per semester for 19 swipes per week or up to 4 swipes per day. A maximum of two swipes may be used per meal period. Students will also receive \$100 in Dutch Guilders per semester for meal purchases at the Market, Fred's or the Café. Any balance of Dutch Guilders remaining at the end of the semester will be lost. A swipe used at Fred's or the Café is good for value meal only during the designated meal time.
- 2) The Silver-Meal Plan is \$2,566 per semester for 14 swipes per week or up to 4 swipes per day. A maximum of two swipes may be used per meal period. Students will also receive \$150 in Dutch Guilders per semester for meal purchases at the Market, Fred's or the Café. Any balance of Dutch Guilders remaining at the end of the semester will be lost. A swipe used at Fred's or the Café is good for value meal only during the designated meal time.

Additional fees

Additional fees include:

Monthly payment plan electronic	No Charge
Glassblowing I and II fee (ART-265/365)	\$120
Ceramics I and II fee (ART-262/362)	\$100
Introduction to the Fine Arts (FA-210)	\$235
Science lab	\$110
Student teaching Pella campus based	\$120
Student teaching (special-permission off site)	\$500

Audit, general (above or below block per semester hour)	\$75
Outdoor Pursuits class (EXSC 342)	\$150
Athletic Training (AT 223, 224, 323, 423, 424)	\$ 60
Exercise Science (EXSC 111)	\$130
Exercise Science (EXSC 151)	\$60
Engineering (ENGR 214, 322, 485)	\$100

Textbooks

The cost of text and reference books varies, depending on the courses taken. New, rentals, or e-books are available on Central's website. The average estimated cost is \$1,339 for the 2019-20 academic 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):	\$110.00
Organ Practice time/week	\$10.00

Student insurance

Central College no longer requires students who are citizens of the United States to be covered by a health insurance plan; however, we know that medical bills due to illness and accident can be overwhelming. If you are in need of short term health insurance, go to <https://www.1stagency.com/shortterm.php> and review short term plans available. Students are responsible for selecting the appropriate short term plan and making payments directly to the appropriate carrier. Central College does not endorse plans listed.

Off-campus programs

Central has study abroad programs in Austria, Spain, England, Wales, 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 2019-2020 academic year are available by contacting the study abroad office.

Central funded scholarships and grants, federal and state gift aid and federal student loans for which the student is eligible will be available to Central students for a maximum of two semesters for Central's study abroad programs.

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 registrar's office to begin the withdrawal process. Students studying on a Central College study 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 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, PLUS Loans, Pell 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. For example – 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 study 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 associate 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 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.

Refund policy for students called to active military duty

Central College is supportive of a student who is a member, or the spouse of a member if the member has a dependent child, of the Iowa National Guard or reserve forces of the United States and who is ordered to National Guard duty or federal active duty. Upon verification of orders requiring active duty, you may select from several tuition credit options.

Options available to qualified students: Upon meeting with the Registrar's office to verify orders, Central will work with you to determine the best plan for your circumstances. The college has three options to review and consider with you.

1. Withdraw from the student's entire registration and receive a full refund of tuition and mandatory fees.
2. Make arrangements with the student's instructors for course grades, or for incompletes that shall be completed by the student at a later date. If such arrangements are made, the student's registration shall remain intact and tuition and mandatory fees shall be assessed for the courses in full.
3. Make arrangements with only some of the student's instructors for grades, or for incompletes that shall be completed by the student at a later date. If such arrangements are made, the registration for those courses shall remain intact and tuition and mandatory fees shall be assessed for those courses. Any course for which arrangements cannot be made for grades or incompletes shall be considered dropped and the tuition and mandatory fees for the course refunded.

These rules are in compliance with Iowa Code 261.9(1)(g)

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 a \$200 nonrefundable deposit for housing. The credits are applied against the student's account.

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.

Monthly payment plans

A monthly payment plan is available to Central College students. There is no charge. For more information 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 2018, 100 percent of those new Freshman who sought financial aid received aid. The average new freshman financial aid package for fall 2018 was \$34,568, which included scholarships, grants, work study, and Federal 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 Oct. 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.

Please complete the FAFSA online at www.fafsa.gov. You may sign the form electronically with an FSA user ID for the student and a separate FSA user ID for your parent if you are a dependent. Please indicate that you would like to have the results released to Central College (code 001850). You will receive a Student Aid Report (SAR) directly from the federal processor. You should review the information for accuracy and immediately make corrections if needed. Results received at Central for accepted applicants prior to January 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 will still 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 director 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 your student account

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

If you are selected for verification you must complete the verification process before any federal or state aid may be credited to your account. If you have not completed verification by the end of the drop and add period of each semester, you will be charged interest on the unpaid balance of your 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 your responsibility to see that all requirements for renewing aid are met. Continuation of financial aid beyond the fourth year may be considered if you have previously formalized your intention to enroll as a part-time student or you have been granted an extra semester or year based on an appeal documenting circumstances beyond your control that either prevented you from completing your degree requirements in the traditional four-year-time-frame or that require you to be enrolled for a semester beyond graduation.

Application materials are distributed late in the fall semester through your Central e-mail account. You will be notified in late spring or early summer of the aid awarded for the next academic year.

Satisfactory academic progress standards for financial aid:

Students receiving financial assistance are required to maintain satisfactory academic progress during their enrollment at Central College in order to receive financial assistance. Satisfactory academic progress (SAP) measures both a qualitative and quantitative component. SAP is achieved when a student maintains both the required grade point averages and the required completion rate.

Required Grades (Qualitative Measure):

At the end of each academic term (fall, spring, summer), the student's cumulative grade point average will be reviewed. Students with a grade point average lower than that required to be considered making satisfactory academic progress for financial assistance will be placed on financial aid warning for the following semester. During the warning period the student may be able to receive financial assistance, but if the student fails to achieve the required cumulative GPA at the end of the next semester the student's financial assistance will be suspended.

When academic progress is measured: Students must achieve:

After 1 semester	1.700
After 2 semesters	1.800
After 3 semesters	1.900
After 4 semesters	2.000
After 5 semesters	2.000
After 6 semesters	2.000
After 7 semesters	2.000

Required Completion Rate (Quantitative Number):

In addition to maintaining the grades specified above, students must progress toward completion of a degree program within a specified time frame. In order to meet these minimum requirements, Central students must complete:

- 23 semester hours of credit at the end of one full academic year
- 47 semester hours of credit at the end of two full academic years
- 75 semester hours of credit at the end of three full academic years
- 106 semester hours of credit at the end of four full academic years

If a student falls short of any completion rule, (qualitative or quantitative) the student's financial assistance will be placed on warning for the following semester. During the warning period a student will be able to receive financial assistance. If the student fails to successfully complete 67% of the attempted credits during the next semester of enrollment (the semester of the warning period) financial aid will be suspended beginning with the next term. Suspension of aid is the loss of financial aid eligibility and will result in no aid for the term. Suspension of financial aid is not the same as academic suspension which is handled by the associate dean of academic affairs office. Successful completion of credits means that a student completes and successfully passes said credits.

Please note that this is the satisfactory academic progress policy for determining financial aid eligibility. Academic policies that relate to academic probation and academic suspension from the college may differ. For more information, see "Academic Warning, Probation and Dismissal under Academic Policies." Students receiving tuition remission or tuition exchange employee benefits for dependent children and spouses must meet these standards to continue receiving the employee benefit.

Incomplete Grades: An incomplete or "I" grade will be treated as a failing grade in the cumulative GPA. If a grade is later given for the course, it is the student's responsibility to notify the director of financial aid so that academic progress may be reassessed.

Withdrawals: Credits from which the student has withdrawn or received a grade of "W" will be counted as attempted credits for purposes of determining satisfactory academic progress. However, credits dropped prior to the end of the add/drop period will not count as credits attempted.

Repeated Coursework: When a student repeats a course, the most recent grade received will be used in the calculation of the cumulative grade point average. Each time the course is taken, the credits for the course will count as attempted credits.

For the purpose of administering federal financial aid (i.e. Title IV funding), the following restrictions apply to all courses appearing on a student's academic transcript.

- A failed course may be repeated as many times as needed;
- Once a student passes (D- or better) a previously failed course, the student may repeat the course one more time to try and achieve a higher grade, in which case the most recent grade and credits earned will be counted toward graduation and in calculation of the student's cumulative grade point average;
- A previously passed course (grade of D- or higher) may only be repeated once, even if the student is attempting to earn a minimum grade required for a major or minor, or to raise the major or cumulative grade point average to the 2.0 minimum required for graduation;
- Courses designated as repeatable (i.e. music ensembles, private music lessons, internships, and practicums) are not restricted, and students may repeat these courses for credit an unlimited number of times.
- Central's academic repeat policy may include additional restrictions for repeating courses. For more information, see the Academic Policies section of Catalog.

Transfer Students: Transfer credits that are accepted at Central College will be counted toward the total attempted credits in determining whether the student is maintaining satisfactory academic progress.

Re-establishing Eligibility: A student who has lost financial assistance eligibility can regain eligibility by making up deficiencies while not receiving aid. It is the student's responsibility to notify the Director of Financial Aid to request aid reinstatement when this has been accomplished.

Appeals: A student that does not meet the minimum completion rules and/or GPA requirements to be considered as maintaining satisfactory academic progress, may appeal in writing to the Director of Financial Aid for extenuating circumstances, such as the death of a family member or an illness or injury to the student. All appeals **MUST** be made in writing and include:

- Information regarding why the student failed to make SAP, and what has changed in the student's situation that will allow the student to demonstrate SAP after the next term of enrollment.
- An academic plan that details how the student will complete his/her degree. The plan **MUST** demonstrate how the student will progress both in regard to GPA and cumulative credits to get back on track in seeking his/her degree. The student must be able to demonstrate that it is reasonably possible to complete the program successfully.

An appeal committee will review the student's appeal request and notify the student of their decision in writing within one calendar week of receipt of the appeal.

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. You will be awarded the highest merit scholarship or award based on academic and/or talent criteria for which you qualify. Other Central awards may be added to academic awards provided the award value does not exceed full tuition and you 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.

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 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 Direct Stafford Loans

Federal Direct Stafford Loans are available to aid applicants who file a FAFSA and are enrolled at least half-time in college. These loans are federally funded with the federal government paying an interest subsidy, if you show financial need, and without an interest subsidy, if you do not show need. If eligible for the interest subsidy, the government will pay the interest on the loan until six months after you graduate, withdraw from college, or enroll less than half-time. If eligible for an unsubsidized loan, you are responsible for the interest while in college or no longer enrolled at least half-time as well. A loan fee of 1.066 percent, will be deducted from each disbursement. No payment toward the principal is required while enrolled at least half-time. Repayment of the principal plus simple interest begins six months after you leave 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. You 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 4.264 percent, will be deducted from each disbursement. Repayment begins immediately upon disbursement with a minimum payment of \$50 a month; however, a deferment option is available through a request with the direct loan servicing center. Federal Direct PLUS Loans have a fixed interest rate of 7.595 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.

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.

Student Employment

More than 80 percent of Central's students are given some employment opportunity during the school year. Full-time 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.

You should limit yourself in the number of hours you work each week. Accordingly the college reserves the right to deny employment to any student who has not maintained a "C" average.

Employed students are paid directly by the controller's office every four weeks. You are allowed to earn the amount specified in your aid award but the final responsibility for whether the amount is earned belongs to you and your supervisor.

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 global 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 themselves in the lifelong quest for the knowledge that sustains and advances everyone.

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.

A critical component of each academic major is that students will learn effective communication skills in the context of their major. These skills are embedded within the major curriculum and students are assessed in a developmental manner appropriate to the discipline. Accordingly, the development of students' written and oral rhetorical skills is the responsibility of faculty teaching courses in each academic major, and writing intensive courses throughout the curriculum.

LAS 110 Intersections

A hallmark of the first-year experience at Central College is the Intersections course, LAS 110. 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 across campus teach the seminars. All sections of the course share a common reading and an introduction to the liberal arts. Instructors select their own topics for the remainder of the course.

LAS 410 Liberal Arts Seminar

As the culmination of the liberal arts core at Central College, the Liberal Arts Seminar (LAS 410) stresses an interdisciplinary approach, recognizing that real-world, complex problems and questions cannot be considered only within disciplinary boundaries. Liberal Arts Seminars focus on a significant question which needs the analysis and synthesis of more than one discipline. Seminar topics engage the student in independent inquiry, critical thinking and persuasive communication. The seminar encourages students to examine how knowledge, integrated and alive, informs our professional, civic, and personal lives. Examples of LAS topics include: Natural Hazards and the Human Dimension; Bob Dylan, American Bard; Citizenry: The Evolution of the Vote and Memory; Black Lives Matter, #metoo, and Classical Literature; Climate Change: North and South; Human Rights, Politics, and Culture; Disease and Health Through Space and Time; Data Visualization; The "Disney-fication" of Identities, Representations, and Development; Modern Board Game Studies: Immersion & Design; Interdisciplinary Perspectives on Inequality and Social Change; The Future of the Past: Memory and Amnesia in Contemporary Culture; Let's Talk Trash; Peace, Justice and Social Change; Myth and the Sacred Journey; Food for Thought; Faith and the Search for Meaning; and Buddhist Traditions of Tibet and the Himalayas.

Advising

Academic advising at Central College is a shared responsibility of the student, the advisor, and the college. The academic advising program empowers 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

Students must follow the graduation requirements in effect at the time of their enrollment. Students who enroll and subsequently interrupt enrollment (i.e. withdrawal or suspension) for more than two years must complete the requirements in effect at the time of re-entry. 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.

Students earn the Bachelor of Arts degree or Bachelor of Science (Engineering) degree as follows:

- 1) **Complete a total of 120 credit hours for the Bachelor of Arts degree or complete 136 credit hours for the Bachelor of Science (Engineering) degree.**
- 2) **Complete no more than 20 credits of internship or practicum.**
- 3) **Complete no more than 60 credits of course work taken in the major discipline counting toward the total 120 credits required for the bachelor of arts degree or the 136 credits required for the bachelor of science (engineering) degree.** This limitation applies to disciplinary/departmental majors only.
- 4) **Complete at least 20 credits of course work at the 300-level or above.**
- 5) **Earn a minimum cumulative grade point average (GPA) of 2.000.**
- 6) **Complete all requirements for at least one approved academic major with a minimum GPA of 2.000 in all courses applied toward the major(s).** Students are required to complete the major requirements in effect at the time the major declaration form is submitted to the registrar's office.
- 7) **Complete all Central Core requirements as outlined below.**
- 8) **Satisfy the following residency requirement.** The two semesters (summer not included) just prior to graduation and a minimum of 60 credits, including 30 of the last 60 credits, must be completed in residence. Students in good academic standing with fewer than 9 credits to complete toward the Central College degree may be granted permission to complete their remaining hours at another accredited college or university with the permission of the academic advisor, major department chair, and the registrar. Students approved to participate in any of Central's dual degree programs must complete the two semesters (summer not included) just prior to enrollment at the dual degree granting institution and a minimum of 60 credits in residence; 30 of the last 60 credits must be completed in residence or at the dual degree granting institution. "In residence" is defined as enrollment at a Central College location (the Pella campus, Central College's approved study abroad/international programs, Chicago Semester, or The Washington Center). Note: An associate dean of academic affairs may grant exceptions to this residency requirement.

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 the current catalog, or the current academic calendar.

Central Core Requirements

Complete all of the following core requirements: integrative studies, disciplinary studies, global perspective, global sustainability and writing intensive. Core courses are identified throughout the academic catalog at the end of the course description and on the online searchable schedule.

Integrative Studies (7 credits). Complete I and II.

- I. **LAS 110, Intersections (4 credits).** All new, first-year students, and transfer students with fewer than 12 transferrable credits (excluding Advanced Placement, International Baccalaureate, or CLEP) entering in the fall semester will take LAS 110 Intersections. All new first-year students and transfer students with fewer than 12 transferrable credits entering in the spring must take LAS 110 the following fall or one writing-intensive course at Central College other than ENGL 101 Composition, which would count in place of the LAS 110 graduation requirement. Transfer credit may not be used to satisfy this requirement.
- II. **LAS 410, Liberal Arts Seminar (3-4 credits).** An inquiry-based, interdisciplinary, writing-intensive seminar which stresses the importance of knowledge to human community. All Senior (or advanced Junior) students are required to take this seminar. Must be completed at Central. Transfer credit may not be used to satisfy this requirement.

Disciplinary Studies (3 credits in each of the following areas; 21 credits total). Each course may be used toward only one disciplinary designation; however, some courses may also be used to count for the global sustainability, global perspective and writing intensive requirements.

- I. Arts (ART)
- II. Historical Perspective (HP)
- III. Literature and Philosophy (LP)
- IV. Mathematical Reasoning (MR)
- V. Natural Science (NS)
- VI. Religion (REL)
- VII. Social and Behavioral Inquiry (SB)

Global Sustainability (GS) 3 credits

Global Perspective (0-14 credits). Complete component I and component II as follows:

- I. **Second Language (0-8 credits). Choose one of the following:**
 - a. Successfully complete two semester-long courses (or the equivalent) of college-level study of a second language. Students may count a one-semester intensive language course (numbered 122 or higher) equivalent to one year (two semesters) of a second language from an approved study abroad program.
 - b. Take the placement examination before beginning language course work at Central and earn a placement score beyond the first-year language courses.
 - c. Take the placement examination before beginning language course work at Central, earn a placement score in the second semester of the first-year, and then enroll in and successfully complete the second semester course.
 - d. Take a proficiency test in a language not taught at Central (including sign languages), and petition the chair of the Modern Languages department to take a proficiency examination or interview in the language. The department chair will arrange for testing; costs involved will be the responsibility of the student.
 - e. In appropriate cases, such as international students for whom English is not their first language, proficiency in English may meet this requirement.

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).

- II. **Elective (6 credits).** Complete option a or b as follows*:
 - a. Successfully complete an approved study abroad program.
 - i. All of Central College's study abroad semester and summer programs (minimum four weeks) satisfy this option.
 - ii. Non-Central College study abroad programs may satisfy this option under the following conditions: 1) the registrar approves courses for transfer; 2) International Programs Committee recommends the program be approved by Curriculum Committee as satisfying this option; and 3) Curriculum Committee approves the program as satisfying this option.
 - iii. International students with non-residence alien status satisfy this option.
 - b. Complete a minimum of 6 credits of coursework. Credit by proficiency and first-year language courses *do not count*.
 - i. Successfully complete a minimum of 3 credits with International Studies designation. (GPN)
 - ii. Successfully complete a minimum of 3 credits with Intercultural Studies designation. (GPC)

** Chicago and Washington D.C. programs and faculty-led programs do not satisfy option a. Faculty-led program courses may count as International Studies or Intercultural Studies with permission of the Curriculum Committee.*

Writing Intensive (WRT) 4 courses. Complete each of the following:

- I. Successfully complete LAS 110 and LAS 410;
- II. Successfully complete one writing intensive course at the 100-level or above during the first two years;
- III. Successfully complete one writing intensive course at the 200-level or above during the second or third year.

Note: Transfer students who are not required to take LAS 110 must take three writing-intensive courses in addition to LAS 410, Liberal Arts Seminar, which must be completed at Central College. The other writing intensive requirements may be satisfied either by courses at Central or by coursework accepted for transfer. At least one of these courses must be at the 200-level or above. Students who wish to apply transfer credit toward this requirement may need to provide a course syllabus to the registrar.

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 registrar's 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 approximately 15 hours of credit each semester, enabling them to complete, on average, 30 hours of credit per academic year and 120 hours of credit – the minimum required for graduation – in four years.

Semester hour of credit definition

In accordance with federal regulations, Central College defines a semester hour of credit as a minimum of 45 hours of student engagement with course material, as defined by the faculty member of the course. This can include direct instruction time as well as indirect engagement, including (but not limited to) reading, assignment completion, exam preparation, writing, and presentations. This standard also applies to other academic activities, including laboratory work, internships, practica, studio work, and other modes of academic work that lead to the awarding of academic credit.

Disabilities

Central College abides by interpretations of the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973 that stipulates no student shall be denied the benefits of an education "solely by reason of a handicap." Disabilities covered by law include, but are not limited to, learning disabilities, hearing, sight, or mobility impairments, and other health related impairments.

Application for Graduation and Participation in Commencement

Students notify the registrar's 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:

- the student is enrolled during the spring semester;
- the student is in good academic standing, and
- the student is within 17 credits of completing graduation requirements, and
- the 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 Latin 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 third year and complete at least 60 credits 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	P (Pass) <i>not applicable, minimum grade "C" is required to receive a "P" grade</i>
A-	3.7 grade points per semester hour	I (Incomplete) <i>not applicable</i>
B+	3.3 grade points per semester hour	W (Withdrawal) <i>not applicable</i>
B	3.0 grade points per semester hour	NC (No Credit) <i>not applicable</i>
B-	2.7 grade points per semester hour	AUD (satisfactory audit) <i>not applicable</i>
C+	2.3 grade points per semester hour	CR (Language and Mathematics proficiency) <i>not applicable</i>
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	

Grades of P, I, W, NC, AUD and CR 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 the registrar’s office 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 all work must be completed no later than the first day of the spring term for a fall class and the first day of the summer term for a spring class. Typically, incompletes are not offered in the summer. At the time of the incomplete request, instructors will provide to the registrar 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. Requests for an extension beyond the deadline should be made, in writing, to the associate dean of academic affairs prior to the previously approved deadline. Both the instructor and student must agree to the extension. Students requesting incompletes in more than one course must receive permission from the associate dean.

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 Friday of the second week of classes). 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 Credit (“NC”) grades

With the approval of the advisor and course instructor, junior- and senior-level students may elect to attempt a maximum of 20 credits outside core, major, or minor requirements, and those courses required for certification, on a pass/no credit basis. Courses offered on a pass/no credit only basis may be used at the discretion of the department to meet major or minor requirements. Credit and a “P” (pass) grade are 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 “NC” (no credit) grade will appear on the transcript. “NC” grades will have no effect on the grade point average. A student must submit an approved pass/no credit option form to the registrar’s office before the end of the Friday of the second week 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 in writing 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 associate dean of academic affairs 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 associate dean of curriculum & faculty development 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 associate dean will then discuss the case with the faculty member, and if further review is necessary, request the department 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 associate 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 at Central College.

Students who believe the above process has been unfairly applied may further appeal in writing to the Vice President of Academic Affairs.

Final Examinations

Students are expected to take final exams during the assigned times. Instructors are expected to utilize the final exam period for a conclusive, meaningful activity. Students who have three finals on one day may request a change of examination time from instructors, but all examinations must be administered no later than the final day of the exam period. Students should check their final examination schedule prior to making any end-of-semester travel arrangements; it is not the responsibility or obligation of the instructor to give opportunities for students to take a final examination outside of the scheduled final examination time.

Dean’s list

Students who complete at least 12 credits 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

First-year standing	0 - 27 semester hours of credit
Second-year standing	28 - 58 semester hours of credit
Third-year standing	59 - 89 semester hours of credit
Fourth-year standing	90 and above

Declaring a major or minor

By the end of the second year, students must file a Declaration of Major/Minor form with the registrar's office in order to be eligible to register for the third year (5th semester) of study. Students are required to complete the major requirements in effect at the time the student submits the form. Minors must be declared prior to registration for the final semester of enrollment.

Registration

General information

Students register for courses online 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 Summer Orientation and Registration 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.

Final official transcripts from all colleges attended need to be received and processed by the Registrar's Office before students may register for their second term of attendance at Central. A registration hold will be placed on the student's account until all transcripts are received.

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 dropped or withdrawn. Students should refer to WebAdvisor for their official class schedule. The official schedule is not located on Blackboard.

Students who plan on being considered “full-time” (enrolled in at least 12 credits in a given semester) for financial aid, athletics, or any other purpose, must be attentive to the number of credits for which they are officially enrolled. Students enrolled in fewer than 12 credits in any semester will have their financial aid reduced according to state and federal regulations. Student athletes enrolled in fewer than 12 credits 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 the ramifications of doing so. The registrar has the right to adjust student schedules during or after the registration period.

Changes in registration

Registration change forms are available from the registrar's office or my.central.edu. Policies governing such changes are as follows:

1. Registration changes (adds, drops, withdrawals) must be approved by students' academic advisor and, at times, the course instructor.
2. Full-semester courses dropped during the official drop/add period (typically the Friday of the second 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 registrar for a waiver of these policies.

For courses that do **not** meet for the entire semester (e.g., 1 credit courses that end at midterm):

1. Students may add or drop through the first week of class. Dropped courses will not result in 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.

Attendance Policy

The college expects students to regularly attend classes. Instructors will provide clear expectations for class attendance in their course syllabi. It is the responsibility of students to be aware of and comply with these expectations.

In the case of a foreseen absence, students should consult their course syllabus and meet with their instructor in advance to discuss the absence. College-sanctioned events are considered excusable activities. All other absences are considered unexcused absences unless approved by individual instructors. In the event of an unexcused absence, it is not the responsibility or obligation of the instructor to give opportunities for students to make up course work. For extended or unforeseen absences, it is the responsibility of the student in all circumstances to maintain contact with his/her instructor(s).

Voluntary and Medical Withdrawals

Students who wish to withdraw entirely from the college must complete a withdrawal form in the registrar's office. Medical withdrawals are granted by the associate dean of curriculum & faculty development and may be voluntary or may be initiated by the college for a student who is in need of professional help that is extensive or unavailable at the college. 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 12th 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 12th 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 (e.g., Withdrawn MM/DD/YYYY). Students who withdraw from the college and later wish to re-enroll should consult the policies governing re-entry.

Administrative withdrawal

When a student has missed all classes for 10 consecutive class days, or who after the end of week seven is failing all classes and not regularly attending classes or completing labs or assignments, the college will begin the process to administratively withdraw the student from the college. The student will be notified by the registrar via registered campus mail and the student's Central College e-mail account, 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 (e.g., 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 12th week of class will receive a "W" (withdraw) grade on the transcript for each full-semester course they are currently registered. Students who are suspended or dismissed after the 12th 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 (e.g., academic suspension MM/DD/YYYY or disciplinary dismissal MM/DD/YYYY). Students who are suspended from the college and later wish to re-enroll should consult the policies governing re-entry.

Returning from withdrawal or suspension (Re-entry)

A student who is withdrawn (voluntary or medical) or suspended (academic or disciplinary) from Central prior to graduation may apply for re-entry and, if approved, return to the college. Applications are due no later than one week prior to the first class day of the semester in which the student wishes to re-enroll. Students who have been away (e.g. withdrawn or suspended) for more than two years must complete the requirements in effect at the time of re-entry. Students approved for re-entry will be required to satisfy all prior financial obligations and to make an enrollment deposit prior to being eligible to register for classes or receive a housing assignment. For more information, contact the registrar (registrar@central.edu) or go to <http://departments.central.edu/registrar/registration/re-entry/>.

Overload

Students who wish to register for more than 18 semester hours of credit will need permission from the registrar 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. Study abroad pre-departure and re-entry courses
3. Central Teachers Academy internships (EDUC 397)
4. Mock Trial (GENR-214)
5. Honors Enrichment courses
6. Senior Honors Thesis courses/projects
7. Honors Seminar (HONR 191)
8. Private music instruction (MUSL courses)*

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

Students will be charged per-credit tuition for each non-exempt semester hour in excess of 18. See Catalog section "College Costs" for more information. The Overload Request form is available from the registrar's office.

Auditing a course

Students may audit courses for no credit with instructor permission and on a space available basis. Satisfactory audits are recorded on the student's transcript with a grade of "AUD" but are not used in the calculation of a student's grade point average. Unsatisfactory audits are not recorded. There are only a few circumstances where an audit may be useful: These include:

- if you want to explore an area unrelated to your major and the course is outside of your primary interests;
- if you want a review of an area you are already knowledgeable in, or;
- if a course is of particular interest but would require an extraordinary effort for you to take for a grade along with your other planned courses.

Instructors determine the criteria needed to receive a satisfactory audit grade (AUD). Typically, examinations, labs, papers and homework are not required; however, regular attendance and class participation is expected. Students may not audit directed study, internship, independent study, practicum, co-op, music lessons (private and group), and music ensembles. Audited courses may not be used to satisfy any graduation requirements (i.e. majors, minors, core, etc.). Students are not allowed to repeat for letter grade a course they previously audited, and students may not repeat a regular graded course as an audit.

To register for a course as an audit, or to change a course from credit to audit or audit to credit, students must file a Registration Change Form with the registrar's office during the normal registration or add/drop periods. The instructor's signature is required.

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 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.
- Students may not repeat LAS 110. (See "Failing LAS 110 Intersections" policy)

Failing LAS 110 Intersections

Students who fail LAS 110 must successfully complete one writing-intensive course at Central College other than ENGL 101 Composition within the next two semesters of enrollment; this course will count in place of the LAS 110 graduation requirement. Students may not withdraw from LAS 110 without permission of the associate dean of curriculum & faculty development.

Transfer of credit

All transfer credit must be earned at a regionally accredited college or university with a grade of "C" or better. A grade of "C-" will not be counted as transfer credit. Work to be considered for transfer credit must be submitted on an official transcript mailed directly to Central College from the transfer institution, sent as an official transcript from the transfer institution, or delivered in a sealed envelope with the registrar's signature across the seal. Students transferring to Central must provide official transcripts for all institutions previously attended.

1. All official transcripts are evaluated for admitted and matriculated students by the registrar's office 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.
2. 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 whether credits fulfill any Core curriculum requirements, in consultation with faculty as needed. Students may not use transfer credits to fulfill Intersections (LAS 110) or Liberal Arts Seminar (LAS 410) requirements.
3. A maximum of 60 semester hours of transfer credit (including a maximum of 24 semester hours from AP, IB, PSEO and dual enrollment) may be applied toward completion of a Central College degree.
4. 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.
5. 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.
6. 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 registrar's office. Students may not repeat a Central course at any other college or university.

Pre-College Credit, Advanced Placement and International Baccalaureate

A maximum of 24 semester hours of credit for Advanced Placement (AP), International Baccalaureate (IB), Post-Secondary Enrollment Option (PSEO), and dual-enrollment programs will be awarded. Pre-college credit is considered transfer credit and is included in the 60 semester hour total transfer limit. A list of approved course equivalencies is available from the registrar's office.

Credit for Advanced Placement (AP)

Students who earn a score of 4 or better on AP exams will be granted a minimum of three semester hours of credit. All AP scores must be sent directly to Central College from the College Board (CEEB 6087).

Credit for International Baccalaureate (IB)

Students who earn a score of 4 or better on IB higher-level exams (subsidiary-level exams 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 College from International Baccalaureate.

Credit for dual enrollment or PSEO

All dual enrollment or PSEO credit must be earned at a regionally accredited college or university with a grade of “C” or better. Grades and credit earned in pre-college courses are not included in the calculation of a student’s Central College cumulative or major grade point average. Dual enrollment and PSEO work to be considered for credit must be submitted on an official transcript and mailed directly to Central College from the institution of record or delivered in a sealed envelope with the registrar’s signature across the seal.

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

Credit by proficiency in computer science

Students who place into COSC 130 Data Structures and complete that course with a grade of "C" or better will be awarded 3 semester hours of proficiency credit for COSC 110 Introduction to Computer Science.

Academic Warning, Probation and Suspension

Central College admits students who have the background, desire and ability to be successful at Central and make adequate progress toward the degree. To graduate from Central College, a student must earn 120 semester hours of credit with a minimum grade point average of 2.000 overall and in their declared 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 academic year. The goal of the college is to ensure that students have the resources they need to succeed academically and to support the student's acquisition of skills of mind, body, and spirit. The Office of the Class Deans and other resources on campus are designed to help students succeed academically, while at the same time helping them fulfill their interests in outside activities. It is with this ethos in mind that Central has developed this system of academic guidance for students.

The academic progress committee, in consultation with the class deans, determines 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*:

	Semester 1 GPA*	Semester 2 GPA**
First Year	1.700	1.800
Second Year	1.900	2.000
Third Year	2.000	2.000
Fourth Year	2.000	2.000

* First- and second-year students are expected to achieve a minimum cumulative and major GPA that coincides with the number of semesters in college.

Academic warning

Students who meet the above minimum standards may receive a written notice of warning if one or more of the following is observed:

- A cumulative GPA less than 2.000, but greater than the minimum required for a classification;
- A semester GPA below 2.000, even though the cumulative GPA is above 2.000;
- Earning fewer than 12 semester hours of credit in any semester (summer excluded); or
- Earning credits at a pace that will put them more than one full semester behind a projected four-year graduation.

Students who receive an academic warning may receive academic mentoring from a class dean to identify solutions to problems the student may be experiencing while at Central, or any other needs moving forward. Students who receive an academic warning for two consecutive semesters may be placed on academic probation.

Academic probation

When a student does not meet the cumulative or major grade point average expected, and/or falls more than one semester behind a projected four-year graduation, the student will be placed on academic probation for the next regular semester of enrollment, and the advisor will be notified. Students placed on academic probation should use the semester as an opportunity to focus on academic improvement. Students will meet with their class dean regularly to clarify goals, identify campus resources to help them succeed, develop additional mentoring relationships with faculty, and enhance their academic skills. Students on academic probation are ineligible to participate in many co-curricular activities, including the following:

- NCAA Division III athletics practices, competitions, and related activities;
- dance or cheer team;
- music ensembles;
- theatre productions, including musicals;
- student government leadership;
- study abroad or domestic semester away programs;
- fraternity or sorority pledging;
- other college-sponsored co-curricular activities.

If a non-athletic activity is required for the probationary student's major, exceptions to this list *may* be granted with the approval of the student's class dean and academic advisor. If there is a question as to the appropriateness of an activity, students should consult with their class dean.

Students who improve their cumulative GPA, major GPA, and total credits earned to the minimum level expected during the fall or spring semester will be removed from academic probation; students who make such improvement after a summer session will be removed from academic probation, but will be required to meet with their class dean during the fall semester. Students who are removed from academic probation as a result of summer performance but fail to attend subsequent meetings with their class dean may be immediately returned to academic probation.

Students who make a noted improvement, but do not achieve the minimum levels outlined above, will be continued on academic probation until their grade point average (cumulative and major) and completed semester hours are at the level(s) expected for their classification. Students on academic probation who demonstrate little or no improvement may be suspended or dismissed.

Students on academic probation for more than one semester may have their financial aid reduced. See the catalog section on [Financial Aid Satisfactory Academic Progress](#) for more information.

Academic suspension

Students who have not benefitted from academic probation or who demonstrate an abrupt decline in academic progress will be suspended. Suspension is deemed appropriate when it is apparent that the student needs a break from studies at Central to 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 apply for re-entry after one semester of suspension. Students who have been suspended are not eligible to enroll in summer classes at Central College until after being approved for re-entry. A transcript notation will indicate that a student has been suspended for academic reasons (e.g., academic suspension MM/DD/YYYY).

Students wishing to return to Central College following the suspension period must apply for re-entry by contacting in writing the associate dean of curriculum and faculty development. The re-entry request will be evaluated in light of interim experiences that reflect increased readiness to succeed academically. Students have a greater likelihood of being approved for re-entry if they show evidence of growth; this can be accomplished by successfully completing courses at another accredited institution, securing counseling to resolve personal issues, engaging in work opportunities that demonstrate success, or similar opportunities.

Academic dismissal

Students who consistently fail to meet satisfactory academic progress standards will be dismissed from the college. Typically, students will be placed on academic probation or suspension prior to dismissal, although a particularly unsuccessful semester may result in immediate 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 (e.g., academic dismissal MM/DD/YYYY).

Appeal of academic suspension or dismissal

Students who have been suspended or dismissed for academic reasons may appeal in writing to the associate dean of curriculum and faculty development. Permission to continue may be granted if there is evidence previously unavailable to the academic progress committee of factors that contributed to the unsuccessful semester. 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 apply for re-entry 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 may include, but are not limited to, a documented serious/prolonged student illness or injury, or the death of a close relative.

Amended student records

Satisfactory academic progress is based on the student's official academic records at the time of the progress review. If a record is amended to reflect appropriate changes (e.g., an incomplete "I" grade is replaced by a standard letter grade), the academic progress committee may re-assess the student's academic status and, accordingly, modify or continue the student's academic standing. Any changes to a student's academic standing based on the amended student record will be effective immediately.

Academic Integrity

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 not only adherence to a process that upholds Central College's standards of academic integrity, but also the creation of 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.

Academic Honesty

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.

You should avoid:

- Plagiarism and/or misuse of ideas from other sources:
 - Deliberately representing the work of someone else as your own work. This can include:
 - Using the ideas, text, formulas, images, or other materials produced by someone else and not acknowledging them as the source; or

- Cutting and pasting the work of others into your assignments without acknowledging the source of this material. This 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. This can include:
 - Not including proper within text citations and/or proper footnotes or endnotes, or
 - 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. This can take many forms, including
 - Copying homework or test answers/responses from other students and turning it in as your own work;
 - Use of personal electronic devices (e.g., cell phones, 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 ; or
 - Failing to report miscalculations in grading.
- Facilitation of dishonest academic activity, such as:
 - Use of technology (e.g., cell phones, 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, such as:
 - 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, including:
 - Presenting false credentials.
 - Altering or forging official university documents and/or files.

Responsibilities for maintaining standards of academic integrity

Each member of the Central College community is responsible and accountable for maintaining these standards of academic honesty in order to maintain the integrity of the college and the degrees it confers.

Instructors are expected to

- Model academic integrity in their own work and in the classroom;
- Provide clear explanations in course syllabi of general and course-specific policies regarding academic integrity and the consequences for violating those policies, and discuss these policies in class;
- Create an environment conducive to rigorous, honest inquiry and learning;
- Monitor academic projects and exams to ensure that the work is the student's own;
- Report and act on any suspected dishonesty in a timely fashion; and
- Maintain confidentiality regarding cases of suspected dishonesty.

Students are expected to

- Approach their work ethically and honestly; submit only their own work, and properly credit the work of others;
- Become familiar with college policies;
- Ask for clarification of general or course-specific guidelines regarding academic integrity; and
- Actively discourage and avoid facilitating other students' acts of dishonesty.

Administrators are expected to

- Ensure that policies governing incidents of reported dishonesty are followed and
- Maintain fairness in the disposition of sanctions.

Procedures for violations of academic standards of integrity

In a case of perceived academic dishonesty, the instructor will collect evidence documenting the violation and arrange to meet with the student to discuss the incident as soon as possible. When a student is observed cheating on a test, the instructor will take custody of the evidence and confront the student as soon as possible.

The instructor of the course will determine the course penalty after consulting with his or her department chair (or the chair's designee) and the associate dean of academic affairs. Depending on the nature of the offense, the penalty in the course may take the form of additional work or reassignment, failing the project or test, or failing the course.

For every discovered integrity violation instructors will file an academic integrity violation report with the associate dean of academic affairs along with copies of any evidence collected. The report will include a description of the offense, the action taken by the instructor and confirmation that a department chair (or designee) was consulted in this process.

After review by the associate dean of academic affairs, an institutional sanction may be imposed. Students will receive a letter restating the course penalty and, if applicable, the institution's sanction or warning, and a copy will be placed in the student's file. Records of academic integrity violations will be kept in the Academic Affairs office for seven years after graduation or withdrawal from Central College. For a first offense, a student will typically receive a letter of warning. Repeated offenses may be grounds for suspension or dismissal from Central College. Serious violations may result in immediate dismissal.

Students who wish to appeal the penalty imposed by the faculty member and/or the institutional sanction must send a letter to the associate dean of academic affairs explaining the grounds for the appeal. The College's Academic Standards Committee will review the evidence submitted and the voting members of the committee (with the associate dean serving in a non-voting capacity) will render a decision on the appeal. A final appeal may be made to the chief academic officer. All appeals must be submitted within two weeks of being notified of a decision.

Those involved with cases of academic integrity violations will maintain strict confidentiality and follow the provisions of the Family Education Rights and Privacy Act as it applies to the release of information in student records.

Information on academic integrity

Further information about plagiarism and other violations of academic integrity is available on the Geisler Library home page under the heading "Copyright and Academic Integrity."

ACADEMIC PROGRAMS

The academic component of Central College is administered through the Office of Academic Affairs. The faculty administer the curriculum through a structure of nineteen academic department and some supporting interdisciplinary programs. The academic departments are: Art, Biology, Chemistry, Communication Studies, Education, Economics/Accounting/Management, English, Exercise Science, History, Library, Mathematics/Computer Science, Modern Languages, Music, Philosophy/Religion, Physics, Political Science, Psychology, Sociology/Anthropology, and Theatre.

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 second year, students must file a Declaration of Major/Minor form with the registrar's office in order to be eligible to register for the third year (5th semester) of study. Students are required to complete the major requirements in effect at the time the student submits the form to the registrar.

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

Accounting	Elementary Education	Music
Actuarial Science	Engineering	Music Education
Anthropology (Cultural)	English	Natural Science
Art	Environmental Studies	Philosophy
Athletic Training*	Exercise Science	Physics
Biochemistry	French & Francophone Studies	Political Science
Biology	German Studies	Psychology
Business Management	History	Religion
Chemistry	Information Systems	Social Science
Communication Studies	Integrated Studies	Sociology
Computer Science	International and Global Studies	Spanish
Economics	Mathematics	Theatre

**The Central College Athletic Training Program is currently accredited by the Commission on Accreditation of Athletic Training Education (CAATE). The program has chosen to voluntarily withdraw its CAATE Accreditation effective July 1, 2022. New major declarations are no longer being accepted.*

Pre-Professional Programs - The following programs are supported by the academic structure. While not specific majors, faculty will work with students in identifying coursework appropriate for their professional aspirations.

Pre-health
Pre-law
Pre-ministry
Pre-engineering

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 registrar's office prior to registration for the final semester of enrollment.

Accounting	Entrepreneurship	Mathematics
Anthropology (Cultural)	Environmental Studies	Mathematics Teaching
Art	Exercise Science	Music
Art History	French & Francophone Studies	Philosophy
Biology	German Studies	Physics
Business Management	Global Health	Political Science
Chemistry	Global Sustainability	Psychology
Chinese Studies	History	Religion
Communication Studies	Integrated Studies	Sociology
Computer Science	International and Global Studies	Spanish
Economics	Linguistics	Theatre
English	Not-For-Profit Management	Writing

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 or Service Learning Module

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. See *Special Programs* for more information about the Service Learning Module option. (XXXX-283/XXXX-383)

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, unpaid work experience, directly supervised by a Central faculty member, designed to give students an opportunity to apply principles learned in academic course work. Graded on a pass/no credit basis. Credit is arranged but not to exceed 3 credits without permission of the associate dean of academic affairs. Examples include: peer instructors or course assistants.

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 credits of other course work during the co-op semester.

x97 Internship

Academic internships provide an opportunity to connect learning to life. Structured as supervised learning experiences in a practical work setting, internships are directed by a professional in the field and supervised by a faculty member in a related discipline. Internships can be done during the academic year, typically replacing a standard course (1-6 credits), or in the summer as a more intensive experience. Alternatively, students can participate in one of Central College’s internship-focused off campus programs for up to 12 hours of credit. Internships are graded on a pass/no credit basis and are recorded on students’ transcripts. For more information, please see “Internships” in the current catalog or contact the center for community-based learning.

x98 Research

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

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 credits

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 descriptions in the catalog provide additional information about the courses, as follows:

- ART Courses that meet the arts Core requirement
- HP Courses that meet the historical perspective Core requirement
- LP Courses that meet the literature and philosophy Core requirement
- MR Courses that meet the mathematical reasoning Core requirement
- NS Courses that meet the natural science Core requirement
- REL Courses that meet the religion Core requirement
- SB Courses the meet the social and behavioral Core requirement
- GS Courses that meet the global sustainability Core requirement
- GPC Courses that meet the global perspective: intercultural Core requirement
- GPN Courses that meet the global perspective: international Core requirement
- WRT Courses that have been approved to meet the writing intensive Core requirement. See the online searchable schedule for the most up-to-date information on which specific sections contain the WRT designation.

ACCOUNTING

Economics, Accounting and Management Department

Faculty

Graham Lemke (chair), Tuan Nguyen, George Nwaogu, Jaclyn Rundle, Maggie Schlerman, Jessica Schuring, Julie Summers

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 systems 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 and Washington, D.C. internship programs, and to become active in various student educational and/or service organizations and other co-curricular activities.

As demonstrated by recent success, Central's accounting graduates are well qualified 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 options with their faculty advisors early in their college careers.

Accounting Major Requirements (53-54 credits)

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

1. Complete all of the following:

- ECON 112 Principles of Microeconomics (3)
- ECON 113 Principles of Macroeconomics (3)
- BMGT 311 Principles of Management (3)
- ACCT 241 Introduction to Financial Accounting (3)
- ACCT 242 Introduction to Management Accounting (3)
- ACCT 341 Intermediate Financial Accounting I (3)
- ACCT 342 Intermediate Financial Accounting II (3)
- ACCT 343 Advanced Management Accounting (3)
- ACCT 344 Individual Tax Accounting (3)
- ACCT 347 Accounting Information Systems (3)
- ACCT 441 Advanced Financial Accounting (3)
- ACCT 442 Auditing (3)
- ACCT 485 Accounting Research Seminar (1)

2. Complete one of the following

- MATH 105 Introduction to Statistics (4)
- MATH 215 Applied Statistics (4)

3. Complete one of the following

- COSC 109 Introduction to Information Management (3)
- COSC 110 Introduction to Computer Science (3)

4. Complete one of the following:

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

5. **Complete one ethics-related course from the philosophy/religion department; consult an accounting faculty member for a list of acceptable courses.**
6. **Complete one of the following:**
 - COMM 160 Communication in Everyday Life (3)
 - COMM 270 Public Speaking (4)
 - COMM 340 Public Relations (4)
 - THEA 150 Acting (3)

A note about the CPA exam

Students who wish to take the CPA exam in Iowa are advised to also take BMGT 231, BMGT 332, and BMGT 261. 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.

Accounting Minor Requirements (18 credit minimum)

1. **Complete all of the following:**
 - ACCT 241 Introduction to Financial Accounting (3)
 - ACCT 242 Introduction to Management Accounting (3)
2. **Complete one of the following:**
 - COSC 109 Introduction to Information Management (3)
 - COSC 110 Introduction to Computer Science (3)
2. **Complete a minimum of 9 credits 300-level or higher in ACCT.**

ACCT x96 Co-op, ACCT x97 Internship, or ACCT x83 Field Experience in Accounting, does not count toward an Accounting minor.

ACTUARIAL SCIENCE

Interdisciplinary Major

Co-Directors

Mark Mills, Jessica Schuring and Graham Lemke

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 strong foundation in the material for the actuarial industry's first two preliminary professional exams which cover calculus-based probability and financial mathematics. Ideally, students will have passed at least these two exams prior to graduation. In addition, students will also have completed all three of the actuarial industry's Validation by Educational Experience (VEE) requirements: Economics, Accounting and Finance, and Mathematical Statistics.

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.

Actuarial Science majors are encouraged to consider the study abroad experience during the spring of their second year or the fall semester of their third or fourth year, depending upon their progression in the major. Some schedule adjustments will need to be made in order to accommodate a semester abroad, so it is important to plan ahead and speak with one of the major's co-directors early.

Major Communication Skills

Students will complete COMM-160 or COMM-270 with a minimum grade of "C".

Major/minor restrictions

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

Actuarial Science Major Requirements (59 credits)

1. Complete all of the following:

ACCT	241	Introduction to Financial Accounting (3)
ACCT	242	Introduction to Management Accounting (3)
BMGT	261	Principles of Finance (3)
BMGT	362	Principles of Investment (3)
BMGT	462	Derivative Markets (3)
COSC	110	Introduction to Computer Science (3)
ECON	112	Principles of Microeconomics (3)
ECON	113	Principles of Macroeconomics (3)
ECON	281	Research Methods in Economics (4)
MATH	131	Calculus I (4)
MATH	132	Calculus II (4)
MATH	215	Applied Statistics (4)
MATH	231	Multivariable Calculus (3)
MATH	240	Linear Algebra (4)
MATH	330	Mathematical Modeling (3)
MATH	341	Probability (3)
MATH	342	Statistics (3)

2. Complete one of the following courses with a grade of at least a "C":

COMM 160 Communication in Everyday Life (3)

COMM 270 Public Speaking (4)

Note: COMM 270 Public Speaking is the preferred course.

Additional recommended courses

Students who want to get additional quantitative experience are encouraged to complete three additional economics courses.

ECON 312 Microeconomic Theory

ECON 313 Macroeconomic Theory

ECON 485 Economics Research Seminar

Students 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 job experiences.

BMGT 231 Business Law I

BMGT 311 Principles of Management

BMGT 363 Advanced Financial Management

COSC 109 Intro to Information Management

COSC 130 Data Structures

ECON 324 Monetary Theory and the Financial System

ENGL 244 Professional Writing

ANTHROPOLOGY (CULTURAL)

Sociology/Anthropology Department

Faculty

Shawn Wick (chair), Jeffrey Bass, Cynthia Mahmood, Jeremia Njeru

Statement of philosophy

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 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. a foreign language, English, History, Business Management major or minor, etc.), providing even more opportunities for students to turn their individual interests into meaningful life endeavors.

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.

Major Communication Skills

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.

Major and minor restrictions

Students may choose to declare a major in either cultural anthropology or sociology. Sociology majors may not declare a cultural anthropology minor. Cultural anthropology majors may not declare a sociology minor.

Cultural Anthropology Major Requirements (35-36 credits)

1. Complete all of the following (14-15 credits):

ANTH	120	Introduction to Cultural Anthropology (3)
ANTH	366	Ethnographic Field Methods (4)
ANTH	462	Culture Theory (4)
ANTH	465	Applied Anthropology (4) or ANTH 397 Internship (3)

2. Complete 21 credits of elective courses, of which:

* at least 15 credits. must be anthropology (ANTH) or sociology (SOC) courses

* up to 6 credits may be taken from the following list:

COMM	268	Intercultural Communication (3)
ENGL	211	Literature of India and the Pacific (3)
ENGL	212	African and Caribbean Literature (3)
ENGL	243	Writing Oral Histories (4)
GEOG	210	Human Geography (3)
GEOG	225	Geography of Sub-Saharan Africa (3)
HIST	217	Contemporary Europe (4)
HIST	220	Middle Eastern Civilization (3)
HIST	250	Latin American Civilization (4)
HIST	271	History of Modern China (4)
HIST	275	History of Modern Japan (4)

HIST	277	Modern East Asian Civilization (4)
HIST	280	Modern African Civilization (4)
MUS	114	World Music (3)
POLS	140	Introduction to International Politics (4)
REL	230	Asian Religions (3) <i>or</i> REL 330 Readings in Asian Religions (4)
REL	235	Islam (3) <i>or</i> REL 335 Readings in Islam (4)

Note: Study Abroad and honors courses may be applied toward the major upon departmental approval.

Cultural Anthropology Minor (18 credits)

1. Complete ANTH 120 Introduction to Cultural Anthropology (3)
2. Complete an additional 15 credits of ANTH and/or SOC courses, with at least 9 credits being ANTH courses, and 6 credits at the 300-400 level.

ART

Art Department

Faculty

Brian Roberts (chair), Matthew Kelly, Susan Swanson

Statement of philosophy

The visual arts are a primary mode of inquiry and an essential component of a Liberal Arts education. Through the making and studying of the visual arts, the Art Department prepares students to be visually literate scholars who engage in the shaping of the modern world. At all levels emphasis is placed upon critical visual analysis, idea generation, and technical facility, with strong written and oral communication skills.

The Art Department provides a wide range of experiences within the fields of Art and Art History. Students work closely with their instructors to develop their creative voice and discover the influence of art throughout history. In studio courses, students learn to work firsthand with materials, idea generation strategies, conceptual development, and skill building techniques. Courses in Art History integrate the skills learned and practiced in the studio into the study and critical analysis of visual and material cultures. Students use the knowledge gained through the close study of works and history to think critically about the relationships between art and a range of human endeavors.

In addition to the classroom experiences, our students are active in a variety of student organizations and co-curricular activities. All of these experiences 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 and Mérida. 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 study abroad office and the art department concerning such courses.

Major Communication Skills

At the time students declare their intent to major in Art, the department will evaluate their writing, reading, speaking, and critical thinking skills for the first time. Art majors are required to create and maintain an electronic portfolio documenting their representative work. The portfolio is begun the semester a student officially declares a major in Art and is assembled in consultation with her or his academic advisor. The department faculty meet annually to discuss and evaluate each student's communication skills. A student whose skills in one or more areas (speaking, reading and writing) are not sufficient, works with her/his advisor to design an improvement plan.

A critical demonstration of skills development occurs in ART 325 History of Modern Art and in ART 485 Senior Seminar in Art. ART 325 serves as the departmental writing intensive course and emphasizes critical reading and writing skills. ART 485 serves as the senior capstone requiring daily reading, writing, and speaking. In addition, students are required to make a formal oral presentation and written thesis in conjunction with their senior exhibitions.

The department conducts a final portfolio review during the fourth year. Passing the final portfolio review is necessary to receive the department's endorsement for graduation.

Major/Minor Restrictions

Students may not minor in both Art History and Art. Art majors may not also minor in Art History.

Art Major Requirements (42 credits)

1. Complete all of the following:

ART	151	2D Problem Solving (4)
ART	161	3D Problem Solving (4)
ART	325	History of Modern Art (4)
ART	425	Theory, Criticism, and Art Since 1945 (4)
ART	485	Senior Seminar in Art (4) - includes senior exhibit (minimum grade "C" required)

2. Complete two of the following:

- ART 110 Art and Architecture of the Ancient World (4)
- ART 221 Medieval Art and Architecture (3)
- ART 222 European Art from the Renaissance to Romanticism (3)
- ART 241 Art, Science & Knowledge-Making, 1500- 1800 (3)
- ART 242 Netherlandish Art, 1400- 1650 (3)

3. Complete 16 credits of ART electives

3. Pass a final portfolio review as determined by department faculty.

Art Minor Requirements (18 credits)

Complete 18 credits of ART courses, including at least one art history course and 3 credits of studio art electives at the 300-400 level.

Art History Minor Requirements (20 credits)

1. Complete all of the following:

- ART 221 Medieval Art and Architecture (3)
- ART 222 European Art from the Renaissance to Romanticism (3)
- ART 325 History of Modern Art (4)
- ART 425 Theory, Criticism and Art Since 1945 (4)

2. Complete at least 3 credits of art history electives

3. Complete at least 3 credits of studio art electives

Teaching Licensure – Art

Students seeking teaching licensure in art at the elementary or secondary level should consult with the education department regarding specific requirements in each area.

ATHLETIC TRAINING

*Exercise Science Department
Athletic Training Program*

Faculty

Paul Weihe (chair), John Roslien (program director), Leslie Duinink, Katelin Gannon, Shelli Green, Sara Shugar Fox, Cody Huisman, Frank Neu, David Pavlat, Pam Richards

Statement of philosophy

The athletic training program will provide health science experiences in collaboration with health professionals enabling athletic training students to master the competencies and proficiencies necessary 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, preceptors, professionals and peers within the college and the Pella community.

The Athletic Training Program is accredited by the Commission on Accreditation of Athletic Training Education (CAATE) through the 2019-2020 academic year. 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 prior to May 2022.

The primary objective of the Central College Athletic Training 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.

Major Communication Skills

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 during AT 223, AT 323, AT 472, and AT 423. Any students assessed as needing further development will be referred to the program director for a prescriptive plan to improve their communication skills.

Athletic Training Major Requirements (59 credits)

1. Complete all of the following:

- AT 152 Introduction to Athletic Training (1)
- AT 223 Level 1: Clinical Rotation I (2)
- AT 224 Level 1: Clinical Rotation II (3)
- AT 272 Athletic Injury Assessment: Lower (3)
- AT 273 Athletic Injury Assessment: Upper (3)
- AT 323 Level 2: Clinical Rotation I (3)
- AT 377 Therapeutic Modalities (3)
- AT 378 Therapeutic Interventions (3)
- AT 379 Organization and Administration of Athletic Training (2)
- AT 380 Athletic Training Pharmacology (1)
- AT 423 Level 3: Clinical Rotation I (3)
- AT 424 Level 3: Clinical Rotation II (2)
- AT 472 Medical Conditions for the Athletic Trainer (3)
- EXSC 111 Essentials of Human Anatomy and Physiology with lab (4)
- EXSC 149 Foundations of Health and Exercise Science (3)
- EXSC 151 First Aid and Sports Injuries (3)
- EXSC 254 Human Anatomy and Kinesiology with Lab (4)
- EXSC 257 Fitness Assessment and Exercise Prescription (4)
- EXSC 334 Sports Nutrition (4)
- EXSC 460 Exercise Physiology (3)
- EXSC 461 Exercise Physiology Lab (2)

Admission to the Athletic Training Program

Students may no longer apply for admission or transfer into the Athletic Training program.

BIOCHEMISTRY

Chemistry Department

Faculty

James Shriver (chair), James Dunne, Ashley Garr, Catherine Haustein, Jay Wackerly

Statement of philosophy

Housed in the chemistry department, a major in biochemistry is offered for students interested in careers straddling the more traditional fields of chemistry and biology. Students choosing this major will obtain excellent preparation for a variety of careers including biochemistry, biotechnology, pharmacology, and agricultural chemistry. A degree in biochemistry is also an excellent precursor to pre-professional programs including medicine, dentistry, and optometry. A student cannot major in both chemistry and biochemistry.

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 (ACS), so biochemistry majors receive instruction comparable to that at larger institutions while benefiting from individualized attention that is the hallmark of Central College.

American Chemical Society certification

In addition to our regular major, we also offer an ACS certified degree designed to give excellent preparation for graduate school. 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.

Major Communication Skills

The communications skills for the biochemistry major are evaluated as follows: In the spring of the second 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.

Major/Minor restrictions

A student may not major in both biochemistry and chemistry.

Biochemistry Major Requirements (59-60 credits)

1. Complete all of the following (52 credits):

CHEM 111	General Chemistry (4)
CHEM 221	Inorganic Chemistry (4)
CHEM 231	Organic Chemistry I (4)
CHEM 241	Analytical Chemistry (4)
CHEM 331	Organic Chemistry II (4)
CHEM 351	Biochemistry (4)
CHEM 361	Physical Chemistry I (3)
CHEM 363	Chemical Kinetics with Lab (1)
CHEM 451	Advanced Topics in Biochemistry (3)
BIOL 131	Introduction to Cells (4)
BIOL 221	Genetics and Evolution (4)
MATH 131	Calculus I (4)
MATH 132	Calculus II (4)
PHYS 111	General Physics I (5)

2. Complete one of the following electives in Biology (4 credits):

- BIOL 341 Human Physiology (4)
BIOL 361 Microbiology (4)

3. Complete an additional biology elective from group 2 or one of the following chemistry courses (3-4 credits):

- CHEM 421 Advanced Inorganic Chemistry (3)
CHEM 431 Advanced Organic Chemistry (4)
CHEM 442 Instrumental Analysis (4)

Coursework required for American Chemical Society Biochemistry Certification (72-73 credits)

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

1. Complete the Central college biochemistry major listed above. (60-61 credits)**2. Complete the following courses:**

- CHEM 461 Physical Chemistry II (3)
PHYS 112 General Physics II (5)

3. Complete two units of research and prepare a final thesis on your work, including safety. (4)

- CHEM 485 Research Investigations in Chemistry (2)

BIOLOGY

Biology Department

Faculty

Nicole Palenske (chair), Russell Benedict, Anya Butt, Ellen Du Pré, Lee Macomber, Paulina Mena, 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 80-acre Carlson-Kuyper Biology Field Station on Lake Red Rock.

Study abroad opportunities

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

Major Communication Skills

Certification of communication skills for the biology major, encompassing reading, writing, speaking, listening, numeric, bibliographic and computer skills, is accomplished in the required sequence: BIOL 130, 131, 221, and 229 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.

Biology Major Requirements (43 credits)

1. Complete all of the following:

- BIOL 130 Diversity of Life (4)
- BIOL 131 Introduction to Cells (4)
- BIOL 221 Genetics and Evolution (4)
- BIOL 229 Ecology and Evolution (4)
- CHEM 111 General Chemistry (4)
- CHEM 231 Organic Chemistry (4)
- MATH 105 Introduction to Statistics (4) or MATH 215 Applied Statistics (4)

2. Complete an additional 15 credits from the following:

- BIOL 210 Epidemiology (3)
- BIOL 211 Biology Research Methods (1)
- BIOL 310 Tropical Ecology (3-4)
- BIOL 315 Aquatic Toxicology (4)
- BIOL 320 Evolution (4)
- BIOL 321 Comparative Vertebrate Anatomy (4)
- BIOL 324 Field Botany (4)
- BIOL 335 Functional Histology (4)
- BIOL 341 Human Physiology (4)
- BIOL 342 Mammalogy (4)
- BIOL 343 Ornithology (4)
- BIOL 345 Limnology (4)
- BIOL 350 Conservation Biology and Ecology of Iowa (4)
- BIOL 360 Human Anatomy (4)
- BIOL 361 Microbiology (4)

CHEM 351 Biochemistry (4)
GEOG 320 Principles of GIS (3)

Biology Minor Requirements (19-20 credits)

1. Complete all of the following:

BIOL 130 Diversity of Life (4)
BIOL 131 Introduction to Cells (4)
BIOL 221 Genetics and Evolution (4)
BIOL 229 Ecology and Evolution (4)

2. Complete one of the following:

BIOL 310 Tropical Ecology with lab (3-4)
BIOL 315 Aquatic Toxicology with lab (4)
BIOL 320 Evolution with lab (4)
BIOL 321 Comparative Vertebrate Anatomy with lab (4)
BIOL 324 Field Botany with lab (4)
BIOL 335 Functional Histology with lab (4)
BIOL 341 Human Physiology with lab (4)
BIOL 342 Mammalogy with lab (4)
BIOL 343 Ornithology with lab (4)
BIOL 345 Limnology with lab (4)
BIOL 350 Conservation Biology and Ecology of Iowa (4)
BIOL 360 Human Anatomy with lab (4)
BIOL 361 Microbiology with lab (4)
CHEM 351 Biochemistry with lab (4)

BUSINESS MANAGEMENT

Economics, Accounting and Management Department

Faculty

Graham Lemke (chair), Tuan Nguyen, George Nwaogu, Jaclyn Rundle, Maggie Schlerman, Jessica Schuring, Julie Summers

Statement of philosophy

Housed in the dynamic Economics, Accounting and Management Department, 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 strong foundation in business with an opportunity to develop emphasis in one of four business administration areas: business administration, international business, finance, and marketing.

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. 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.

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 or Washington, D.C. programs, to explore co-op and internship opportunities, and to participate in student organizations. By integrating practical and theoretical experiences, students will be prepared to appreciate the global and cultural diversity of the 21st century.

Business Management Major Requirements (46-47 credits)

Note: This major may not be declared in combination with the Information Systems Management major

1. Complete all of the following: (24)

- ACCT 241 Principles of Financial Accounting (3)
- ACCT 242 Principles of Management Accounting (3)
- ECON 112 Microeconomics (3)
- ECON 113 Macroeconomics (3)
- BMGT 231 Business Law (3)
- BMGT 261 Principles of Finance (3)
- BMGT 271 Principles of Marketing (3)
- BMGT 311 Principles of Management (3)

2. Complete one course in statistics from the following: (4)

- MATH 105 Introduction to Statistics (4)
- MATH 215 Applied Statistics (4)

3. Complete one course in computer science from the following: (3)

- COSC 109 Introduction to Information Management (3)
- COSC 110 Introduction to Computer Science (3)

4. Complete one of the courses below.*(3)

- COMM 160 Communication in Everyday Life (3)
- COMM 270 Public Speaking (4)
- THEA 150 Acting (3)

*It is recommended that students complete this before the third year.

5. Complete 9 credits at the 300-level or higher in business management, following the emphasis area guide, and/or as developed in conversation with your academic advisor and as approved by the EAM Department Chair. (9)

Students complete emphases in their upper-level coursework, typically in business administration, marketing, finance or international management. Certain 300 and 400 level economics and accounting courses may count toward this requirement; consult with your academic advisor for more information.

Pre- Approved BMGT Emphasis Areas:**Business Administration**

Choose one course from:

- BMGT 372 Consumer Behavior (3)
- BMGT 373 Marketing Management (3)
- BMGT 375 Marketing Research (3)

Choose one course from:

- BMGT 362 Principles of Investments (3)
- BMGT 363 Advanced Financial Management (3)

Choose one course from:

- BMGT 335 Not For Profit Management (3)
- BMGT 352 Human Resource Management (3)
- BMGT 381 Operations Management (3)

Marketing

Complete all of the following;

- BMGT 372 Consumer Behavior (3)
- BMGT 373 Marketing Management (3)
- BMGT 375 Marketing Research (3)

Finance

Complete the following:

- BMGT 362 Principles of Investments (3)
- BMGT 363 Advanced Financial Management (3)

Choose one course from:

- ACCT 341 Intermediate Financial Accounting I (3)
- ACCT 344 Individual Tax Accounting (3)
- ECON 322 International Trade and Finance (3)
- ECON 324 Monetary Theory and Financial Systems (3)

International Business:

Complete the following:

- ECON 322 International Trade and Finance (3)

Choose one course from:

- POLS 326 Political Violence and Terrorism (4)
- POLS 344 International Law and Human Rights (4)

Choose one course from:

- BMGT 362 Principles of Investments (3)
- ECON 329 Economic Development (3)

Plus: study abroad for a minimum of one semester at one of Central's Study Abroad programs.**6. Complete a strategic management capstone course. (3)**

- BMGT 485 Strategic Management Capstone- Corporations (3)
- BMGT 486 Strategic Management Capstone- Start-Ups and Small Businesses (3)

Business Management Minor Requirements (21 credits minimum)

Note: This minor cannot be declared in conjunction with the accounting major or information systems major.

1. Complete all of the following:

ECON	112	Principles of Microeconomics (3)
ECON	113	Principles of Macroeconomics (3)
ACCT	241	Introduction to Financial Accounting (3)
ACCT	242	Introduction to Management Accounting (3)
BMGT	311	Principles of Management (3)

2. Complete one of the following:

BMGT	261	Principles of Finance (3) (Prerequisite ACCT 241)
BMGT	381	Operations Management (3) (Prerequisites: MATH 105 or MATH 215; and third-year standing)

3. Complete one of the following:

BMGT	231	Business Law (3)
BMGT	271	Principles of Marketing (3)

CHEMISTRY

Chemistry Department

Faculty

James Shriver (chair), James Dunne, Ashley Garr, Catherine Haustein, Jay Wackerly

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, teaching, industrial lab work, environmental testing laws 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 third 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 fourth 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.

Major Communication Skills

The communications skills for the chemistry major are evaluated as follows: In the spring of the second 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. Final assessment will be made at the end of CHEM 363, Chemical Kinetics with Lab.

Chemistry Major Requirements (60 credits)

1. Complete all of the following:

CHEM 111	General Chemistry (4)
CHEM 221	Inorganic Chemistry (4)
CHEM 231	Organic Chemistry I (4)
CHEM 241	Analytical Chemistry (4)
CHEM 331	Organic Chemistry II (4)
CHEM 351	Biochemistry with Lab (4)
CHEM 361	Physical Chemistry I (3)
CHEM 363	Chemical Kinetics with Lab (1)
CHEM 461	Physical Chemistry II (3)

BIOL	131	Introduction to Cells (4)
MATH	131	Calculus I (4)
MATH	132	Calculus II (4)
PHYS	111	General Physics I (5)
PHYS	112	General Physics II (5)

2. Complete ***at least 6 credits*** from the following:

CHEM	372	Environmental Chemistry (3)
CHEM	421	Advanced Inorganic Chemistry (3)
CHEM	431	Advanced Organic Chemistry (4)
CHEM	442	Instrumental Analysis (4)
CHEM	451	Advanced Topics in Biochemistry (3)
CHEM	463	Advanced Physical Chemistry (3)

American Chemical Society Certified Chemistry Major Requirements (68 credits)

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 listed in part 1 of the Central College chemistry major. (54)

2. Complete CHEM 442 Instrumental Analysis (4)

3. Complete ***two*** electives from the following list (6)

CHEM	372	Environmental Chemistry (3)
CHEM	421	Advanced Inorganic Chemistry (3)
CHEM	431	Advanced Organic Chemistry (4)
CHEM	451	Topics in Advanced Biochemistry (3)
CHEM	463	Advanced Physical Chemistry (3)

4. Complete two units of research and prepare a final thesis on your work, including safety. (4)

CHEM	485	Investigations in Chemistry (2)
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Chemistry Minor Requirements (19 credits)

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

CHEM	111	General Chemistry (4)
CHEM	231	Organic Chemistry I (4)
CHEM	241	Analytical Chemistry (4)

2. Complete an additional two Chemistry courses at the 200-level or higher with at least one course at the 300-level or higher.

CHINESE STUDIES

Interdisciplinary Minor

Faculty advisor

Chia Ning

Statement of philosophy

The interdisciplinary minor in Chinese Studies is focused on an understanding of the language, history, politics, economics, culture and religions of China, both in the past and present. The minor in Chinese Studies includes selected courses on the Central College campus in addition to appropriate coursework through an approved study abroad program in China. Chinese Studies assists students in preparation for various forms of engagement with China, including the fields of international business, government, cultural exchange, diplomacy, non-profit organizations, and other options of career building.

Study abroad opportunities

Students can choose to study in China on programs in Beijing (intensive Chinese language), Nanjing (language and culture), or Shanghai (accelerated Chinese; or business, language and culture).

Chinese Studies Minor Requirements (minimum 14 credits plus one semester of study abroad in China)

1. Complete the following courses:

- CHIN 121 Beginning Chinese I (4)
- CHIN 122 Beginning Chinese II (4)
- HIST 271 History of Modern China (4)

2. Complete one of the following elective courses:

- HIST 310 Studies in World History: Seminar on Modern China and Japan (4)
- HIST 310 Studies in World History: Qing China and Russia (4)
- REL 230 Asian Religions (3) or REL 330 Readings in Asian Religions (4)
- LAS 410 Buddhist Traditions of Tibet and the Himalayas (4)

NOTE: Courses listed above are not offered regularly or are offered only once every two or three years. Students interested in the minor are encouraged to consult with the minor faculty advisor early on to plan their preparation for the minor and to discuss the course offerings schedule.

3. Complete at least three credits of Chinese language at the 200-level or above from an approved study abroad program in China.

COMMUNICATION STUDIES

Communication Studies Department

Faculty

Dennis Doyle (chair), Shelley Bradfield, Meryl Irwin, Linda Laine

Statement of philosophy

The Communication Studies program provides students with broad-based exposure to the academic discipline that examines the process of creating messages, meaning, and relationships in a broad array of contexts. In an effort to cultivate critical thinking, clear writing, articulate speaking, and proficiency with technology, our students study communication within a variety of contexts, particularly those related to professional engagement, civic responsibility, and media citizenship. Through a combination of theoretical grounding and applied 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 lifelong learning. Coursework is supplemented by internships, service learning experiences, co-curricular activities, and supervised independent study.

Major Communication Skills

Competency in oral communication is demonstrated through the completion of COMM 270 Public Speaking with a minimum grade of “C” for the course.

Competency in written communication skills is assessed by the evaluation of materials contained in a student’s ePortfolio and the completion of COMM 280 Communication Research and Writing 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. Students are urged to complete COMM 280 in their second year.

Communication Studies Major Requirements (39-42 credits)

1. Complete all of the following:

- COMM 160 Communication in Everyday Life (3)
- COMM 180 Introduction to Communication Theory (3) (minimum grade of “C” required)
- COMM 280 Communication Research and Writing (4) (minimum grade of “C” required)

2. Complete at least 1 credit from the following:

- COMM 383 Service Learning Module in Communication Studies
 - COMM 397 Internship in Communication Studies
- Internships completed as part of off campus programs may count if pre-approved by the department*

3. Complete 8 elective courses in communication studies, including a minimum of 3 upper-level courses at the 300-level or above. Students are encouraged to take a diverse range of upper-level courses representative of the communication discipline. *An additional 3-4 credits of COMM 397 or 383 may be used in place of one elective course if pre-approved by the department.*

4. Compile an ePortfolio comprised of academic and related work

Communication Studies majors are required to create and maintain an assessment e-Portfolio. The e-Portfolio includes a representative sample of academic and related work for the purpose of demonstrating proficiency in communication studies learning outcomes as well as oral and written communication skills. Students create their e-Portfolio upon declaring the Communication Studies major. The student’s academic advisor reviews updates to the e-Portfolio as a precondition of registration for courses each semester. Departmental approval of the e-Portfolio is a prerequisite for graduation. Ultimately, the contents of this e-Portfolio constitute the foundation upon which a professional e-Portfolio may be constructed during a student’s fourth year for the purpose of seeking employment or gaining entry into graduate school

Communication Studies Minor Requirements (19-22 credits)

Students interested in pursuing a minor in Communication Studies should meet with a faculty member in the department for advisement early in their program.

1. Complete the following:
 - COMM 160 Communication in Everyday Life (3)
 - COMM 180 Introduction to Communication Theory (3)
2. Complete 4 elective courses in communication studies, including a minimum of 2 courses at the 300 level or above.

COMPUTER SCIENCE

Mathematics/Computer Science Department

Faculty

Mark Johnson (chair), Robert Franks, Stephen Fyfe

Statement of philosophy

Are you interested in becoming an app developer, software engineer or web developer? Central College offers a broad range of computer science courses where students gain experience working with programming languages such as Python, Java, C++ and PHP, to become application developers, networking administrators, system analysts, web programmers and software engineers.

No previous computing experience is required before beginning the computer science program. The major is designed to be flexible, facilitating study abroad, internships, and second majors, or minors. Introductory courses in Python and Java lay the foundation for a software design course in the second year. After taking these courses, students are prepared for a variety of upper-level courses and electives. The senior year culminates in a senior project of the student's choice.

Major Communication Skills

Students majoring in computer science will develop their ability to speak, listen, read, and write technical material throughout the major curriculum. If a student's progress is insufficient, additional coursework in writing or speaking may be recommended by the academic advisor. Final development and evaluation of communication skills will occur in the capstone senior project course, COSC-420.

Major/minor restrictions

Students who declare computer science as their major or minor may not declare an information systems major with an emphasis in computer information systems. Students seeking a teaching endorsement should consult the education department.

Computer Science Major Requirements (42 credits)

1. Complete all of the following:

- COSC 110 Introduction to Computer Science (3)
- COSC 130 Data Structures (3)
- COSC 220 Software Design (4)
- COSC 235 Discrete Structures (3)
- COSC 245 Computer Organization and Architecture (4)
- COSC 330 Algorithms (3)
- COSC 420 Senior Project (4)
- MATH 131 Calculus I (4)

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

2. Complete 11 credits of elective COSC courses at the 200-level or higher, excluding internships and practicum.

Computer Science Minor Requirements (20 credits)

1. Complete all of the following:

- COSC 110 Introduction to Computer Science (3)
- COSC 130 Data Structures (3)
- COSC 220 Software Design (4)

2. Complete 10 credits of additional COSC courses numbered 120 and above, excluding COSC 396 and 397, with at least 3 credits at the 300 or 400 level.

ECONOMICS

Economics, Accounting and Management Department

Faculty

Graham Lemke (chair), Tuan Nguyen, George Nwaogu, Jaclyn Rundle, Maggie Schlerman, Jessica Schuring, Julie Summers

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 they must make economic decisions.

Majors in economics take courses in microeconomics, macroeconomics and research 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 EAM 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.

Economics Major Requirements (51 credits)

1. Complete all of the following:

- COMM 270 Public Speaking (4)
- ECON 112 Principles of Microeconomics (3)
- ECON 113 Principles of Macroeconomics (3)
- ECON 281 Research Methods in Economics (4)
- ECON 312 Microeconomic Theory (4)
- ECON 313 Macroeconomic Theory (4)
- ECON 485 Economics Research Seminar (3)
- MATH 215 Applied Statistics (4)
- MATH 131 Calculus I (4)

2. Complete one of the following:

- COSC 109 Introduction to Information Management (3)
- COSC 110 Introduction to Computer Science (3)

3. Complete 15 credits from 300- and 400-level courses in ECON.

- POLS 241 International Political Economy, and MATH 330 Mathematical Modeling may also count.
- ECON 397 does not count toward the economics major.

Economics Minor Requirements (18 credit minimum)

1. Complete the following:

- ECON 112 Principles of Microeconomics (3)
- ECON 113 Principles of Macroeconomics (3)

2. Complete a minimum of 12 credits of additional ECON courses, chosen in consultation with an economics faculty member; 6 of these additional hours must be taken at the 300-level or higher.

EDUCATION (ELEMENTARY)

Education Department

Faculty

Jennifer Diers (chair), Amanda Clark, Alan Hastings, Melissa McAninch, Tamala Strawser, Julianne Taylor

Statement of philosophy

The philosophical foundation of teacher education at Central College is the liberal arts tradition. Central College teacher preparation candidates exhibit knowledge, skills, and dispositions that are aligned with national and state teaching standards and are grounded in our program's focus on developmental, authentic learning experiences. Through the completion of coursework and embedded field/clinical experiences, our graduates are prepared to exhibit the following skills and dispositions of effective teachers:

- Plan instruction by using knowledge of the content, cross disciplinary skills, individual learner differences, the community, and best practice to meet rigorous learning goals
- Use differentiated strategies and connect concepts to encourage learners to develop deep understanding of the content
- Utilize strategies, resources and technology to enhance critical/creative thinking and problem solving
- Apply classroom management and motivational strategies to create positive, productive learning environments
- Make instructional decisions based on multiple methods of assessment
- Collaborate as a professional, self-directed, and committed learner
- Reflect and facilitate student learning
- Advocate for students

The achievement of these program standards is based on a commitment to the personal and professional fulfillment of each student. Students receive individualized attention through advising, instruction and supervision of clinical/field experiences. Field experiences are extensive and developmentally appropriate. Continuous contact with teachers and students in clinical settings enables prospective teachers to successfully transfer educational theory into effective practice. Programs at Central College combine the best of traditional educational practice with the latest in innovative contemporary theory.

Education students may be eligible to enroll in the Central Teacher Academy (CTA), which is a three-year program that pairs a teacher education candidate with a K-12 mentor teacher. Students in CTA complete additional clinical/field experiences and professional development sessions. All education students 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. 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 with the intent of also meeting the licensure requirements of another state should consult with the Department of Education in that state.

Admission and retention requirements

Application for the teacher education program is expected after completing EDUC 110, 135, and 181. Candidates are continually evaluated throughout the program to ensure appropriate progression on departmental standards and are formally reviewed by the full department at the point of admission to the teacher education program, at individual conferences at the end of each block, prior to student teaching, and before application for licensure.

Admission and retention in the teacher education program includes the following criteria:

1. Achievement of the designated score on standardized basic skills tests for admission and licensure (Scores of 235 each on C-BASE tests of Reading/Literacy, Writing, and Math);
2. Maintenance of a cumulative grade point average of 2.7;
3. Attainment of a minimum grade of "C" in all courses with the EDUC prefix;
4. Achievement of major program grade point average requirements or proficiencies (based on content area);
5. Successful completion of field experience assignments;
6. Successful completion of departmental benchmark assignments;
7. Demonstration of Central College teacher candidate dispositions;
8. Demonstration of expertise in content and effective oral and written communication;
9. Recommendation of the major department.

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.

Major Communication Skills

The communication skills expectations addressing reading, writing and speaking for Central College are found in the student learning outcomes for the education department. These communication goals are accompanied by measurable competencies that more clearly delineate specific expectations.

The initial evaluation of communication skills takes place in EDUC 110 during a student's first or second year. Writing skills are evaluated through writing assignments that are assessed for content, style and mechanics. Writing assignments include term papers, journals, position papers, 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.

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 assessment of communication competency 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 485 or EDUC 486). As a culminating experience, students must present their program portfolio to faculty members and peers.

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 (see below)
2. Completed all courses for licensure (see below)
3. An additional licensure endorsement program (see list below)
4. Successful completion of the state-approved content and pedagogy exams
5. Demonstration of competence in the Central College standards and dispositions and received approval of the education department for licensure.

Elementary Education Major Requirements (48 credits)

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 110 Foundations of Education (3)
- EDUC 135 Children with Exceptionalities (3)
- EDUC 181 Developmental Psychology (3)
- EDUC 215 Human Relations (3)
- EDUC 237 Teaching Language Arts and Reading (3)
- EDUC 239 Psychology in Elementary Education (3)
- EDUC 333 Science and Technology Curriculum and Methods (3)
- EDUC 334 Social Studies Curriculum and Methods (3)
- EDUC 352 Teaching of Reading (3)
- EDUC 354 Teaching of Mathematics (3)
- EDUC 374 Behavior and Classroom Management-Elementary (3)
- EDUC 453 Advanced Integration of Technology in Education – Elementary (1)
- EDUC 485 Senior Seminar in Elementary Education (2)

2. Complete one of the following two options:

- EDUC 460 Elementary Student Teaching (12)

OR

Complete both of the following:

- EDUC 462 Elementary Student Teaching (6)
- EDUC 468 K-6 Mild and Moderate Disabilities Student Teaching (6)

Teacher licensure requirements

(in addition to 48 credits education major requirements)

1. Complete all elementary education major requirements (48 credits -- see above) with a “C” or better in each course

2. Complete the following:

EDUC 210 Methods of Teaching Physical Education, Visual Arts, and Performing Arts in the Elementary Classroom (3)

ENGL 208 Literature for Children (3)

GEOG 210 Human Geography (3)

HIST 130 United States to 1877 (3)

Or HIST 131 United States since 1877 (3)

Or HIST 132 Issues in American History (3)

MATH 115 Mathematical Concepts I (3) and MATH 116 Mathematical Concepts II (3)

Or MATH 131 Calculus I (4) and either MATH 115 Mathematical Concepts I (3) or MATH 116 Mathematical Concepts II (3)

Or MATH 132 Calculus II (4) and either MATH 115 Mathematical Concepts I (3) or MATH 116 Mathematical Concepts II (3)

NASC 110 Concepts in Natural Science with Lab (4)

One additional science course of students choosing

3. Complete a 24 credit 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	Science- Basic
English/language arts	Social Studies
French	Spanish
German	Speech communication/theatre
Instructional Strategist I- Mild & Moderate	Middle School- Language Arts
Mathematics	Middle School- Mathematics
Music	Middle School- Science
K-12 Physical education/health	Middle School- Social Studies
Reading	

EDUCATION- TEACHER LICENSURE

K-12 ART, MUSIC, PE/HEALTH

Education Department

Faculty

Jennifer Diers (chair), Amanda Clark, Alan Hastings, Melissa McAninch, Tamala Strawser, Julianne Taylor

Statement of philosophy

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

Program approval

The Central College teacher education program is approved by the Iowa Department of Education. Students successfully completing one of the prescribed programs may be considered candidates for an Iowa Teaching License that is required 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 with the intent of also meeting the licensure requirements of another state should consult with the Department of Education in that state.

Admission and retention requirements

Application for the teacher education program is expected after completing EDUC 110, 135, and 181. Candidates are continually evaluated throughout the program to ensure appropriate progression on departmental standards and are formally reviewed by the full department at the point of admission, prior to student teaching and before application for licensure.

Admission and retention in the teacher education program includes the following criteria:

1. Achievement of the designated score on standardized basic skills tests for admission and licensure (Scores of 235 each on C-BASE tests of Reading/Literacy, Writing, and Math)
2. Maintenance of a cumulative grade point average of 2.7
3. Attainment of a minimum grade of "C" in all courses with the EDUC prefix
4. Achievement of major program grade point average requirements or proficiencies (based on content area)
5. Successful completion of field experience assignments
6. Successful completion of departmental benchmark assignments
7. Demonstration of Central College teacher candidate dispositions
8. Demonstration of expertise in content and effective oral and written communication
9. Recommendation of the major department

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

Licensure for grades K-12 is granted for three areas at Central College: art, music, and Health/PE. Teachers in these areas must complete the education program for K-12 as well as complete a major in one of the three areas above.

A K-12 license may be granted to those who have:

1. Completed the education program for K-12 education
2. Completed all courses for licensure
3. Successfully completed state-approved content and pedagogy exams (Praxis II exams)
4. Demonstrated basic proficiency in the Central College InTASC standards and dispositions
5. Attained approval of the Education Department for licensure

K-12 Education Licensure Program

Complete all of the following (41 credits) with a "C" or better in each course:

- EDUC 110 Foundations of Education (3)
- EDUC 135 Teaching Children with Exceptionalities (3)
- EDUC 181 Developmental Psychology (3)
- EDUC 215 Human Relations (3)
- EDUC 340 Learning and Assessment in Secondary Education (3)

EDUC 342 Reading in the Content Area – Secondary (1)
 EDUC 375 Behavior and Classroom Management-Secondary- K12 (3)
 EDUC 450 General Secondary Methods (3)
 EDUC 455 Advanced Integration of Technology in Education – Secondary (1)
 EDUC 466 Elementary Student Teaching in Subject Area (6)
 EDUC 476 Secondary Student Teaching in Subject Area (6)
 EDUC 486 Professional Development Seminar-Secondary (2)

AND

EDUC 312 Methods of Teaching Art in Elementary Schools (2) AND EDUC 315 Methods of Teaching Art in Secondary Schools (2)

OR

EDUC 313 Methods of Teaching Music in Elementary Schools (3) AND EDUC 316 Teaching Choral and Instrumental Music in Secondary Schools (2)

OR

EDUC 311 Methods of Teaching Health and Physical Education in Elementary Schools (2) AND EDUC 314 Methods of Teaching Health and Physical Education in Secondary Schools (2)

(Complete BOTH the elementary methods course and the secondary methods course associated with the desired endorsement--4-5 credits)

K-12 Endorsements

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

<u>Teaching Endorsement(s)</u>	<u>Corresponding Central Major</u>
K-8 and 5-12 Health and Physical Education	Exercise Science
K-8 and 5-12 Music	Instrumental Music Education
K-8 and 5-12 Music	Vocal Music Education
K-8 and 5-12 Art	Art

Note: Students wishing to complete only a K-8 or only a 5-12 endorsement in art or music must work specifically with a member of the education department to design their course of study.

EDUCATION- TEACHER LICENSURE

SECONDARY EDUCATION

Education Department

Faculty

Jennifer Diers (chair), Amanda Clark, Alan Hastings, Melissa McAninch, Tamala Strawser, Julianne Taylor

Statement of philosophy

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

Program approval

The Central College teacher education program is approved by the Iowa Department of Education. Students successfully completing one of the prescribed programs may be considered candidates for an Iowa Teaching License that is required 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 with the intent of also meeting the licensure requirements of another state should consult with the Department of Education in that state.

Admission and retention requirements

Application for the teacher education program is expected after completing EDUC 110, 135, and 181. Candidates are continually evaluated throughout the program to ensure appropriate progression on departmental standards and are formally reviewed by the full department at the point of admission, prior to student teaching and before application for licensure.

Admission and retention in the teacher education program includes the following criteria:

1. Achievement of the designated score on standardized basic skills tests for admission and licensure (Scores of 235 each on C-BASE tests of Reading/Literacy, Writing, and Math)
2. Maintenance of a cumulative grade point average of 2.7
3. Attainment of a minimum grade of "C" in all courses with the EDUC prefix
4. Achievement of major program grade point average requirements or proficiencies (based on content area)
5. Successful completion of field experience assignments
6. Successful completion of departmental benchmark assignments
7. Demonstration of Central College teacher candidate dispositions
8. Demonstration of expertise in content and effective oral and written communication
9. Recommendation of the major department

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

Teachers at the secondary level may teach in their endorsement area(s) in grades 5-12.

A 5-12 secondary license may be granted to those who have:

1. Completed the education program for secondary education
2. Completed all coursework for licensure
3. Successfully completed state-approved content and pedagogy exams (Praxis II exams)
4. Demonstrated basic proficiency in the Central College InTASC standards and dispositions
5. Attained approval of the Education Department for licensure

Secondary Education Licensure Program (7-12)

Complete all of the following (40 credits) with a "C" or better in each course:

EDUC 110	Foundations of Education (3)
EDUC 135	Children with Exceptionalities (3)
EDUC 181	Developmental Psychology (3)
EDUC 215	Human Relations (3)
EDUC 340	Learning and Assessment in Secondary Education (3)

EDUC 342	Reading in the Content Area – Secondary (1)
EDUC 375	Behavior and Classroom Management-Secondary K-12 (3)
EDUC 384	Field Experience in Secondary Education (1)
EDUC 450	General Secondary Methods (3)
EDUC 451	Secondary Special Methods (1)
EDUC 455	Advanced Integration of Technology in Education – Secondary (1)
EDUC 470	Secondary Student Teaching (12)
EDUC 486	Professional Development Seminar-Secondary (2)

Secondary Endorsement Areas (5-12)

Communicate with the Education Department on possible Secondary endorsement areas.

ENGINEERING

Physics Department

Faculty

Viktor Martisovits (chair), Chad Garber, Elizabeth Golovatski, Pavrithra Premaratne, Alexey Pronin, Puneet Vishwakarma

Statement of philosophy

Students can earn a Bachelor of Science degree in Engineering which broadly prepares them for a career at the interface of mechanical and electrical engineering. Building on the liberal arts ethos of the institution, this degree incorporates substantial course work in physics and other sciences with the application of engineering principles. This education provides each student the fundamentals to enter the workforce immediately after graduation or attend graduate school and the skills to quickly adapt and learn for a quickly evolving society. In addition to the requirements below, students are strongly encouraged and supported to complete internships in engineering at local, national and international locations. Through the completion of this work students will achieve the following general outcomes in alignment with the Accreditation Board for Engineering and Technology (ABET):

- an ability to apply knowledge of mathematics, science, and engineering
- an ability to design and conduct experiments, as well as to analyze and interpret data
- an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- an ability to function on multidisciplinary teams
- an ability to identify, formulate, and solve engineering problems
- an understanding of professional and ethical responsibility
- an ability to communicate effectively
- the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
- a recognition of the need for, and an ability to engage in life-long learning
- a knowledge of contemporary issues
- an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice

Study abroad opportunities

Students majoring in engineering are able to study abroad around the globe with careful planning, especially during the summer. International internships might be available at some study abroad sites. Students are encouraged to consult with an academic advisor while planning to go abroad.

Major Communication Skills

The department believes that it is important that students in engineering are able to listen, speak, read, and write within the discipline. Many courses throughout the major include activities evaluating students' communication skills. The final evaluation will occur in ENGR 485 Capstone Design I and ENGR 486 Capstone Design II.

Technology Skills

Students must achieve competency in Matlab and engineering graphics prior to the second semester of their sophomore year and the first semester of their junior year, respectively. This work can be completed external to Central College or completed via the following two courses: ENGR 111 Engineering Graphics and ENGR 112 Matlab for Engineers.

Engineering Major Requirements (97 s.h.)

1. Complete all of the following:

- ENGR 111 Engineering Graphics (2)
- ENGR 112 Matlab for Engineers (2)
- ENGR 211 Statics (3)
- ENGR 212 Dynamics (3)
- ENGR 213 Strength of Materials (3)
- ENGR 214 Engineering Materials with Lab (3)
- ENGR 221 Electric Circuits (3)
- ENGR 222 Electronic Devices with Lab (4)
- ENGR 311 Thermodynamics (3)
- ENGR 312 Fluid Mechanics (3)
- ENGR 313 Theory of Machines (3)
- ENGR 314 Heat Transfer with Lab (4)

ENGR 321 Electromagnetism (3)
ENGR 322 Signals and Systems with Lab (4)
ENGR 411 Dynamic Systems and Control with Lab (3)
ENGR 421 Digital Control Systems (3)
ENGR 485 Capstone Design I (1)
ENGR 486 Capstone Design II (3)
PHYS 111 General Physics I with Lab (5)
PHYS 112 General Physics II with Lab (5)
PHYS 215 Theoretical and Experimental Methods (2)
PHYS 216 Waves (2)
PHYS 225 Modern Physics I (3)
MATH 131 Calculus I (4)
MATH 132 Calculus II (4)
MATH 231 Multivariable Calculus (3)
MATH 250 Differential Equations (3)
CHEM 111 General Chemistry with Lab (4)

- 2. Complete an additional 6 s.h. of ENGR 430.**
- 3. Complete an additional 3 s.h. of PHYS courses numbered 211 or above.**

ENGLISH

English Department

Faculty

Joshua Dolezal (chair), Valerie Billing, Kate Nesbit, Mary Stark

Statement of philosophy

The Department of English enriches academic quality at Central College through traditional literary studies and innovative teaching and research across disciplines. We foster close reading, vigorous critical thinking, strong writing, and intellectual and artistic creativity in all of our courses. By studying language with respect and rigor, English majors cultivate two of the most essential habits of successful people: self-reflection and empathy for others.

While our faculty demonstrates expertise in literary theory and specific historical periods, we mentor students and collaborate with colleagues across campus in four major ways.

First, we believe in civic engagement in global and local contexts. Our classes develop strong commitments to sustainability, social justice, and service-learning. Second, we believe the study of literature and creative writing produces agile professionals. Central College graduates in English have thrived in fields as diverse as journalism, architecture, business management, education, law, medicine, public administration, and library science. Third, we are committed to deepening intercultural and international competence in our students through study abroad, courses in travel writing and global/postcolonial literature, and teaching English as a second language. Finally, we see literature as the nexus of interdisciplinary learning. We explore connections between literature, science, aesthetics, history, gender studies, and cultural studies. By buttressing the core curriculum at Central College through writing-intensive courses and liberal arts seminars, we bring the gift of literacy to the entire liberal arts community.

Study Abroad Opportunities

We strongly encourage students in English to study abroad. Majors will find their course of study meshes with academic offerings any of Central College's study abroad sites, but especially those in London, England and Bangor, Wales.

The London program, based at Roehampton University, offers courses in contemporary and Shakespearean theater, literature, linguistics, art, architecture, history and politics as well as a variety of liberal arts disciplines. London also offers a wealth of internship opportunities in communication, publishing, journalism, library science, broadcasting, education and theatre, through which our majors gain valuable professional experience in an urban environment.

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

Major Communication Skills

The English Department guarantees personal and thoughtful mentorship of student writing both in the classroom and in a distinctive portfolio review process. When students declare their intent to major in English, the department requests a portfolio of at least three papers that demonstrate critical reading and mastery of style. Majors must submit a second portfolio of at least five papers in their senior year for the final portfolio review. English faculty meet as a department to discuss portfolios and return detailed feedback to each student on strengths and areas for improvement in his or her writing. The combination of individual attention from professors and the collective opinion of the English Department on student writing helps our majors understand their writing process and grow increasingly more reflective about the ways they might continue to improve. Passing the final portfolio review is necessary to meet the major communication skills requirement.

English Major Requirements (40 credit minimum)

1. **Take all of the following required courses:**

ENGL 160	The Literary Imagination (4) or an additional course from genre and issue studies
ENGL 346	Discovering Shakespeare (3)
ENGL 425	Seminar in Literary Studies (4)

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

ENGL 236	American Literature I (3)
ENGL 237	American Literature II (3)
ENGL 251	British Literature I (3)
ENGL 252	British Literature II (3)

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

ENGL 211	Literature of India and the Pacific (3)
ENGL 212	African and Caribbean Literature (3)

- ENGL 213 Nature Writing and Environmental Literature (3)
- ENGL 214 Literature by Women (3)
- ENGL 215 African-American Literature (3)
- ENGL 216 LGBTQ+ Literature and Culture (3)
- ENGL 249 Reading Poetry (3)
- ENGL 260 Irish Literature (3)
- ENGL 270 Illness and Health in Literature (4)

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

- ENGL 318 Literature of Peace and Social Justice (4)
- ENGL 361 World Literature I (4)
- ENGL 362 World Literature II (4)
- ENGL 374 Studies in 19th Century Literature (4)
- ENGL 375 Studies in 20th Century Literature (4)

5. Take one course in advanced writing:

- ENGL 240 The Personal Essay (4)
- ENGL 241 Short Story Writing (4)
- ENGL 243 Writing Oral Histories (4)
- ENGL 343 Travel Writing (4)
- ENGL 344 Writing for Non-Profit Organizations (4)

6. Take two courses of English elective at the 200 level or above. May include EDUC 231 as well as any course which counts toward English major. May not include: ENGL 208, ENGL 222, ENGL 244, or ENGL 320.

English Major with Additional Emphasis in Writing (52 credit minimum)

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 third year.

1. Complete all requirements for the English major listed above (40 credits)

2. Complete three of the following (in addition to those taken for the English major):

- ENGL 240 The Personal Essay (4)
- ENGL 241 Short Story Writing (4)
- ENGL 242 Poetry Writing (3)
- ENGL 243 Writing Oral Histories (4)
- ENGL 244 Professional Writing (3)
- ENGL 342 Advanced Poetry Writing (3)
- ENGL 343 Travel Writing (4)
- ENGL 344 Writing for Non-Profit Organizations (4)
- ENGL 492 Practicum in English (Arr)

3. Complete one of the following:

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

4. Produce a writing portfolio in consultation with the writing emphasis coordinator during the fourth year.

English Minor Requirements (20 credit minimum)

1. Take four of the following. At least one course must be a survey in American or British literature (236, 237, 251, or 252) and at least one must be a 300-level course)

- ENGL 160 The Literary Imagination (4)
- ENGL 211 Literature of India and the Pacific (3)
- ENGL 212 African and Caribbean Literature (3)
- ENGL 213 Nature Writing and Environmental Literature (3)
- ENGL 214 Literature by Women (3)
- ENGL 215 African-American Literature (3)
- ENGL 216 LGBTQ+ Literature and Culture (3)
- ENGL 236 American Literature I: 1620-1890 (3)
- ENGL 237 American Literature II: 1890-Present (3)
- ENGL 249 Reading Poetry (3)
- ENGL 251 British Literature I: 800-1785 (3)

ENGL 252	British Literature II: 1785- Present (3)
ENGL 260	Irish Literature (3)
ENGL 270	Illness and Health in Literature (4)
ENGL 318	Literature of Peace and Social Justice (4)
ENGL 361	World Literature I (4)
ENGL 362	World Literature II (4)
ENGL 374	Studies in 19 th Century Literature (4)
ENGL 375	Studies in 20 th Century Literature (4)

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

ENGL 240	The Personal Essay (4)
ENGL 241	Short Story Writing (4)
ENGL 243	Writing Oral Histories (4)
ENGL 343	Travel Writing (4)
ENGL 344	Writing for Non-Profit Organizations (4)

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

ENGL 346	Discovering Shakespeare (3)
ENGL 425	Seminar in Literary Studies (4)

Note: Students seeking teaching licensure should consult with the Education Department regarding additional required courses.

Writing Minor Requirements (17 credit minimum)

Note: Students must meet with the writing minor coordinator to declare their intention to minor no later than the end of their third year.

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

ENGL 240	The Personal Essay (4)
ENGL 241	Short Story Writing (4)
ENGL 242	Poetry Writing (3)
ENGL 243	Writing Oral Histories (4)
ENGL 244	Professional Writing (3)
ENGL 342	Advanced Poetry Writing (3)
ENGL 343	Travel Writing (4)
ENGL 344	Writing for Non-Profit Organizations (4)
ENGL 492	Practicum in English (Arr)
ENGL 497	Internship in Writing (Arr)
ENGL 499	Independent Studies in English (Arr)

2. Produce a writing portfolio in consultation with the writing minor coordinator during the fourth year.

English courses for licensure in secondary education

Students should take either EDUC 231 or ENGL 332 to fulfill the language study requirement.

ENGL 222	Literature for Young Adults (1)
ENGL 320	Teaching Writing (2)
EDUC 451	Secondary Special Methods (1)
COMM 265	Performance Studies (4)
Plus 12 credits 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.

Please check with the education department for any other specific requirements.

ENTREPRENEURSHIP

Interdisciplinary Program Minor

Statement of Philosophy

The entrepreneurship minor allows students of all academic disciplines to develop an entrepreneurial mindset. This enables students to envision things that don't currently exist, identify problems worth solving, and develop an ability to affect change in a positive manner. This may include the creation of a new business venture, serving as an intrapreneur in a corporate setting or solving a community problem through a social entrepreneurial solution. In each setting, the solution to any problem calls for specific skills, which we have defined as our entrepreneurship program outcomes:

- The ability to think in a creative and critical manner.
- The ability to recognize opportunities.
- The ability to capitalize on these opportunities by generating new ideas and marshaling resources.
- The ability to create and operate a new venture.

Students will gain these skills through a highly experiential, hands-on approach coupled with the guidance of mentors.

Minor Restriction

A student cannot declare both the Entrepreneurship Minor and the Not-for-Profit Minor.

Entrepreneurship Minor Requirements (22 credit minimum)

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

- ENTR 215 The Entrepreneurial Mindset (3)
- ENTR 315 Advanced Entrepreneurship: Startup Semester (3)
- BMGT 271 Principles of Marketing (3)
- BMGT 311 Principles of Management (3)
- BMGT 341 Social Entrepreneurship (3)

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

- ACCT 241 Introduction to Financial Accounting (3)
- BMGT 335 Not-For-Profit Management (3)
- ENGL 344 Writing for Non-Profit Organizations (4)

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

- BMGT 231 Business Law I (3)
- BMGT 375 Marketing Research (3)
- GEOG 320 Principles of GIS w/ Lab (3)
- THEA 330 Theatre Management (4)

4. Complete an internship or experiential opportunity pre-approved by the entrepreneurship director (1-3 credits)

ENVIRONMENTAL STUDIES

Interdisciplinary Major

Director

Anya Butt

Statement of Philosophy

Environmental studies examines the relationship of science, society and nature in a world with a focus on sustainability. Addressing global and local environmental issues requires understanding them in context, with a firm grasp of the environmental relationships and the existing socio-economic and political structures that sustain them. Students select either the environmental science track or the environmental sustainability track and work with an advisor to plan their programs. Both tracks provide students with a strong grounding in the three legs of sustainability: an understanding of economics, politics, and the relevant scientific aspects for constructively solving problems through an interdisciplinary approach.

Course work is enriched by supervised independent research, career-focused internships, experiential and service learning opportunities. Central's extensive network of internship opportunities provide students with invaluable hands-on experience. Strongly recommended for both tracks is at least one semester of study abroad.

The Environmental Studies major is one component of Central's commitment to becoming a leader in sustainability education, along with the Global Sustainability program. Both programs focus on addressing global issues that arise due to the scarcity of resources on our earth and efforts by humanity to balance our needs with those of future generations. Due to the commonalities in courses and focus between the Environmental Studies program and the Global Sustainability minor, students are not allowed to declare major/minors simultaneously in these programs.

Major Communication Skills (both tracks)

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. Evaluation of students' communication skills formally occurs in GENR 215 Research Strategies and ENVS 380 Environmental Studies Seminar, with the final pre-graduation evaluation occurring in ENVS 480 Environmental Studies Senior Seminar. Two requirements of these common capstone course are a major paper and an oral public presentation.

The Environmental Science Track

This track focuses on understanding and analyzing relevant interactions of chemical, physical, biological and dynamic environmental processes. Properly addressing environmental problems requires the ability to analyze complex systems and explore solutions within the socio-cultural, economic and political decision-making process. Through a focus on the science involved in environmental issues, students gain a comprehensive ability to address these issues within an applied context. Students can elect either a biological, chemical or geoscience emphasis in their major.

Career opportunities in environmental science are varied and increasing. Individuals with a chemical emphasis will have opportunities in a number of industries, including agribusiness, looking for entry level individuals with strong analytical skills for water, air, biological or soil analyses. 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 in 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

Major/Minor restrictions

Students planning to major or minor in Environmental Studies may not minor in Global Sustainability.

Environmental Studies Major/Environmental Science Track Requirements (54-56 credits)

1. Complete all of the following:

BIOL	130	Diversity of Life (4)
BIOL	131	Introduction to Cells (4)
BIOL	229	Ecology and Evolution (4)
CHEM	111	General Chemistry (4)
CHEM	241	Analytical Chemistry (4)
ECON	112	Principles of Microeconomics (3)
ENVS	120	Introduction to Environmental Science (4)
ENVS	380	Environmental Studies Seminar (2)
ENVS	480	Environmental Studies Senior Seminar (1)
GENR	215	Research Strategies (1)

GEOG 320 Principles of GIS (3)

2. Complete one of the following:

GEOG 325 Planning for Sustainable Communities (4)
 POLS 242 Global Sustainability (4)

3. Complete one of the following socio economic courses:

ECON 321 Environmental Economics (3)
 ECON 329 Economic Development (3)
 GEOG 225 Geography of Sub-Saharan Africa (4)
 HIST 237 American Environmental History (4)
 POLS 233 American Environmental Politics and Policy (4)
 SOC 335 Globalization & Development (4)

4. Complete one of the following:

COSC 110 Introduction to Computer Science (3)
 MATH 215 Applied Statistics (4)*

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

5. Complete at least 10 credits of elective credit from the following (with at least 6 credits at the 200-level or above):

BIOL 310 Tropical Ecology (1-4)
 BIOL 315 Aquatic Toxicology (4) (not regularly offered)
 BIOL 324 Field Botany (4)
 BIOL 342 Mammology (4)
 BIOL 343 Ornithology (4)
 BIOL 345 Limnology (4)
 BIOL 350 Conservation Biology and Ecology of Iowa (4)
 BIOL 361 Microbiology (4)
 CHEM 221 Inorganic Chemistry (4)
 CHEM 231 Organic Chemistry I (4)
 CHEM 331 Organic Chemistry II (4)
 CHEM 351 Biochemistry (4)
 CHEM 372 Environmental Chemistry (3) (not regularly offered)
 CHEM 442 Instrumental Analysis (4)
 ENVS 125 Geology and the Environment (3)
 ENVS 240 Agriculture and Sustainability (3)
 EXSC 215 Introduction to Angling (3)
 GEOG 237 Physical Geography: Weather and Climate (4)
 GEOG 238 Physical Geography: Geomorphology (4)
 GEOG 420 Advanced GIS (2)
 PHYS 101 Introductory Physics I (4)
 PHYS 102 Introductory Physics II (4)
 or
 PHYS 111 General Physics I (5)
 PHYS 112 General Physics II (5)
 PHYS 204 Energy and Environment (3)
 SUST 125 Introduction to Sustainability (4)

300/400-level internship by arrangement and approval by the program director

LAS 410 courses by approval of the program director as appropriate

Note: Study abroad courses may also apply as electives pending approval by the program director.

The Environmental Sustainability 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. At the base of most conflicts is the equitable allocation of resources, today and for future generations. By focusing on the socio-economic and political structures, students are able to help properly define sustainable resource use at the global, national and local levels.

Due to their strong backgrounds in the sciences, the social sciences and GIS, environmental sustainability graduates have career opportunities in sustainability focused careers, as well as a diverse variety of positions in environmental protection and policy for government agencies at the national, state and local levels; with nongovernmental organizations and international organizations that address issues of social justice, poverty, environmental degradation, international education, rural and economic development, resource management and land use planning.

Environmental Studies Major/Environmental Sustainability Track Requirements (51-53 credits)**1. Complete all of the following required courses:**

BIOL	130	Diversity of Life (4)
CHEM	107	Introduction to Environmental Chemistry (3)
ECON	112	Principles of Microeconomics (3)
ECON	113	Principles of Macroeconomics (3)
ENVS	120	Introduction to Environmental Science (4)
ENVS	380	Environmental Studies Seminar (2)
ENVS	480	Environmental Studies Senior Seminar (1)
GENR	215	Research Strategies (1)
GEOG	237	Physical Geography: Weather and Climate (4)
GEOG	320	Principles of GIS (3)

2. Complete one of the following:

GEOG	325	Planning for Sustainable Communities (4)
POLS	242	Global Sustainability (4)

3. Complete one of the following history courses:

HIST	237	American Environmental History (4)
POLS	233	American Environmental Politics and Policy (4)

4. Complete one of the following socio-economic courses:

ECON	321	Environmental Economics (3)
ECON	329	Economic Development (3)
GEOG	325	Geography of Sub-Saharan Africa (4)
POLS	241	International Political Economy (4)
SOC	335	Globalization & Development (4)

5. Complete one of the following research methods courses:

BIOL	210	Epidemiology (4)
COSC	110	Introduction to Computer Science (3)
MATH	215	Applied Statistics (4)
POLS	250	Methods of Political Research (4)

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

6. Complete 9 s.h. of the following elective courses (with at least 6 credits of these at the 200-level or above):

ANTH	260	Medical Anthropology (4)
BEHS	285	Not-for-Profit Seminar (1)
BEHS	397	Internship in Not-for-Profit Management (3)
BIOL	229	Ecology and Evolution (4)
BIOL	310	Tropical Ecology (1-4)
ENGL	213	Nature Writing and Environmental Literature (3)
ENGL	318	Literature of Peace and Social Justice (4)
ENGL	344	Writing for Non-Profit Organizations (4)
ENVS	125	Geology and the Environment (3)
ENVS	240	Agriculture and Sustainability (3)
EXSC	215	Introduction to Angling (3)
EXSC	261	Community, Consumer and Global Health (3)
GEOG	110	Introduction to Geography (3)
GEOG	420	Advanced GIS (2)
GERM	362	Germany and the Environment (3) (not regularly offered)
POLS	140	Introduction to International Politics (4)
POLS	344	International Law and Human Rights (4)
POLS	397	State and Local Environmental Project Review Internship (3)
SUST	125	Introduction to Sustainability (4)

300/400 level internship by arrangement and approval by the program director

LAS 410 courses by approval of the program director as appropriate

Note: Study abroad courses may also apply as electives pending approval from the program director

Environmental Studies Minor Requirements (23-24 credits)

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

ENVS 120 Introduction to Environmental Science (4)
GEOG 320 Principles of GIS (3)

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

GEOG 325 Planning for Sustainable Communities (4)
POLS 242 Global Sustainability (4)

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

ECON 321 Environmental Economics (3)
ECON 329 Economic Development (3)
GEOG 225 Geography of Sub-Saharan Africa (4)
HIST 237 American Environmental History (4)
POLS 233 American Environmental Policies and Politics (4)
SOC 335 Globalization & Development (4)

4. Complete ***at least 9 credits*** of additional electives with the approval of the Environmental Science director (with 4 at or above the 200 level).

EXERCISE SCIENCE

Exercise Science Department

Faculty

Paul Weihe (chair), Leslie Duinink, Katelin Gannon, Shelli Green, Cody Huisman, David Pavlat, Pam Richards, John Roslien, Sara Shuger Fox

Statement of philosophy

Majors in Central's exercise science program will master the science of exercise utilized in educational, fitness/wellness, sport/performance and therapeutic settings. Students become active learners and acquire the knowledge and skills necessary to meet the challenges of a dynamic world. Existing assessment tools, a comprehensive body of knowledge and communication skills are developed and utilized in a problem solving environment.

Graduates will know how to respond, adjust and adapt to exercise; analyze and evaluate individual physiology 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.

Major Communication Skills

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 in the following classes: EXSC 254, EXSC 257, EXSC 334, 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.

Major Restrictions: Students may not declare majors in both exercise science and athletic training.

Exercise Science Major Requirements (48 credits)

1. Complete all of the following:

- EXSC 111 Essentials of Human Anatomy & Physiology with Lab (4)
- EXSC 149 Foundations of Health and Exercise Science (3)
- EXSC 151 First Aid and Sports Injuries (3)
- EXSC 254 Human Anatomy and Kinesiology with Lab (4)
- EXSC 257 Fitness Assessment and Exercise Prescription (4)
- EXSC 334 Sports Nutrition (4)
- EXSC 460 Exercise Physiology (3)
- EXSC 461 Exercise Physiology Lab (2)

2. Choose 21 s.h. of electives beyond the 100 level with minimum of nine credits at the 300-level or above in EXSC, AT or the following: CHEM 231, CHEM 331, CHEM 351, BIOL 210, BIOL 221, BIOL 341, BIOL 360, EDUC 311, EDUC 314, or MATH 215. (A maximum of 3 credits of 397 or 497 may count for the major.)

Teaching Licensure

Students seeking licensure must complete all requirements for the EXSC major, plus the following EXSC courses and the education courses listed in the Education (K-12 Art, Music, P.E..) portion of the catalog or as provided by the education department.

- EXSC 110 Intro to Stress Management (3)
- EXSC 120 Theory and Practical Application of Health Related Fitness (3)
- EXSC 212 Adapted Physical Education (3)
- EXSC 220 Personal Wellness (3)
- EXSC 260 Substance Abuse (3)
- EXSC 261 Community, Consumer, & Global Health (3)

Coaching Endorsement (#101)

A coaching endorsement is for students who are completing the requirement to be a licensed teacher.

Courses required as per the BOEE:

- EDUC 181 Developmental Psychology (3)
- EXSC 111 Essentials of Human Anatomy and Physiology with lab (4)
- EXSC 151 First Aid and Sports Injuries (3)
- EXSC 213 Principles of Coaching (3)

Recommended courses:

EXSC 254 Human Anatomy and Kinesiology with Lab (4)

EXSC 462 Motor Learning (3)

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 student may receive a coaching authorization without a teaching license. These students will also need to refer to the BOEE website.

Exercise Science Minor Requirements (27 credits)

1. Complete all of the following:

EXSC 111 Essentials of Human Anatomy of Physiology with Lab (4)

EXSC 149 Foundations of Exercise Science (3)

EXSC 151 First Aid and Sports Injuries (3)

EXSC 254 Human Anatomy and Kinesiology with Lab (4)

EXSC 257 Fitness Assessment and Exercise Prescription (4)

EXSC 334 Sports Nutrition (4)

EXSC 460 Exercise Physiology (3)

EXSC 461 Exercise Physiology Lab (2)

FRENCH AND FRANCOPHONE STUDIES

Modern Languages Department

Faculty

Maria Snyder (chair), 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 communication skills and insight into important cultural topics. All on-campus courses include sessions with native-speakers or advanced speakers of the target language and are supported by 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 and Francophone Studies major statement of philosophy

The study of French and Francophone cultures is by nature interdisciplinary, bringing together many themes that can be understood using a single language. Courses in the program address not only mastery of language skills, but also intercultural competence and knowledge of the people and places connected by the French language. Distinct courses bring together aspects of languages, culture, translation and business. Most classes are taught exclusively in French in order to maximize the opportunity for students to master the language. However, because a language and its culture are inextricably linked, the French and Francophone Studies program sees the study of language as encompassing much more than coursework. It also involves the opportunity to live in the French House, to have frequent contact with native French assistants and to live and study in France. 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 and students planning to teach French spend at least one semester's study in a Central College approved French program (or department chair approval). All courses taught in French and offered in a Central College approved French program (or department chair approval) at the 200- 400 level apply toward the French major.

Major Communication Skills

All French and Francophone Studies majors will successfully complete a total of at least 35 credits at the 222 level and above.

French and Francophone Studies Major Requirements (35 credits):

1. Complete all of the following:

- ◆ Take at least 29 credits at 222-level and above, or equivalent courses taken abroad.
- ◆ FREN 489 Senior Capstone in French (3).
- ◆ A minimum of 3 credits in another language (Spanish, German, Chinese, or approved language) at the appropriate level.
- ◆ One semester of study abroad in a Central College approved French program (or department chair approval).

*Note: FREN 121, 122 and 221 (or proficiency) are prerequisites for FREN 222, but do not count toward the major

French and Francophone Studies Minor Requirements

1. A minimum of 3 credits of French or Francophone literature or culture (course to be approved by the French faculty)
2. A total of at least 6 credits at the 300-level or above.

GERMAN STUDIES

Modern Languages Department

Faculty

Maria Snyder (chair), 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.

Major Communication Skills

All German majors will successfully complete significant written and oral work in one (or more) 300-400 level course.

German Studies Major Requirements (28 credits at 300-level or above):

Note: All majors are expected to study in Germany/Austria 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 all of the following:

- ◆ GERM 331 Survey of German Culture and Literature (3)
- ◆ A minimum of 3 credits in German literature (GERM 332, 342 or class abroad)
- ◆ A minimum of 3 credits in civilization or culture (course abroad)
- ◆ A minimum of 3 credits in another language (Spanish, French, Chinese, or approved language) at the appropriate level
- ◆ GERM 489 Senior Capstone (1)
- ◆ A minimum of 15 credits of electives (language, literature, culture, or classes taken in the language abroad) at the 300-level or above (321 and 322 apply)
- ◆ 1 semester of study abroad in Vienna (or department chair approval)

At least 3 credits must be taken after studying in Vienna

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 study abroad office.
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.

German Studies Minor Requirements

1. A minimum of 3 credits of German literature or culture (course to be approved by the German faculty)
2. A total of at least 6 credits at the 300-level or above.

Note: Special requirements apply for teacher certification.

GLOBAL HEALTH

Interdisciplinary Program Minor

Director

Ellen Du Pré

Statement of philosophy

As a member of the Heartland Global Health Consortium, Central College subscribes to the belief that we are responsible for producing global citizens, aware of the interconnections between health, development, environment and social justice. As global citizens, we understand that health issues around the world can no longer be regarded as solely local, whether these are issues of diseases crossing boundaries or impacts of the global economy driving health care policy and environmental conditions. This minor is designed to prepare students to understand and appreciate that health issues require solutions that are grounded in a holistic approach including globalization, policy, sustainability and cultural and personal awareness. The required courses provide students with a background in understanding epidemiology, as well as a global perspective.

Students choosing careers in all pre-health programs as well as public policy, planning, international studies, social work, anthropology, environmental studies and health communications are served by this minor. Students are encouraged to study abroad at one of Central's international programs to enhance their development as global citizens, and to pursue relevant internships.

Global Health Minor Requirements (21-24 credits):

1. Complete all of the following (9 credits)

BIOL	210	Epidemiology (3)
GEOG	210	Human Geography (3)
GEOG	320	Principles of GIS (3)

2. Complete one of the following (Globalization and Health focus, 3-4 credits)

ANTH	260	Medical Anthropology (4)
LAS	410	Diseases Through Space and Time (3)
LAS	410	HIV and the AIDS Pandemic (4)

Approved service learning project in a health agency by arrangement, minimum 3 credits

3. Complete one of the following (Policy focus, 3-4 credits)

ECON	321	Environmental Economics (3)
ECON	329	Economic Development (Arr)
POLS	233	American Environmental Politics and Policy (4)
POLS	241	International Political Economy (4)
POLS	344	International Law and Human Rights (4)

4. Complete one of the following (Sustainability focus, 3-4 credits)

GERM	362	Germany and the Environment (3)
PHYS	204	Energy and Environment (not offered regularly) (3)
POLS	242	Global Sustainability (4)

5. Complete one of the following (Cultural and personal awareness focus, 3 credits)

COMM	276	Communicating in Health and Illness (3)
ENGL	213	Nature Writing and Environmental Literature (3)
EXSC	261	Community, Consumer and Global Health (3)
SOC	225	Social Problems (3)

Experiential Learning and Internship Opportunities

As part of the minor, students are encouraged to engage in an experiential learning experience whether it be in Iowa or elsewhere. This experience would help students better understand the various fields within Global Health that they might be interested in after graduation for career or graduate study. Students are encouraged to work with the Office of Community Based Learning, the Career Center, and the Study Abroad office to plan for this experience early in their college career.

GLOBAL SUSTAINABILITY

Interdisciplinary Program Minor

Co-directors

Anya Butt, Jim Zaffiro

Statement of Philosophy:

Global sustainability is meeting the needs of Earth's living generations without compromising the ability of future generations to meet theirs. Sustainability education emphasizes the interconnectedness of ecological, political, economic, socio-cultural, and moral-ethical systems. Global sustainability education promotes active learning, trans-disciplinary integration, and synthesis of concepts, theories, and methods of inquiry, along with development of practical problem-solving skills.

Sustainability education helps students acquire and apply heightened knowledge of significant intergenerational issues and problems and solutions by raising awareness and understanding of how their personal and collective actions affect the sustainability of local and global systems. Many problems are global in scope, transcending national boundaries and requiring global solutions. Complex underlying local, national, and international political and economic institutions and processes structure and manage the research, policy debates, and international negotiations aimed at reaching agreements and finding ways to implement solutions for the problems themselves.

This integrative program is designed to offer all students, regardless of major or career aspirations, a means of acquiring some of the tools and practical experience they will need when they enter the work force, assume leadership positions in their communities, and deal with complex, interconnected problems on a scale never before faced by humans.

The Global Sustainability minor is one component of Central's commitment to becoming a leader in sustainability education, along with the Environmental Studies program. Both programs focus on addressing global issues that arise due to the scarcity of resources on our earth and the subsequent efforts by humanity to balance our needs with those of the future generations, and thus work in concert with one another.

Minor restrictions

Due to the commonalities in courses and focus between the Global Sustainability minor and the Environmental Studies program, students are not allowed to declare major/minors in both programs.

Global Sustainability Minor Requirements (21-23 credits)

1. Complete *both* of the following: (8 credits)

ENVS 120 Introduction to Environmental Science With Lab (4)
 POLS 242 Global Sustainability (4)

2. Complete an approved 283 or 383 Service Learning Module course, approved campus or community-based sustainability service project, internship, or supervised independent research project (1-3 credits)

3. Complete *at least 12 credits* from the approved lists of electives with at least 3 credits from each category and a minimum of 3 credits at the 300 level or above:

Ecological Systems Integrity (Complete at least **3 credits** of the following):

BIOL 118 Environmental Problems and Midwest Ecosystems with Lab (4)
 BIOL 229 Ecology and Evolution (4)
 BIOL 310 Tropical Ecology (1-4)
 BIOL 315 Aquatic Toxicology with Lab (4)
 BIOL 345 Limnology with Lab (4)
 CHEM 107 Introduction to Environmental Chemistry (3)
 CHEM 372 Environmental Chemistry (3)
 EDUC 275 Health, Safety and Nutrition (3)
 ENVS 125 Geology and the Environment with Lab (3)
 EXSC 215 Introduction to Angling (3)
 EXSC 261 Community, Consumer and Global Health (3)
 GEOG 210 Human Geography (3)
 GEOG 320 Principles of GIS (3)
 LAS 410 HIV and the AIDS Pandemic (4)
 NASC 105 Science, Technology and Literature (3)
 PHYS 204 Energy and the Environment (3) (not offered regularly)

Ethical, Social and Cultural Integrity (Complete at least **3 credits** of the following):

ANTH 266 First Peoples of North America (3)
COMM 268 Intercultural Communication (3)
GEOG 215 Introduction to International Studies (3)
ENGL 213 Nature Writing and Environmental Literature (3)
ENGL 270 Illness and Health in Literature (4)
ENGL 318 Literature of Peace and Social Justice (4)
ENGL 344 Writing for Non-Profit Organizations (4)
LAS 410 Human Rights, Politics and Culture (4)
SOC 325 Social Movements (3)

Political and Economic Systems Equity (Complete at least **3 credits** of the following):

BEHS 285 Not-for-Profit Seminar (1)
BMGT 335 Not-for-Profit Management (3)
ECON 321 Environmental Economics (3)
ECON 329 Economic Development (3)
GERM 362 Germany and the Environment (3)
POLS 140 Introduction to International Politics (4)
POLS 233 American Environmental Politics and Policy (4)
POLS 241 International Political Economy (4)
POLS 344 International Law and Human Rights (4)
POLS 397 State and Local Environmental Project Review Internship (3)
SOC 335 Globalization & Development (4)

Notes:

- Students planning to major or minor in Environmental Studies may not minor in Global Sustainability
- Students interested in Global Sustainability are encouraged to explore Environmental Studies
- Students completing this minor are strongly encouraged to choose an LAS capstone course related to their particular areas of interest within the minor
- Study abroad courses may apply as electives with permission from the director(s)

HISTORY

History Department

Faculty

Lori Witt (chair), Mark Barloon, Chia Ning, Timothy Olin

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 investigations assists students in developing their reasoning skills, as well as advancing their 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. Study abroad is strongly encouraged for history majors.

Major Communication Skills

Evaluation of communication skills is based on each student's performance in HIST 485 and 486. This two-course sequence requires extensive writing and reading in addition to the development of research skills, and the student must successfully complete each course to obtain departmental recommendation for graduation with a history major. Preliminary evaluations of communication skills are made when evaluating each student's performance in the 100-level courses. Each student's skills will be continually monitored through subsequent course work in the major.

History Major Requirements (38 credits)

1. Complete *one* of the following courses:

HIST 125 World History to 1500 (3)

HIST 126 World History since 1500 (3)

2. Complete *one* of the following courses:

HIST 130 United States to 1877 (3)

HIST 131 United States since 1877 (3)

HIST 132 Issues in American History (3) (topic varies)

3. Complete *16 credits* from the following courses:

HIST 210 History of Modern Europe (4)

HIST 212 World War & Shaping of 20th Century (4)

HIST 213 The USSR (4)

HIST 215 The Balkans: Between East and West (4)

HIST 216 Germany and Central Europe (4)

HIST 217 Contemporary Europe (4)

HIST 220 Middle Eastern Civilization (3)

HIST 230 Foundations of American Nationalism (4)

HIST 231 Emerging United States (4)

HIST 232 Origins of Modern America (4)

HIST 233 The Fifties & Sixties: US History: 1945-1975 (4)

HIST 234 Recent United States (4)

HIST 237 American Environmental History (4)

HIST 250 Latin American Civilization (4)

HIST 271 History of Modern China (4)

HIST 275 History of Modern Japan (4)

HIST 276 Early East Asian Civilization (4)

HIST 277 Modern East Asian Civilization (4)

HIST 280 Modern African Civilization (4)

HIST 397/497 Internship (maximum 4 credits allowed to count)

Up to 2 courses from the following may also count toward the 16 credits requirement. Students seeking secondary education licensure should consult their history and education advisors prior to enrolling in these courses:

POLS 211 American Political Parties (4)

POLS 222 African Politics Since 1935 (3)

POLS 225 Modern Latin America (4)

POLS 231 The Middle East in World Affairs (4)

POLS 235 The U.S. in World Affairs (4)

POLS 361 American Political Philosophy (4)

REL 250 American Religious Thought (3)

REL 252 The Reformation (3)

REL 253 Medieval Christendom (3)

REL 254 The Early Church (3)

4. Complete 8 credits of the following:

HIST 310 Studies in World History (4)

HIST 330 Studies in American History (4)

Note: Each of these course may be repeated for credit with different topics.

5. Complete all of the following:

HIST 485 Historiography Seminar (4)

HIST 486 History Research Seminar (4)

History Minor Requirements (22 credits)

1. Complete a minimum of 22 credits including seven credits each of American and world history distributed as follows:

- Two HIST courses at the 100-level or above (6-8 credits)
 - Three to four (12 credits required) HIST* courses 200-level or above. Up to 4 credits of HIST-397/497 may count.
 - One HIST course at the 300-level or above (excluding HIST-397/497) (4 credits)
- *Students may count up to four credits from the approved list of political science or religion courses noted within the history major requirements.

*Note: The history minor will **not** meet the State of Iowa requirements for teaching certification in history as a minor field.*

Secondary education teaching licensure

Students seeking education teaching licensure must, depending on the endorsement they are seeking, complete the History Major Requirements listed above, which must include:

- 15 credits of world history courses (HIST 125 or HIST 126, HIST 485 and 8 credits of electives at the 200 or 300 level (World History Endorsement).
- 15 credits of American history courses (HIST 130 or 131, HIST 486, and 8 credits of electives at the 200 or 300 level (American History Endorsement).

Students should consult their history and education advisors for courses needed. In addition, students seeking teaching licensure must earn a GPA of 3.0 in the history major and complete all education (EDUC) courses required for licensure.

INFORMATION SYSTEMS

Interdisciplinary Major

Director

Stephen Fyfe

Statement of philosophy

Are you interested in developing software systems or managing the information structure for an organization? Would you like to be a chief information officer someday? The information systems major at Central allows students to choose from an emphasis in accounting information systems (AIS), computer information systems (CIS), or management information systems (MIS). Graduates have entered graduate school and immediate employment as IT managers, web programmers, and information systems auditors.

Introductory courses for the information systems major introduce students to the fields of computer science and business management, which are the building blocks for the interdisciplinary field of information systems. The course, Introduction to Information Management, provides a foundation to the field. Upper-level courses allow students to select an area of focus (such as accounting information systems, computer information systems, or management information systems) and take courses related to that area.

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 Communication Skills

Students majoring in Information Systems develop their communications skills in different ways depending on their emphasis. Accounting and management information systems majors take either COMM-160 or COMM-270; computer information systems majors take the computer science senior project COSC-420.

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. Information systems majors with the MIS emphasis cannot also declare a business management major.

Information Systems Major Requirements (49-52 credit minimum)

1. Complete all of the following:

- ACCT 241 Introduction to Financial Accounting (3)
- ACCT 242 Introduction to Management Accounting (3)
- BMGT 311 Principles of Management (3)
- COSC 109 Introduction to Information Management (3)
- COSC 110 Introduction to Computer Science (3)
- COSC 130 Data Structures (3)
- COSC 210 Database and the Web (4)
- ECON 112 Principles of Microeconomics (3)
- ECON 113 Principles of Macroeconomics (3)

2. Complete one of the following:

- COSC 255 Programming: "Language" (2)
- COSC 283/383 Service Learning Module (2)

3. Complete one of the following

- MATH 105 Introduction to Statistics (4)
- MATH 215 Applied Statistics (4)

4. Complete all requirements for one of the following emphases:

* *Accounting information systems (AIS) emphasis:*

- ACCT 341 Intermediate Financial Accounting I (3)
- ACCT 342 Intermediate Financial Accounting II (3)
- ACCT 343 Advanced Management Accounting (3)
- ACCT 347 Accounting Information Systems (3)
- ACCT 442 Auditing (3)
- COMM 160 Communication in Everyday Life (3) OR COMM 270 Public Speaking (4)

** Computer information systems (CIS) emphasis:*

COSC 220 Software Design (4)

COSC 345 Computer Systems (4)

COSC 420 Senior Project (4)

3 credit of elective COSC courses at the 200-level or higher or GEOG 320 Principles of GIS with Lab

** Management information systems (MIS) emphasis:*

BMGT 261 Principles of Finance (3)

BMGT 271 Principles of Marketing (3)

BMGT 381 Operations Management (3)

ECON 281 Research Methods in Economics (4)

COMM 160 Communication in Everyday Life (3) OR COMM 270 Public Speaking (4)

INTEGRATED STUDIES

Interdisciplinary Major

Statement of Philosophy:

The integrated studies major is intended for students whose academic interests and goals can be best met outside the structure of any single departmental major and/or minor. It is by nature interdisciplinary, and is integrated around a basic theme or interest that culminates in a capstone thesis or project. An Integrated Studies major can serve as an excellent preparation for a variety of graduate school programs and professional careers.

Study Abroad Opportunities:

Courses taken abroad can be included in an Integrated Studies Major.

Proposal for an Integrated Studies Major: A student wishing to declare an Integrated Studies major must submit a proposal for the major with the support of two supervising faculty members from two different departments. The student is responsible for choosing their academic advisors and regularly collaborating with them throughout the design and approval process. It is recommended that a student pursuing an Integrated Studies major have a GPA of 3.0 or higher. Students who do not meet this GPA threshold should consult with their current advisor or class dean before applying. The proposal must clearly articulate:

1. The goals, topic, or theme of the proposed Integrated Studies major. The student will formulate a short title for the major's focus that will appear on the transcript.
2. How the Integrated Studies major addresses the stated goals, topic, or theme better than a combination of pre-established major(s)/minor(s) and how it helps meet the student's educational and vocational objectives.
3. The courses to be taken that will constitute the major.
4. The intended final capstone thesis or project that will be a culmination of the student's undergraduate work within the major.

Final approval of the major is received from the Curriculum Committee. The registrar will forward all major proposals to the Committee on behalf of the student and notify the student of the Committee's decision. Any subsequent changes to the students' proposed courses must be made in writing in advance of the change and are subject to approval of the advising team. The Integrated Studies major should be approved by the end of the sophomore year, and in no case later than the first semester of the junior year. Planning for the capstone project should begin three semesters prior to graduation. Students with an Integrated Studies major may not declare another major. Minors may be declared as long as less than 50 percent of the credits between the Integrated Studies major and proposed minor overlap.

Integrated Studies Major Requirements (45 credits):

- Choose either three or four academic disciplines, from at least two different departments (e.g., Mathematics and Computer Science count as two disciplines and one department). In order to count as a chosen discipline, a student must complete at least 6 credits, and at least 3 credits at the 200- level or above, in that discipline.
- Complete at least 45 credits in the chosen disciplines.
- Complete a combined minimum of 12 credits at the 300/400-level from two disciplines, with a maximum of three credits of internship, practicum, private music lessons, directed study, independent study, or directed research counting toward this total. With permission of the advising team, three credits of LAS-410 may count toward this requirement when it fits into the student's area of focus.
- A maximum of 10 credits at the 100-level may be used toward the 45 credits required for the major.
- Complete a 3-6 credit integrated capstone senior thesis or project. The capstone is not included in the 12 credits of 300/400-level required above. The capstone must be approved by the student's advising team, supervised by the major advisors, and may be a senior honors project, independent study, directed research, theatre production, art exhibit, or other culminating project. Students may not use transfer credit to satisfy the capstone requirement.

Integrated Studies Minor Requirements (minimum of 21 credits):

- Choose either two or three academic disciplines, from at least two different departments (e.g., Mathematics and Computer Science count as two disciplines and one department). To count as a chosen discipline, a student must complete at least 6 credits, and at least 3 credits at the 200- level or above, in that discipline.
- Complete at least 21 credits in the chosen disciplines, with a maximum of 8 credits at the 100- level.
- Complete a minimum of 6 credits at the 300/ 400- level unique from the courses counted for the student's major(s). A maximum of three credits of internship, practicum, private music lessons, directed study, independent study, or directed research can count toward the Integrated Studies minor, but may not count toward the 300/400- level requirement.

Examples of Integrated Studies Foci:

Students are strongly encouraged to develop their own individualized interdisciplinary focus. Advisor(s) could be sought from relevant disciplines. The following are some examples of how this might be done:

- Students focusing on **Allied Health** could consider courses in Biology, Chemistry, Physics, Psychology, Communication Studies, and Exercise Science.
- Students focusing on **American Studies** could consider courses in History, English, Political Science, Sociology, Anthropology, and Religion.
- Students focusing on **Arts Management** could consider courses in Business Management, Art, Music, and Theatre.
- Students focusing on **Food Systems** could consider courses in Anthropology, Biology, Environmental Studies, Political Science, and Chemistry.
- Students focusing on **Gender Studies** could consider courses in Psychology, Sociology, English, Anthropology, and Exercise Science.
- Students focusing on **Global Health** could consider courses in Anthropology, Biology, Economics, Exercise Science, Environmental Studies, Political Science, Mathematics, and Psychology.
- Students focusing on **Not-For-Profit Management** could consider courses in Business Management, Accounting, Communication Studies, and English.
- Students focusing on **Geography** could consider courses in Geography, Economics, English, History, Political Science and Sociology.
- Students focusing on **Visual Communication** could consider courses in Art, Computer Science, and Communication Studies.

INTERNATIONAL AND GLOBAL STUDIES

Interdisciplinary Major

Statement of Philosophy

International and global studies is an interdisciplinary major that explores the changing forces of globalization and investigates the responses by the actors and institutions (economic, political, cultural and societal) to this reconfiguring of global life. It develops a global understanding of historical and contemporary world issues and seeks to encourage cross-cultural sensitivity emphasizing the interrelatedness of cultural, societal, linguistic, political, economic, environmental and aesthetic issues in the world today. A common body of knowledge is established through a set core of courses integrated with a focus track, study abroad, language proficiency and culminating individualized capstone project. Students may choose to pursue their studies within a specific geographic region or may develop a custom focus area in global studies, international relations, cultural studies, global environment, political or economic development.

Declaration of International and Global Studies Major Students considering the International and Global Studies major or minor should work with an advisor early in their academic career to develop coursework to support their international and global studies interests. A student wishing to declare an International and Global Studies major must submit a proposal and Declaration of International and Global Studies form for the major to the registrar with the support of at least one supervising faculty advisor, typically by the college's published major declaration deadline, but no later than registration for the student's sixth semester of enrollment. The registrar will forward all International and Global Studies major proposals to the Curriculum Committee for the final approval process.

Study abroad

Students are required to enroll in at least one semester in an appropriate Central College abroad program or another program approved by the college. Because the overseas experience is so vital to proper preparation for active participation in an international environment, students should confer with their academic advisor early in their academic careers to plan for the best combination of on- campus and study abroad coursework to fulfill major requirements.

Major Communication Skills

The major communication skills is typically satisfied in the 300-400 level coursework and senior capstone.

International and Global Studies Major Requirements (40 credits plus language proficiency)

Note: Students are strongly encouraged to begin working with a major advisor early in their academic career.

1. Complete all of the following (16 credits):

- ANTH 120 Introduction to Cultural Anthropology (3)
- ECON 113 Principles of Macroeconomics (3)
- GEOG 210 Human Geography (3)
- GEOG 215 Introduction to International Studies (3)
- POLS 140 Introduction to International Politics (4)

2. At the time of declaration, students will be required to design, specify and propose a focus/track. Complete 15 credits in a specific focus (i.e. regional, global studies, cultural studies, global environment, political, or economic development) area beyond the 100-level* and a minimum of nine credits of 300/400-level is required. Language courses numbered 322 or below may not be counted toward these 15 credits. *Students who select a geographical region as their focus area may count a 100-level survey course in that region toward the major.

Examples of International and Global Studies major foci:

- Geographic region (i.e. Africa, Asia, Latin America, Middle East, Europe)
- Cultural studies
- Political or economic development
- Global environment
- International politics/relations

3. Complete 6 additional elective credits beyond the 100-level, chosen in consultation with the major advisor; however, courses in a second foreign language at any level may be included in this requirement. Language courses in the primary foreign language numbered 322 or below may not be counted toward this 6 credit requirement.

4. Capstone (minimum 3 credits) senior thesis or project. The capstone is not included in the nine credits of 300/400- level required for the focus area. The capstone may be a senior honors project, independent study, directed research or other culminating project and must be approved by the student's academic advisor and faculty director prior to the start of the semester of enrollment.

5. Demonstrate proficiency in a foreign language through the intermediate (222 or two years) level.

6. Study abroad for at least one semester. Students with a regional focus are required to study abroad in that region.

International and Global Studies Minor Requirements (18 credits plus language proficiency)

Declaration of International and Global Studies Minor. A student wishing to declare an International and Global Studies minor must submit a declaration of International and Global Studies minor form to the registrar with the support of at least one supervising faculty advisor by the college's published minor declaration deadline, but no later than registration for the student's final semester of enrollment. The Curriculum Committee chair, in consultation with the supervising advisor and registrar will approve International and Global Studies minor declarations.

1. **Complete GEOG 215 Introduction to International Studies (3)**
2. **Complete three courses (9-10 credits) from:**
 - ANTH 120 Introduction to Cultural Anthropology (3)
 - COMM 268 Intercultural Communication (3)
 - ECON 113 Principles of Macroeconomics (3)
 - GEOG 210 Human Geography (3)
 - POLS 140 Introduction to International Politics (4)
3. **Complete six additional credits of elective at the 300-level or above either in a focus area or specific region(s). Language courses numbered 322 or below may not count.**
4. **Demonstrate proficiency in a foreign language through the intermediate (222 or two years) level.**
5. **Study abroad for at least one semester is highly recommended.**

LINGUISTICS

Interdisciplinary Minor

Linguistics Minor Requirements (18 credits)

Complete **18 credits** in linguistics. Typically courses would include ENGL 230 Principles of Linguistics, EDUC 231 Teaching English Language Learners, ENGL 331 History of the English Language, ENGL 332 Advanced English Grammar, or others approved by the program directors.

English as a Second Language Teaching Endorsement

An English as a second language teaching endorsement is available for education majors.

Additional information

Recommendations: study of a less commonly taught language, plus a course in computer science, if not already taken. 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.

MATHEMATICS

Mathematics/Computer Science Department

Faculty

Mark Johnson (chair), Russell Goodman, Thomas Linton, Mark Mills, Wendy Weber

Department Information

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. The mathematics faculty is committed to developing these skills in all students.

All majors will study contemporary and classic branches of mathematics. In addition, faculty encourage students to gain breadth in the major by taking both theoretical and applied courses. Other course requirements are flexible, allowing students to obtain teacher certification, gain practical experience in an internship, or go overseas on one of Central College's abroad programs. Whether in teaching, in graduate school, or in the workplace, graduates with a liberal arts major in mathematics have the tools they need for success.

The mathematics and computer science department offers three distinct majors: mathematics, computer science, and mathematics with secondary education emphasis. (Please see the appropriate sections of this catalog for information on the computer science major.)

Study Abroad

Majors are encouraged to study abroad at any Central College site. Mathematics/secondary education emphasis majors are encouraged to consider Budapest Semesters in Mathematics Education. For many students, the spring semester of their sophomore year is an ideal time for an abroad experience. Students should consult mathematics faculty while planning to go abroad.

Mathematics credit by proficiency

For information on earning credit by proficiency in mathematics, please see the "Credit by Proficiency" section of this catalog.

Major Communication Skills

The department believes it is essential that majors in mathematics are able to speak, read, write, and listen within the discipline. As such, many courses throughout the major include activities that evaluate students' ability to communicate. The final evaluation of a student's communication skills occurs in MATH 386 Mathematics Seminar. In this course, students develop and hone their reading, research, writing, and speaking skills through exploration of mathematical topics.

Major/minor restrictions

Students interested in combining business and mathematics may want to consider the actuarial science major, but a mathematics major may not also declare a major in actuarial science. Students seeking a mathematics teaching endorsement should consult the education department.

Mathematics Major Requirements (42 credits)

Some students choose to pursue teaching licensure through the Mathematics major. 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 Education Department that such students should be denied admission to or be dropped from the teacher education program until their grade point average within the mathematics and computer science courses has been brought up to at least 2.5.

1. Complete all of the following:

MATH 131	Calculus I (4)
MATH 132	Calculus II (4)
MATH 221	Foundations of Mathematics (3)
MATH 231	Multivariable Calculus (3)
MATH 240	Linear Algebra (4)
MATH 386	Mathematics Seminar (3)
MATH 421	Abstract Algebra I (3)
MATH 431	Real Analysis I (3)
COSC 110	Introduction to Computer Science (3)

2. Complete 12 credits of the following electives:

MATH 215	Applied Statistics (4)
MATH 250	Differential Equations (3)
MATH 310	Geometry (3)
MATH 330	Mathematical Modeling (3)
MATH 341	Probability (3)

MATH 342	Statistics (3)
MATH 370	Numerical Analysis (3)
MATH 390/490	Topics in Mathematics (3)

Mathematics Major/Secondary Education Emphasis Requirements (42-43 credits)

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 Education Department that such students should be denied admission to or be dropped from the teacher education program until their grade point average within the mathematics and computer science courses has been brought up to at least 2.5.

1. Complete all of the following:

MATH 131	Calculus I (4)
MATH 132	Calculus II (4)
MATH 221	Foundations of Mathematics (3)
MATH 231	Multivariable Calculus (3)
MATH 240	Linear Algebra (4)
MATH 310	Geometry (3)
MATH 386	Mathematics Seminar (3)
MATH 421	Abstract Algebra I (3)
COSC 110	Introduction to Computer Science (3)

2. Complete option a or b as follows:

a. Complete all of the following:

MATH 341	Probability (3) <i>and</i>
MATH 342	Statistics (3)

AND

Two of the following electives:

MATH 250	Differential Equations (3)
MATH 330	Mathematical Modeling (3)
MATH 370	Numerical Analysis (3)
MATH 431	Real Analysis I (3)
MATH 390/490	Topics in Mathematics (3)

b. Complete all of the following:

MATH 215	Applied Statistics (4)
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AND

Three of the following electives:

MATH 250	Differential Equations (3)
MATH 330	Mathematical Modeling (3)
MATH 341	Probability (3)
MATH 370	Numerical Analysis (3)
MATH 431	Real Analysis I (3)
MATH 390/490	Topics in Mathematics (3)

Mathematics Minor Requirements (21 credits)

1. Complete all of the following:

MATH 131	Calculus I (4)
MATH 132	Calculus II (4)
MATH 240	Linear Algebra (4)

2. Complete an additional 9 credits of MATH courses numbered 215 or higher; COSC 235 may be taken in place of MATH 221.

Mathematics Teaching Minor Requirements (26-28 credits)

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 Education Department that such students should be denied admission to or be dropped from the teacher education program until their grade point average within the mathematics and computer science courses has been brought up to at least 2.5.

1. Complete all of the following:

- MATH 131 Calculus I (4)
- MATH 132 Calculus II (4)
- MATH 310 Geometry (3)*
- COSC 110 Introduction to Computer Science (3)

*Note: MATH 310 has a prerequisite of MATH 221; COSC 235 may satisfy this prerequisite with instructor approval.

2. Complete one of the following:

- COSC 235 Discrete Structures (3)
- MATH 221 Foundations of Mathematics (3)

3. Complete one of the following:

- MATH 240 Linear Algebra (4)
- MATH 421 Abstract Algebra I (3)

4. Complete option a or b as follows:

a. Complete all of the following:

- MATH 341 Probability (3) *and*
- MATH 342 Statistics (3)

b. Complete all of the following:

- MATH 215 Applied Statistics (4) *and*
- 3 credits of MATH courses numbered 231 or higher

MUSIC

Music Department

Faculty

Cynthia Krenzel (chair), Mark Babcock, Stan Dahl, Kris DeWild, Gabriel Espinosa, Mitchell Lutch, Ian Moschenross, Sarah Van Waardhuizen

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 Central's study abroad programs.

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. 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

Opportunities for applied music study and ensemble participation exist at many of Central College's study abroad sites. Music faculty advisors work carefully with music majors to coordinate departmental requirements with study abroad.

Major Communication Skills

In order to be certified for graduation, a music major must show competency in reading, writing and speaking. The evaluation criteria are as follows:

- a. Reading: a paper for MUS 313 Music History: 1940-Present based on two scholarly articles chosen by you with the instructor's approval.
- b. Writing: a grade of 80% or higher on a research paper in MUS 211 or 212.
- c. Oral Skills: an oral presentation given in MUS 313.

Music Major Requirements (37-39 credits)

1. Complete all of the following:

- MUS 120 Theory and Aural Skills I (4)
- MUS 125 Theory and Aural Skills II (4)
- MUS 211 History of Western Music: Antiquity to 1750 (3)
- MUS 212 History of Western Music: Pre-Classical to 1940 (3)
- MUS 215 Piano for Proficiency I (1)*
- MUS 216 Piano for Proficiency II (1)*
- MUS 220 Theory & Aural Skills III (4)
- MUS 231 Conducting (2)
- MUS 235 Theory & Aural Skills IV (4)
- MUS 313 Music History: 1940-Present (3)

*with permission of the music department MUS 215 or/and MUS 216 may be waived

2. Complete 10 credits of applied lessons (MUSL) in the primary area of music study.

3. Maintain continuous enrollment in a primary ensemble (MUSG).

Note: Primary ensembles are MUSG 220, 222, 223, 224 (primary ensemble for string players only), 225

4. Pass the piano proficiency exam.

In order to be certified for graduation, a music major must pass a test in piano proficiency. Specific skills tested for each track are detailed in the department's Music Major Handbook. Students with keyboard experience may take a placement test to waive the piano proficiency exam and/or the Piano for Proficiency course requirements..

5. **Present a senior recital of one-half hour in the student's primary area of music study (or other approved significant senior project)**
6. **Complete the concert attendance requirement.**
Music education majors are required to attend 48 recitals or concerts prior to graduation. Further information is provided in the department's Music Major Handbook.

Music Minor Requirements (22 credits)

1. **Complete all of the following:**
MUS 120 Theory and Aural Skills I (4)
MUS 125 Theory and Aural Skills II (4)
MUS 212 History of Western Music: Pre-Classical to 1940 (3)
2. **Complete *one* of the following:**
MUS 211 History of Western Music: Antiquity to 1750 (3)
MUS 313 History of Western Music: 1940 to Present (3)
3. **Complete *4 credits* of applied lessons (MUSL)**
4. **Complete *4 credits* of music electives (MUS/MUSG/MUSL)**

MUSIC EDUCATION

Music Department

Faculty

Cynthia Krenzel (chair), Mark Babcock, Stan Dahl, Kris DeWild, Gabriel Espinosa, Mitchell Lutch, Ian Moschenross, Sarah Van Waardhuizen

Statement of philosophy

The Bachelor of Arts in Music Education is designed to prepare students for careers as music educators at the elementary and/or secondary level within the context of a comprehensive liberal arts program. Proceeding from a solid foundation in the analytical, historical, cultural and creative aspects of music, course requirements in this program are tailored to the specific needs of potential educators in the two tracks offered (vocal and instrumental). Recognizing the value of study in other cultures, the department works with music education majors to make study at one of Central's study abroad programs possible for them.

The Music Department stresses academic integrity in all aspects of the music curriculum. 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 education major, each student must pass an audition to indicate aptitude and prospects for success including competence in at least one major performance area. The student must additionally apply and be accepted to the teacher education program through Central's Education Department.

Music education tracks

The Department of Music offers two distinct tracks in music education: instrumental music education (combined K-8/5-12), and vocal music education (combined K-8/5-12). Both tracks have a common set of 29 credits of music courses and various competency and performance requirements. The common set is listed below, followed by the additional requirements for each track.

In addition to the 60 credits of music courses listed in this section, music education majors must complete all the courses for secondary licensure listed in the "Education--K-12 Art, Music, PE" section of the catalog. These courses, together with the required music courses, fulfill the coursework requirements for teaching licensure in the state of Iowa.

Study abroad opportunities

Opportunities for applied music study and ensemble participation exist at many of Central College study abroad sites. Music faculty advisors work carefully with music majors to coordinate departmental requirements with study abroad.

Major Communication Skills

In order to be certified for graduation, a music major must show competency in reading, writing and speaking. The evaluation criteria are as follows:

- a. Reading: a paper for MUS 313 Music History: 1940-Present based on two scholarly articles chosen by you with the instructor's approval.
- b. Writing: a grade of 80% or higher on a research paper in MUS 211 or 212.
- c. Oral Skills: an oral presentation given in MUS 313

Major restrictions

Music Education majors cannot also declare a major or minor in Music. Additionally, a Music Education--Vocal major cannot also declare a major in Music Education--Instrumental, and a Music Education--Instrumental major cannot also declare a major in Music Education--Vocal.

Music Education Major- Instrumental (60 credits)

NOTE: Students who declare the Music Education-Instrumental track may not also declare the Music Education-Vocal track.

1. Complete all of the following: (27 credits)

- MUS 120 Theory and Aural Skills I (4)
- MUS 125 Theory and Aural Skills II (4)
- MUS 211 History of Western Music: Antiquity to 1750 (3)
- MUS 212 History of Western Music: Pre-Classical to 1940 (3)
- MUS 220 Theory and Aural Skills III (4)
- MUS 231 Conducting (2)
- MUS 235 Theory and Aural Skills IV (4)
- MUS 313 History of Western Music: 1940 to Present (3)

2. Complete all of the following: (2 credits)

MUS 215 Piano for Proficiency I (1)

MUS 216 Piano for Proficiency II (1)

Students who place out of any Piano for Proficiency course must substitute an equivalent number of music (MUS/MUSG/MUSL) electives.

3. Complete all of the following: (17.5 credits)

EDUC 313 Methods of Teaching Music in the Elementary School (3)

EDUC 316 Teaching Choral and Instrumental Music in Secondary Schools (2)

MUS 150 Introduction to Music Education (1)

MUS 249 Instrumental Methods: Percussion (1)

MUS 250 Instrumental Methods: Woodwinds (1)

MUS 251 Instrumental Methods: Brass (1)

MUS 252 Instrumental Methods: Strings (1)

MUS 255 Voice for Instrumental Music Educators (1)

MUS 333 Advanced Instrumental Conducting and Methods (4)

MUS 334 Marching Band Techniques* (1)

MUS 335 Jazz Band Techniques* (1)

MUSG 226 Chamber Ensemble (.5)

4. Complete 10 credits of applied lessons (MUSL) in the primary area of music study

5. Complete 1 credit of applied lessons (MUSL) in a secondary area of music study

6. Complete 2.5 credits of music (MUS/MUSG/MUSL) electives*

7. Maintain continuous enrollment in a primary ensemble (MUSG).

Note: Primary ensembles are MUSG 220, 222, 223, and 224 (primary ensemble for string majors only). The student is exempt from this requirement during the student teaching semester.

8. Present a senior recital of one-half hour in the student's primary area of applied music study (or other approved significant senior project)

9. Complete the piano proficiency requirement.

In order to be certified for graduation, a music education major must pass a test in piano proficiency. Specific skills tested for each track are detailed in the department's Music Major Handbook.

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 second year. If they are not passed, the student must take Applied Piano (MUSL 125) in each of the following semesters until all sections are passed.

10. Complete the concert attendance requirement. Music education majors are required to attend 48 recitals or concerts prior to graduation. Further information is provided in the department's Music Major Handbook.

Music Education Major- Vocal (60 credits)

NOTE: Students who declare the Music Education-Vocal track may not also declare the Music Education-Instrumental track.

1. Complete all of the following: (27 credits)

MUS 120 Theory and Aural Skills I (4)

MUS 125 Theory and Aural Skills II (4)

MUS 211 History of Western Music: Antiquity to 1750 (3)

MUS 212 History of Western Music: Pre-Classical to 1940 (3)

MUS 220 Theory and Aural Skills III (4)

MUS 231 Conducting (2)

MUS 235 Theory and Aural Skills IV (4)

MUS 313 History of Western Music: 1940 to Present (3)

2. Complete all of the following: (2 credits)

MUS 215 Piano for Proficiency I (1)

MUS 216 Piano for Proficiency II (1)

Students who place out of any Piano for Proficiency course must substitute an equivalent number of music (MUS/MUSG/MUSL) electives.

3. Complete *all* of the following: (15 credits)

- EDUC 313 Methods of Teaching Music in the Elementary School (3)
- EDUC 316 Teaching Choral and Instrumental Music in Secondary Schools (2)
- MUS 150 Introduction to Music Education (1)
- MUS 228 Diction for Singers (2)
- MUS 332 Advanced Choral Conducting and Methods (4)
- MUS 341 Voice Pedagogy (3)

4. Complete the following: (4 credits)

- MUS 236 Show Choir and Jazz Choir Techniques (2)
- MUS 256 Instrumental Methods for Vocalists (2)

5. Complete *10 credits* of applied lessons (MUSL) in the primary area of music study; if the primary area is not voice, the student must additionally take 4 credits of applied lessons in voice.**6. Complete *2 credits* of music (MUS/MUSG/MUSL) electives.*****7. Maintain continuous enrollment in a primary ensemble (MUSG).**

Note: Primary ensembles are MUSG 220, 222, 223, and 224 (primary ensemble for string majors only). The student is exempt from this requirement during the student teaching semester.

8. Present a senior recital of one-half hour in the student's primary area of applied music study (or other approved significant senior project)**9. Complete the piano proficiency requirement.**

In order to be certified for graduation, a music education major must pass a test in piano proficiency. Specific skills tested for each track are detailed in the department's Music Major Handbook.

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 second year. If they are not passed, the student must take Applied Piano (MUSL 125) in each of the following semesters until all sections are passed.

10. Complete the concert attendance requirement. Music education majors are required to attend 48 recitals or concerts prior to graduation. Further information is provided in the department's Music Major Handbook.

NATURAL SCIENCE

Interdisciplinary Major

Director

Anya Butt

Statement of philosophy

The natural science major offers the opportunity to develop knowledge and skills in several disciplines. The natural science major is well suited for students who desire a broad background in the natural sciences as a preparation for a variety of career options and graduate or professional school. This major is also particularly appropriate for prospective natural science teachers at the secondary level.

Major Communication Skills

Natural Science majors are required to successfully complete two of the following courses BIOL 229, CHEM 241, PHYS 331 or GEOG 238. The program director will confer with the instructor of those courses to seek input on the student's oral and written communications skills and if necessary advise the student on additional courses to assist in developing better communication skills.

Major/Minor Restrictions

Students who major in natural science may not minor in the areas (biology, chemistry or physics) used to fulfill the major requirements.

Natural Science Major Requirements (54-58 credits)

1. Complete the following courses:

MATH 131 Calculus I (4)

MATH 132 Calculus II (4)

2. Complete all courses from any three of the four areas below.

Biology (16 credits)

BIOL 130 Diversity of Life (4)

BIOL 131 Introduction to Cells (4)

BIOL 221 Genetics and Evolution (4)

BIOL 229 Ecology and Evolution (4)

Chemistry (16 credits)

CHEM 111 General Chemistry (4)

CHEM 221 Inorganic Chemistry (4)

CHEM 231 Organic Chemistry I (4)

CHEM 241 Analytical Chemistry (4)

Physics (15 credits)

PHYS 111 General Physics I (5)

PHYS 112 General Physics II (5)

PHYS 225 Modern Physics I (3)

PHYS 331 Advanced Laboratories (2)

Geosciences (minimum 15 credits)

PHYS 106 Introduction to Astronomy (3)

ENVS 125 Geology and the Environment (3)

GEOG 237 Physical Geography: Weather and Climate (4)

GEOG 238 Physical Geography: Geomorphology (4)

At least one other approved NASC/ENVS/GEOG course

Note: The following courses are not required but are strongly recommended:

BIOL 320 Evolution (4)

CHEM 361 Physical Chemistry I (4)

or CHEM 351 Biochemistry (4)

NOT-FOR-PROFIT MANAGEMENT

Interdisciplinary Program Minor

Director

Jaclyn Rundle

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 minor 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.

Minor Restriction

A student cannot declare both the Not-for-Profit minor and the Entrepreneurship minor.

Not-For-Profit Management Minor Requirements (20 credit minimum)

1. Complete all of the following (14 credits):

BEHS	285	Not-For-Profit Seminar (1)
BMGT	271	Principles of Marketing (3)
BMGT	311	Principles of Management (3)
BMGT	335	Not-For-Profit Management (3)
ENGL	344	Writing for Non-Profit Organizations (4)

2. Complete one of the following (minimum of 3 credits):

ACCT	241	Introduction to Financial Accounting (3)
BMGT	352	Human Resource Management (3)
BMGT	372	Consumer Behavior (3)
BMGT	373	Marketing Management (3)

3. Complete one of the following (minimum of 3 credits):

ACCT	346	Government and Non-Business Accounting (3)
BEHS	397	Internship in Not-For-Profit Management (3)
COMM	340	Public Relations (4)
COSC	109	Introduction to Information Management (3)
ENGL	243	Writing Oral Histories (4)
GEOG	320	Principles of GIS (3)
THEA	330	Theatre Management (4)

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 Christian Opportunity Center, JUMP for Kids, 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

Philosophy/Religion Department

Faculty

Brian Peterson (chair), Anna Christensen, Terry Kleven, Mark Thomas

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.

Major Communication Skills

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 approve a student's communications skills before the third year. After a major's skills are approved, further submission of papers for skills review is optional.

Philosophy Major Requirements (31 credits)

1. Complete both of the following:

- PHIL 125 Logic (3)
- PHIL 221 Classical Thought (3)

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

- PHIL 222 Modern Thought (3)
- PHIL 223 Contemporary Philosophy (3)

3. Complete an additional 22 credits of PHIL electives. At least 13 credits must be at the 200-level or above, with at least 4 credits at the 300-level.

Philosophy Minor Requirements (15 credits)

1. Complete the following:

- PHIL 125 Logic (3)

2. Take *one* of the following:

- PHIL 221 Classical Thought (3)
- PHIL 222 Modern Thought (3)
- PHIL 223 Contemporary Philosophy (3)

3. Take an additional 9 credits of PHIL, with at least 6 credits of those at the 200-level or above

PHYSICS

Physics Department

Faculty

Viktor Martisovits (chair), Chad Garber, Elizabeth Golovatski, Pavrithra Premaratne, Alexey Pronin, Puneet Vishwarkarma

Statement of philosophy

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. The physics program at Central College is a four-year program that prepares students for jobs in engineering and other technical areas, teaching, physics graduate school, engineering 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 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.

Study abroad opportunities

Students majoring in physics have been able to study abroad with careful planning, especially during the summer.

Major Communication Skills

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 111. 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 331 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, there are no specific reading requirements. PHYS 331 has sufficiently high standards of technical writing that passing both semesters is evidence of a student's writing skills. The formal requirement needed to meet the communication skill goal in speaking is to pass COMM 160 Communication in Everyday Life or COMM 270 Public Speaking.

Physics Major Requirements (minimum of 57 credits)

1. Complete all of the following:

- PHYS 111 General Physics I (5)
- PHYS 112 General Physics II (5)
- PHYS 225 Modern Physics I (3)
- PHYS 331 Advanced Labs (4) (2 semesters)
- CHEM 111 General Chemistry (4)
- MATH 131 Calculus I (4)
- MATH 132 Calculus II (4)
- MATH 231 Multivariable Calculus (3)
- MATH 250 Differential Equations (3)

2. Complete 19 credits from the following elective courses:

- PHYS 211 Analog Electronics (3)
- PHYS 215 Theoretical and Experimental Methods (2)
- PHYS 216 Waves (2)
- PHYS 322 Optics (3)
- PHYS 324 Statistical Thermodynamics (3)
- PHYS 325 Modern Physics II (3)
- PHYS 326 Analytical Mechanics (4)

PHYS 412 Quantum Mechanics (4)
PHYS 421 Electricity and Magnetism II (3)
ENGR 212 Dynamics (3)
ENGR 311 Thermodynamics (3)
ENGR 321 Electromagnetism (3)

3. Complete one of the following:

COMM 160 Communication in Everyday Life (3)
COMM 270 Public Speaking (4)

Physics Minor Requirements (18 credits)

1. Complete all of the following:

PHYS 111 General Physics I (5)
PHYS 112 General Physics II (5)
PHYS 225 Modern Physics I (3)
PHYS 331 Advanced Laboratories (2)

2. Complete an additional 3 credits of PHYS courses numbered 211 or above

Pre-engineering

Central's dual degree engineering program leads to a B.A. from Central and a B.S. in engineering from either 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 at least 90 semester hours of credit completed, including all Core requirements and all major requirements), the student leaves Central and enrolls at either The University of Iowa or Iowa State University. Upon completion of one year of engineering study at 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. Students pursuing Central's B.S. in Engineering program are not eligible to participate in the dual degree engineering program.

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

Political Science Department

Faculty

Andrew Green (chair), Keith Yanner, James Zaffiro

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.

Major Communication Skills

Oral Communication and Writing skills are an integral part of a major in political science and for careers which political science majors will pursue. Political science majors will have their own communication and writing skills assessed on an annual basis and will be provided feedback from the department's faculty members. The final evaluation of the major communication skills will occur while the student is enrolled in POLS 489 after successful completion of the following:

- a) A professional research project
- b) A professional presentation of the research project's findings

Political Science Major Requirements (42-44 credits)

1. Complete all of the following (20 credits):

MATH	105	Introduction to Statistics (4)
POLS	110	Introduction to American Politics (4)
POLS	140	Introduction to International Politics (4)
POLS	250	Political Science Research Methods (4)
POLS	489	Research Seminar (4)

2. Complete three of the following with at least one course at the 300-level (11-12 credits):

HIST	217	Contemporary Europe (4)
POLS	225	Modern Latin America (4)
POLS	231	Middle East in World Affairs (4)
POLS	241	International Political Economy (4)
POLS	242	Global Sustainability (4)
POLS	326	Political Violence and Terrorism (4)
POLS	344	International Law and Human Rights (4)

3. Complete three of the following with at least one course at the 300-level (10-12 credits):

POLS	211	American Political Parties (4)
POLS	212	Congress (4)
POLS	213	Courts (4)
POLS	214	The Presidency (4)
POLS	215	The Politics of State and Local Governments (4)
POLS	216	Political Behavior: Political Participation, Elections, and Media (4)
POLS	233	American Environmental Politics and Policy (4)
POLS	235	The US in World Affairs (4)
POLS	316	Presidential Elections (4)
POLS	355	Seminar in Public Policy (3)
POLS	361	American Political Philosophy (4)

Note: A 3-credit, political science internship (POLS-397) will count as one course in either Group 2 or Group 3.

Political Science Minor Requirements (21-24 credits)

Complete six Political Science courses with a 6 s.h. of internship credit in POLS 397 counting for up to two courses.

PSYCHOLOGY

Psychology Department

Faculty

Randall Renstrom (chair), Karen Cleveland, Keith Jones, Ashley Scolaro

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 one of Central College's study abroad programs.

Major Communication Skills

An initial evaluation of a student's writing, reading, speaking, information literacy, computer skills, and critical thinking skills occurs in PSYC 220 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 Tutoring & Writing Center 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 fourth year after the student has completed PSYC 480 Advanced Research in Psychology (4) and PSYC 336 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 Major Requirements (37 credits)

1. Complete all of the following:

PSYC 122	General Psychology (3)
PSYC 220	Psychological Investigations (4)
PSYC 335	Fundamentals of Statistics (4)
PSYC 336	SPSS for Psychological Research (1)
PSYC 348	Experimental Psychology (4)
PSYC 480	Advanced Research in Psychology (4)

2. Complete 17 credits of PSYC elective courses. One of these electives must be at least a 3-credit hour, 400-level psychology course (excluding PSYC 497 Internship).

Psychology Minor Requirements (18 credits)

Complete 18 credits of PSYC courses; at least six credits at the 300-level or above.

Note: Students wishing to earn a minor should seek advising from a member of the psychology department early in the development of their program.

RELIGION

Philosophy/Religion Department

Faculty

Brian Peterson (chair), Terence Kleven, David Timmer, Elena Vishnevskaya

Statement of philosophy

The educational mission of the religion program is to serve both the Central Core and religion majors and minors. The department takes seriously its obligation to introduce to all students religion as humanities. All courses at the 100- and 200-level are open to non-majors at different stages of their education. The department also seeks to offer a balanced array of courses for majors and minors.

Course offerings in religion cover four focus areas: *Biblical Studies* (Old Testament and New Testament), *History of Christianity* (Western, Eastern, American), *Comparative Religious Traditions* (Judaism, Islam, and Asian religions), and *Modern Religions Thought* (theology, ethics, and culture). In addition, the department offers courses in *Christian Worship, Spirituality, and Ministry*. 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 a *Christian Ministries Emphasis* is offered.

Major Communication Skills

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.

Religion Major Requirements (33 credits)

33 credits of REL courses or other approved courses, with at least 3 credits in each of the focus areas (see below, 1-4), and at least 8 hours in the focus areas at the 300-level. No more than 3 credits of internship and 3 credits of independent study (excluding REL 499, senior independent study) may be counted toward the 33 credits.

1. Biblical Studies—Complete at least one of the following:

REL	110	Old Testament History and Religion (3)
REL	111	Introduction to the New Testament (3)
REL	210	The Prophets (3)
REL	211	The Writings (3)
REL	216	Jesus and the Gospels (3)
REL	217	Revelation and the General Epistles (3)
REL	218	Pauline Epistles (3)
REL	310	Readings in The Prophets (4)
REL	311	Readings in The Writings (4)
REL	316	Readings in Jesus and the Gospels (4)
REL	317	Readings in Revelation and the General Epistles (4)

2. History of Christianity—Complete at least one of the following:

REL	150	The Christian Heritage (3)
REL	222	Spirituality in the Christian Tradition (3)
REL	250	American Religious Thought (3)
REL	252	The Reformation (3)
REL	253	Medieval Christendom (3)
REL	254	The Early Church (3)

3. Comparative Religious Traditions—Complete at least one of the following:

REL	230	Asian Religions (3)
REL	233	The Jewish Experience (3)
REL	235	Islam (3)
REL	236	Islam in North Africa and Spain(3)
REL	238	Taoism and Confucianism (4)
REL	330	Readings in Asian Religions (4)

- REL 335 Readings in Islam (4)
 REL 336 Readings in Islam in North Africa and Spain (4)

4. Modern Religious Thought—Complete at least *one* of the following:

- REL 270 Christianity and Culture (3)
 REL 272 Modern Christian Thought (3)
 REL 274 World Christianity (3)
 REL 276 Christian Ethics (3)
 REL 370 Readings in Christianity and Culture (4)
 REL 372 Readings in Modern Christian Thought (4)
 REL 374 Readings in World Christianity (4)
 REL 376 Readings in Christianity Ethics (4)

5. Complete the following:

- REL 499 Senior Independent Study (3-4)

6. Complete REL electives (as necessary to earn a total of 33 credits of major courses)

Note: One course (3 credits) of the following may also be counted as religion major electives. Other courses on the list may be counted as hours in the major beyond the 33 credit minimum. Check with the department for more details.)

- HIST 220 Middle Eastern Civilization (3)
 HIST 221 Biblical Archaeology (3)
 SOC 342 Sociology of Religion (3)
 Any PHIL course except PHIL 125
 Liberal Arts Seminars (LAS 410) taught by departmental faculty

Pre-Ministry Program

Central College continues the emphasis of the ecumenical Christian tradition in general, and the Reformed tradition in particular, to prepare students for a life of service to God and community, as well as to prepare some students for a professional 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. Pastoral and vocational counseling is offered by the chaplain, the director of the Christian ministries emphasis of the religion major, and other faculty members. 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 complete ministry internships in churches and church-related organizations either locally or through Central's off-campus programs. Students may also choose to receive spiritual formation 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 220 Christian Worship (3)
 REL 272 Modern Christian Thought (3)
 or REL 372 Readings in Modern Christian Thought (4)
 REL 285 Pre-Ministerial Seminar (Arr)
 REL 397 The Ministry Internship (Arr)
 or REL 398 Cross-Cultural Ministry Internship (2)

Contact the Christian ministries emphasis director for more details.

Religion Minor Requirements (18 credits)

Complete 18 credits of REL courses with at least 12 credits of those at the 200-300 level, including: at least 3 hours in each of *three* of the four focus areas specified for the major: biblical studies; history of Christianity; comparative religious traditions; and modern religious thought.

SOCIAL SCIENCE

Interdisciplinary Major

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.

Major Communication Skills

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.

Social Science Major Requirements (45-47 credits)

1. Complete all courses from three of the subject areas below:

American History (at least 15 credits)

HIST 130 United States to 1877 (3) or HIST 131 United States since 1877 (3)

HIST 486 History Research Seminar (4)

At least two American HIST Electives at the 200- or 300-level (total of at least 8 credits)

World History (at least 15 credits)

HIST 125 World History to 1500 (3) or HIST 126 World History Since 1500 (3)

HIST 485 Historiography Seminar (4)

At least two World HIST Electives at the 200- or 300-level (total of at least 8 credits)

American government (at least 15 credits)

POLS 110 Introduction to American Politics (4)

And at least 11 credits from:

POLS 212 Congress (4)

POLS 213 Courts (4)

POLS 214 The Presidency (4)

POLS 215 The Politics of State and Local Governments (4)

POLS 216 Political Behavior: Political Participation, Elections, and Media (4)

POLS 316 Presidential Elections (4)

POLS 361 American Political Philosophy (4)

Economics (16 credits)

ECON 112 Principles of Microeconomics (3)

ECON 113 Principles of Macroeconomics (3)

ECON 312 Microeconomic Theory (4)

or ECON 313 Macroeconomic Theory (4)

Two 200-level or above ECON electives (6 credits total), *excluding ECON 281*

Geography (at least 15 credits)

GEOG 210 Human Geography (3)

At least 12 credits from GEOG courses, with 5 credits at the 300- level or above

Psychology (15 credits)

PSYC 122 General Psychology (3)

Two 200-level PSYC courses (total of at least 6 credits)

Two 300- or 400-level PSYC courses (total of at least 6 credits)

Sociology (15 credits)

SOC 120 Principles of Sociology

Two 200-level courses (6 credits) chosen from:

SOC 225 Social Problems (3)

SOC 235 Schools and Societies (3)

SOC 241 Criminology (3)

SOC 242 Sociology of the Family (3)

Two SOC electives at the 300-level or above (6 credits)

SOCIOLOGY

Sociology/ Anthropology Department

Faculty

Shawn Wick (chair), Jeremia Njeru, Dawn Reece, Jon Witt

Statement of philosophy

Sociology is the systematic study of the relationship between the individual and society and of the consequences of difference. According to the sociological perspective, we as humans must create culture in order to establish relationships to nature and with each other. As we share the culture we construct with others, we collectively come to take its reality for granted and act according to its principles. Over time, the resulting relationships solidify, giving rise to a social structure which helps guide our actions. Because the positions we occupy within that structure play such an important role in shaping who we are and what we do, sociologists place particular emphasis on studying the impact social location has on opportunity, including analysis of factors such as age, educational attainment, ethnicity, gender, race, and social class.

The ability to understand how societies are ordered, maintained, and changed better equips students to live in a rapidly changing, increasingly diversified, and sometimes chaotic world. We believe that exposure to sociological theories and research enables students to more effectively explain why we think and act as we do, thus equipping students to make more informed choices. In addition, learning appropriate research methods prepares students to ask and answer their own sociologically informed questions. The sociological imagination, which enhances our capacity to understand the intersection between history and biography, provides students with the skills they need to follow a variety of pathways after graduation. Our majors frequently pursue careers in social work, school counseling, law enforcement, criminal justice, human resources, and not-for-profit management.

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.

Major Communication Skills

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 who need to strengthen their communication skills may receive an outline of procedures that may include taking composition courses, developmental reading or speaking courses and working with the skills center.

Major and minor restrictions

Students may choose to declare a major in either sociology or cultural anthropology. Cultural anthropology majors may not declare a sociology minor. Sociology majors may not declare a cultural anthropology minor.

Sociology Major Requirements (36 credits)

1. Complete ***all*** of the following:
 - SOC 120 Principles of Sociology (3)
 - SOC 248 Statistics for Sociologists (4)
 - SOC 350 Methods of Social Research (4)
 - SOC 450 Sociological Theory (4)
 - SOC 485 Senior Seminar (4)
2. Complete an ***additional 17 credits*** of sociology (SOC) or anthropology (ANTH) elective courses
(at least 6 of these 17 credits must be at the 300-400 level)

Sociology Minor Requirements (18 credits)

Complete ***18 credits of SOC and/or ANTH courses***, with at least 6 credits at the 300-400 level.

SPANISH

Modern Languages Department

Faculty

Maria Snyder (chair), Allison Krogstad, Kathy Korcheck, 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 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 semester (preferably, one year) – in one of Central’s programs in Granada, Spain or Mérida, Mexico. 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 and should contact a Spanish professor for more information.

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.

Major Communication Skills

All Spanish majors will successfully complete significant written and oral work in one (or more) 300-400 level course.

Spanish Major Requirements (30-46 credits)

1. Complete all of the following:

- a. SPAN 323 Introduction to Hispanic Literature (3)
- b. A minimum of 3 credits in Hispanic literature (SPAN 332, 342 or class abroad)
- c. A minimum of 3 credits in civilization or culture (SPAN 343, 344, 350 or class abroad)
- d. A minimum of 3 credits in another language (French, German, or approved language) at the appropriate level
- e. A 3 credit 400-level senior seminar course (SPAN-487)
- f. A minimum of 15 credits of electives (language, literature, culture, or classes taken in the language abroad) at the 300-level or above (321 and 322 apply)
- g. 1 semester of study abroad in Mérida and/or Granada (or department chair approval)

All courses, except requirement “d,” must be taken in Spanish.

Of the 24 credits taken in Spanish beyond SPAN 323 Introduction to Hispanic Literature, at least 3 must relate specifically to Spain and at least 3 must relate specifically to Latin America.

Spanish Minor Requirements

1. SPAN 323 Introduction to Hispanic Literature (3) or its equivalent
2. A total of at least 6 credits at the 300-level or above.

THEATRE

Theatre Department

Departmental faculty

Mathew Kelly (chair), Charles Adamson, Kate Kanne, Mary Jo Sodd

Statement of philosophy

The Central College theatre program is committed to the development of our students as artist-citizens within the international art form of theatre. The curriculum provides a broad exposure to the theatre arts with majors eventually focusing on either a performance or design/ tech track. Theatre requires considerable collaboration and all students will be encouraged, over the course of their college career, to engage in every aspect of a production. Intellectual and artistic developments are carefully balanced within a production-oriented atmosphere.

Study Abroad Opportunities

Theatre students are encouraged to participate in one of Central's international programs and/or the Chicago program. Theatre courses are available in several of the European centers. Some of these courses apply directly to the major. Students should consult with the department faculty and the study abroad office concerning such courses. Additional internship opportunities are also available.

Major Communication Skills

Successful acquisition of major communication skills, including oral and written work will be assessed through regular coursework, participation in mainstage and student-driven productions and close consultation with a student's advisor. Additional coursework in other areas of the college that will support these essential theatrical skills will be encouraged

Theatre Major Requirements (minimum 48 credits)

Note: Students who plan to major or minor in theatre will be expected to participate in co-curricular theatre programs every semester except while studying abroad. Education majors desiring a theatre endorsement will have the same expectation.

1. Complete all of the following:

THEA 150	Acting (3)
THEA 161	Intro to Theatrical Design (3)
THEA 163	Stagecraft (4)
THEA 240	Ancient to Medieval: Theatre History and Dramatic Literature (3)
THEA 241	Renaissance to Modernism: Theatre History and Dramatic Literature (3)
THEA 258	Directing I (4)
THEA 292	Practicum (1)
THEA 370	Script Analysis and Dramatic Literature (4)
THEA 485	Senior Seminar (4)
THEA 494	Practicum in Theatre (1)

2. Complete two of the following:

THEA 165	Stage and Properties Management (3)
THEA 266	Theatrical Makeup Design (3)
THEA 221	Voice and Movement (3)

3. Complete two of the following in *either* the Acting/ Directing track or Design/ Tech track:

Acting/ Directing track:

THEA 330	Theatre Management (4)
THEA 350	Classical Acting II (3)
THEA 358	Directing II (4)

Design/ Tech track:

THEA 360	Scenic Design (3)
THEA 364	Lighting Design (3)
THEA 368	Costume Design and Construction (3)

4. Complete 6 credits of THEA Electives

Theatre Minor Requirements (20 credits)

1. Complete *a minimum of 20 credits* of THEA courses that have been approved by the department. At least 3 credits must be at the 300-400 level.

COURSES OF INSTRUCTION

Accounting

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.

ACCT 242 Introduction to Management Accounting (3)

Prerequisite: ACCT 241. 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 341 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 section of the balance sheet.

ACCT 342 Intermediate Financial Accounting II (3)

Prerequisite: ACCT 341. 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 343 Advanced Management Accounting (3)

Prerequisite: ACCT 242, and MATH 105 or MATH 215; or consent of the instructor. 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 344 Individual Tax Accounting (3)

Prerequisite: ACCT 241. Studies the general framework of the determination of income tax for an individual, with an emphasis on successful tax preparation.

ACCT 345 Advanced Taxation (3)

Prerequisite: ACCT 241 and ACCT 344. 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 346 Government and Non-Business Accounting (3)

Prerequisite: ACCT 242. 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 347 Accounting Information Systems (3)

Prerequisite: COSC 109 or COSC 110. Pre- or corequisite: ACCT 242. Introduces students to the role information systems plays 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 390 Topics (Arr)

Prerequisite: instructor's permission. Selected topics in accounting may be offered, depending upon student and staff interest.

ACCT 397 Internship (Arr)

Prerequisite: BMGT 311, ACCT 242, third-year 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 credits total. Pass/No credit basis.

ACCT 441 Advanced Financial Accounting (3)

Pre- or corequisite: ACCT 342. 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 442 Auditing (3)

Prerequisite: ACCT 341 and ACCT 347. 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 485 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 Credit basis.

ACCT 499 Independent Study (Arr)

Prerequisite: instructor's permission. An independent research experience for senior majors.

Anthropology

ANTH 120 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. (SB and GPC or GPN) Students may not receive credit for both GPC and GPN.

ANTH 260 Medical Anthropology (4)

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. (SB, GPC)

ANTH 275 Magic, Science, and Religion (4)

Prerequisite: Second-year standing. Explores the ways in which human beings perceive and experience the world. We use discussion, reading and writing to delve into these three, and other, modes of cognition and action. In this effort we confront witchcraft, spirit possession, ritual, and other phenomena of anthropological interest, inquiring as to methods, ethics, and personal viewpoints. (SB, GPN)

ANTH 366 Ethnographic Field Methods (4)

Prerequisite: ANTH 120 or SOC 120 and third-year standing 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. (SB, WRT)

ANTH 370 Anthropology of Violence (4)

Pre-requisite: Second-year standing, third-year standing recommended. This upper level seminar on the anthropology of violence considers major areas in the study of violence including war and peace, gendered violence, genocide, human rights abuses, the silencing of violence, and writing/speaking about violence. The methods of ethnographic research are applied to arenas of violence, and related ethical issues are examined. Students participate in a practicum involving cases of asylum resulting from violence. Discussion of readings is complemented by careful and examined writing of analytical and research papers. (SB and GPC or GPN) Students may not receive credit for both GPC and GPN.

ANTH 375 Ethnographic Writing (4)

Prerequisite: second-year standing and a prior course in anthropology, English or sociology. Explores modes of writing about culture and place. Moving beyond the scientific realist style typically used in anthropology, we try our hands at ethnographic writing focusing on landscape, dialogue, voice, poetry, emotion, politics, and more. Intensive research in local communities allows us to experiment with note taking and collaboration in ethnographic work, and we discuss the ethical issues that arise in contemporary anthropology. (SB, WRT)

ANTH 397/497 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 Credit basis.

ANTH 462 Culture Theory (4)

Prerequisite: ANTH 120 or instructor's permission. An examination of the history and development of anthropological theory, with emphasis on the contributions of prominent theorists.

ANTH 465 Applied Anthropology (4)

Prerequisite: anthropology or sociology major and third-year 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 485 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 499 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 110 Art and Architecture of the Ancient World (4)

A broad survey of painting, sculpture, and architecture from prehistoric to late antiquity. Students are introduced to the field of art history as they learn to identify, interpret, and distinguish the art and architecture of various periods, styles, and cultures including Ancient Near Eastern, Egyptian, Greek, and Roman. Works of art are studied in their historical context with emphasis on the cultural values revealed in them. (ART)

ART 151 2D Problem Solving (4)

A hands-on workshop introducing the fundamental theory and practice of studio art primarily in two-dimensional media. 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)

ART 161 3D Problem Solving (4)

A foundation studio art course that examines the elements of visual organization and the communicative possibilities of materials as they apply to three-dimensional forms. Investigates the relationship of form and content through emphasis on idea generation, problem solving, basic three dimensional studio techniques, and art vocabulary sufficient to analyze sculptural forms. (ART)

ART 221 Medieval Art and Architecture (3)

Examines art and architecture produced during the Middle Ages in Europe (from the fourth century CE through the Gothic era, ca. 1400 CE). We will explore major artistic monuments and movements, and analyze how works of art serve as tangible crystallizations of the religious, social, liturgical and historical circumstances of their period and culture. The class will consider art in a variety of media, focusing on painting, sculpture, and architecture. Students will be encouraged to approach each period through key monuments or objects, analyzing each within its own particular cultural perspective. (ART)

ART 222 European Art from the Renaissance to Romanticism (3)

Traces the development in Western European art from the Renaissance to the early 18th century. Introduces students to the field of art history as they learn how to look actively at art works, to interpret the art and architecture of various periods, styles, and cultures within their specific historical contexts. Explores how social, cultural, religious, spiritual, economic, political, and material factors influenced these artists' changing perception of, and responses to, their world and their artistic expressions. (ART)

ART 241 Art, Science, and Knowledge-Making, 1500-1800 (3)

Examines the range of intersections between art-making, scientific knowledge, and "ways of knowing" in the Early Modern era (c. 1500-1800) through themes and case studies. Introduces the principles, basic methods, and terminology of art historical analysis. Explores the role and exchange of visual communication between artists and thinkers within the social, cultural, religious, economic, political, and material contexts that influenced changing perceptions of, and responses to, an expanding world and new knowledge. (ART)

ART 242 Netherlandish Art, 1400-1650 (3)

This course surveys the principal developments in paintings created in Flanders (today's Belgium) and the Low Countries between 1400 and 1650. It aims to provide students with an understanding of fundamental artistic characteristics of Flemish and Dutch art from the Renaissance to the Baroque period, as well as the socioeconomic, cultural, material, and intellectual contexts in which artworks were produced, consumed, and circulated. The course draws upon the canonical works of such artists as Van Eyck, Bruegel, Rubens, Rembrandt, and Vermeer. (ART)

ART 250 Drawing and Painting: Fundamental Practices (4)

This is a hands-on studio art course exploring the fundamental creative practice of drawing and painting. Critical analysis and interpretation of work will be ongoing with regular group and individual critiques. Concepts covered in this class will include, but not be limited to, perspective, proportion, line, value, texture, gesture, negative space, and color theory. Students will draw and paint primarily from real life observation. Additional interpretive projects will be included. (ART)

ART 255 Printmaking: Lithography and Relief Workshop (4)

A hands-on studio art course exploring the fundamental theory, history, and practice of lithography and relief printmaking. Students will integrate content using a variety of traditional and non-traditional techniques within these two areas. While exploring the historical link between printmaking, book arts and papermaking, students will learn to make handmade paper from recycled materials. Critical analysis, interpretation and regular critiques will supplement the studio practice. (ART)

ART 262 Ceramics I (4)

Prerequisite: second-year standing. A studio art course exploring clay as an art medium through the basic ceramic processes commonly used by potters and sculptors, including hand-building, throwing, surface treatment, glazing, and firing. (ART)

ART 264 Sculpture I (4)

Prerequisite: second-year standing. A studio art course investigating the concepts, processes, and materials of sculpture. The practice of organizing three-dimensional form will be explored through such techniques as casting, assemblage, and modeling. The range of materials could include wood, metal, paper, clay, and found objects. (ART)

ART 265 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)

ART 267 Metalsmithing I (4)

Prerequisite: second-year standing. A studio art course investigating the concepts, processes, and materials for jewelry, hollowware, and small sculptural objects. The practice of organizing three-dimensional form will be explored through such techniques as casting, smithing, fabrication, and finishing processes. The primary materials explored will be nonferrous metals: brass, copper, and sterling silver. (ART)

ART 268 Body Sculpture and Fiber Arts (4)

Prerequisite: second-year standing. Explores historical and cultural aspects of body decoration and alteration through hands-on experience in creating contemporary interpretations through various fiber arts techniques including weaving, knotting and soft sculpture. (ART)

ART 270 Book Arts: Traditional Structures (4)

A hands-on studio art course exploring the fundamental theory, history, and practice of creating handmade books using traditional structures. Students will learn to construct handmade books using 1, 2, and 3 section sewing techniques, French chain binding, and Coptic binding techniques among others. Initial projects will focus on mastery of technique while later projects will begin to integrate content. The historical link between book arts and papermaking will also be examined. Critical analysis, interpretation and regular critiques will supplement the studio practice. (ART)

ART 295 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 Credit basis.

ART 325 History of Modern Art (4)

Explores the origins and development of avant-garde modern art in Europe from the late-18th century to the 1930s. Students examine various artistic movements and styles within their cultural and historical contexts, focusing on the interrelation of ideas and concepts about art and history. (ART, WRT)

ART 350 Drawing and Painting: Conceptual Approaches (4)

Prerequisite: second-year standing. A hands-on studio art course emphasizing conceptual and thematic approaches to the creative practice of drawing and painting. Critical analysis and interpretation of work will be ongoing with regular group and individual critiques. We will focus on visual communication, idea generation, historical context as well as artistic influences. Previous experience in studio art class recommended. (ART)

ART 355 Paper and Print: Intaglio Workshop (4)

Prerequisite: second-year standing. A hands-on studio art course exploring the fundamental theory, history, and practice of intaglio printmaking techniques, specifically etching and engraving. Students will integrate content using a variety of intaglio printmaking techniques such as etching, drypoint, engraving, and aquatint. While exploring the historical link between printmaking, book arts and papermaking, students will learn to make handmade paper from recycled materials. Critical analysis, interpretation and regular critiques will supplement the studio practice. Previous experience in studio art class recommended. (ART)

ART 362 Ceramics II (4)

Prerequisite: ART 262. A continuation of Ceramics I focused on more complex hand-building and wheel throwing construction methods, exploration into various glazing methods as well as an introduction to firing procedures. Emphasis on individual direction and technical achievement.

ART 365 Glassblowing II (3)

Prerequisite: ART 265 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 367 Metalsmithing II (4)

Prerequisite: ART 267. A continuation of Metalsmithing I with both individually arranged and structured projects exploring more complex construction and statements in jewelry and small sculpture from metal. Emphasis on conceptual and technical achievement.

ART 370 Book Arts: Experimental Structures (4)

Prerequisite: second-year standing. An advanced studio art course exploring the theory, history, and practice of creating handmade books using experimental structures. Emphasis will be placed on conceptual development and non-traditional book structures. The history of the book and handmade paper will be examined with particular emphasis on contemporary artist's books. Critical analysis, interpretation and regular critiques will supplement the studio practice. (ART)

ART 380 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 397 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 Credit basis.

ART 399 Independent Study (Arr)

Prerequisite: third-year 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 credits.

ART 425 Theory, Criticism, and Art Since 1945 (4)

Prerequisite: ART 325 or instructor permission. A study of contemporary artistic theory and practice focusing on the ideas and issues that have informed art criticism of the past 40 years.

ART 485 Senior Seminar in Art (4)

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 152 Introduction to Athletic Training (1)

Prerequisite: Instructor permission. Provides knowledge, theory and skill training in entry-level athletic training procedures and skills through lab, observation and lecture. Provides American Red Cross certification in First Aid/BBP/Professional Rescuer CPR. Covers the five domains of athletic training; injury/illness prevention and wellness protection, clinical evaluation and diagnosis, immediate and emergency care, treatment and rehabilitation and organizational and professional health and well-being. This course is required for all students accepted into the Athletic Training Education Program.

AT 223 Level 1: Clinical Rotation 1 (2)

Prerequisite: Admission to ATEP, EXSC 111, EXSC 149 and EXSC 151. 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 224 Level 1: Clinical Rotation 2 (3)

Prerequisite: AT 223 or instructor permission. This course has both in-class and out-of-class components. In class, students will improve their understanding and efficiency with evaluation, assessment and treatment of low back and lower extremity injuries. Out of class rotations are designed to expose students to off campus healthcare settings and winter and spring sports in a structured environment. Students will spend a maximum of 3 weeks with each rotation. During that time, students will be expected to demonstrate professionalism while familiarizing themselves with the rules, equipment and idiosyncrasies of each sport.

AT 272 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 273 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 323 Level 2: Clinical Rotation 1 (3)

Prerequisite: AT 223, 224, 272 and 273 or instructor permission. This course has both in-class and out-of-class components. In class, students will improve their understanding and efficiency with evaluation, assessment and treatment of cervical, thoracic and upper extremity injuries. Out of class, the practical component will 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 377 Therapeutic Modalities (3)

Prerequisite: EXSC 151 and AT 272. 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 378 Therapeutic Interventions (3)

Prerequisite: EXSC 151, AT 272 and 273. 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 379 Organization and Administration of Athletic Training (2)

Prerequisite: AT 224. Topics include foundations of management and organizational hierarchy of the NATA; program creation and evaluation; selecting, supervising, and evaluating staff; budgeting, purchasing, inventory, and maintenance; facility design; medical records management; insurance systems; legalities of sports medicine; ethical considerations in sports medicine; and organizing pre-participation physicals and drug testing. Students will explore and develop position notices and budget models, coordinate a sports medicine symposium, design an athletic training facility, explore different medical documentation styles, and evaluate drug testing and pre-participation physicals.

AT 380 Athletic Training Pharmacology (1)

Prerequisite: AT 224. This course will provide knowledge of the practical aspects of over-the-counter (OTC) and prescription (Rx) medications including: anti-inflammatory medications (steroidal and non-steroidal), analgesics, local anesthetics, bronchodilators and other respiratory medications, antibiotics, beta-blockers and hypertensives, and performance-enhancing drugs. Proper use in the athletic environment will be examined. This course will also examine the roles and responsibilities of a certified athletic trainer in understanding the indications, actions, side effects, precautions, dose information, allergies, and dispensing of commonly used medications. Students will also discuss and debate the issues surrounding drug testing. Students will explore and develop a comprehensive drug dispensing, education, and testing program.

AT 423 Level 3: Clinical Rotation 1 (3)

Prerequisite: AT 323, AT 377 and 378, or instructor permission. Senior level review and evaluation of clinical competencies and proficiencies. Extensive content in organization and administration of athletic training programs.

AT 424 Level 3: Clinical Rotation 2 (2)

Prerequisite: AT 323, AT 377 and 378, or instructor permission. Senior level review and evaluation of clinical competencies and proficiencies. Extensive content in organization and administration of athletic training programs.

AT 472 General Medical Conditions for the Athletic Trainer (3)

Prerequisite: AT 272 and AT 273. 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 397 Internship in Not-for-Profit Management (3)

Biology

BIOL 118 Environmental Problems and Midwest Ecosystems with Lab (4)

One of the most endangered ecosystems on earth is not in a distant place, but in Iowa. This course examines Midwestern ecosystems and environmental problems impacting them. Course goals are to increase knowledge and appreciation for nature in the Midwest and examine major environmental problems impacting Iowa, focusing on their causes and solutions. Students will spend a significant amount of time outdoors, and will design and conduct a research project. Includes one 3-hour lab. Does not count toward the Biology major. Students cannot receive credit for BIOL 118 and BIOL 123 or ENV 120. (NS, GS)

BIOL 130 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. (NS)

BIOL 131 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. (NS)

BIOL 201 Introduction to Human Anatomy and Physiology I with Lab (4)

This is a two-course sequence surveying the structure and function of the human body; designed for certain pre-health programs such as nursing and occupational therapy where students are not seeking a science major. This course will cover body organization, basic cell structure and function, tissues, integumentary system, skeletal system, muscular system, nervous system and endocrine system. Includes one three-hour lab per week that involves significant laboratory experience including some dissection, examination of histological specimens, preserved organs and anatomical models. Does not count toward the Biology major or minor. (NS)

BIOL 202 Introduction to Human Anatomy and Physiology II with Lab (4)

Prerequisite: Completion of BIOL 201 with a grade of C or higher. This is the second of a two-course sequence surveying the structure and function of the human body; designed for certain pre-health programs such as nursing and occupational therapy where students are not seeking a science major. This course will cover the cardiovascular system, lymphatic system, digestive system, respiratory system, urinary system, reproductive system and will conclude with growth and development. Includes one three-hour lab per week that involves significant laboratory experience including physiological experimentation, some dissection, examination of preserved organs and anatomical models. Does not count toward the Biology major or minor.

BIOL 205 Natural History of American Ecosystems (2)

Prerequisite: BIOL 130. Students will be immersed in a detailed study of ecosystems found in a region. The overall goal is to increase understanding of the biological and physical factors that interact to build ecosystems. We also will address conservation issues impacting the area and learn to recognize important species or groups of species. The course will meet once a week during the second half of the spring semester and will conclude with a nine day trip to visit that ecosystem during late spring / summer. Students must attend both the class and the trip to receive credit. An extra fee will be assessed and students must buy their own food. This course does not count toward the biology major or minor.

BIOL 210 Epidemiology (3)

Introduces the basic concepts and principles of epidemiology and biostatistics as applied to public health problems, including historical overview; descriptive methods and sources of data; diagnostic screening; study designs; analytical tools; measures of association; bias and confounding factors. Emphasis is placed on methods of epidemiologic investigation, appropriate summaries and displays of data, and the use of classical statistical approaches to describe the health of populations, as well as critical evaluation and interpretation of public health research, using examples from the literature. (NS, GS)

BIOL 211 Understanding Biological Research (1)

Prerequisite: BIOL 131 and second year standing. Designed to enhance a student's understanding of each step in the process of biological research including: identifying and developing a research question, searching current literature, developing a hypothesis, designing an experiment, collecting and analyzing data and reporting the results. Students will also be expected to demonstrate the ability to read and interpret scientific research. Pass/no credit.

BIOL 221 Genetics and Evolution with Lab (4)

Prerequisite: BIOL 131 and second-year standing. An introduction to genetic and evolutionary analysis. Coverage includes both classical and molecular genetics and evolution 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, and their relationship to the evolution of populations and speciation. Laboratory will use both classical and molecular techniques to illustrate key concepts. One three-hour lab per week.

BIOL 229 Ecology and Evolution with Lab (4)

Prerequisite: BIOL 130 and BIOL 131. Analyzes the patterns present, and processes operating, in ecological populations, communities and ecosystems. Emphasis on ecology as a driver of evolution and the resulting adaptations in organisms. Laboratories introduce students to field methods and quantitative analyses, and allow students to conduct research, explore and interpret data, and present results. One three-hour lab per week. (GS)

BIOL 310 Tropical Ecology (1-4)

Prerequisite: BIOL 130 or instructor's permission. Introduces students to marine and terrestrial ecosystems in the tropics. Meets once a week during the semester and during a 17 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. (NS)

BIOL 315 Aquatic Toxicology with Lab (4)

Prerequisite: CHEM 111 and one of the following: BIOL 130 or BIOL 131 or ENVS 120. This course will allow students to better understand the effects and impacts of toxic substances and human activity on freshwater ecosystems. In lab, students will learn how to measure basic water quality parameters and perform acute toxicity tests on living organisms. Students will then develop and conduct field or lab based experiments pertaining to aquatic toxicology, analyze their data and present their findings. Includes one three-hour lab per week.

BIOL 320 Evolution with Discussion Lab (4)

Prerequisite: BIOL 221 and BIOL 229. An overview of evolution as the unifying principle of the biological sciences, with coverage of the origins of evolutionary thought, population genetics and phylogenetics. Includes workshop activities on topics such as population genetics, morphometrics and phylogeny reconstruction as well as review of the primary literature. One two-hour discussion lab per week. (WRT)

BIOL 321 Comparative Vertebrate Anatomy with Lab (4)

Prerequisite: BIOL 130. 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 324 Field Botany with Lab (4)

Prerequisite: BIOL 130 and 131. 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 including a weekend field trip will introduce the students to methods of plant identification, taxonomy and botanical field studies. Includes one three-hour lab per week.

BIOL 335 Functional Histology with Lab (4)

Prerequisite: BIOL 131. 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 341 Human Physiology with Lab (4)

Prerequisite: BIOL 131 and CHEM 231. 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 342 Mammalogy with Lab (4)

Prerequisite: BIOL 130 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. Labs emphasize anatomy, field biology and identification of mammals, as well as census and capture techniques.

BIOL 343 Ornithology with Lab (4)

Prerequisite: BIOL 130 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 345 Limnology with Lab (4)

Prerequisite: BIOL 229 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 350 Conservation Biology and Ecology of Iowa (4)

Prerequisite: BIOL 130. Students will explore terrestrial ecosystems of Iowa, examining their ecology and the biology of the dominant organisms forming them. Furthermore, we will learn the basic principles of conservation biology and how these concepts are relevant to nature in the Midwest. Labs will be field-based, and students will explore, study, and manage ecosystems in our area. Participants must be prepared for field work in rugged landscapes and all kinds of weather. (GS)

BIOL 360 Human Anatomy with Lab (4)

Prerequisite: BIOL 131. 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 361 Microbiology with Lab (4)

Prerequisite: BIOL 131 or instructor's permission. A comprehensive overview of the biology of bacteria with discussions on archaea, eukaryotes, and viruses. Course topics include microbial structure/ function, physiology, genetics, host-microbe interactions, immunology, and ecology. The laboratory includes techniques in bacterial isolation, culture, quantitation, light microscopy, and physiological testing.

BIOL 386 Biology Seminar (1)

Pre-requisite: BIOL 221. Students present and discuss biological topics of the instructor's choice as a context in which the scientific reasoning and communication skills of the students are evaluated, developed, and certified for graduation. A minimum grade of C or better is required from this course to count toward the major.

BIOL 397 Internship in Biology (Arr)

Prerequisite: BIOL 130, 131 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 Credit basis.

BIOL 499 Independent Study in Biology (1-4)

Prerequisite: BIOL 386 and instructor's permission. A research-oriented experience designed to focus on a well-defined problem identified in BIOL 386. 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 credits may be taken pursuant to the major without approval of the department chair.

Business Management

BMGT 231 Business Law I (3)

Prerequisite: second-year 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 261 Principles of Finance (3)

Prerequisite: ACCT 241. This course introduces some basic concepts in financial management and their application to corporate financing and investment decisions. Topics covered will include financial statement analysis, time value of money, bond and stock pricing, capital budgeting, risk and return, and capital structure.

BMGT 271 Principles of Marketing (3)

Prerequisite: second-year 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 311 Principles of Management (3)

Prerequisite: second-year 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 335 Not-for-Profit Management (3)

Prerequisite: BMGT 311 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 341 Social Entrepreneurship (3)

Prerequisite: BMGT 311. Introduces the principles of social entrepreneurship. Focuses on social enterprises, or hybrid organizations that seek both to make a profit and to achieve a social good. Course topics include identification of different types of social entrepreneurs and social enterprises; legal structures and certification processes for social enterprises; importance of building and maintaining connections to stakeholders; evaluation of social enterprise effectiveness; global aspects of social entrepreneurship; and current social enterprise trends.

BMGT 352 Human Resource Management (3)

Prerequisite: BMGT 311 and third-year 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 362 Principles of Investment (3)

Prerequisite: BMGT 261, MATH 105 or MATH 215 and ECON 112 or ECON 113. Concentrates on capital markets, security analysis and portfolio management. Classical and contemporary theories concerning optimum portfolio construction and asset allocation will be emphasized.

BMGT 363 Advanced Financial Management (3)

Prerequisite: BMGT 261, and ECON 112 or ECON 113. 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 372 Consumer Behavior (3)

Prerequisite: BMGT 271. Analyzes personal and interpersonal influences on buyer behavior. Topics include perception, dissonance, imagery, lifestyle, culture, social class, the family and marketing communications.

BMGT 373 Marketing Management (3)

Prerequisite: BMGT 271. 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 375 Marketing Research (3)

Prerequisite: BMGT 271 and MATH 105 or MATH 215. 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 379 International Marketing (3)

Prerequisite: BMGT 271. Emphasizes the marketer's role in analyzing how cultural, social, political, and economic factors affect marketing decision-making in an international context. Focuses on the opportunities and challenges associated with the increasing globalization of markets.

BMGT 381 Operations Management (3)

Prerequisite: BMGT 311, MATH 105 or MATH 215 and third-year standing. 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 390/490 Topics (Arr)

Prerequisite: instructor's permission. Selected topics in management may be offered, depending upon student and staff interest.

BMGT 397 Internship (Arr)

Prerequisite: BMGT 311, ACCT 242, third-year 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 credits total. Pass/No Credit basis.

BMGT 462 Derivative Markets (3)

Prerequisite: BMGT 362. This is an advanced course in derivative markets. Familiarity with derivative securities as would be found in an undergraduate investments text is assumed. Topics will include futures and forward prices, swaps, binomial option pricing, the Black-Scholes-Merton model, Brownian motion and Itô's Lemma. Much of the material covered will correspond to the Society of Actuaries Exam IFM (Investment and Financial Markets).

BMGT 485 Strategic Management Capstone- Corporations (3)

Prerequisite: BMGT 261, BMGT 271, BMGT 311 and fourth year standing. A capstone course that focuses on the integration of knowledge and application of skills gained in core business management courses. Emphasizes analysis of the business environment and use of strategic processes (strategy formulation, implementation, evaluation and control) to manage corporations and other large-scale organizations.

BMGT 486 Strategic Management Capstone- Start-Ups and Small Business (3)

Prerequisite: BMGT 261, BMGT 271, BMGT 311 and senior standing. A capstone course that focuses on the integration of knowledge and application of skills gained in core business management courses. 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 496 Co-Op (Arr)

Prerequisite: third-year standing, instructor's permission, and declared department major with ECON 112, 113, ACCT 241, 242 and BMGT 311 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 Credit (awarded upon completion of the Co-op program).

BMGT 499 Independent Study (Arr)

Prerequisite: instructor's permission. An independent research experience for senior majors.

Chemistry

CHEM 102 Chemistry Workshop (1)

Reinforces the basic concepts and problem solving skills needed to succeed in chemistry, focusing on skills in dimensional analysis and valency. CHEM 102 is required as a pre- or co-requisite for CHEM-111 for those students with an ACT Math score of 23 or below and is strongly recommended for those students with an ACT Math score between 24 and 27.

CHEM 107 Introduction to Environmental Chemistry (3)

Designed for students who may not have a background in chemistry but have an interest in the environmental impacts of chemistry. This basic chemistry knowledge will then be applied to chemical process in the atmosphere, lithosphere and hydrosphere. The course will conclude with a study of the biosphere. Students may not receive credit for CHEM 118 and either CHEM 108 or CHEM 111. (NS, GS)

CHEM 111 General Chemistry with Lab (4)

Prerequisite: High school or college algebra; pre- or co-requisite: CHEM 102 for students with an ACT Math score of 23 or below. Introduces the principles of chemistry for understanding chemical problems and for advanced work in the department. Develops college-level problem solving, analytical thinking, writing and reading skills. One three-hour lab per week. (NS)

CHEM 221 Inorganic Chemistry with Lab (4)

Prerequisite: CHEM 111. An introduction to inorganic chemistry including descriptive chemistry, chemical bonding, solubilities and coordination chemistry. One three-hour lab per week.

CHEM 231 Organic Chemistry I with Lab (4)

Prerequisite: CHEM 111. 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 241 Analytical Chemistry with Lab (4)

Prerequisite: CHEM 111. An introduction to analytical chemistry, including chemical and physical methods. Two lectures and two laboratories per week.

CHEM 331 Organic Chemistry II with Lab (4)

Prerequisite: CHEM 231. 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 351 Biochemistry with Lab (4)

Prerequisite: BIOL 131 and CHEM 331. Introduces the chemistry and metabolic processes of living organisms. One three-hour lab per week.

CHEM 361 Physical Chemistry I (3)

Prerequisite: CHEM 241 and MATH 132. An introduction to thermodynamics in a chemistry context. Examines matter in various states. CHEM 361, CHEM 461 and CHEM 363 can be taken in any order.

CHEM 363 Chemical Kinetics with Lab (1)

Prerequisite: CHEM 241 and MATH 132. An introduction to chemical kinetics concepts, including transport phenomena, mechanisms, reaction rates, and transition state theory. Course will include both lecture and laboratory work.

CHEM 372 Environmental Chemistry with Lab (3)

Prerequisite: CHEM 241 (CHEM 231 is recommended). An advanced chemistry course focusing on the chemical processes operating in the Earth's atmosphere, hydrosphere, and lithosphere. Labs will focus sampling and analysis methods used in detecting various chemicals in the environment. Includes one three-hour lab per week. (GS)

CHEM 421 Advanced Inorganic Chemistry with Lab (3)

Prerequisite: CHEM 221 and 361. An advanced study of modern theories concerning chemical bonding, bioinorganic and organometallic chemistry. One three-hour lab per week. Usually offered in alternate years. (WRT)

CHEM 431 Advanced Organic Chemistry with Lab (4)

Prerequisite: CHEM 331. Concepts in physical organic chemistry that can include mechanisms, molecular orbital theory, thermodynamics and kinetics. Some aspects of chemical synthesis will also be covered. Includes one three hour lab per week. Usually offered in alternate years. (WRT)

CHEM 442 Instrumental Analysis with Lab (4)

Prerequisite: CHEM 241. 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. Usually offered in alternate years.

CHEM 451 Advanced Topics in Biochemistry (3)

Prerequisite: CHEM 351 Biochemistry. Building from the foundational concepts covered in Biochemistry, this course covers one or more advanced topics in Biochemistry. Example topics include Biophysical chemistry, bioinorganic chemistry, Pharmaceutical biochemistry, and Medicinal chemistry. May be repeated once for credit when the topic changes.

CHEM 461 Physical Chemistry II (3)

Prerequisite: CHEM 241 and MATH 132. An introduction to quantum chemistry, chemical spectroscopy, and atomic and molecular structure.

CHEM 463 Advanced Physical Chemistry (3)

Prerequisite: CHEM 461. Advanced topics in physical chemistry based on instructor interest and students' needs. Not offered regularly.

CHEM 485 Research Investigations in Chemistry (2)

In this course, the student will conduct collaborative research with a faculty mentor from the chemistry department. Students may participate in ongoing faculty research or help collaboratively design their own research topic. Six hours of lab time a week is expected. Students will present their work to the public at the end of each term. Repeatable for credit.

CHEM 199, 299, 399 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 397/497 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 Credit basis.

CHEM 498 Research (Arr)

Prerequisite: CHEM 461 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 121 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.

CHIN 122 Beginning Chinese II (4)

Prerequisite: CHIN 121. A consolidation of the foundations established in CHIN 121. 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.

CHIN 221 Intermediate Chinese I (4)

Prerequisite: CHIN 122 or equivalent. A consolidation of the foundations established in CHIN 122. 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. (GPN)

CHIN 222 Intermediate Chinese II (4)

Prerequisite: CHIN 221 or equivalent. A consolidation of the foundations established in CHIN 221. 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. (GPN)

CHIN 399 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.

Communication Studies

COMM 160 Communication in Everyday Life (3)

Introduces students to basic skills necessary for communicating effectively across a variety of social and professional contexts. Emphasis is placed on the development of an analytical and critical approach to planning, implementing and assessing effectiveness when communicating with others. Oral communication competencies include listening, large and small group discussion, and formal presentations. (SB)

COMM 180 Introduction to Communication Theory (3)

Surveys and analyzes significant theories of the Communication Studies discipline. Topics include the self and messages, relationship development, groups and organizations, public communication, the media, and culture and diversity. Critical thinking and writing skills are cultivated through brief theory application papers. Theories are also explored through in-class exercises.

COMM 250 Evaluating Contemporary Media (4)

Prerequisite: Second-year standing or instructor's permission. Investigates how contemporary screen media construct, reflect, and naturalize identities in the U.S. and other national contexts. In addition, the course introduces students to the contexts of production, text, and audiences, and invites them to actively respond to the identities constructed through screen media. (GPC)

COMM 262 Interpersonal Communication (4)

Prerequisite: second-year 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. (SB)

COMM 265 Performance Studies (4)

Studies aesthetic communication through a performative context including both individual and group performance methods. Emphasizes the creative process used to communicate a textual interpretation through a carefully prepared performance. Examples of aesthetic texts include fiction, digital media, personal narrative, poetry, and oral history. (ART)

COMM 268 Intercultural Communication (3)

Prerequisite: second-year standing or instructor's permission. Explores communication within and across cultural groups. Addresses cultural differences broadly, including not only ethnicity, but also race, age, sexual orientation, gender, and disability. Presents and applies key concepts, skills, and processes of intercultural communication. Provides a forum not only to talk about diversity, but also to interact across difference and develop a better understanding of one's own culture. (GPC)

COMM 270 Public Speaking (4)

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 276 Communicating Health & Illness (3)

Prerequisite: second-year standing. Provides a broad introduction to communication about health and illness, addressing multiple health care contexts. Explores how health and illness are socially constructed through interaction and how they affect and are affected by our communication. Topics include health/illness identity and social support, provider-client interaction, communication in health care organizations, and public health, including issues related to media, healthcare policy, and health promotion. The course is both theoretical and practical. While students will be introduced to the theoretical underpinnings of healthcare interactions, they will also gain practical information that they can use in their own experiences as health care citizens and professionals.

COMM 280 Communication Research and Writing (4)

Prerequisite: COMM 180 and second-year standing or instructor's permission. Introduces basic primary and secondary research methods used in the study of human symbolic activity. Provides working knowledge of resources and research methods used in the communication discipline while refining research and academic writing skills. Primary methods emphasized include survey, ethnography, interviewing, and textual analysis. Includes significant writing component. Designed for students planning to be Communication Studies majors. (WRT)

COMM 330 Media Criticism (3)

Prerequisite: third-year standing or instructor's permission. Students will examine the production, textual meaning, and reception contexts of media culture by focusing on the gains of historical and contemporary approaches to media studies and their theoretical limitations. Each unit will incorporate case studies that examine the influence of media, and students will be tested on each unit along with the opportunity to implement each theoretical approach. Finally, students will select a theoretical perspective to apply to their media object of choice in a critical analysis paper.

COMM 340 Public Relations (4)

Prerequisite: third-year 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 342 Negotiating Organizational Cultures (4)

Prerequisite: third-year standing or instructor's permission. Examines the role of communication in workplace and other organizational cultures. Presents and applies theories of organizational communication through readings, case studies, and an original primary research project. Develops analytical, problem-solving, professional, and personal effectiveness through exploration of topics such as organizational systems and cultures, power and difference in organizations, and teamwork and leadership.

COMM 380 Communication Ethics (4)

Prerequisites: third-year standing or instructor's permission. Investigates the complex nature of ethical issues imbedded in our everyday communication. 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 are explored, including interpersonal, organizational, mediated, and political. Emphasis is placed on guided class discussion, with written analysis papers, case study research, and oral presentations comprising the main assignments.

COMM 385 Digital Media Discourses (4)

Prerequisite: third-year standing or instructor's permission. Examines dystopian and utopian discourses about how digital media influence human communication with a focus on personal, interpersonal, social, educational, professional and virtual contexts. In addition to reading scholarly articles, students will consider how their media interactions fashion communication and relationships. This class is designed to engage students through daily readings and discussion, evaluated reviews of material and concepts, and primary and secondary research examining an issue in digital media.

COMM 397 Internship in Communication Studies (Arr)

Prerequisite: declared major or minor in Communication Studies; departmental GPA of 2.0 or higher; and departmental approval. An applied professional experience in communication-related fields. Includes midterm and final evaluations by site supervisor; written reflection during the experience; conferences with supervising faculty member; and submission of an acceptable internship analysis paper. May be repeated for a maximum of 8 credit hours applied to the major or 3 credit hours applied to the minor. Pass/No Credit basis.

Computer Science

COSC 109 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. Does not count toward the Computer Science major or minor requirements.

COSC 110 Introduction to Computer Science (3)

Prerequisite: Minimum ACT composite score of 23 or COSC 109 recommended. 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. (MR)

COSC 130 Data Structures (3)

Prerequisite: COSC 110. 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 210 Database and the Web (4)

Prerequisite COSC 110. Introduction to the client-server paradigm using web clients and database servers. The interaction of the web client languages HTML, CSS, and Javascript with server languages such as PHP and SQL will be explored.

COSC 220 Software Design (4)

Prerequisite: COSC 130. 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 235 Discrete Structures (3)

Prerequisite: COSC 130. An introduction to the mathematical ideas commonly used in computer science, such as logic, proof, sets, counting, discrete probability, relations, functions, graphs, and automata. (MR)

COSC 245 Computer Organization and Architecture (4)

Prerequisite: COSC 130. 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 255 Programming: "Language" (2)

Prerequisite: COSC 130. A study of a selected programming language not covered in other computer science courses. This course may be repeated with a different language.

COSC 325 Mobile Application Development (4)

Prerequisite: COSC 220. Studies the principles of software development for mobile platforms.

COSC 330 Algorithms (3)

Prerequisite: COSC 130. 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 345 Computer Systems (4)

Prerequisite: COSC 130, COSC 245 recommended. Studies fundamental system concepts such as memory management, input/output, process and thread management, concurrency, and networking.

COSC 362 Computer Graphics (4)

Prerequisite: COSC 220. Introduction to the principles and techniques of computer graphics. This course begins with a bottom-up approach, in which you write C++ code from scratch to create 3D images in two fundamentally different ways. This provides a strong foundation for learning OpenGL, the industry-standard graphics API.

COSC 390/490 Topics: Computer Science (Arr)

Prerequisite: COSC 220. 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 420 Senior Project (4)

Prerequisite: COSC 220. Students independently research an advanced topic in computer science of their choice and then design and implement a project based on their topic. Students are expected to present (orally and in writing) the results of their work.

Economics

ECON 112 Principles of Microeconomics (3)

Introduces the major concepts and applications of microeconomic theory. Examines the economic decision making of individuals and firms and explores market mechanisms within the context of scarce resources. Explores economic rationales for government intervention in the market. (SB)

ECON 113 Principles of Macroeconomics (3)

This course explores the function of the national economy. By discussing unemployment, inflation, economic growth and a variety of measures of economic output, students in the course will begin to understand how economic behavior affects nations in the aggregate. Special attention is placed to the function of both fiscal and monetary policy. (SB)

ECON 281 Research Methods in Economics (4)

Prerequisites: ECON 112, ECON 113 and MATH 215. An in-depth analysis of the role of inferential statistics in economics. Emphasizes model construction and applications of probability to univariate and multivariate hypothesis testing, confidence intervals, and regression analysis; among other topics. (WRT)

ECON 312 Microeconomic Theory (4)

Prerequisites: ECON 112, ECON 113 and MATH 131. 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 313 Macroeconomic Theory (4)

Prerequisites: ECON 281 and MATH 131. 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 321 Environmental Economics (3)

Prerequisite: ECON 112. 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. (GS)

ECON 322 International Trade and Finance (3)

Prerequisite: ECON 113. This course seeks to expose students to both the theoretical and application aspects of international trade and finance. Students learn why countries trade with each other, the benefits associated with trade and the role politics play in hindering free trade, migration and capital flows. Students also learn how cultural ties, geographic proximity, domestic tastes and preferences affect international trade in goods and services. The second half of the course covers topics such as the balance of payments, exchange rates, Monetary Unions and financial globalization. (GPN)

ECON 323 Labor Economics (3)

Prerequisite: ECON 281. 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 324 Monetary Theory and the Financial System (3)

Prerequisite: ECON 113. 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 329 Economic Development (3)

Economic development is a subset of economics concerned with not just economic growth but a concurrent change in the standard of living for masses of people living in lesser developed countries. This involves changes in economic, social, political and institutional mechanisms. This course also considers intergenerational equity and development so future generations are not left worse off in the drive for current economic development. (GS)

ECON 390 Topics (Arr)

Prerequisite: instructor's permission. Selected topics in economics may be offered, depending upon student and staff interest.

ECON 397 Internship (Arr)

Prerequisite: third-year standing. 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 credits total. Does not count toward the economics major. Pass/No Credit basis.

ECON 485 Economics Research Seminar (3)

Prerequisite: ECON 281, ECON 312, ECON 313 and senior standing. 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 281 or another upper-level course. There is an emphasis on close collaboration between student and department faculty. (WRT)

ECON 499 Independent Study (Arr)

Prerequisite: instructor's permission. An independent research experience for senior majors.

Education

EDUC 110 Foundations of Education (3)

Focuses on 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 literacy and research skills. Field experience includes 15 hours of observation at the elementary, middle and high schools. This course is required for admission to the teacher education program.

EDUC 135 Children with Exceptionalities (3)

This general survey course presents an overview of children and adolescents with exceptionalities. The special education process, characteristics of exceptionalities, and treatment options will be examined related to children experiencing learning disabilities, emotional behavior disorders, attention deficit hyperactivity disorder, autism spectrum disorders, physical and other health impairments or disabilities, and areas of giftedness. Field experience includes 10 hours of observation at the elementary, middle and high schools. This course is required for admission to the teacher education program. (SB)

EDUC 181 Developmental Psychology (3)

Focus is on basic theories and concepts related to physical, cognitive, and psychosocial development. While specific emphasis will be placed on children and adolescents, a lifespan perspective will be utilized including discussion and content from pre-natal development through issues associated with death and dying. Field experience includes 10 hours of observation at the elementary, middle and high schools. This course is required for admission to the teacher education program. (SB)

EDUC 210 Methods of Teaching Physical Education, Visual Arts, and Performing Arts in the Elementary Classroom (3)

Prerequisite: admission to the teacher education program. Provides elementary teachers with the opportunity to explore creative expression, integrating the teaching of physical education, health, and wellness as well as the visual and performing arts into the elementary curriculum. Students will be required to examine and apply National Standards for physical education, music education and the visual arts to teaching methods. The theoretical, philosophical, developmental, social, and cultural foundations that support arts integration and cross-curricular applications will be examined.

EDUC 215 Human Relations (3)

Prerequisite: admission to the teacher education program. Examines issues in education related to culture, gender, ethnicity, sexual orientation, socio-economic status and linguistic diversity. Intended to increase knowledge of and sensitivity to the diverse groups that make up the student population in schools today. A semester-long (15 hour) service learning experience provides opportunities to relate knowledgeably, respectfully, and sensitively to students from ethically-diverse backgrounds. (GPC, WRT)

EDUC 220 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. A variety of language modes, including writing, speaking, reading, listening, and non-verbal are considered. Students will also be able to recognize and observe differences between spoken and written language. Particular emphasis is placed on developing communicative competence in school settings.

EDUC 231 Teaching English Language Learners (3)

Prerequisite: admission to the teacher education program. An introduction to the concepts, methods, and practice of teaching English language learners in schools and community. Designed for those who plan to teach English here or abroad.

EDUC 237 Teaching Language Arts and Reading (3)

Prerequisite: admission to the teacher education program. Co-requisite: EDUC 239. 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 of 15 hours is required.

EDUC 239 Psychology in Elementary Education (3)

Prerequisite: admission to the teacher education program. Co-requisite: EDUC 236. 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.

EDUC 262 Collaboration Strategies (3)

Prerequisite: admission to the teacher education program. Strategies for creating and maintaining communication and collaborative relationships with parents, regular classroom teachers, paraprofessionals, support personnel, and others including community resources, involved in meeting the needs of students with disabilities and their families. Skills needed to facilitate differing family systems, dynamics, and cultural expectations will be built on an appreciation of family and community difference. The collaborative and consultative roles of teachers in maximizing the student's integration in the general curriculum, classroom, and school will be included.

EDUC 311 Methods of Health and Physical Education in the Elementary School (2)

Prerequisites: admission to the teacher education program. Provides students with a variety of theoretical, philosophical, and practical principles that are necessary for the development of a sound, professionally grounded, and research-based curriculum for children in grades K-8. The theoretical principles will drive the design, development, and implementation of lessons plans for elementary physical education and health. Students will participate in 20 hours of clinical experiences in area schools in grades K-8. Students will write and implement lessons plans and units, critique methods, and conduct self and peer evaluations of their teaching.

EDUC 312 Methods of Teaching Art in the Elementary School (2)

Prerequisites: admission to the teacher education program. Explores the history and philosophies of art education and the developmental levels of art making. Provides methods for teaching art that challenges children to use higher order thinking skills. Lessons will be prepared and presented to elementary art students. Students will participate in a 20 hour clinical experience in K-8 classrooms. Students will create and teach lessons and self and peer review their teaching.

EDUC 313 Methods of Teaching Music in the Elementary School (3)

Prerequisite: admission to teacher education program. Provides students with a variety of theoretical and practical principles that are necessary for the development of the general music curriculum for K-8th grade students. The emphasis is on the presentation of musical concepts through a variety of approaches with special regard for aspects of child development. Students will participate in 20 hours of clinical experiences at area schools. Students will write lesson plans, use appropriate teaching techniques, apply theoretical principles in the practical setting, and conduct self and peer evaluations of their teaching methods.

EDUC 314 Methods of Teaching Health and Physical Education in the Secondary School (2)

Prerequisites: admission to the teacher education program. Provides students who intend to teach health and PE in grades 5-12 with a variety of theoretical, philosophical, and practical principles that are necessary for the development of a sound, professionally grounded, and research-based curricula and programs. Information covered includes general and specific teaching methods, justifying and designing a physical education program, developing a total program and implementing instructional activities. Students will participate in 20 hours of clinical experience in area schools in grades 5-12. Students write and implement lessons plans and units, critique methods, and conduct self and peer evaluations of their teaching.

EDUC 315 Methods of Teaching Art in the Secondary Schools (2)

Prerequisites: admission to the teacher education program. Methods and strategies for teaching art to secondary students and will include readings and handouts from professional organizations about the field of art education. Students will take away from this class several ways to engage students in visual thinking and strategies to carry out that task with age appropriate materials. Students will participate in class discussions about the readings. Responses may be required in verbal and/or written form. A total of 20 hours of clinical experiences will be completed in the secondary art classroom, including classroom observations of secondary art students followed by experiences where students will prepare and teach lessons to secondary art classes and will self and peer review their teaching.

EDUC 316 Teaching Choral and Instrumental Music in Secondary Schools (2)

Prerequisite: admission to the teacher education program. Provides students with the skills, techniques, and resources needed to teach choral and instrumental music in grades 5-12. Students will consider various perspectives of music philosophy and learn how these views affect teaching methods. Students will learn pedagogical approaches and techniques for individual lessons and small ensemble and large ensemble rehearsal settings. Students will prepare for both the administrative responsibilities and musical responsibilities for directing a secondary school music program. Students will participate in 20 hours of clinical experience in area schools in grades 5-12. Students will write and implement lessons plans and units, critique methods, and conduct self and peer evaluations of their teaching and rehearsal methods.

EDUC 320 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. A field experience of 15 hours in middle school sites is required.

EDUC 322 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 331 Curriculum and Methods for Students with Mild/Moderate Disabilities-Elementary (3)

Pre-requisite: admission to the teacher education program. Co-requisite EDUC 360. Fuses the characteristics of students with diverse learning needs with the demands of education. This methods and strategies course covers multiple approaches for providing curricular and instructional methodologies to educate students with mild disabilities. Ethical considerations are given to contemporary alternatives for meeting the individual needs of students who differ in degree and nature of disability in order to maximize participation and progress in the general education curriculum. Features of effective teaching and features of high-quality educational tools, including the use of assistive technology, provide a structure for exploring curriculum and approaches which maximize a student's potential to learn. Course covers sources of services, organizations, and networks for individuals with mild and moderate disabilities, including career, vocational and transitional support to post-school settings with maximum opportunities for decision making and full participation in the community. A minimum of 30 hours of unique field experience targeting programs that enhance a student's social participation in family, school, and community activities is expected and specific to the elementary endorsement.

EDUC 332 Curriculum and Methods for Students with Mild/Moderate Disabilities-Secondary (3)

Pre-requisite: admission to the teacher education program. Fuses the characteristics of students with diverse learning needs with the demands of education. This methods and strategies course covers multiple approaches for providing curricular and instructional methodologies to educate students with mild disabilities. Ethical considerations are given to contemporary alternatives for meeting the individual needs of students who differ in degree and nature of disability in order to maximize participation and progress in the general education curriculum. Features of effective teaching and features of high-quality educational tools, including the use of assistive technology, provide a structure for exploring curriculum and approaches which maximize a student's potential to learn. Course covers sources of services, organizations, and networks for individuals with mild and moderate disabilities, including career, vocational and transitional support to post-school settings with maximum opportunities for decision making and full participation in the community. A minimum of 30 hours of unique field experience targeting programs that enhance a student's social participation in family, school, and community activities is expected and specific to the elementary endorsement.

EDUC 333 Science and Technology Curriculum and Methods (3)

Prerequisites: EDU 352, EDUC 354, EDUC 374 and admission to the teacher education program. Co-requisite of EDUC 334. 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, a 10 hour field experience and integration of technology will be stressed. Designed for students seeking K-6 licensure.

EDUC 334 Social Studies Curriculum and Methods (3)

Prerequisites: EDUC 352, EDUC 354, EDUC 374. Co-requisite: EDUC 333. 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 10 hour field experience. Designed for students seeking K-6 licensure.

EDUC 340 Learning and Assessment in Secondary Education (3)

Prerequisites: admission to the teacher education program. Co-requisites: EDUC 342 and EDUC 375.. 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 of 20 hours is included.

EDUC 342 Reading in the Content Area–Secondary (1)

Prerequisite: admission to the teacher education program. Co- requisites: EDUC 340 and EDUC 375. 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.

EDUC 344 IEPs, Assessment, and Evaluation (3)

Prerequisite: admission to the teacher education program. Teaches the legal provisions, regulations and guidelines regarding unbiased assessment and use of psychometric instruments and instructional assessment measures of individuals with disabilities. Application of assessment results to individualized program development and management, and the relationship between assessment and placement decisions. Knowledge of any specialized strategies such as functional behavioral assessment and any specialized terminology used in the assessment for various disabling conditions.

EDUC 352 Teaching of Reading (3)

Prerequisites: EUDC 237, EDUC 239 and admission to the teacher education program. Co- requisites: EDUC 354 and EDUC 374. 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 of 10 hours included.

EDUC 354 Teaching of Mathematics (3)

Prerequisites: EDUC 237, EDUC 239 and admission to the teacher education program. Co- requisites: EUDC 352 and EDUC 374. 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 of 10 hours included.

EDUC 360 Instructional Strategies I: Behavior Modification (3)

Prerequisite: admission to the teacher education program; Co-requisite: EDUC 331. Teaches non-aversive approaches to individual behavioral issues, specially designed instructional techniques addressing academic areas, and the evaluation and instruction in skills which maximize the development of cognitive, academic, social, language, and functional abilities for students are addressed.

EDUC 374 Behavior and Classroom Management-Elementary (3)

Prerequisites: EDUC 237, EDUC 239 and admission to the teacher education program. Co-requisites: EDUC 352 and EDUC 354. 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.

EDUC 375 Behavior and Classroom Management-Secondary and K-12 (3)

Prerequisite: admission to the teacher education program. Co-requisites of EDUC 340 and EDUC 342. Focuses on strategies in behavior and classroom management. Addresses classroom management strategies appropriate for all children, including those with special educational needs.

EDUC 383 Field Experience in Special Education (1)

Prerequisite: 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 30 hour field experience may be completed up to three times in different settings. Pass/No Credit basis.

EDUC 384 Field Experience in Secondary Education (1)

Prerequisites: EDUC 340, EDUC 342, EDUC 375 and admission to the teacher education program. Co-requisites: EDUC 450 and EDUC 451. Students will explore classroom observation techniques and basic theories of communication, tutoring, and planning and will participate in a meaningful 30 hour 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 Credit basis.

EDUC 397 Central Teacher Academy Internship (1)

Prerequisite: instructor permission. Participants in the Central Teacher Academy collaborate with a mentor teacher 2-3 hours/week to provide instructional services to students in the Pella community. Participants also engage in a variety of professional development activities sponsored by Central College and their school placements. This course may be repeated up to 5 times.

EDUC 425 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 438 Reading Clinic and Field Experience (6)

Prerequisite: admission to the teach education program. Provides instruction tailored specifically to meet the needs of the individual child. The course includes the study of methods, materials, and assessment for providing meaningful reading instruction for students at all levels of reading ability, with specific attention to students with reading difficulties. Clinical field experience of 45 hours is required.

EDUC 444 Literacy Strategies for Content Area Reading (3)

Prerequisite: admission to the teacher education program. Examines strategies for integrating literacy in the content areas. A 15-hour middle school practicum experience provides opportunities to embed strategies in the classroom curriculum and instruction to enhance students' abilities to learn content knowledge and disciplinary literacy.

EDUC 450 General Secondary Methods (3)

Prerequisites: EDUC 340, EDUC 342, EDUC 375 and admission to the teacher education program. Co-requisites: EDUC 384 and EDUC 451. 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, and reflecting upon teaching through a professional learning community.

EDUC 451 Secondary Special Methods (1)

Prerequisites: EDUC 340, EDUC 342, EDUC 375 and admission to the teacher education program. Co-requisites: EDUC 384 and EDUC 450. 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.

EDUC 453 Advanced Integration of Technology in Education-Elementary (1)

Prerequisite: approval to student teach. Co- requisites: EDUC 460 or EDUC 462 and EDUC 468 and EDUC 485. 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.

EDUC 455 Advanced Integration of Technology in Education-Secondary (1)

Prerequisite: approval to student teach. Co-requisites: EDUC 470 or EDUC 466 and EDUC 476 and EDUC 486. 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.

EDUC 458 Special Methods: Teaching Foreign Language in the Elementary School (1)

Prerequisite: approval to student teach 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 460 Elementary Student Teaching (12)

Prerequisite: approval to student teach. Co- requisites: EDUC 453 and EDUC 485. Students will observe, assist and teach in elementary school classrooms for 16 weeks under the guidance of the classroom teacher, the school principal and the college supervisor. Pass/No Credit basis.

EDUC 461 Elementary Intern Teaching (Arr)

Prerequisite: blocks 1, 2 and 3 and approval to student teach. An experience as a teaching intern with close supervisory assistance from the local school district as well as from the college staff. Pass/No Credit basis.

EDUC 462 Elementary Student Teaching (6)

Prerequisite: approval to student teach. Co- requisites: EDUC 468, EDUC 453 and EDUC 485. Supervised observation and teaching for 8 weeks in regular K-6 classroom. Pass/No Credit basis.

EDUC 464 Elementary Student Teaching in Subject Area (12)

Prerequisite: approval to student teach. Co- requisites: EDUC 485 and EDUC 453. Supervised observation and teaching experience for 16 weeks for students who only seek endorsement in elementary art, music or physical education. Pass/No Credit basis.

EDUC 466 Elementary Student Teaching in Subject Area (6)

Prerequisite: approval to student teach. Co- requisites: EDUC 455, EDUC 476 and EDUC 486. Supervised observation and teaching experience for 8 weeks for students who seek endorsements in both elementary and secondary art, music or physical education. Pass/No Credit basis.

EDUC 468 K-6 Mild and Moderate Disabilities Student Teaching (6)

Prerequisite: approval to student teach. Co-requisites: EDUC 462, EDUC 453, and EDUC 485. Supervised observation and teaching for 8 weeks in K-6 multicategorical resource room for students with mild disabilities. Pass/No Credit basis.

EDUC 469 7-12 Mild and Moderate Disabilities Student Teaching (2 or 6)

Prerequisite: approval to student teach. Supervised observation and teaching in 7-12 special education environment serving students with mild disabilities. Elementary Education majors: Take 2 credits concurrently with EDUC 453, 460, and 485. K-12 Subject Areas: Take 2 credits concurrently with 455, 466, 476, and 486. Secondary Education majors: Take 6 credits concurrently with EDUC 455, 476 and 486. Pass/no credit basis.

EDUC 470 Secondary Student Teaching (12)

Prerequisite: approval to student teach. Co- requisites: EDUC 455 and EDUC 486. Students observe, serve as teaching assistants and take responsibility for teaching in grades 7-12 for 16 weeks under the guidance of their college supervisor, the classroom teacher and the school principal. Pass/No Credit basis.

EDUC 476 Secondary Student Teaching in Subject Area (6)

Prerequisite: approval to student teach. Co- requisites: EDUC 455, EDUC 466 and EDUC 486. Supervised observation and teaching experience for 8 weeks for students who seek endorsement in both elementary and secondary art, music or physical education. Pass/No Credit basis.

EDUC 485 Senior Seminar in Elementary Education (2)

Prerequisite: approval to student teach. Co- requisites: EDUC 453 and EDUC 460 or EDUC 462 and EDUC 468. 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 action research projects at the conclusion of student teaching, and will engage in a variety of planned professional development opportunities. Pass/No Credit basis.

EDUC 486 Professional Development Seminar-Secondary (2)

Prerequisite: approval to student teach. Co- requisites: EDUC 455 and EDUC 470 or EDUC 466 and EDUC 476. 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 action research projects at the conclusion of student teaching, and will engage in a variety of planned professional development opportunities. Pass/No Credit basis.

Engineering

ENGR 111 Engineering Graphics (2)

Prerequisite: MATH 131 and PHYS 111 each with a grade of “C” or better. Introduction to engineering design graphics, 3-dimensional visualization and spatial reasoning. Topics include descriptive geometry, engineering drawing conventions, dimensioning and tolerance specification, parametric and feature-based solid modeling, and assembly design. Emphasizes the use of CAD (Solidworks) as the major graphics and design tool.

ENGR 112 MATLAB for Engineers (2)

Prerequisites: MATH 132 and PHYS 112 each with a grade of “C” or better. Introduction to solving engineering problems using the MATLAB and basic concepts in programming. Students are expected to learn basic operations of MATLAB, various data types and ways to manipulate them, building functions and loops, data input and output, and visualization of data. The course is taught with an emphasis on engineering applications.

ENGR 211 Statics (3)

Prerequisites: MATH 132 and PHYS 111 each with a grade of “C” or better. Principles of force and moment balance are applied to systems in static equilibrium. Students are introduced to the concepts of free-body diagrams and equivalent systems of forces, moments, analysis of simple structures (e.g., trusses, frames), internal forces and stresses.

ENGR 212 Dynamics (3)

Prerequisite: MATH 231 and ENGR 211 each with a grade of “C” or better. Application of classical mechanics to engineering problems of motion and acceleration. Topics include kinematics and kinetics of particles, systems of particles, and rigid bodies.

ENGR 213 Strength of Materials (3)

Prerequisite: MATH 231 and ENGR 211 each with a grade of “C” or better. Stress and deformation analysis of materials and solid structures under a variety of load conditions. Topics include stress and strain definitions, uniaxial loading, linear elasticity, material behaviors, bending of beams, torsion of circular shafts, and thin-walled tubes.

ENGR 214 Engineering Materials with Lab (3)

Prerequisite: CHEM 111 and ENGR 213 each with a grade of “C” or better. Atomic structure, bonding, and crystal structure of solids. Mechanical and physical properties of solids mechanical and physical tests, phase equilibria, and processing of solids. Strengthening methods, principles of material selection, ferrous and non-ferrous metallurgy, polymers, and ceramic composites. Three hours of lab per week.

ENGR 221 Electrical Circuits (3)

Prerequisites: MATH 132 and PHYS 112 each with a grade of “C” or better. The course covers principles of linear circuit analysis and problem solving techniques associated with circuits containing both passive and active components. Students are introduced to DC circuit analysis, AC circuit analysis, and transient circuit analysis.

ENGR 222 Electronic Devices with Lab (4)

Prerequisite: ENGR 221 and PHYS 225 each with a grade of “C” or better. Introduces the mechanisms and principles of operation of major electronic devices: operational amplifiers, diodes, bipolar junction transistors, and field-effect transistors. Covers the terminal characteristics of the devices, volt-ampere curves, small and large signal equivalent circuit models, and basic single stage amplifier configurations. Three hours of lab per week.

ENGR 311 Thermodynamics (3)

Prerequisites: MATH 132 and PHYS 112 each with a grade of “C” or better. An introduction to classical thermodynamics. Fundamental concepts based on zeroth, first and second laws of thermodynamics. State descriptions of pure substances and mixtures. Control volume analysis and conservation principles applied to systems with respect to mass, energy, and entropy with applications to power, refrigeration, chemically reacting and other energy conversion systems.

ENGR 312 Fluid Mechanics (3)

Prerequisite: MATH 231, MATH 250 and ENGR 212 each with a grade of “C” or better. An introductory course in fluid mechanics. Fundamental concepts including continuity, momentum, and energy relations. Control volume analysis and differential formulations. Internal and external flows in laminar and turbulent regimes. One dimensional compressible flows.

ENGR 313 Theory of Machines (3)

Prerequisites: ENGR 212 and ENGR 213 each with a grade of “C” or better. Analysis and synthesis of mechanisms using graphical and analytical techniques. Applications include cams, gears, and linkages such as four-bar, slider-crank, and quick-return mechanisms. Gear train specification and force analysis. Position, velocity, and acceleration analysis and mechanical advantage of a wide variety of linkage systems.

ENGR 314 Heat Transfer with Lab (4)

Prerequisites: ENGR 214, ENGR 311 and ENGR 312 each with a grade of “C” or better. Examines fundamentals of conduction, convection, and thermal radiation energy transfer. Conduction of heat in steady and unsteady state. Principles of boundary layer theory applicable to free and forced convection heat transfer for internal and external flows. Radiation analysis with and without convection and conduction. Three hours of lab per week investigating thermo-fluids phenomena.

ENGR 321 Electromagnetism (3)

Prerequisites: PHYS 215 and PHYS 216 each with a grade of “C” or better. Examines electrostatics, Coulomb’s law, Gauss’s law, polarization, permittivity, electric energy, and capacitance. Magnetostatics, the Lorentz force law, the Biot-Savart law, Ampere’s law, magnetization, permeability and constitutive relations, magnetic energy, and inductance. Introductory Maxwell’s equations. Transmission lines, voltage and current waves, wave impedance, reflection, SWR, and the Smith chart.

ENGR 322 Signals and Systems with Lab (4)

Prerequisites: MATH 250, ENGR 112 and ENGR 222 each with a grade of “C” or better. An introduction to the framework associated with the analysis of linear systems. Continuous and discrete time signals, signal manipulations, signal representation by orthogonal functions, impulse response, convolution, Fourier and Laplace analysis, and frequency response of circuits and systems. Three hours of lab per week.

ENGR 411 Dynamic Systems and Control with Lab (3)

Prerequisites: ENGR 313, ENGR 322 and PHYS 216 each with a grade of “C” or better. Fundamentals of dynamic system analysis and control systems. Topics include: system modeling and representation, system time and frequency response, system stability, open loop and closed loop systems, PID controllers, control design using root-locus, frequency response, and state space analysis. Three hours of lab per week.

ENGR 421 Digital Control Systems (3)

Prerequisites: ENGR 313, ENGR 321 and ENGR 322 each with a grade of “C” or better. Study and analysis of digital control systems. Topics include: system interfacing and data acquisition, study of different types of actuators and sensors, development of circuits for automation, and controller design for digital systems.

ENGR 430 Senior Engineering Elective (3)

Prerequisite or co-requisite: ENGR 485. Study of advanced engineering topics with emphasis on engineering design. May be repeated with different topics.

ENGR 485 Capstone Design I (1)

Prerequisites: ENGR 111, ENGR 313, ENGR 314 and ENGR 322 each with a grade of “C” or better. This is the first course in a two-course sequence in design and gives senior engineering majors an opportunity to complete a major design experience based on the knowledge and skills acquired in engineering course work. Student groups will work on projects with industry mentors to identify a real-world engineering problem and devise its solution incorporating appropriate engineering standards and multiple realistic constraints. Students will analyze the problem and perform design, implementation and evaluation of their solution. Students will work as a team and report their progress and results.

ENGR 486 Capstone Design II (3)

Prerequisites: ENGR 411, ENGR 421, and ENGR 485 each with a grade of “C” or better. Continuation of Capstone Design I. The objective of Capstone Design II is to provide Engineering students with an opportunity to further refine design skills developed during Capstone Design I and conclude the design project started in the fall semester.

English

ENGL 100 Reading and Writing Strategies (2)

Supports and is linked to the readings and types of writing (summary, analysis, synthesis) assigned in LAS-110 Intersections. Involves frequent conferences and is designed for students needing extra practice with college-level reading and writing skills. Does not count toward the English major.

ENGL 101 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. (WRT)

ENGL 160 The Literary Imagination (4)

Prerequisite: limited to first and second-year students. The Literary Imagination introduces students to the critical concepts and vocabulary of literary study by focusing on a specific genre or topic. Designed for potential English majors as well as for all students who enjoy reading literature. Promotes the development of college-level skills in writing and critical thinking. (LP, WRT)

ENGL 208 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 211 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 Keneally. (LP, GPN)

ENGL 212 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. (LP, GPN)

ENGL 213 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. (LP, GS)

ENGL 214 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. (LP)

ENGL 215 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. (LP, GPC)

ENGL 216 LGBTQ+ Literature and Culture (3)

Examines how different genres of literature articulate LGBTQ+ experiences, intimacies, politics, and communities by undertaking close readings of plays, poetry, and fiction from the 16th century to the present. We will question how those texts stage sexuality in relation to gender, race, health, activism, economics, and kinship, aiming to understand how queer sexualities are produced both through and against these other categories of experience. (LP, GPC)

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 230 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 236 American Literature I: Pre-Columbian-1890 (3)

Studies major figures and movements of American literature from the origins through Realism. Major periods covered include European contact with indigenous North American communities, Puritan New England, the Early Republic, and the American Renaissance. (LP)

ENGL 237 American Literature II: 1890-Present (3)

Studies four major movements in American literature: Realism, Naturalism, Modernism, and Postmodernism. Includes attention to feminism, multiculturalism, and sexuality. (LP)

ENGL 240 The Personal Essay (4)

Instruction, practice and experimentation in the art of the personal essay. Readings include both contemporary and historical examples of the form. (ART, WRT)

ENGL 241 Short Story Writing (4)

A workshop course exploring the art and craft of short story writing. Readings include stories by contemporary fiction writers. (ART, WRT)

ENGL 242 Poetry Writing (3)

A workshop course focusing on both formal and free styles of poetry writing. Readings include poetry and essays by contemporary poets. (ART)

ENGL 243 Writing Oral Histories (4)

Blends narrative techniques with fact-driven reporting. Explores both short articles and feature writing, hones interviewing and research skills, and emphasizes the importance of both note taking and revision in the writing process. Discussions emphasize selections from literary journalism and longform radio storytelling. Requires participation in service-learning to help students integrate course content with experience. (ART, WRT)

ENGL 244 Professional Writing (3)

Theory, principles and processes of effective communication typically encountered in business and the professions. Practice in many areas of professional communication, including letter, memo, and email correspondence; short and formal reports, and formal presentations. Best for students who have had an internship or are preparing for one. (WRT)

ENGL 249 Reading 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. (LP)

ENGL 251 British Literature I: 800-1785 (3)

Studies major figures from the Beowulf poet to the eighteenth century. The major emphasis is on authors such as Chaucer, Spenser, Donne, Milton and Swift. In addition, students develop skills in reading, interpreting and criticizing literature, using secondary materials, writing critical papers and contributing to class discussions. (LP)

ENGL 252 British Literature II: 1785- present (3)

Studies major figures from the Romantic period to the present. Emphasis is on authors such as Wordsworth, Keats, Tennyson, Hardy, Yeats, Joyce, and Woolf. In addition, students develop skills in reading, interpreting and criticizing literature, using secondary materials, writing critical papers and contributing to class discussions. (LP)

ENGL 260 Irish Literature (3)

Studies the major literary artists in Ireland. Authors studied include Swift, Wilde, Shaw, Yeats, Joyce, Beckett, Heaney, Boland and McGuckian. (LP, GPN)

ENGL 270 Illness and Health in Literature (4)

Emphasizes the interdependence of storytelling and science and raises questions about the human condition by exploring the roles of literature and the creative arts within medicine. Readings will include fiction, memoir, and drama. (LP, WRT)

ENGL 318 Literature of Peace and Social Justice (4)

Prerequisites: Third-year standing. Introduces students to some of the key ideas and theories from the interdisciplinary field of Peace Studies and applies those theories to the study of literary texts. Explores such issues as nonviolence, civil disobedience, human rights, economic and environmental injustice through the lens of literature and poses the question: what can literary texts, literary language and ways of thinking, contribute to our understanding of peace and social justice? (LP, GS, WRT)

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 331 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 335 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. (SB)

ENGL 342 Advanced Poetry Writing (3)

Prerequisite: ENGL 242 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. (ART)

ENGL 343 Travel Writing (4)

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. (ART, WRT)

ENGL 344 Writing for Non-Profit Organizations (4)

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. (WRT)

ENGL 346 Discovering Shakespeare (3)

Studies the major comedies, histories and tragedies, with some background readings in Shakespeare's England as it affected the theatre. (LP)

ENGL 361 World Literature I (4)

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. (LP, WRT)

ENGL 362 World Literature II (4)

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. (LP, GPN, WRT)

ENGL 374 Studies in 19th Century Literature (4)

Prerequisite: Two 200-level literature courses or instructor permission. Studies major works by British Romantic and Victorian authors such as Wordsworth, Byron, P. B. and Mary Shelley, Charlotte and Emily Bronte, George Eliot and Hardy. (WRT)

ENGL 375 Studies in 20th Century Literature (4)

Prerequisite: Two 200-level literature courses or instructor permission. 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. (WRT)

ENGL 392 ESL Practicum (Arr)

Prerequisite: 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 397 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 425 Seminar in Literary Studies (4)

Prerequisites: Third-year standing and at least one 300-level literature course. A specialized investigation into a specific and limited topic or major author, such as Ben Jonson and Christopher Marlowe; Willa Cather; Thomas Pynchon; Virginia Woolf and Toni Morrison; or Ecocriticism. Each seminar will focus on the student's critical and research abilities to produce a major analytic project.

ENGL 497 Internship in Writing (Arr)

Prerequisite: third-year 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 Credit basis.

ENGL 199, 299, 399, 499 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.

Entrepreneurship

ENTR 100 Exploring Entrepreneurship (1)

Prerequisite: participation in the Business Horizons Program. Explores the aspects of a free enterprise system through a business simulation process of creating a new business venture. This includes developing a product, crafting a mission and vision statement, branding the company, and producing business and marketing plans. Students will also execute a marketing plan by producing promotional materials and prepare an investor pitch presentation. Offered pass/no credit only.

ENTR 215 The Entrepreneurial Mindset (3)

This course is designed to inspire and engage participants in the fundamental aspects of an entrepreneurial mindset and the unlimited opportunities it can provide. The overall objective is to empower learners through entrepreneurial thinking and immerse them in entrepreneurial experiences that will enable them to develop entrepreneurial skills.

ENTR 315 Advanced Entrepreneurship: Startup Semester (3)

Prerequisite: ENTR 215. This course provides students with a toolkit of techniques, skills and resources that will empower them to accept the entrepreneurial challenge of starting and operating a new business venture, all in a semester's time. Students will learn the fundamentals of business models/customer development and then get out of the building to interact with customers, vendors, partners and suppliers while developing a sustainable business.

ENTR 384 Field Experience in Entrepreneurship (1-3)

Prerequisite: ENTR 215. Co-requisite: ENTR 315. The primary purpose of this course is to provide structure/organization for a group of activities/projects/experiences by students completing the requirements of the Entrepreneurship Program. The focus of this experiential course is on new venture creation (startup phase) in a live environment. Projects may include a new student led venture or working closely with entrepreneurs on specific projects leading towards a launch of a new venture. Pass/No Credit basis.

Environmental Studies

ENVS 120 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. (NS, GS)

ENVS 125 Geology and the Environment with Lab (3)

Introduction to the elementary principles of physical geology, including identification of minerals and the major rock types. Examines applications of geological resources and the associated environmental impact as well as a review of the processes forming them through tectonic activity and geomorphic agents. Reviews events over geologic time and the geologic history of Iowa. Includes a 3 hour lab and weekend field trips. (NS, GS)

ENVS 240 Agriculture and Sustainability (3)

Modern agriculture has been essential in feeding the world's growing population. But is it sustainable? In this course, we will engage in a holistic examination of agriculture, covering the history of our current system, examine trends in sustainable agriculture and investigate connections between agriculture, the environment, our current socio-economic systems and global health. (GS, WRT)

ENVS 380 Environmental Studies Seminar (2)

Prerequisite: ENVS 120 and third-year standing or instructor's permission. Concurrent enrollment with GENR 215 is recommended. Students research and examine environmental issues with an interdisciplinary perspective, developing a collaborative research proposal for a project the following year. Specific topics will depend on the interests of the students and instructor. Students will be required to present and communicate effectively on chosen topics. (WRT)

ENVS 480 Environmental Studies Senior Seminar (1)

Prerequisite: ENVS 380 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).

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 111 Essentials of Human Anatomy & Physiology with Lab (4)

This is a single semester course introducing the morphology (structure and function) of the human body designed to prepare students for the Exercise Science and Athletic Training major curriculum. The course includes study of all eleven systems of the body. Students will meet for lecture three times per week and a two hour laboratory once a week. The laboratory will consist of learning from laboratory manual, anatomical model and digital A&P tools. (NS)

EXSC 120 Theory and Practical Application of Health Related Fitness (3)

Examines the scientific theory and practical application of the health related components of physical fitness (i.e. cardiorespiratory endurance, muscular endurance, muscular strength, flexibility, body composition). Topics will include recent trends in group fitness programming and practical application of fitness to different populations and exercise settings. (Does not count toward the EXSC major.)

EXSC 121 Theory and Practical Application of Skill Related Fitness (3)

Examines the scientific theory and practical application of the skill related components of physical fitness (i.e. agility, coordination, balance, reaction time, and speed). Topics will include recent trends and a multi-component approaches to teaching and coaching weight room technique and various other skills in strength and conditioning. (Does not count toward the EXSC major.)

EXSC 149 Foundations of Health and Exercise Science (3)

An introduction to the discipline of kinesiology, as well as the scientific application and professional practice within the sub-disciplines of motor behavior, exercise physiology, biomechanics, sport/exercise psychology, etc.

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 Heart Association Heartsaver CPR certification. Additional lab fee applies. See College Costs section of current Catalog.

EXSC 175 Fundamentals and Theory of Sport Skills (3)

An introduction to the latest information from exercise science that addresses teaching/coaching sport skills. Emphasis will be placed on knowledge of history, rules, general methods of play and strategy, as well as teaching methodology for each sport presented. Possible course topics include baseball, track & field, volleyball, soccer and football.

EXSC 212 Adapted Physical Education (3)

Prerequisite: second-year standing. Considers developmental, remedial, and corrective programs in physical education; emphasizes adaptation to special needs beyond the regular physical education program. Requires participation in service learning to help students integrate course content with experience.

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 215 Introduction to Angling (3)

Prerequisite: instructor's permission. This course introduces the basic skills, theory and equipment necessary to begin the development of lifelong angling skills. Awareness of resource sustainability, environmental responsibility, water chemistry testing, stream/pond assessment and biological monitoring will be introduced. Biological data collection, analysis and submission to statewide database will be required. Other topics include fish characteristics (Biology), habitat design and building, knots, others determined by the class. A current Iowa fishing license is required. There is a lab fee. (GS)

EXSC 220 Personal Wellness (3)

Prerequisite: second-year standing. Principles, concepts and evidence-based research related to understanding the concept of wellness and recognize the long term benefits of maintaining a high level of wellness in today's world. Emphasis on individual decision making, prevention strategies and personal conduct developed is emphasized. *Note: Students who received credit for EXSC 160 may not also receive credit for EXSC 220.*

EXSC 230 Exercise Psychology (3)

Prerequisites: PSYC 122 recommended. Analysis of psychological theories for predicting health based exercise behavior. The assessment of psychological and psychobiological responses to exercise will be distinguished for intervention use. Students will develop and predict psychological adherence interventions for increasing exercise participation.

EXSC 254 Human Anatomy and Kinesiology with Lab (4)

Prerequisite: EXSC 111. Examines the structure and function of the skeletal, muscular, and articular systems of the body. Includes one 75 minute lab per week.

EXSC 257 Fitness Assessment and Exercise Prescription (4)

Prerequisite: EXSC 111 and second-year standing. Assessment of physiological fitness levels and development of individualized exercise prescriptions.

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, Consumer, and Global Health (3)

Reviews current and complex health issues within the perspective of global sustainability. Consumer, community and global health concepts, theories and models will be examined at the local, state, national and international levels. (GS)

EXSC 283 Field Experience: Exercise Science (Arr)

Prerequisite: second-year standing and instructor's permission. A practical experience under the direct supervision of a certified individual.

EXSC 293 Practicum in Strength and Conditioning I (3)

Prerequisite: 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 Credit basis.

EXSC 313 Wellness Coaching (3)

Prerequisite: EXSC 220 and EXSC 257. Designed to focus on the emerging field of health and wellness coaching. Students will increase their knowledge of and integrate basic coaching skills for health professionals. A client-centered process and evidence-based approach will be presented to better understand integrative health coaching.

EXSC 334 Sports Nutrition (4)

Prerequisite: EXSC 111 or BIOL 131, and third-year standing. An evaluation and application of human nutrition; interpretation of sports nutrition concepts, analysis of key nutrient functions, deficiencies, sources of and utilization of nutrients, theory of popular dietary plans and efficacy (Mediterranean, DASH, Paleo, Gluten Free). The mastery of the physiology as it relates to digestion and metabolism will also be examined. Assessment of nutrition principles to design specific dietary plans for athletes, chronic diseases, and weight management will be rated. Evaluation of sports nutrition principles to formulate an enhanced sports performance, including ergogenic aids will be discussed. Modification of optimal nutrition will be discussed and measured as the foundation for physical performance (aerobic & resistance). The interrelationships among intake, expenditure, performance, training, and maintenance of optimal health will be justified through current literature. Students will examine ingredients on labels (food & supplement) and judge media recommendations in nutrition.

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. Students who have completed EXSC-242W (Wales) may not also enroll in or receive credit for EXSC-342. Additional lab fee applies. See College Costs section of current Catalog.

EXSC 358 Principles of Personal Training (3)

Prerequisite: EXSC 257. Explains individualized fitness programs, business and legal issues for personal trainers and develops personality and communication attributes of trainers.

EXSC 361 Biomechanics with Lab (4)

Prerequisite: EXSC 254 and third-year 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. Includes one 75 minute lab per week.

EXSC 372 Principles and Theories of Strength and Conditioning (4)

Prerequisite: EXSC 254 and 257. 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 379 Epidemiology of Physical Activity (3)

Prerequisite: EXSC 257 and third-year standing. Examines the relationship between an individual's physical activity and public health policy in terms of cost and effectiveness of combating various diseases and chronic conditions. Various methods for epidemiological assessment will be discussed as well as current research regarding physical activity, chronic disease risk factors, and the basis for public health policies. Recommendations for proactive physical activity following the American College of Sports Medicine's "Exercise is Medicine" model will be highlighted.

EXSC 380 Worksite Program Planning and Evaluation (3)

Prerequisite: EXSC 257 and third-year standing. 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. Requires participation in service learning to help students integrate course content with experience.

EXSC 393 Practicum in Strength and Conditioning II (3)

Prerequisite: 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 Credit basis.

EXSC 432 Fitness After Fifty (3)

Prerequisite: EXSC 257. Presents the information needed to develop safe and effective physical activity programs for older adults. Requires participation in service learning to help students integrate course content with experience.

EXSC 460 Exercise Physiology (3)

Prerequisite: EXSC 254, EXSC 257, and third-year standing. Examines principles of physiology involved with both the acute and chronic effects of exercise.

EXSC 461 Exercise Physiology Lab (2)

Prerequisite or corequisite: EXSC 460. A lab-oriented class that helps put exercise physiology theories into practice.

EXSC 462 Motor Learning (3)

Prerequisite: third-year standing. Examines principles of skill acquisition related to motor skill performance; includes teaching and coaching methods.

EXSC 493 Practicum in Strength and Conditioning III (3)

Prerequisite: 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 Credit basis.

EXSC 397/497 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 Credit basis.

Fine Arts

FA 210 Introduction to the Fine Arts (4)

This class will expose students to the fine arts: art, music and theatre. Experiential opportunities exist for students to attend performances, gallery events and museum visits. The class will explore the links between historical events and the intellectual, artistic, philosophical and religious movements associated with specific works. (ART)

FA 226 Global Cinema (3)

This course invites students to compare films from different cultural traditions and to learn the language of cinema. The course will explore the ways in which film-makers across the globe and throughout the century have borrowed tools and techniques from each other to create new cross-cultural experiences. Cinema from Europa, the Middle East, Africa, and Asia will be discussed. The course is taught in English with German writing assignments and discussion sections. (ART, GPC). Taught as GENR 190 in the fall of 2018. Students may not also receive credit for GERM 326 and FREN 326.

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 121 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 122 Beginning French II (4)

Prerequisite: FREN 121. A continuation of the introductory course. Offers further development of skills in all areas and study of contemporary France.

FREN 221 Intermediate French I (4)

Prerequisite: FREN 122, placement. A continuation of FREN 122. 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. (GPN)

FREN 222 Intermediate French II (4)

Prerequisite: FREN 221 or instructor's permission. A continuation of FREN 221. 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. (GPN)

FREN 321 Culture and Conversation (4)

Prerequisite: FREN 222, placement, or instructor's permission. Focuses on exploring French and Francophone culture thematically through the French language. (GPN)

FREN 323 Exploring French and Francophone Literary Expression (4)

Prerequisite: FREN 321, FREN 322 or instructor's permission. An introductory survey of French and Francophone works, authors, terminology, genre and literary history. (LP, GPN)

FREN 324 Exploring French and Francophone Media (4)

Prerequisite: FREN 222, placement, or instructor's permission. Explores the French and Francophone world through contemporary media in French. Emphasis on speaking and listening to authentic French. (GPN)

FREN 326 Global Cinema (4)

Prerequisite: FREN 321 or FREN 322 or instructor's permission. This course invites students to compare films from different cultural traditions and to learn the language of cinema. Students will learn how film-makers from around the globe have given voice to people and cultures rarely seen in Western film. The course will also explore the ways in which film-makers across the globe and throughout the century have borrowed tools and techniques from each other to create new cross-cultural experiences. Cinema from Europa, the Middle East, Africa, and Asia will be discussed. The course is taught in English with weekly discussion section in French. (ART, GPC). Taught as FREN 390 in the fall of 2018. Students may not also receive credit for FA 226 and GERM 326.

FREN 330 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 362 Acting French (4)

Prerequisite: FREN 321 or FREN 322 or instructor's permission. An introduction to French theatre designed to strengthen reading skills and oral command of the language through the study and performance of short French plays from the classical to the contemporary period. Plays and performance will provide a window to French culture while expanding the students' knowledge of French art and history. (LP, GPN)

FREN 489 Senior Capstone in French (3)

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 490 Topics in Francophone Literatures and Civilization (3)

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. (LP, GPC)

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 497 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 Credit basis.

FREN 499 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.

General College Credit (non-departmental courses)

GENR 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.

GENR 105 Introduction to College Success II (1)

Prerequisite: GENR 104 and participation in the SSS program. A continuation of GENR-104 where students will develop self-awareness and lifelong learning skills. Examines career exploration, personality preferences, learning styles and emotional intelligence. This course meets in the second half of the semester.

GENR 106 Intro to Central: Transfers (1)

This course provides transfer students with an introduction to Central College. Class discussion will address acclimation to Central's community, engagement in activities and how to succeed academically.

GENR 214 Mock Trial (1-2)

Students will 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. The course focuses on the development of critical thinking and oral communication skills. Offered for two credits in the fall and one credit in the spring. Unlimited repeats allowed. Pass/No Credit basis..

GENR 215 Research Strategies (1)

Prerequisite: second-year 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.

GENR 225 Pre-Departure Seminar (.5)

This course is designed to complement each student's study abroad experience and is a mandatory part of your study abroad. It will prepare you for what you are about to encounter abroad and will explore how culture affects the way we perceive the world around us and examine, more closely, specific culture(s) of your program country. Pass/No Credit basis.

GENR 225 Re-entry Seminar (.5)

This course is designed to complement the study abroad experience and is mandatory when you return to campus. It will assist you in processing your experience and help you find productive ways to share your experience with others back at home. Pass/No Credit basis.

GENR 292 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 Credit basis.

GENR 283 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 Credit. May be repeated.

Geography

GEOG 110 Introduction to Geography (3)

As an introduction to the broad field of Geography, this course introduces students to a survey of geographic concepts ranging from economy, politics, plants, urbanization, culture, and landforms to industry, population, and agriculture. In this course, students will also learn about the tools Geographers use to study the world, including maps. The course is therefore designed for students who are new to geography, and it will attempt to engage their broad interests through the lens of geographical thinking and analysis. (SB, GS)

GEOG 210 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. (SB, GS)

GEOG 215 Introduction to International Studies (3)

Introduction to the complexities and diversity of political, economic, social and cultural interactions of nations and people. Provides an expanded understanding of the world and cultures, through exploration of global and regional issues (GPN)

GEOG 225 Geography of Sub-Saharan Africa (3)

The African continent remains a mystery to many outside of that region. Students will examine the diverse experiences of the people who live there with particular attention paid to the environmental and cultural geography south of the Sahara. Students will explore various challenges and opportunities that people in this region face such as food insecurity, rural/urban conflicts, environmental management, gender empowerment, foreign aid, debt, and engagement with both the United States and China. (SB, GS, GPN)

GEOG 237 Physical Geography: Weather and Climate with Lab (4)

Explores how the earth's natural systems (weather, climate, and hydrological processes) interrelate, work and interact to shape and influence earth's natural regions, including soils and the biosphere. One three-hour lab per week. (NS, GS)

GEOG 238 Physical Geography: Geomorphology with Lab (4)

Explores how the earth's natural processes (fluvial, aeolian, karst, glacial and coastal processes) work and interact to shape and influence earth's environments. One three-hour lab per week. (NS)

GEOG 320 Principles of GIS with Lab (3)

Prerequisite: second-year standing. 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, data entry, analysis and display, as well as creating and managing GIS projects. Also covers some of the more advanced functionality of geoprocessing through Spatial and Network Analyst. One three hour lab per week.

GEOG 325 Planning for Sustainable Communities (4)

Prerequisite: second-year standing. Explores the theory and practice of sustainable community planning and examines ways that geographers and urban and regional planners engage in creating more environmentally, socially and economically sustainable communities at multiple scales, from the local community to larger regional, national and global communities. We will consider urban and surrounding rural communities, exploring how they are interconnected in multiple ways, requiring integrated community and spatial planning. (GS)

GEOG 420 Advanced GIS with Lab (2)

Prerequisite GEOG 320. This course builds on introductory principles of GIS, examining where and how GIS is used in advanced spatial analyses. Topics covered in the course include: spatial literacy, 3-D representations in GIS, online GIS services, spatial statistic, as well as a variety of modeling techniques in GIS. Students will be expected to develop their own GIS project, as well as complete weekly laboratory assignments.

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 121 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 122 Beginning German II (4)

Prerequisite: GERM 121 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 221 Intermediate German Language and Culture I (4)

Prerequisite: GERM 122 or equivalent. Students will practice reading, writing, speaking and hearing German while exploring a variety of cultural topics. Differentiated classroom instruction will allow students of a variety of levels to work together. Students will also attend conversation and culture lab with one of our language assistants from Germany or Austria. Taught concurrently with GERM 321. Students may not receive credit for GERM 221 and GERM 321 in the same semester. Course is conducted in German. (GPN)

GERM 222 Intermediate German Language and Culture II (4)

Prerequisite: GERM 221 or equivalent. Students will practice reading, writing, speaking and hearing German while exploring a variety of cultural topics. Differentiated classroom instruction will allow students of a variety of levels to work together. Students will also attend conversation and culture lab with one of our language assistants from Germany or Austria. Taught concurrently with GERM 322; students may not receive credit for GERM 322 and GERM 222 in the same semester. Course is conducted in German. (GPN)

GERM 240 The German Imagination (3)

Taught in English; also offered as GERM 340. By examining literary and non-literary readings, film, and popular culture, students will be introduced to the development of a particularly German cultural and intellectual tradition. Students who wish to count this course toward the German Studies major or minor or receive 300-level credit must register for GERM 340, which has a prerequisite of GERM 321, and will be assigned alternative course work and readings in German. (LP)

GERM 321 Advanced German Language and Culture I (4)

Prerequisite: GERM 222 or equivalent. Students will practice reading, writing, speaking and hearing German while exploring a variety of cultural topics. Differentiated classroom instruction will allow students of a variety of levels to work together. Students will also attend conversation and culture lab with one of our language assistants from Germany or Austria. Taught concurrently with GERM 221; students may not receive credit for GERM 221 and GERM 321 in the same semester. Course is conducted in German. (GPN)

GERM 322 Advanced German Language and Culture II (4)

Prerequisite: GERM 321 or equivalent. Students will practice reading, writing, speaking and hearing German while exploring a variety of cultural topics. Differentiated classroom instruction will allow students of a variety of levels to work together. Students will also attend conversation and culture lab with one of our language assistants from Germany or Austria. Taught concurrently with GERM 222; students may not receive credit for GERM 222 and GERM 322 in the same semester. Course is conducted in German. (GPN)

GERM 326 Global Cinema (4)

Prerequisite: GERM 321 or GERM 322 or instructor's permission. This course invites students to compare films from different cultural traditions and to learn the language of cinema. Students will learn how film-makers from around the globe have given voice to people and cultures rarely seen in Western film. The course will also explore the ways in which film-makers across the globe and throughout the century have borrowed tools and techniques from each other to create new cross-cultural experiences. Cinema from Europa, the Middle East, Africa, and Asia will be discussed. The course is taught in English with German writing assignments and discussion sections. (ART, GPC). Taught as GERM 390 in the fall of 2018. Students may not also receive credit for FA 226 and FREN 326.

GERM 330 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 331 Survey of German Culture and Literature (3)

Prerequisite: GERM 322 or instructor's permission. Using readings, audio, and video, students will encounter major literary and historical works, key cultural moments, and varied forms of literary expression from the German-speaking world. The course also aims to assist students as they improve their level of expression in written and spoken German. Taught in German. (LP, GPN)

GERM 340 The German Imagination (3)

Prerequisite: GERM 321. Taught in English; also offered as GERM 240. By examining literary and non-literary readings, film, and popular culture, students will be introduced to the development of a particularly German cultural and intellectual tradition. Students who wish to count this course toward the German Studies major or minor must register for GERM 340 and will be assigned alternative course work and readings in German. (LP)

GERM 362 Germany and the Environment (3)

This course will examine Germany's relationship to the environment in light of its particular political, cultural and business context. Taught in English, with appropriate assignments for students wishing to count this course toward a German Studies major. (GS, GPN)

GERM 390 Topics in German (3)

Offered as needed to meet student needs and interests when these cannot be accommodated by regular offerings. May be taught in English or German, depending on student population, 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. (GPN)

GERM 489 Senior Capstone (1)

Prerequisite: Completion of study abroad or instructor's permission. Intended to be taken concurrently with another German Studies course. Students will compile a portfolio including materials for professional use and additional written assignments in German, which demonstrate the students' critical reflection upon their experiences in Pella and abroad.

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 Credit basis.

GERM 497 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 Credit basis.

GERM 499 Independent Study-German (Arr)

Open to qualified students with departmental approval.

History

HIST 125 World History to 1500 (3)

This course examines the similarities and differences between multiple cultural centers in the Americas, Africa, and Eurasia starting in the Neolithic. Topics will include politics, religion, art, migration, and intercultural interactions. The course concludes with the start of the European "Age of Discovery" in the 15th century. (HP, GPN)

HIST 126 World History Since 1500 (3)

Starting in 1500, we will investigate the places and events that have helped shape the world in which we live. In particular, we will focus on how groups of people meet and interact. We will look at the connections between Europe, Africa, East Asia, and the New World. (HP, GPN)

HIST 130 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. (HP)

HIST 131 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. (HP)

HIST 132 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. (HP)

HIST 210 History of Modern Europe (4)

This course explores the history of Europe from the end of the Middle Ages until today. The continuous shift between fragmentation and relative unity in economic, political, and social spheres will underpin the class. (HP, GPN)

HIST 212 World War and the Shaping of the 20th Century (4)

A detailed examination of World War I and World War II. The causes, combat, and outcomes of both wars will be discussed. The ultimate goal is to investigate how these two wars shaped the twentieth century. (HP)

HIST 213 The USSR (4)

This course provides a broad overview of the USSR from its creation to its dissolution. We begin by looking at the origins of the Soviet Union in Tsarist Russia and explore the Union itself (politics, economics, and society). Finally, we examine the fallout after the 1991 collapse including Vladimir Putin and the Chechen Wars. (HP)

HIST 215 The Balkans: Between East and West (4)

This course provides an overview of the history of the Balkan Peninsula (including the modern Bosnia-Herzegovina, Croatia, Serbia, Bulgaria, Romania, and Macedonia among others). In particular, we will look at the region as a meeting point of cultures: Greek and Latin, Christian and Muslim, capitalist and communist. (HP, GPN)

HIST 216 Germany and Central Europe (4)

Bounded by Germany in the west, Poland in the east, the Baltic Sea in the north, and to the northern Balkans in the south, Central Europe is a geographical space as well as a persistent idea. This course will explore the history of this region from antiquity to the present day focusing on conflict and accommodation. (HP, GPN)

HIST 217 Contemporary Europe (4)

This course will examine the history of Europe from 1890 until the beginning of the twenty-first century. We will spend a significant amount of time examining how modern European history is one of conflict (World Wars I and II, the Balkan Wars of the 1990s) and division (the Cold War) but also one of increasing unity (the European Union) and the recent current trends towards separatism. Formerly numbered POLS-223. Students with credit for POLS-223 may not also receive credit for HIST-217. (HP, GPN)

HIST 220 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. (HP, GPC, WRT)

HIST 221 Biblical Archaeology (3)

Examines the history, geography and culture of the Bible lands through the study of archaeology. Introduces students to types of material remains and examines the significance of these physical objects for an understanding of the Bible. Although students are introduced to a range of scientific methods that are used by the archaeologist, as a Humanities course the examination of specific methods and discoveries are related to larger patterns of textual, historical and human interest. The course is typically taught with a focus on either the Old Testament or New Testament periods. (HP, GPN)

HIST 230 Foundations of American Nationalism (4)

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. (HP)

HIST 231 The Emerging United States: 1787-1877 (4)

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. (HP)

HIST 232 The Origins of Modern America: 1877-1945 (4)

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. (HP)

HIST 233 The Fifties and Sixties: U.S. History: 1945-1975 (4)

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. (HP)

HIST 234 Recent United States (4)

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. (HP)

HIST 235 The Immigrant Experience (3)

An overview of patterns and issues in immigration history 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. (GPC)

HIST 237 American Environmental History (4)

Environmental history studies the changing relationships between human beings and the natural world through time. This course examines American history through the lenses of conservation, environmentalism, geography, philosophy, public policy, and technology. Consequently, American history looks very different when seen in environmental context. (HP, GS)

HIST 250 Latin American Civilization (4)

A survey of Latin American history, culture and politics from 1500 to the present, with a focus on Mexico and Peru – the two most diverse countries in Spanish-speaking America. Students read extensively in primary and secondary sources on these two countries, and also conduct research a topic of individual interest in Latin America. (HP, WRT, GPC)

HIST 271 History of Modern China (4)

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. (HP, GPN)

HIST 275 History of Modern Japan (4)

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. (HP, GS, GPN)

HIST 276 Early East Asian Civilization (4)

Explores the historical foundations of Asian civilization from the earliest times to the 15th century with special emphasis on China and Japan. Students who have received credit for HIST 170 may not enroll in or receive credit for HIST 276. (HP, GPN)

HIST 277 Modern East Asian Civilization (4)

Explores the development of Asian civilization from the 15th century to the present with special emphasis on comparing the histories of China and Japan. Students who have received credit for HIST 171 may not enroll in or receive credit for HIST 277. (HP, GPN)

HIST 280 Modern African Civilization (4)

An interdisciplinary survey of cultures and life in modern Africa. Emphasis on sub-Saharan African history, art, political economy, women, development and society. Explores sustainability principles across cultures, historical time periods, and societies. (HP, GS, GPN)

HIST 310 Studies in World History (4)

Prerequisite: second-year standing. 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. (HP)

HIST 330 Studies in American History (4)

Prerequisite: second-year standing. 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. (HP)

HIST 485 Historiography Seminar (4)

Prerequisite: instructor's permission. Examines the nature of historical inquiry and methodology over time. Includes discussion of recent issues in the field of History.

HIST 486 History Research Seminar (4)

Prerequisite: instructor's permission. This course is designed to help students learn how to do sophisticated historical research, read and interpret primary and secondary source materials, and write a formal research paper in a scholarly manner. (WRT)

HIST 497 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 Credit basis.

HIST 499 Independent Study-History (Arr)

Prerequisite: instructor's permission.

Honors

HONR 191 Honors Seminar (1)

Prerequisite: honors-eligible status. A seminar designed for honors-eligible students to explore a specific topic or issue. May be repeated for credit.

HONR 391 (1)

Prerequisite: honors-eligible status. A seminar designed for honors-eligible students to explore a specific topic or issue. May be repeated for credit.

Liberal Arts Seminar

LAS 110 Intersections (4)

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. Students are introduced to college-level skills of reading, writing, speaking, listening, critical thinking and information literacy.

LAS 410 Liberal Arts Seminar (3)

Prerequisite: senior standing or instructor’s permission. Explores a question or problem of significance using interdisciplinary approaches. Students will demonstrate their ability to engage in independent inquiry and persuasively communicate results. The course will show how knowledge, integrated and alive, informs our professional, civic and personal lives.

Approved Liberal Arts Seminar topics include:

- Americans in Paris (3)
- Behind Bars: Revealing Chocolate’s Bitter Sweetness (3) (GS)
- Black Lives Matter, #metoo, and Classical Literature (4) (GPC)
- Bob Dylan, American Bard (4)
- The Bowling League: An Inquiry into Disability in America (3)
- Buddhist Traditions of Tibet and the Himalayas (4) (GPN)
- The Burden of Modern Disease: The Social, Cultural, and Economic Costs of Non-Communicable Disease (3) (GS)
- Citizenry: The Evolution of the Vote and Memory (4)
- Climate Change: North and South (4) (GS)
- Communicating Participation: Political Engagement through Media (4)
- Constructing and Pursuing Happiness: Lessons from Science & Art (3)
- Data Visualization (3)
- Disease and Health Through Space and Time (3)
- The “Disney-fication” of Identities, Representations, and Development (4)
- Ethnobotany: How Plants Save the World (3) (GS, GPC)
- Exploring Ecotones of Literature, Science, and History (3) (GS)
- Faith and the Search for Meaning (4) (GPN)
- Food and Justice (3) (GS)
- Food for Thought (4) (GS)
- The Future of the Past: Memory and Amnesia in Cultural Culture (3) (GPN)
- Human Rights, Politics, and Culture (4) (GPC or GPN)
- Interdisciplinary Perspectives on Inequality and Social Change (GS)
- Latinos in U.S. Popular Culture (3)
- Let’s Talk Trash (4)
- Masks: Art and Culture (4)
- Modern Board Game Studies: Immersion & Design (4)
- Myth and the Sacred Journey (4)
- Natural Hazards and the Human Dimension (4) (GS)
- Peace, Justice and Social Change (4) (GS)
- Problematics of Faith and Meaning (3) (GPN)
- Science Fiction and Empire (3)
- Sport in America (3)
- Sustainability Around the World (4) (GS and GPC or GPN)
- War and Society (3)
- World History through a Glass (4)
- Where Science and Fiction Collide (3)
- The Wire: Individuals and Institutions in Urban America (4)

Mathematics

MATH 102 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. (MR)

MATH 105 Introduction to Statistics (4)

Prerequisite: Placement at the MATH 109 level or lower. An introduction to the basic statistical methods for collecting, organizing, displaying, and analyzing data, along with the basic statistical procedures for inference. No prior knowledge of statistics is assumed. Does not count toward the major. Students may not receive credit for both MATH 105 and MATH 215. Students completing MATH 131 or higher should take MATH 215. (MR)

MATH 109 Pre-Calculus (3)

Prerequisite: College Algebra 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. (MR)

MATH 115 Mathematical Concepts I (3)

Prerequisite: EDUC 110, EDUC-135 or EDUC-181 and intended Elementary Education major. This course studies mathematical content needed for teaching elementary mathematics: problem solving, sets, functions, ratios, proportions, the properties of and operations on whole numbers, integers, fractions, decimals, rational and irrational numbers. Does not count toward the mathematics major. (MR)

MATH 116 Mathematical Concepts II (3)

Prerequisite: MATH-115. This course continues the introduction of the mathematical content needed for teaching elementary mathematics: algebraic thinking, data analysis, statistics, probability, measurement, geometry. Does not count toward the mathematics major. (MR)

MATH 131 Calculus I (4)

Prerequisite: usually, 4 years of college-bound mathematics or MATH 109. An introduction to differential calculus of functions of one variable. Covers concepts, mechanics, and applications of the derivative with an introduction to integral calculus. (MR)

MATH 132 Calculus II (4)

Prerequisite: MATH 131. 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. (MR)

MATH 215 Applied Statistics (4)

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. (MR)

MATH 221 Foundations of Mathematics (3)

Prerequisite: MATH 131. This course introduces the fundamental mathematical methods and objects: introductory logic, methods of proof, sets, functions, relations and infinities. (MR)

MATH 231 Multivariable Calculus (3)

Prerequisite: MATH 132. This course introduces the principles, methods and applications of calculus in three or more dimensions. (MR)

MATH 240 Linear Algebra (4)

Prerequisite: MATH 131. This course introduces matrices, vector spaces and linear mappings. (MR)

MATH 250 Differential Equations (3)

Prerequisite: MATH 132. Students learn to solve ordinary differential equations including systems. Students are introduced to numerical techniques and methods of qualitative analysis.

MATH 260 Mathematical Questions from the Classroom (1)

Corequisite: EDUC 451 (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 310 Geometry (3)

Prerequisite: MATH 221. Introduces students to the foundations of geometry. Studies geometric transformations, axiomatic systems for finite geometries and Euclidean geometry, synthetic geometry, hyperbolic geometry, and other geometries.

MATH 330 Mathematical Modeling (3)

Prerequisite: MATH 132 and COSC 110. 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 341 Probability (3)

Prerequisite: MATH 132. This course introduces an axiomatic approach to probability, sample spaces and the study of distribution functions.

MATH 342 Statistics (3)

Prerequisite: MATH 341 (MATH 231 recommended). This course is about the study of distribution functions, estimation techniques and hypothesis testing.

MATH 370 Numerical Analysis (3)

Prerequisite: MATH 132 and COSC 110. A treatment of numerical methods for solving problems such as rootfinding, approximation and interpolation, differentiation and integration, matrix operations, and differential equations.

MATH 386 Mathematics Seminar (3)

Prerequisite: Third-year standing and a declared mathematics or mathematics/secondary education emphasis major. Students read, write, present, and listen to presentations by peers on mathematical topics of the instructor's choice. (WRI)

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 397 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 Credit basis.

MATH 421 Abstract Algebra I (3)

Prerequisite: MATH 221 (MATH 240 recommended). This course introduces abstract mathematical systems, groups, rings and fields with an emphasis on precise definitions and rigorous proofs.

MATH 431 Real Analysis I (3)

Prerequisite: MATH 221. This course is a theoretical study of functions of a real variable with emphasis on precise definitions and rigorous proofs.

Music

MUS 105 Music Fundamentals (3)

Designed for students with little or no music theory background. An introduction to music reading skills, including sight-singing, basic keyboard skills, and the structure of music. Does not count toward the Music or Music Education major or minor. (ART)

MUS 111 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. (ART)

MUS 114 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. (ART, GPN)

MUS 120 Theory and Aural Skills I (4)

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. (ART)

MUS 125 Theory and Aural Skills II (4)

Prerequisite: MUS 120. A continuation of MUS 120.

MUS 150 Introduction to Music Education (1)

Prerequisite: Intended for first year students interested in music education. An introductory course to music education for prospective music education majors. Students will learn the historical and philosophical underpinnings to music education in America. Students will become acquainted with methods, tools, language, and literature in the music education profession.

MUS 211 History of Western Music: Antiquity to 1750 (3)

The development of Western music from pre-Christian antiquity to 1750, with emphasis on the Middle Ages, Renaissance, Baroque, and pre-Classical periods. Emphasis is also placed on listening to music for form and style. Completion of MUS 125 or equivalent musical preparation is strongly advised before taking this course. (ART, WRT)

MUS 212 History of Western Music: Pre-Classical to 1940 (3)

The development of Western music from the pre-Classical era to 1940, with emphasis is on the Classical, Romantic, Late Romantic, and early Modern eras. Emphasis is also placed on listening to music for form and style. Completion of MUS 125 or equivalent musical preparation is strongly advised before taking this course. (ART, WRT)

MUS 215 Piano for Proficiency I (1)

Develops sight-reading, score-reading, improvisation, accompanying, and harmonization skills necessary for passing the piano proficiency exam that is required of all music and music education majors. Students with keyboard experience may take a placement test to exempt themselves from taking the Piano for Proficiency courses.

MUS 216 Piano for Proficiency II (1)

Develops sight-reading, score-reading, improvisation, accompanying, and harmonization skills necessary for passing the piano proficiency exam that is required of all music and music education majors. Students with keyboard experience may take a placement test to exempt themselves from taking the Piano for Proficiency courses.

MUS 220 Theory and Aural Skills III (4)

Prerequisite: MUS 125. A continuation of MUS 125. Students must concurrently enroll in MUS 215 Piano for Proficiency I unless exempted by proficiency exam.

MUS 228 Diction for Singers (2)

Focuses on the correct song pronunciation of the four major vocal solo and choral classic languages (English, French, German, and Italian). The course incorporates the International Phonetic Alphabet. It is required for all vocal music education majors and encouraged for all vocal performers and conductors.

MUS 231 Conducting (2)

Prerequisite: MUS 125. A study of fundamental conducting techniques, both choral and instrumental.

MUS 235 Theory and Aural Skills IV (4)

Prerequisite: MUS 220. 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. Students must concurrently enroll in MUS 216 Piano for Proficiency II unless exempted by proficiency exam.

MUS 236 Show Choir and Jazz Choir Techniques (2)

Prerequisite: MUS 125 and admission to teacher education. Co- or prerequisite of MUS 231. Students will learn the fundamentals in terms of directing and managing both a show choir and a jazz choir. Implementation and observation of both kinds of ensembles will help to further facilitate the learning throughout the semester. Vocal music education students need to be well versed and trained to direct many different kinds of ensembles, including show choir and a jazz choir.

MUS 240 Music Technology (1)

An introduction to computer software available for the music idiom.

MUS 249 Instrumental Methods: Percussion (1)

Prerequisite: MUS 120 and MUS 125 or instructor permission. A basic methods course for prospective instrumental music teachers. Students learn to play the instruments in the percussion family and basic techniques for teaching the instruments. Other information relating to effective teaching (e.g., history of the instruments, selection of instruments, repertoire) is also addressed. Offered spring of odd-numbered years.

MUS 250 Instrumental Methods: Woodwinds (1)

Prerequisite: MUS 120 and MUS 125 or instructor permission. A basic methods course for prospective instrumental music teachers. Students learn to play the instruments in the woodwind family and basic techniques for teaching the instruments. Other information relating to effective teaching (e.g., history of the instruments, selection of instruments, repertoire) is also addressed. Offered fall of odd-numbered years.

MUS 251 Instrumental Methods: Brass (1)

Prerequisite: MUS 120 and MUS 125 or instructor permission. A basic methods course for prospective instrumental music teachers. Students learn to play the instruments in the brass family and basic techniques for teaching the instruments. Other information relating to effective teaching (e.g., history of the instruments, selection of instruments, repertoire) is also addressed. Offered spring of even-numbered years.

MUS 252 Instrumental Methods: Strings (1)

Prerequisite: MUS 120 and MUS 125 or instructor permission. A basic methods course for prospective instrumental music teachers. Students learn to play the instruments in the string family and basic techniques for teaching the instruments. Other information relating to effective teaching (e.g., history of the instruments, selection of instruments, repertoire) is also addressed. Offered fall of even-numbered years..

MUS 255 Voice for Instrumental Music Majors (1)

Prerequisites: MUS 125 and admission to the Teacher Education Program. Provides instrumental music education majors with basic knowledge for working with school-age singers. Structure and function of the larynx and breathing apparatus; developmental factors affecting school age singers; techniques for teaching good vocal production; guidelines for choosing repertoire at each point in the developmental spectrum. In class singing and role playing are integral parts of the course.

MUS 256 Instrumental Methods for Vocalists (2)

Prerequisite: MUS 125. Provides choral music education majors an introduction to wind, percussion, and string methods and pedagogy. Students will learn from experts in the field and explore real-world situations by partnering with K-12 instrumental music educators throughout the course. In-class playing and ensemble participation will be woven into the curriculum.

MUS 313 Music History: 1940-Present (3)

Prerequisite: MUS 212. The development of Western music from 1940- present, with an emphasis on Modernist and Postmodernist approaches to musical composition. This course also provides the opportunity for upper-level music students to research and present on selected topics from the literature of genres such as orchestral, chamber, symphonic, concerto, art song, opera and oratorio. Completion of MUS 125 or equivalent musical preparation is strongly advised before taking this course.

MUS 332 Advanced Choral Conducting and Methods (4)

Prerequisite MUS 231. Examines the artistic nature of choral conducting and the methods for leading an effective choral program. Emphasis is given to the variety of choral repertoire and stylistic considerations.

MUS 333 Advanced Instrumental Conducting and Methods (4)

Prerequisite: MUS 231. Examines the artistic nature of instrumental conducting and the methods for leading an effective band or orchestra programs. Emphasis is given to repertoire and stylistic considerations.

MUS 334 Marching Band Techniques (1)

Prerequisite: MUS 125; Pre- or Co-requisite: MUS 231. Studies the materials, organization and methods for charting marching band shows for school programs. Offered fall of even-numbered years.

MUS 335 Jazz Band Techniques (1)

Prerequisite: MUS 125; Pre- or Co-requisite: MUS 231. Studies the materials, organization and methods for teaching improvisation to musicians in jazz programs. Offered fall of even-numbered years.

MUS 341 Voice Pedagogy (3)

Prerequisite: two semesters of MUSL 120, MUSL 220 or MUSL 320. An introduction to the teaching of singing. Topics 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, each class member will give lessons to two beginning voice students with supervision and feedback. Offered spring semester of even-numbered years.

MUS 397/497 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 Credit basis. Offered on request.

MUS 499 Independent Study (Arr)

Prerequisite: instructor's permission. Research in approved topics. May be repeated on demand. Offered on request.

Music (groups/ensembles)

MUSG 220 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. (ART)

MUSG 222 A Cappella Choir (1)

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. (ART)

MUSG 223 Symphonic Wind Ensemble (1)

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. (ART)

MUSG 224 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. (ART)

MUSG 225 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 226 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. (ART- Steel Drum I, Steel Drum II, and Percussion only)

MUSG 227 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. (ART)

MUSG 229 Treble Clef Choir (.5)

Students will actively engage in choral music through sound technique, serious study of the varied repertoire and the development of artistic expression. Students will gain a stronger appreciation for the choral art and its relationship to the larger society. All students who can sing in the treble clef range are eligible for participation in the Treble Clef Choir. No audition is required. The ensemble will perform varied repertoire throughout the spring semester of the academic year. (ART)

Music Lessons (private instruction)

MUSL 1xx Applied Study (1)

Beginning-level individual instruction in a performance area, 30 minutes per week for 13 weeks. At the instructor's discretion, small-group instruction may substitute. Attendance at Student Showcase Recitals (maximum of 2 per semester) is required; the instructor may also require participation in periodic studio classes.

MUSL 2xx Applied Study (1-2)

Prerequisite: instructor permission. Intermediate-level individual instruction in a performance area, 30 minutes (for 1 SH) or 60 minutes (for 2 SH) per week for 13 weeks. Students should enter with the ability to perform intermediate-level solo repertoire in the performance area. For voice study, music-reading ability sufficient to learn songs independently is also expected. Attendance at Student Showcase Recitals (maximum of 2 per semester) is required; the instructor may also require participation in periodic studio classes.

MUSL 3xx Applied Lessons (1-2)

Prerequisite: instructor permission, declared music major, and at least 2 semesters of study at the 100- and/or 200-level. Advanced-level individual instruction in a performance area, 30 minutes (for 1 SH) or 60 minutes (for 2 SH) per week for 13 weeks. Attendance at Student Showcase Recitals (maximum of 2 per semester) is required; the instructor may also require participation in periodic studio classes.

Natural Science

NASC 110 Concepts in Natural Science with Lab (4)

Uses the processes of science to explore fundamental topics of physical, life and earth/space sciences and to examine the interactions among these sciences. Includes several laboratory exercises and demonstrations throughout the course. This course is intended for students seeking an elementary teaching license. (NS)

Philosophy

PHIL 120 Introduction to Philosophy (3)

An historical and topical introduction to the discipline of philosophy. Students will be exposed to life's most fundamental questions such as: what can we know? what is the nature of reality? how should we live? how should we be governed? Through an exposure to both primary and secondary sources, this course will examine how some of the key philosophical figures have addressed such questions and will lead us to self-examination of our own assumptions. (LP)

PHIL 121 Ethics (3)

The primary focus of this course will be on answers to the question, Are assessments of moral right and wrong any more than expressions of personal or group preferences (and if so, what more)? Applications of such theories (Greek, Christian, rationalist, evolutionary, etc.) will serve to illustrate their meaning. The course promotes college-level skills in writing and analytical reading. (LP)

PHIL 125 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. (MR)

PHIL 127 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. (LP, WRT)

PHIL 221 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. (LP, WRT)

PHIL 222 Modern Thought (3)

In this course, we will trace the history of philosophy from Descartes to Kant (c.1600-1800), focusing on key texts that address the sources and limits of human knowledge. In particular, we will study works associated with the three central movements of modern epistemology: continental rationalism, British empiricism, and German idealism. (LP, WRT)

PHIL 223 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. (LP)

PHIL 240 Political Philosophy (3)

A historical survey of Western political thinkers from Plato to the present, with emphasis on changing cultural/historical contexts. (LP)

PHIL 244 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 260 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 261 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 264 Theory of Knowledge (3)

This course is a philosophical investigation of the nature of knowledge and its various forms. Is real knowledge about the world possible? Can we know things in themselves or only how they appear to us? How does everyday knowledge differ from scientific or philosophical knowledge? Other topics include skepticism, relativism, and the relationship between knowledge and religious belief. (LP, WRT)

PHIL 280 Plato (3)

This course will focus on Plato's philosophic and political thought, by discussing dialogues such as the *Gorgias* and the *Symposium*. (LP, WRT)

PHIL 321 Reading in Classical Thought (4)

This is a Readings add-on for PHIL 221 Classical Thought, which will offer additional readings in the subject of Classical Philosophy and one additional classroom hour per week. Readings will change year-to-year. Students cannot receive credit for both PHIL 221 and PHIL 321. (LP, WRT)

PHIL 323 Readings in Contemporary Philosophy (4)

Offered jointly with PHIL 223 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 223 and PHIL 323. (LP)

PHIL 360 Readings in Metaphysics (4)

Offered jointly with PHIL 260 and covering the same topics but with some separate assignments, sessions and expectations for advanced discussion and research. Students cannot receive credit for both 260 and 360.

PHIL 361 Readings in Moral Philosophy (4)

Offered jointly with PHIL 261 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 261 and 361.

PHIL 364 Readings in Theory and Knowledge (4)

Offered jointly with PHIL 264 and covering the same topics but with some separate assignments, sessions and expectations for advanced discussion and research. Students cannot receive credit for both 264 and 364. (WRT)

PHIL 380 Readings in Plato (4)

Offered jointly with PHIL 280 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 280 and PHIL 380. (LP)

PHIL 390 Topics in Philosophy (Arr)

Varying topics determined by the interests of students and the staff. May be repeated for credit.

PHIL 397/497 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 Credit basis.

PHIL 399 Independent Study (Arr)

Physics

PHYS 101 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. (NS)

PHYS 102 Introductory Physics II with Lab (4)

Prerequisite: PHYS 101. A continuation of PHYS 101. One three-hour lab per week. (NS)

PHYS 106 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. (NS)

PHYS 111 General Physics I with Lab (5)

Pre- or co-requisite: MATH 131. 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. (NS)

PHYS 112 General Physics II with Lab (5)

Prerequisite: PHYS 111; Pre- or co-requisite: MATH 132. A continuation of PHYS 111. Designed for physics, chemistry, and engineering majors. Required for advanced physics courses. One three-hour lab per week. (NS)

PHYS 204 Energy and Environment (3)

Prerequisite: second-year 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. (NS, GS)

PHYS 211 Analog Electronics with Lab (3)

Prerequisite: PHYS 112. 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 215 Theoretical and Experimental Methods (2)

Prerequisites: PHYS 112 and MATH 231. Introduces students to various theoretical and experimental methods used in engineering and physics. Topics include theory of fields, curvilinear coordinates, tensors, spectral analysis, errors in experiments, and their propagation.

PHYS 216 Waves (2)

Prerequisite: PHYS 112. Physical concepts and mathematical relations describing wave phenomena in a variety of physical systems. Topics include oscillation in mechanical and electrical systems, mechanical and electromagnetic waves, and optics.

PHYS 225 Modern Physics I (3)

Prerequisite: PHYS 112. Special theory of relativity, quantization of electromagnetic waves and photons, wave properties of matter, structure of the atom, and introductory quantum mechanics. (NS)

PHYS 322 Optics (3)

Prerequisite: PHYS 112. Pre- or co-requisite: MATH 231 or instructor's permission. Light as an electromagnetic wave, propagation of light, geometrical optics, polarization, interference, diffraction, and their applications.

PHYS 324 Statistical Thermodynamics (3)

Prerequisite: PHYS 112. Pre- or co-requisite: MATH 231 or instructor permission. First and second laws of thermodynamics, thermodynamic potentials, and an introduction to kinetic theory and statistical mechanics.

PHYS 325 Modern Physics II (3)

Prerequisite: PHYS 225. Continuation of PHYS 225. 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 326 Analytical Mechanics (4)

Prerequisite: PHYS 112. Pre- or co-requisite: MATH 231 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 331 Advanced Laboratories (2)

Pre- or co-requisites: PHYS 225 and third-year 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 412 Quantum Mechanics (4)

Prerequisite: PHYS 225. Pre- or co-requisite: MATH 231 or instructor permission. The Schrodinger equation, hydrogen atom, simple harmonic oscillator, expectation values, eigenvalues, eigenfunctions, operators.

PHYS 421 Electricity and Magnetism II (3)

Prerequisite: ENGR 321. A continuation of ENGR 321. 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 397/497 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 Credit basis.

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 110 Introduction to American Politics (4)

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. (SB)

POLS 140 Introduction to International Politics (4)

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. (SB, GPN, GS)

POLS 211 American Political Parties (4)

An examination of the American political party system and its many changes over the past 200+ years. Discussion will focus on the history of the party system, the role that political parties play in American democracy, and ways that the parties have adapted to the technological and legal challenges of the 21st century. (HP)

POLS 212 Congress (4)

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 213 Courts (4)

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 214 The Presidency (4)

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 215 The Politics of State and Local Governments (4)

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.

POLS 216 Political Behavior: Political Participation, Elections, and Media (4)

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 222 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. (HP, GPN)

POLS 225 Modern Latin America (4)

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. (HP, GPC, WRT)

POLS 231 The Middle East in World Affairs (4)

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. (HP, GPN, WRT)

POLS 233 American Environmental Politics and Policy (4)

Investigates the political and public policy dimensions of major American environmental issues and problems from 1945 to the present. Identifies and analyzes major U.S. environmental actors, including industry groups, environmental NGOs, as well as major governmental actors and policy bodies in the environmental arena at the national state, and local levels. (GS)

POLS 235 The U.S. in World Affairs (4)

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. (HP)

POLS 241 International Political Economy (4)

An introduction to the politics of international economic relations focused on finance, trade, development, security, migration, illicit markets and the key institutions involved in those areas. In addition to weekly assignments involving critical reading, viewing, writing and discussion, students complete a semester-long case study analysis on some topic of personal interest. The project involves evaluation of reliable, relevant primary and secondary sources and the application of a formal case study analysis framework. Final products of the project include a formal written report and oral presentation. (SB, GPN, WRT)

POLS 242 Global Sustainability (4)

Prerequisite: second-year standing or instructor permission. 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. (SB, GS)

POLS 250 Methods of Political Research (4)

Prerequisite: MATH 105 and 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 316 Presidential Elections (4)

Prerequisite: Second-year standing, third-year recommended. An examination of presidential elections. Discussion will be directed toward electoral processes, how voters make decisions in elections, and strategic campaigning by candidates, political parties, and other political actors. Course will be offered every fourth fall during a presidential election year. (SB)

POLS 326 Political Violence and Terrorism (4)

An inquiry into the causes of political violence and terrorism focused on theories of human nature and institutions. Causal explanations are evaluated against particular cases involving different types of political violence in different historical, cultural, and political contexts. In addition to weekly assignments requiring critical reading, viewing, writing and discussion, students complete a semester-long Event Structure Analysis (ESA) on some particular case of political violence. The ESA project involves evaluation of reliable, relevant primary and secondary sources and the application of a formal social sequence analysis framework. Final products of the project include a formal written report and oral presentation. (SB, GPC, WRT)

POLS 344 International Law and Human Rights (4)

A prior course in Political Science; POLS-140 strongly recommended. Examines major international legal principles and organizations in a changing global system. Special emphasis on evolution of human rights norms in a changing international order. Emphasis on the United Nations system, particularly peace and security and sustainable development functions. Examines the growing role of non-governmental organizations (NGOs in world politics. (SB, WRT)

POLS 355 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.

POLS 361 American Political Philosophy (4)

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. (LP)

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 397 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 credits may count toward a major or minor in political science. Pass/No Credit basis.

POLS 397 State and Local Environmental Project Review Internship (3)

Three semester hour internship with a state or local governmental entity, or project development consultant, working on an environmental document for an infrastructure project. Students will experience firsthand how state and local governments, along with private partners, implement and work within federal environmental policy during the project development process. This internship will be graded A-F. (GS)

POLS 399 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 489 Research Seminar (4)

Prerequisite: POLS 250, SOC 350 or ANTH 366. A senior capstone experience primarily for Political Science majors. Students work closely with the instructor in conceiving, executing, and communicating an original empirical research or civic engagement project on some topic or issue of personal interest. The final products include a long written project report and oral presentation to satisfy the political science department’s major communication skills requirement.

Psychology

PSYC 122 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. (SB)

PSYC 175 Applied Social Psychology (3)

Prerequisite: PSYC 122. This class is intended for advanced first-year students. Humans are deeply social. This class will explore the ways we people understand and interact with one another in everyday life. Why do we obey people in authority? What are the roots of prejudice and how can we overcome them? Why do other people sometimes bring out our worst and other times bring out our best? We will address these questions and more as we apply social psychology to our everyday lives and hopefully learn something about what it means to be a person in the presence of other people.

PSYC 220 Psychological Investigations (4)

Prerequisite: PSYC 122 and second-year standing. 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. (WRT)

PSYC 225 Psychology of Personality (3)

Prerequisite: PSYC-122 and second-year standing, or instructor's permission. The scientific study of the origins and effects of individual differences in thought, emotion, and behavior. Topics covered include current topics in personality research, theoretical perspectives, and assessment techniques.

PSYC 231 Psychopathology (3)

Prerequisite: second-year standing and PSYC 122. Surveys psychological disorders and abnormal behaviors including symptoms, causes and treatments. Integrates biological, psychological, and social influences. Introduces diagnostic criteria for major disorders.

PSYC 240 Psychology of Gender (3)

Prerequisite: PSYC 122 and second-year standing, or instructor's permission. This course explores psychological research and theory related to gender, with a particular focus on the ways in which gender influences men's and women's daily lives. Attention is given to the biological, cognitive, and psychosocial changes in sex and gender across the life-span. Topics include the effects of parents, peers, school, work, and health as they shape gender identity. Throughout the course, we will examine how gender can be studied using empirical research methods and emphasize the importance of identity, sexual orientation, culture, and social class in understanding gender. (GPC)

PSYC 250 Stress and Health (3)

Prerequisite: second-year standing and PSYC 122 or instructor's permission. Examines how biological, psychological, and social factors interact with and affect physical and emotional wellbeing. Special emphasis will be placed on the role that stress plays in health. Students will learn about these complex relationships and how to apply this knowledge to real-world situations, including their own health behaviors.

PSYC 277 Clinical Neuroscience (3)

Prerequisite: PSYC 122 and second-year standing. Clinical neuroscience focuses on the neurological underpinnings of psychological disorders and diseases of the central and peripheral nervous system. The course will explore a wide variety of topics including addiction, autism spectrum disorders, borderline and antisocial personality disorders, obsessive compulsive disorder, schizophrenia, dementia, affective disorders, neurodegenerative diseases, and neuropsychological assessment. Students may not receive credit for both PSYC 277 and PSYC 477.

PSYC 278 Forensic Neuroscience (3)

Prerequisite: PSYC 122 and second-year standing. Advances in psychology and neuroscience techniques and imaging have required the judicial system to reconsider the role that behavioral science plays in courtroom decision-making. In Forensic Neuroscience, students will learn the applications of psychology and neuroscience to the judicial system while interpreting evidence in past criminal trials or mock courtroom settings. The course will explore a wide variety of topics including the neurological underpinnings of eye witness memory, jury selection, battered woman syndrome, the insanity plea, competency to stand trial and the criminal mind. Students may not receive credit for both PSYC 278 and PSYC 478.

PSYC 279 Social, Affective, and Developmental Neuroscience (3)

Prerequisite: PSYC 122 and second-year standing. Social, affective and developmental neuroscience focuses on the neurological underpinnings of emotion, social interaction and development. The course will explore a wide variety of topics including the neuroscience of empathy, religious and political affiliation, love, language development and developmental disorders such as autism and dyslexia. Students may not receive credit for both PSYC 279 and PSYC 479.

PSYC 330 Multicultural Issues in Psychology (3)

Prerequisite: PSYC 122 and third-year standing, or instructor's permission. This course will introduce and familiarize students with the concept of multicultural issues in the field of psychology. The concept of "culture" will be viewed broadly, not only encompassing issues of race and ethnicity, but also gender, age, sexual orientation, religion, socio-economic status, immigration status, personal interests and attitudes as well as ability and disability. The course will examine various issues through a multicultural lens including education, communication, research, testing, prejudice, identity development, health, and acculturation. (GPC)

PSYC 334 Social Psychology (3)

Prerequisite: third-year standing or instructor's permission and PSYC 122. 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 335 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. (MR)

PSYC 336 SPSS for Psychological Research (1)

Corequisite: concurrent enrollment in PSYC 480. 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 Credit basis.

PSYC 340 Cognitive Psychology (3)

Prerequisite: third-year standing or instructor's permission and PSYC 122; PSYC 220 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 348 Experimental Psychology (4)

Prerequisite: third-year standing or instructor's permission, PSYC 220 and previous or concurrent enrollment in PSYC 335, 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 382 Child & Adolescent Development (3)

Prerequisite: third-year standing or instructor's permission and PSYC 122. 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. A student cannot receive credit for both EDUC 270 and PSYC 382.

PSYC 384 Adult Development & Aging (3)

Prerequisite: third-year standing or instructor's permission and PSYC 122. 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 and grieving, and social policy. Requires participation in service-learning to help students integrate course content with experience.

PSYC 385 Principles of Counseling (3)

Prerequisite: third-year standing and PSYC 225 or 231 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 397 Internship: Psychology (Arr)

Prerequisite: third-year 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 credits in the 35 credit minimum. Students considering an internship should confer with the department to receive consultation and guidelines. Pass/No Credit basis.

PSYC 457 History and Systems (4)

Prerequisite: PSYC 122 and third-year standing or instructor 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 468 Social Cognition (4)

Prerequisite: Third- or fourth-year standing and at least two 200-level psychology courses or instructor permission. Explore social-cognitive processing, or thinking in social contexts. Topics include stereotyping, memory, social judgment, and using knowledge about others in social interactions. Students will explore these topics, read original empirical research and theoretical papers, and consider research methods used to investigate these phenomena. Additionally, we will examine how social cognition has been influenced by cognitive, social, and developmental psychology.

PSYC 477 Clinical Neuroscience (3)

Prerequisite: PSYC 122 and senior standing. Clinical neuroscience focuses on the neurological underpinnings of psychological disorders and diseases of the central and peripheral nervous system. The course will explore a wide variety of topics including addiction, autism spectrum disorders, borderline and antisocial personality disorders, obsessive compulsive disorder, schizophrenia, dementia, affective disorders, neurodegenerative diseases, and neuropsychological assessment. Students may not receive credit for both PSYC 277 and PSYC 477.

PSYC 478 Forensic Neuroscience (3)

Prerequisite: PSYC 122 and senior standing. Advances in psychology and neuroscience techniques and imaging have required the judicial system to reconsider the role that behavioral science plays in courtroom decision-making. In Forensic Neuroscience, students will learn the applications of psychology and neuroscience to the judicial system while interpreting evidence in past criminal trials or mock courtroom settings. The course will explore a wide variety of topics including the neurological underpinnings of eye witness memory, jury selection, battered woman syndrome, the insanity plea, competency to stand trial and the criminal mind. Students may not receive credit for both PSYC 278 and PSYC 478.

PSYC 479 Social, Affective, and Developmental Neuroscience (3)

Prerequisite: PSYC 122 and senior standing. Social, affective and developmental neuroscience focuses on the neurological underpinnings of emotion, social interaction and development. The course will explore a wide variety of topics including the neuroscience of empathy, religious and political affiliation, love, language development and developmental disorders such as autism and dyslexia. Students may not receive credit for both PSYC 279 and PSYC 479.

PSYC 480 Advanced Research in Psychology (4)

Prerequisite: PSYC 335, PSYC 348 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. (WRT)

PSYC 486 Psychological Tests and Assessment (4)

Prerequisite: Senior standing, PSYC 335 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 199, PSYC 299, PSYC 399, PSYC 499 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 110 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, WRT)

REL 111 Introduction to the New Testament (3)

A study of the New Testament within its literary, cultural and canonical context in order to understand its central theological teachings. (REL)

REL 150 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)

REL 210 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, WRT)

REL 211 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, WRT)

REL 216 Jesus and the Gospels (3)

Introduces students to the 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)

REL 217 Revelation and the General Epistles (3)

Studies the Book of Revelation and what are called either the General Letters or Catholic Epistles (Hebrews, James, 1 and 2 Peter, and Jude). Students will examine the historical contexts, literary features, and theological themes of these early writings. Additionally, they will explore the application of these themes within the American and Global contexts. (REL, WRT)

REL 218 Pauline Epistles (3)

Examines the epistles of the apostle Paul in their historical and religious contexts. Among the topics treated are: the "historical" Paul, to the extent that this can be constructed from the available sources, the structure and theology of the Pauline and deuterio-Pauline epistles, the influence and image of Paul in early Christianity, and contemporary controversies and issues in the study of Paul. (REL)

REL 220 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, WRT)

REL 222 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)

REL 230 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, GPC)

REL 233 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)

REL 235 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, GPN, WRT)

REL 236 Islam in North Africa and Spain (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, GPN, WRT)

REL 238 Taoism and Confucianism (4)

This course examines ideas and practices of Taoism and Confucianism. It explores how these two schools of thought have sought out meaning in their respective understandings of ultimate reality and how the latter translate to everyday living. Students will gain knowledge in historical, religious-philosophical, and cultural contexts of Taoism and Confucianism. Students will speak and write competently about theological and ethical problematics of the two traditions. The course will seek to foster students' appreciation for the oriental schools of thought. (REL, GPN, WRT)

REL 250 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. (REL)

REL 252 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. (REL)

REL 253 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. (REL)

REL 254 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. (REL)

REL 270 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)

REL 272 Modern Christian Thought (3)

Studies leading trends in modern Christian thought using a comparative approach. (REL)

REL 274 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, GPN)

REL 276 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)

REL 285 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 286 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 310 Readings in The Prophets (4)

Prerequisite: instructor's permission. Offered jointly with REL 210 and covering the same topics, but with some separate assignments, sessions and expectations for advanced discussion and research. Students cannot receive credit for both REL 210 and REL 310. (REL, WRT)

REL 311 Readings in The Writings (4)

Prerequisite: instructor's permission. Offered jointly with REL 211 and covering the same topics, but with some separate assignments, sessions and expectations for advanced discussion and research. Students cannot receive credit for both REL 211 and REL 311. (REL, WRT)

REL 316 Readings in Jesus and the Gospels (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 REL 216 and REL 316. (REL)

REL 317 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 330 Readings in Asian Religions (4)

Prerequisite: instructor's permission. Offered jointly with REL 230 and covering the same topics, but with some separate assignments, sessions and expectations for advanced discussion and research. Students cannot receive credit for both REL 230 and REL 330.

REL 335 Readings in Islam (4)

Prerequisite: instructor's permission. Offered jointly with REL 235 and covering the same topics, but with some separate assignments, sessions and expectations for advanced discussion and research. Students cannot receive credit for both REL 235 and REL 335. (REL, GPN, WRT)

REL 336 Readings in Islam in North Africa and Spain (4)

Prerequisite: Instructor permission. Offered jointly with REL 236 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, GPN, WRT)

REL 370 Readings in Christianity and Culture (4)

Prerequisite: instructor's permission. Offered jointly with REL 270 and covering the same topics but with some separate assignments, sessions and expectations for advanced discussion and research. Students cannot receive credit for both REL 270 and REL 370. (REL)

REL 372 Readings in Modern Christian Thought (4)

Prerequisite: instructor's permission. Offered jointly with REL 272 and covering the same topics, but with some separate assignments, sessions and expectations for advanced discussion and research. Students cannot receive credit for both REL 272 and REL 372. (REL)

REL 374 Readings in World Christianity (4)

Prerequisite: instructor's permission. Offered jointly with REL 274 and covering the same topics but with some separate assignments, sessions and expectations for advanced discussion and research. Students cannot receive credit for both REL 274 and REL 374. (REL, GPN, WRT)

REL 376 Readings in Christian Ethics (4)

Prerequisite: instructor's permission. Offered jointly with REL 276 and covering the same topics but with some separate assignments, sessions and expectations for advanced discussion and research. Students cannot receive credit for both REL 276 and REL 376. (REL)

REL 390 Topics in Religious Studies (Arr)

Varying topics determined by the interests of students and the staff. May be repeated for credit.

REL 397 The Ministry Internship (Arr)

Prerequisite: 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 third and fourth 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 Credit basis.

REL 398 Cross-Cultural Ministry Internship (2)

Prerequisite: 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 497 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 Credit basis.

REL 499 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.

Service Learning Module

XXXX-283/XXXX-383 Service Learning Module (1-3)

Provides for individualized (200 or 300 level) academic service-learning activity focused on a specific field of study in collaboration with an approved community partner. Registration process involves preparation and approval of a proposal in consultation with a faculty member and the director of CCBL. Typically, students will receive credit in the department of the faculty member. Requirements include: a minimum of 2 hours of service per week for every semester hour of credit earned; pre-experience readings; participation in CCBL reflection series; a final product, and participation in the CCBL Symposium at the conclusion of the semester. Pass/No Credit. May be repeated. Does not fulfill the experiential component (x) of the cultural awareness graduation requirement (old core).

Sociology

SOC 120 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. (SB, GPC)

SOC 225 Social Problems (3)

Prerequisite: SOC 120 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 235 Schools and Societies (3)

Prerequisites: SOC 120 or EDUC 110. Designed to provide an overview of sociological theories that examine education in modern societies. Utilizing a global, comparative approach, the course investigates topics such as: the historical origins of schooling and education systems; the effects of school characteristics on student achievement and educational attainment; education and inequality; cross-national differences in educational systems; the organizational characteristics of schooling; and prospects for school reform. Discussion of research in these areas helps to dispel myths about formal education and provide a sense of the powerful impact -- and also the limitations -- of schools in modern societies. (SB, GPN)

SOC 241 Criminology (3)

Prerequisite: SOC 120. Criminology is designed to provide an overview of sociological and criminological theories that explain crime and deviance in the contemporary period. In addition, we examine the consequences and patterning of crime, and analyze the criminal justice system and corrections policies. (SB)

SOC 242 Sociology of the Family (3)

Prerequisite: SOC 120 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. (SB)

SOC 248 Statistics for Sociologists (4)

Pre-requisites: SOC 120 and a declared sociology or anthropology major or minor. Serves as an introduction to statistical analysis used in sociological research. Explores how and when to use descriptive statistics, including measures of central tendency and dispersion, inferential statistics, including analysis of variance and chi-square, bivariate analysis, including nominal, ordinal, and interval-ratio level variables, and multivariate analysis. We will pay particular attention to how these techniques serve as tools to help provide answers to sociological questions. (MR)

SOC 250 Introduction to Social Work (3)

Prerequisite: SOC 120 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 320 Sociology of Gender (4)

Prerequisite: SOC 120 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 333 Sociology of Popular Culture (3)

Prerequisite: SOC 120 and second-year standing. Popular culture has become a taken-for-granted part of our everyday lives. Using tools sociology provides, we will examine its production, consumption, expansion, and impact. Topics explored may include the relationship between popular culture and social order, norms, identity, taste, persuasion, and propaganda.

SOC 335 Globalization & Development(4)

Prerequisite SOC 120. Explores historical and contemporary processes that are leading to greater cultural, economic, and political interconnectedness at individual, local, and national levels. A central goal of the course is to clarify what is meant by the ideas "globalization" and "development" and to better understand how and to what extent these forces affect societies and individuals around the world. Provides an overview of globalization and development drawing on theoretical ideas from sociology and related fields. (GPN, GS)

SOC 336 Status and Inequality in Social Life (4)

Prerequisite: SOC 120 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 340 Sociology of Sport (3)

Prerequisite: SOC 120 and second-year standing. Sport in the United States pervades social institutions throughout society, including family, education, economy, and government. This course focuses on sport – from youth sports to the professional level – as a social and cultural phenomenon utilizing sociological concepts to analyze the influence sport has on individuals and society. Particular attention will also be paid to issues of race, gender, and class as they relate to sport.

SOC 342 Sociology of Religion (3)

Prerequisite: SOC 120 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 346 American Ethnicity (4)

Prerequisite: SOC 120 and second-year standing. Explores the meaning and consequences of race and ethnicity in the United States. Explores how race and ethnicity are impacted by social, structural, and historical changes in society. Gives special attention to theories utilized by sociologists to explain demographic and social trends related to race. (GPC)

SOC 350 Methods of Social Research (4)

Prerequisite: SOC 248 (or its equivalent); SOC 120 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. (WRT)

SOC 397 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. Pass/No Credit basis.

SOC 425 Applied Sociology (4)

Pre-requisite: SOC 350 and declared Sociology major or minor. Applied Sociology explores the relevance and promise of sociological analysis for understanding and addressing social problems. Framed by an examination of the many contributions sociologists have made to meaningful social change, the course provides students with an opportunity to apply sociological theory, research, and analytic frames to address real-world social problems outside of the traditional classroom setting. In short, we will focus on the processes involved in conducting sociological research to contribute to the solution of problems in the larger society.

SOC 450 Sociological Theory (4)

Prerequisite: five courses in the department. Provides analysis of sociology's major theorists with an emphasis on classic works, such as those by Marx, Weber, Durkheim, Cooley, Mead, and others. The goal will be on both learning the content of various theoretical perspective and on application of such models to critique contemporary society.

SOC 485 Senior Seminar (4)

Prerequisite SOC 450. A capstone course where students integrate and assess acquired sociological knowledge through applied research, guided discussion, and written analysis. In addition, students will prepare for their transition from college to professional life by investigating prospective post-graduate educational and career paths and produce documents (e.g., resume, cover letter, statement of purpose, etc.) relevant to each of these paths. (WRT)

SOC 499 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 121 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 low to mid- level of the ACTFL scale.

SPAN 122 Beginning Spanish II (4)

Prerequisite: SPAN 121, placement or equivalent. 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 to mid- level of the ACTFL scale.

SPAN 221 Intermediate Spanish I (4)

Prerequisite: successful completion of SPAN 122 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. (GPN)

SPAN 222 Intermediate Spanish II (4)

Prerequisite: successful completion of SPAN 221 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-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. (GPN)

SPAN 321 Advanced Spanish: Grammar, Composition & Conversation I (4)

Prerequisite: successful completion of SPAN 222 or equivalent, or placement. Continues development of reading, writing, speaking and listening comprehension skills. Aims to have students attain intermediate high to advanced low 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. (GPN)

SPAN 322 Advanced Spanish: Grammar, Composition & Conversation II (4)

Prerequisite: successful completion of SPAN 321 or equivalent or placement. Continues development of reading, writing, speaking and listening comprehension skills. Students must attain intermediate high to advanced low on the ACTFL scale for all four language skills by the end of the course. (GPN)

SPAN 323 Introduction to Hispanic Literature (3)

Prerequisite: SPAN 322 or placement. An introduction to the scope of Hispanic Literature. Studies significant literary works in prose, poetry, drama and the literary essay and authors from the medieval to contemporary times. The course approaches literature in its historical dimension as part of a larger cultural and historical process. Introduces vocabulary, concepts and methods to enable students to analyze the building blocks of literary texts and see how meaning is constructed and deconstructed. (LP, GPN)

SPAN 324 Spanish for Heritage Learners

Prerequisite: SPAN 321 or equivalent or placement or higher. Continues the development of listening, writing, and speaking skills in Spanish for heritage speakers, with the emphasis on their unique linguistic and cultural needs and abilities. Service-learning is required. (Note: this course is intended for heritage speakers of Spanish.) (GPC)

SPAN 330 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 332 Modern Spanish Literature (3)

Prerequisite: SPAN 323 or equivalent. Focuses on various authors and genres in the modern literature of Spain, including the society and culture that made that literature possible. Students will learn how to engage the literary text in order to see how it reflects history and represents human endeavor in political, aesthetic and personal terms. May be taken twice with different genres/authors.

SPAN 342 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 343 Civilization of Hispanic America (3)

Prerequisite: successful completion of SPAN 323 or equivalent. 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. (GPC)

SPAN 344 Culture and Civilization of Spain (3)

Prerequisite: Successful completion of SPAN 323 or equivalent. This course offers students a survey of Spanish culture and civilization, from prehistoric times to the present. Students will examine Spanish geography, history, politics, religion, civilization and the arts through written and visual texts. (HP, GPN)

SPAN 350 Hispanics/Latinos in the United States (3)

Prerequisite: successful completion of SPAN 323 or equivalent. 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. (GPC)

SPAN 425 Topics in Hispanic Culture and Civilization (3)

Prerequisite: SPAN 323 or equivalent. 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 487 Senior Seminar in Hispanic Literature and/or Culture (3)

Prerequisite: two Spanish courses numbered 332 or higher. Explores a focused topic in the literature and/or culture of Spain and/or Latin America. Students are expected to apply the knowledge and skills they have acquired during the course of the major program in an interdisciplinary manner. May be repeated for credit when topics vary.

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 499 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.

Sustainability

SUST 125 Introduction to Global Sustainability (4)

Global sustainability is about meeting the needs of the present generation without compromising the ability of future generations to meet theirs. Sustainability has three interconnected dimensions: environmental, economic, and social, because people all over the planet, rich and poor, urban and rural, children and adults, have a wide variety of basic human needs. This course will challenge you to think about yourself in relation to the natural world, in relation to other people in the natural, and economic, and social world, and our responsibilities in relation to those yet unborn people of future generations, who also have basic rights to a good life in dignity on Planet Earth. (GS, WRT)

Theatre

THEA 140 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. (ART)

THEA 142 Introduction to Film (4)

Develops a greater understanding of and appreciation for the art and history of film as it examines contemporary American and international cinema in historical and cultural contexts. Enhances analytical skills to better understand filmmakers' intentions and the means by which they convey them. (ART)

THEA 150 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. (ART)

THEA 161 Introduction to Theatrical Design (3)

An introduction to theatrical design concentrating on the creative process in developing the design of sets, lighting, costumes, as well as the presentation of design ideas. This course examines the role of the designer and how designs support the ideas of a play in visual ways. Promotes the development of college-level writing, reading, listening and speaking skills. Students with credit for THEA-173 may not also receive credit for THEA-161. (ART)

THEA 163 Stagecraft (4)

An introduction to the rudimentary skills involved with planning, constructing, painting, rigging and lighting of stage scenery.

THEA 165 Stage and Properties Management (3)

Introduces students to the process and responsibilities of stage management focusing on production duties, rehearsal responsibilities and production obligations. Also covered in this course will be the responsibilities of a properties manager; including the coordination, organization, and care of stage properties.

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 240 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. (HP)

THEA 241 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. (HP)

THEA 258 Directing I (4)

Prerequisite: THEA 150. A study of the theory and practice of directing. Each student will direct a one act play.

THEA 266 Theatrical Makeup Design (3)

A laboratory- format course concentrating on the materials, skills and techniques used for applying theatrical makeup and designing makeup for the stage. Students will develop several makeup styles addressing challenges related to compensating for theatrical lighting, aging the youthful face, emphasizing character, effects and prosthetic techniques. (ART)

THEA 290 Topics (Arr)

Prerequisite: instructor's permission. Exploration of specialized fields and/or issues in theatre. May be repeated. Variable credit.

THEA 292 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 330 Theatre Management (4)

Prerequisite: Second-year standing and a prior course in art, music, or theatre. Introduces students to the practice, realm and study of theatre management in terms of professional, regional, community and academic practices. Students investigate components of arts management including strategic planning, marketing/ public relations, arts law, financial management, development/ fund raising, operations/ facilities management, and personnel. Offered alternate years. (WRT)

THEA 350 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. (LP)

THEA 358 Directing II (4)

Prerequisite: THEA 258. 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 360 Scenic Design (3)

Prerequisite: THEA 161. Emphasizes the art of scenic design through the study and process of creating sets. Includes design process from script analysis and research to presentation of final design ideas. Model making, drafting and rendering will be covered. Formerly THEA-260. Students with credit for THEA-260 may not also receive credit for THEA-360.

THEA 364 Lighting Design (3)

Prerequisite: THEA 161. 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. Formerly THEA-264. Students with credit for THEA-264 may not also receive credit for THEA-364. (ART)

THEA 368 Costume Design and Construction (3)

Prerequisite: THEA 161. Introduces the student to costume construction and costume design. This will engage students in examining artistic expression within historical and cultural contexts, analytical approaches and hands-on experiences. No prior knowledge of sewing necessary. Formerly THEA-248. Students with credit for THEA- 248 may not also receive credit for THEA- 368. (ART)

THEA 370 Script Analysis and Dramatic Literature (4)

Prerequisite: Second-year standing. An interdisciplinary investigation of theatre and literature. Explores a variety of analytic methods for examining dramatic literature from both performance and design perspectives. Brief explorations of critical theory used to critique, analyze, and produce plays. (LP,WRT)

THEA 397 Internship in Theatre (Arr)

Prerequisite: 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 Credit basis.

THEA 485 Senior Seminar in Theatre (4)

Prerequisite: Declared theatre major and senior standing. Serves as a capstone to the Theatre major's undergraduate career and prepares them for transition into the professional theatre and/or graduate studies. The course may include lectures, workshops, professional guest speakers, discussion sessions and any other aspects related to the collaborative world of theatre. Students will complete various writing-intensive projects including resume building, portfolio constructing, career-based cover letters and a 5-8 page research paper based upon their individualized track in theatre.

THEA 490 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 494 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 Credit basis.

THEA 499 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.

Writing

WRIT 100 Writing Studio (1)

Co-requisite: Concurrent registration LAS 110 and placement. Practice in the basics of academic writing, including a focus on the writing process. Students will strengthen writing skills through weekly large group workshops and appointments with a writing center tutor. Pass/No credit basis.

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 (1.5-2)

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.

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. Interns choose two courses (Arts in the City, Diversity and Inequality, Urban Planning or Values and Vocation) along with an internship. Student teachers do not choose courses, but participate in seminars related to student teaching.

EDUC 453C Advanced Integration of Technology in Education-Elementary (1)

This course will be taught on-line through Central College. Prerequisite: admission to the teacher education program. A continuation of EDUC 250 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 460.

EDUC 455C Advanced Integration of Technology in Education-Secondary (1)

This course will be taught on-line through Central College. Prerequisite: admission to the teacher education program. A continuation of EDUC 250 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 470.

EDUC 460C Elementary Student Teaching (12)

Prerequisite: blocks 1, 2 and 3 and approval of the teacher education committee. 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 485. Pass/No Credit basis.

EDUC 470C 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 451 and 486. Pass/No Credit basis.

EDUC 485C 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 460 or EDUC 462 and EDUC 466. Pass/No Credit basis.

EDUC 486C Professional Development Seminar-Secondary (2)

Prerequisite: approval to student teach. 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 Credit basis.

FA 200C Arts in the City (3)

This course investigates urban cultural life as reflected in the arts of Chicago. Students will attend plays, concerts, movies, and visit art galleries. We will process these experiences through readings, lectures, and classroom discussion as we explore how Christians engage culture. (ART)

GENR 200C Digital Media and Social Entrepreneurship (3)

This course helps Chicago Semester students enrolled in the new summer entrepreneurship track develop a Christian perspective on the ethical, cultural, and pragmatic concerns arriving with the emergent field of social entrepreneurship. (Summers only)

GENR 385C Diversity and Inequality: Engaging Chicago Cross Culturally (3)

This course introduces students to the culture, history, assets, and challenges of Chicago neighborhoods. Students will examine their own social and cultural locations and compare and contrast how their stories are similar to or different from the Chicago racial and ethnic landscape. (GPC)

GENR 386C Urban Planning, Development and the Sustainable City (3)

This course explores the evolution and development of the city, with particular emphasis on the built environment in Chicago. Students will explore the significance of the city's architecture, sculpture, parks, community murals, and impacts of city design. Students will seek to understand and critique the city's built environment through field trips, guest speakers, readings, and class discussions. (GS)

GENR 387C Social Justice Seminar (3)

This course will introduce students to major streams of social justice thought, including the history of the criminal justice field and contemporary movements for social justice. We will examine the role of race, poverty, and inequality in people's experiences of the criminal justice system in the U.S. As a class we will discuss how marginalization, segregation, and the lack of access to social resources influences people's experiences of justice. We will also explore two major issues related to justice: mass incarceration and mass eviction. Finally, through conversations and visits with practitioners, advocates, and organizers we will look at models of restorative justice and how communities address issues related to injustice. (GS)

GENR 397C Chicago Internship (9)

This field education internship experience gives students hands-on practice experience in the knowledge and skills learned in major courses. Students develop a learning contract for focused areas of development and learning and are mentored and supervised at the site by professional staff with experience in the area of practice. Students are also supervised by Chicago Semester staff through a weekly professional seminar course and through midpoint and final site visits. Taken only on the Chicago Semester program. Pass/No Credit basis.

PHIL 286C Values and Vocations (3)

This course explores from a variety of perspectives on the concept of vocation. Drawing on readings from religion, theology, and sociology, students will examine the ways in which we discern our calling in light of our responsibility to engage the common good. Students will also look at social structures that impact work and family life (gender, race, religion, and class) and how they might shape our understanding of vocation.

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 colleges and universities throughout the country and abroad.

GENR 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 internship in Washington D.C. through The Washington Center designed to enrich students' education through supervised practical experience in nearly every possible setting: government, business, historical, fine arts, sciences, health, not-for-profit, among others.

ACADEMIC RESOURCES

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. Introduction to College Success courses to assist freshmen with the college transition.
2. Cultural enrichment outings in Pella and surrounding areas.
3. Tutoring in basic skills and 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 advising by staff for academic, career and personal issues.
8. Grant aid to qualifying students.
9. Financial literacy seminars.

These student assistance and support services are provided free to Central College students who qualify for the program.

The Tutoring & Writing Center

The Tutoring & Writing Center (TWC) provides free individual peer tutoring, both writing and subject tutoring, in addition to group tutoring and Supplemental Instruction (SI) sessions. Trained student tutors, recommended by faculty, offer feedback and assistance on an appointment or drop-in basis. Writing tutors consult with students on all aspects of the writing process and on any writing assignments. Writing tutors are also paired with each section of the LAS 110, Intersections, and writing fellows are available for writing-intensive courses. Subject tutors work with individuals or small groups to better understand class material and assignments. SI sessions are peer-led group reviews for historically difficult classes. The TWC, co-directed by the Director of Writing and the Tutoring Coordinator, is located in the library, facilitating close collaboration between librarians, tutoring and writing staff in their support of student learning.

Geisler Library

Geisler Library is central in supporting student learning and academic success. It provides an extensive collection of print and electronic books, journals, films, music, and archival materials, as well as online access to numerous databases and full-text academic journals. Librarians offer individual research assistance and work closely with faculty to teach students the research abilities necessary for intellectual achievement and lifelong learning. The library supports students and faculty as innovators and creators by providing expertise and equipment for digital media projects. Tutoring and writing services are located in the library, facilitating close collaboration between librarians and tutoring and writing staff in their support of student learning. Classes may utilize the library instruction areas for research or writing workshops. Students can take advantage of numerous group and individual study spaces or take a break in the Global Café at Geisler downstairs. Geisler Library's celebrated Writers Reading Series features local, national, and international authors reading and discussing their works.

Information Technology

Almost every facet of life at Central College is supported by some form of technology. From communicating with prospective students to keeping in touch with alumni, technology helps students, faculty, and staff learn, teach, work, and play.

The ITS Help Desk, staffed by computer professionals and student workers, provides technical assistance and support to students, faculty, and staff.

A campus portal called myCentral serves as a gateway to campus information and web-based services. Faculty and students have electronic access to course materials and related tools through Blackboard Learn, Central's learning management system. A student information system powered by Ellucian Colleague supports Central's administrative processes from before admission through graduation and beyond.

Google Apps for Education and Microsoft Office365 provide email services, cloud storage for files, and collaboration tools for group projects. Technology-enhanced classrooms enrich the face-to-face learning experience, and videoconferencing capabilities bring the outside world into the classroom. The Panopto video platform allows faculty to create tutorial videos as well as record live classes and student presentations.

Students are encouraged to bring their own computers and smart devices to campus and may print from their personal computers to multi-function printers located around campus. There are several computer labs where students have access to specialized software. In many cases, license agreements allow that software to be installed on student's personal computers as well.

The student's physical ID card is used for many purposes such as check-in at the dining venues, opening residence hall doors, releasing print jobs, and borrowing library materials. A mobile app called CBORD Mobile ID can be used in place of a physical ID card to open residence hall outside doors. Other mobile apps allow students to access customized campus and course information on the go.

A campus-wide Ethernet network and redundant connections to the Internet underpin all these systems. A robust wi-fi network blankets the campus, including classroom buildings, residence halls, and most outdoor spaces.

Students who bring a television to campus may connect to an all-digital cable TV system in their residence hall rooms. Televisions must have QAM tuners to pull in all the available channels. Channel 4.1 is a Campus Life Channel used to promote activities and events happening on campus.

The friendly experts in IT Services strive to enhance learning and productivity through both proven and innovative technology solutions and support services. They seek to provide reliable and secure communication systems that support current day-to-day operations while keeping an eye to the future by monitoring technology trends and anticipating campus needs.

Information Technology Policies

Additional information regarding Information Technology Policies is available at <https://www.central.edu/policies/section/51>.

PRE-PROFESSIONAL PROGRAMS

Pre-engineering

Central's dual degree engineering program leads to a B.A. from Central and a B.S. in engineering from either 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 at least 90 semester hours of credit completed, including all Core requirements and all major requirements), the student leaves Central and enrolls at either The University of Iowa or Iowa State University. Upon completion of one year of engineering study at 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. Students pursuing Central's B.S. in Engineering program are not eligible to participate in the dual degree engineering program.

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.

Pre-health

The pre-health program is designed to serve the needs of students who plan to attend professional or graduate school in a variety of health-related fields (including but not limited to medical school, veterinary school, dental school, optometry school, chiropractic school, nursing school, physical therapy school and occupational therapy school). Central offers dual degree agreements with Palmer College of Chiropractic (Davenport, Iowa), Washington University (St. Louis, MO) for Occupational Therapy, Allen College of Nursing (Waterloo, Iowa) Drake University (Des Moines, Iowa) for Athletic Training and Grand View University (Des Moines, Iowa) for Athletic Training. 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. As students identify specific professions or areas of interest, they should declare their intent and interest area(s) via the pre-health declaration form which is submitted to the Pre-Health Advisor. 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 requirements.

Pre-nursing

Central's agreement with Allen College is an excellent way for students to obtain both a nursing degree and a liberal arts degree. This program allows students to complete both a Bachelor of Arts degree (BA) from Central College in the major of his/ her choice and a Bachelor of Science in Nursing (BSN) from Allen College. Students are able to take full advantage of all opportunities offered at a small liberal arts institution. Students may spend three or four years at Central as a full time student, taking courses toward the Central College degree and then transfer into the Allen College Accelerated Nursing Program and complete a 15 month program. Credits earned from each institution allow for completion of both degrees in just a little over 4 years. Students may also opt to complete the four year degree at Central College and then transfer to the Nursing Program at Allen College.

Students interested in this program should contact the Pre-Health Advisor. The Pre-Health Advisor will work with students and their major advisor to ensure that all required coursework is taken and to communicate with representatives at Allen College regarding transfer into their accelerated Nursing program. Because the pre-nursing option does involve meeting several requirements for both degrees it is best if interested students meet with their pre-health advisor and their major advisor prior to the start of their first semester to develop a three year schedule plan that will ensure that all requirements are met in order to graduate in the time frame mentioned above.

Pre-chiropractic

Central's 3 + 1 agreement with Palmer College is an excellent opportunity for students to obtain both a Doctor of Chiropractic degree and a liberal arts degree in a shortened time span. Students will earn credits toward a Bachelor of Arts degree (BA) from Central College majoring in Biology and transfer to Palmer College to begin work on the Doctor of Chiropractic degree. Students typically spend three years at Central as full time students, taking courses toward the Central College degree with a major in Biology. Students are able to take full advantage of all opportunities offered at a small liberal arts institution. After three years at Central College, students transfer into the Palmer Program. Credits earned during the first year in the Doctor of Chiropractic program at Palmer College are transferred back to Central College and allow the student to complete the Central College BA degree. Students may also opt to complete the four year degree with another major at Central College and then transfer to the Chiropractic Program at Palmer College.

Students interested in this program should contact the Pre- Health Advisor. The Pre- Health Advisor will work with students and their major advisor to ensure that all required coursework is taken and to communicate with representatives at Palmer College regarding transfer into their Doctor of Chiropractic program. Because the 3 + 1 option does involve meeting several requirements for both degrees it is best if interested students meet with their advisor and the Pre- Health Advisor prior to the start of their first semester to develop a three year schedule plan that will ensure that all requirements are met in order to graduate in the time frame mentioned above.

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 adviser(s), to choose courses which will maximize their skills prior to applying for law school.

Pre-ministry

Central College continues the emphasis of the ecumenical Christian tradition in general, and the Reformed tradition in particular, to prepare students for a life of service to God and community, as well as to prepare some students for a professional 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. Pastoral and vocational counseling is offered by the chaplain, the director of the Christian ministries emphasis of the religion major, and other faculty members. 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 complete ministry internships in churches and church-related organizations either locally or through Central's off-campus programs. Students may also choose to receive spiritual formation 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.

HONORS

Emerging Scholars Program

Central College's Emerging Scholars Program presents academically high-achieving students with the opportunity to grow as intellectuals within a community of their peers. The components of the Emerging Scholars Program give students the flexibility to explore a variety of disciplines while encouraging them to advance their knowledge within their discipline. Students who are accepted into the Emerging Scholars Program forge important mentoring relationships with faculty, and they practice taking the initiative to pursue their own intellectual interests. In addition to the strictly academic elements of the Emerging Scholars Program, members are invited to attend special cultural and educational events programmed for them throughout the year.

The capstone of the Emerging Scholars Program is the Senior Honors Thesis, a significant research project spearheaded by the student, and supervised by two faculty members. In addition to offering unique opportunities for in-depth study, the thesis allows students to distinguish themselves when applying for graduate school, fellowships, and employment.

Application

Membership in the Emerging Scholars Program is by application only. Students who have a 3.5 minimum cumulative Central College grade point average are eligible to apply.

Students may apply after completing at least one semester as a full-time student at Central College; students must be accepted into the program at least three semesters prior to graduation. If the student falls below the 3.5 minimum GPA they must raise their GPA by the following semester to 3.5 or above to remain in the program.

Components

For a student to earn an Honors designation on their transcript the following components of the Emerging Scholars Program must be successfully completed:

- Two Honors Seminars (HONR 191)
- Two Honors Enrichments or directed/independent study approved by the Honors Director
- A Senior Honors Thesis
- A 3.500 cumulative GPA or above at the time of graduation

Honors Seminars* group students together from a variety of disciplines to explore topics at an advanced level. In contrast, students may opt to add **Honors 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 an advanced level. A capstone experience, the **Senior Honors Thesis** is a year-long project focused on an area of special academic interest, often relating to the total educational experience. To complete this work, students choose and work closely with a faculty mentor to formulate, research, create, and present a comprehensive and cohesive project. Completion of these components culminates with a ceremony in which each student is formally recognized and presented with a medallion to wear at commencement.

*In addition to students in the Emerging Scholars Program, all students with a 3.5 GPA or entering freshmen with a 28 ACT and a 3.75 or who finish in the top 5% of their class are eligible to take **Honors Seminars** and **Honors Enrichment Credits**.

The Emerging Scholars Program is coordinated by Dr. Kathy Korbeck, the Honors director. For more information, on any of the components of the Honors program, contact the Honors Director or send an email to honors@central.edu.

SPECIAL PROGRAMS

Service-Learning Modules

Service-learning modules provide for individualized (200 or 300 level) academic service-learning activity focused on a specific field of study in collaboration with an approved community partner. The registration process involves preparation and approval of a proposal in consultation with a faculty member and the director of the Center for Community-Based Learning (CCBL). Typically, students will receive credit in the department of the faculty member. Requirements include: a minimum of 2 hours of service per week for every semester hour of credit earned; pre-experience readings; participation in CCBL reflection series; a final product, and participation in the CCBL Symposium at the conclusion of the semester. Modules may be taken for 1-3 credits, are graded pass/no credit, and may be repeated.

Internships

General Learning Objective: All academic internships will bridge theory and practice. Internships will purposefully connect an academic perspective to experience. Academic internships enhance student's understanding of both themselves and a work environment and, in doing so, will enrich their educational training.

Support Statement: In addition to work done at a business or organization, each internship will require an academic learning goal and some form of guided reflection. This academic reflection can include, but is not limited to: goal setting session, reflection through journaling, portfolio development, peer-discussions, research, paper writing, and/or presentations. Similarly to the traditional classroom, faculty have the freedom to develop additional goals most appropriate for individual internships.

For each semester hour of credit, a student will complete at least 36 hours on-site and 6 hours of academic reflection. Registered internships are graded on a pass/no credit basis and are recorded on students' transcripts.

On-site and Academic Hours per credit hour			
Credit Hours	On-Site Hours	Academic Hours	Total Hours per Semester
1	36	6	42
2	72	12	84
3	108	18	126
4	144	24	168
5	180	30	210
6	216	36	252

The following policies also apply to students engaged in internship opportunities:

- A student may earn up to nine credits at the same internship site over a maximum of two terms, provided that there is significant change in the duties involved or in the level of responsibility.
- No academic credit will be awarded after-the-fact for work already completed.
- Students must register for internships prior to the start of work or prior to the published add deadline for the semester the internships is to take place, whichever is sooner.

The director in the Center for Career and Professional Development provides assistance with site investigation, the application process, and guidance regarding evaluation. Internships are clearly invaluable in providing students with firsthand experience in professional work environments. For more detailed information, see www.central.edu/career/internships.

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 credit credit for the internship through the program. Students who are interested must obtain application information from Jessica Klyn de Novelo, Director, Career & Professional Development, rather than applying directly to TWC.

For the semester, students can receive 15 academic credits by enrolling in GENR 389D *Washington Center Seminar* (3) and POLS 397D *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

Chicago Semester

Chicago Semester is a consortium program offering internships or student teaching in Chicago during either fall or spring semesters typically during one's junior or senior year. Students participating internships take two graded seminar courses taught by Chicago Semester staff. In addition to outstanding career-related internships, students attend fine arts and cultural events, navigate metro transportation, and live in apartments in downtown Chicago with 2-3 other participants. Interns will register for one internship (9 credits) and two seminar courses (6 credits) for a total of 15 credits. Student teachers will register for student teaching and a seminar focusing on contemporary issues related to the urban classroom environment. Application information and details about the selection process for Chicago Semester are available from Jessica Klyn de Novelo, Director, Career and Professional Development. The Chicago Semester website is www.chicagosemester.org.

The summer program consists of 10 weeks in which the students participating will complete one course (3) as well as an Internship combined with the Professionalism Seminar (6) for a total of 9 academic credits.

Social Justice Internship Program in the City

This eight-week faculty-led summer program combines academic coursework and social justice training with an internship in one of many possible arenas in an urban setting. Central faculty serve as program leaders and teach the course *Interdisciplinary Perspectives on Social Justice*. Internships take place in non-profit and community organizations. Open to juniors and seniors in any discipline, the program provides a strong foundation in social justice theory and practice within an experiential learning setting that encourages reflection. For more information contact Jessica Klyn de Novelo, Director, Career and Professional Development.

International Internships

Internships are available at many international sites in connection with Central's study abroad programs. Information about these programs is available at <http://www.central.edu/study-abroad> and in the study abroad office in the Center for Global Experiential Learning.

STUDY ABROAD AT CENTRAL COLLEGE

Central College supports off-campus program around the world as part of its commitment to global experiential learning. Students are actively encouraged to develop global competencies allowing them to understand, live and work in culturally diverse environments. International education challenges students to understand empathetically, live cooperatively and act responsibly in a changing and intricately connected world.

Each major allows space for students to study off campus for at least one semester earning credits toward a major, minor, or core curriculum requirements. Most locations offer various study tracks and can accommodate students at multiple levels of language and proficiency. Students take courses from program faculty and may also enroll in courses at affiliate universities depending upon the program. Students also gain valuable work experience through credit-bearing internships and service-learning placements, while home stays, language partners, and activities help them achieve cultural immersion. Current offerings include semester or year-long, summer, and short-term programs around the world.

For additional information visit the Center for Global Experiential Learning (www.central.edu/study-abroad) or contact studyabroad@central.edu.

Non-Central study abroad programs

Central students seeking to enroll in a non-Central study abroad program that has not been pre-approved 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, registrar, and study abroad offices on campus.

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 credits 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 may 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.

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 credits 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.

Service Award

This award recognizes a volunteer or student organization that demonstrated a superior commitment to the greater community during the past academic year through active service (i.e. hands-on service activities, philanthropic and fundraising events, political and/or advocacy efforts, or other civic engagement-related pursuits.)

Organizational Excellence Award

This award honors a student organization for making positive contributions to and building community at Central College, outstanding programming, and/or strong organizational structure, leadership, and action.

Outstanding New Leader Award

This award honors a first or second year student volunteer who shows leadership promise while not necessarily holding a leadership position through their exemplary contributions to a recognized student organization and have helped the organization grow their participation.

Outstanding Event Award

This award recognizes a successfully-planned, efficiently-run, effectively-advertised, and well-attended event that enhanced the social, educational and/or cultural life at Central College which was sponsored by a recognized student organization or student-led volunteer group.

Bridge Builder Award

This award recognizes a student volunteer, recognized student organizations or paraprofessional who have worked to establish connections across campus, i.e., collaborative social or educational events, exploration of diverse cultures, or education about issues that have challenged the campus.

Unsung Hero Award

This award recognizes a student volunteer(s) or student paraprofessional(s) that has/have positively influenced a program or organization from behind the scenes through a positive attitude, a willingness to help in whatever capacity necessary, and a commitment to excellence in the completion of tasks and duties.

Annual Theme Award

This award recognizes a student volunteer or recognized student organization who has demonstrated outstanding leadership in promoting and implementing the college's annual theme; for 2018-9- Living in Community.

Student Organization Advisor of the Year Award

This award recognizes an individual Central College employee who exemplifies Central's ideals of leadership, service and excellence through the individual's dedication, mentorship, compassion, and wisdom while serving as an advisor to a campus student organization.

Senior Student Development Award

This award is presented to a student paraprofessional who has made notable contributions within student development while at Central College. This award recognizes sustained, outstanding leadership in integrated, co-curricular, and/or extracurricular activities and involvement to improve an aspect campus life for students.

Diversity & Inclusion Award

This award is presented to a student volunteer or recognized student organization that actively demonstrates commitment to issues of diversity, inclusion, and social justice through its programming and campus initiatives.

Departmental Awards

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 endowed cash award is presented to a graduating senior in recognition of exemplary achievement or service in the areas of environmental, ecological, evolutionary, or field biology.

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 endowed cash 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.

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 111 and 231. The student is selected by the professors in these courses and receives a CRC handbook.

Inorganic Chemistry Award

The Inorganic Chemistry Award recognizes a senior student who displays significant aptitude for inorganic chemistry and to encourage further interest in the field. The award includes a certificate and letter of recognition from the ACS Division of Inorganic Chemistry.

Organic Chemistry Award

The Organic Chemistry Award recognizes a senior student who displays significant aptitude for organic chemistry and to encourage further interest in the field. The award includes a certificate and letter of recognition from the ACS Division of Organic Chemistry.

Communication Studies

Steve and Joyce Bell Excellence in Journalism Award

The Bell endowed cash award is given to a sophomore, junior or senior 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 and on-line news outlets. The same recipient is not eligible for the award in consecutive years. Categories considered for this award include: news stories and opinion pieces that contain original reporting, investigative journalism, stories presented in a series, creative photo journalism, video news packaging, and editorial leadership. Nominations for the Bell Award are solicited from 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 cash award goes to the junior or senior within the Communication Studies department who has exhibited sound academic achievement, high moral character, and who has made a significant contribution to the department.

Economics/Accounting/Business management

Butler Scholar in Economics Award

Named in honor of Dr. Donald Butler, late Professor emeritus of economics, this honor and cash award is given to a senior economics major or a senior student who has completed a significant number of courses in economics. The award is based on the student's interest in independent research, the desire to pursue a career in economics or a related field, evidence of intellectual growth, and superior academic performance. The student is selected at the end of his/her junior year, and the student undertakes a research program in economics that culminates in a written paper and public presentation to other students and faculty.

Economics, Accounting and Management Department Business Management Award

This award is given to a senior Business Management major. Departmental faculty will grant the award based on the recipient's scholarship, leadership and demonstration of sincere interest in the field of business management. In recognition of his/her achievement, the award recipient's name will be inscribed on a plaque in the Weller Center. The award recipient also will receive a monetary award.

Economics, Accounting and Management Department Outstanding Leadership and Service Award

This award is given to a senior Economics, Accounting, or Business Management major who has distinguished himself/herself not only by earning a minimum cumulative GPA of 3.0, but also by providing independently driven and entrepreneurially minded leadership and/or service to the department and its students. This can be demonstrated either through work done in student clubs or through other volunteer service in the department. In recognition of his/her service/leadership, the award recipient's name will be inscribed on a plaque in the Weller Center. The award recipient also will receive a monetary award.

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.

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 *Institute of Management Accountants* to a student planning a career in accounting.

Iowa Society of CPAs 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 public accounting.

Robert J. Maurer Accounting Award

Each year the faculty from the department of Economics, Accounting and Management will make a written recommendation for this award. The award shall be distributed to the senior accounting major who has demonstrated excellence in accounting as determined by the EAM department faculty. In making this determination the faculty will take all relevant facts and circumstances into consideration to include but not limited to the following criteria in making their selection: a min overall GPA of 3.5, a min accounting GPA of 3.33 with all 300 and 400 level accounting courses taken at Central or an approved program. Completion of a senior honors project with an Accounting related topic. Outstanding performance in Accounting Research Seminar; student has immediate plans for a career in accounting as evidenced by intention to take an accounting certification exam; service to the department through help with grading, supplemental instruction student clubs; high quality and outstanding performance in accounting related internship.

Education

Bruce and Susan Berical Anderson Education Grant

The Bruce and Susan Berical Anderson Education Grant supports graduates of Central College who successfully complete the Central Teacher Academy in good academic standing. Susan was a dedicated teacher, mentor and friend to all those who knew and worked with her. The Central Teacher Academy supports all aspects of teaching and follows Susan's wish that with a passion for education, and a fire in their belly, all teachers can make a difference in the lives they touch.

Lee Collins Award for Excellence in Education

This endowed 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, and commitment to the welfare of youth.

Barbara Dieleman Award for Excellence in Education

The award is given in honor 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, 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.

Environmental Science

Anya Z. Butt Environmental Studies Award

The Anya Z. Butt Environmental Studies award is awarded to a graduating senior who has had significant impact on campus or community through involvement and advocacy in environmental issues and has incorporated a sense of global awareness in their studies, evidence through participation in a study abroad program. The recipient receives a monetary award.

The Outstanding Environmental Science Award

The Outstanding Environmental Science Award is awarded to the student with the highest GPA graduating in the environmental science track of the major. The recipient receives a monetary award.

The Outstanding Environmental Sustainability Award

The Outstanding Environmental Sustainability Award is awarded to the student with the highest GPA graduating in the environmental sustainability track of the major. The recipient receives a monetary award.

Exercise Science**Roslien Distinguished Athletic Training Student Award**

This endowed 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 Distinguished Athletic Training Student Award honors a student in the program who epitomizes dedication to the program, the profession and Central College. The recipient receives a plaque and a monetary award.

The Rising Star Award

The "Rising Star" award honors a graduating senior in the Athletic Training Education Program who has found direction and inspiration in their final year in the Athletic Training major. The award is given to a student late in their academic journey at Central College that becomes an active participant in their pursuit of Athletic Training.

Verle Rinehart Exercise Science Award

The Verle Rinehart Exercise Science Award is an endowed award given 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. This endowed award pays for a certification exam.

Interdepartmental/Humanities**The Vander Lugt-Voss Scholarship Fund and Prizes in the Humanities**

The Vander Lugt-Voss Scholarship Fund 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 endowed 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. The recipient receives a monetary award.

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 endowed 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****Lilo Ritter Award in German****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.

Music**Music Leadership Award**

The award is given to a senior music major who has demonstrated excellence in music performance, course work, peer leadership and support of larger department goals. Selection is made by the music faculty annually.

Physics

Richard J. Mentink 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. The recipient receives a monetary award.

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 endowed, cash 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.

Megan Sloss Award

The Megan Sloss award is given to a graduating sociology major who exhibits strong character, a positive and inquisitive spirit, builds relationships with both peers and faculty, and demonstrates devotion to social service work, positive social change, and/or social justice issues.

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. The recipient receives a monetary award.

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

Most Valuable Player Award

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

Defensive Player of the Year Award

Newcomer of the Year Award

Tom Steward "Mr. Hustle" Award

Established in 2013 as a memorial to Tom Steward by his family, this award is to honor a varsity men's basketball player who displays the most consistent effort and hustle during the season.

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.

Most Improved

Given to a player who made the most strides in development of his game during the off-season and/or during the year.

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****Newcomer****Gary Dirksen Award****Gray Team Player of the Year****Hustle Award****Teammate Award****Top Defensive Player Award****Top Offensive Player Award****Coaches' Award****Men's cross country****Most Valuable Performer Award****Freshman of the Year****Most Improved Performer Award****Dutch Spirit Award**

Awarded to the runner who shows a positive spirit and puts team before themselves.

Women's cross country**Most Valuable Performer Award****Most Improved Performer Award****Freshman of the Year****Dutch Spirit Award**

Awarded to the runner who shows a positive spirit and puts team before themselves.

Football**Heerema-Schilder Memorial Plaque**

A plaque 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/Menning 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

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

Newcomer Award

Most Inspirational

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.

Most Improved Player Award

Defensive Player of the Year
Newcomer of the Year

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.

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.

Men's track and field

Most Valuable Performer Award

Most Improved Performer Award

Most Valuable Freshman Award

Dutch Award

Awarded to the runner who shows a positive spirit and puts team before themselves.

Women's track and field

Most Valuable Performer Award

Most Improved Performer Award

Dutch Award

Awarded to the runner who shows a positive spirit and puts team before themselves.

Most Valuable Freshman 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 strived to achieve on the court but has also striven to achieve off the court.

Leadership Award

Spirit Award

100% 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

Academic Award

Coach's Award

Awarded to a standout in areas important to the coaching staff that are not reflected in the record.

DIRECTORIES

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- Mr. Steven Sikkink '83, Des Moines, IA, Central Iowa Area Director, Fellowship of Christian Athletes
- Mrs. Donna Smith '81, Pella, IA, Community Volunteer
- Mr. Harry Smith '73, New York, NY, NBC News Correspondent
- *Mr. Clay Thompson '90, Miami, FL, Vice President, Latin America, Caterpillar Financial Services Corp.
- *Ms. Deanna Ver Steeg '94, Chicago, IL, Senior Director, Strategic Demand Management – Headquarters and Latin America, - Business Process & Technology, S.C. Johnson & Son, Inc.
- Mrs. Judith Vogel '82, Johnston, IA, Investment Analyst, Principal Global Investors
- Dr. Markay Winston '87, Bloomington, IN, Assistant Superintendent for Monroe County Community School Corporation
- Ms. Mary Worstell '73, Washington, D.C., Advisor, HHS office on Women's Health, U.S. Department of Health and Human Services; Lead, Healthy Aging, 2015 White House Conference on Aging, retired

Ex Officio

Dr. Mark Putnam, Pella, IA, President, Central College

- ** Chairperson of the Board
- * Vice Chair of the Board

Administrative Offices

Mark L. Putnam, president, B.A., M.A., Ed.D.
Mary E.M. Strey, vice president for academic affairs and dean of the faculty, B.A., Ph.D.
Thomas Johnson, vice president for finance and administration/treasurer, B.S, M.B.A.
Carol Williamson, vice president for enrollment management and student development, B.A.
Sunny Eighmy, vice president for advancement, B.A., M.A.

Faculty and Instructional Staff

- Charles D. Adamson – B.F.A., M.A., University of Central Missouri; Ph.D. 2013, Texas Tech University. – Assistant professor of theatre
- Mark Babcock – B.A., Central College; M.M. 1993, Westminster Choir College. – M. Joan Kuyper Farver Endowed chair in Music, Professor of music
- Mark C. Barloon – B.A., Iowa State University; M.A., The University of Iowa; Ph.D. 2001, University of North Texas. – Senior lecturer of history
- Jeffrey D. Bass – B.A., Sarah Lawrence College; M.A., University of Chicago; Ph.D. 2000, University of California, San Diego. – Associate professor of anthropology
- Russell A. Benedict – B.A., M.S., University of Nebraska, Omaha; Ph.D. 1997, University of Nebraska, Lincoln.– Professor of biology
- Valerie Billing–B.A., University of Illinois; M.A., Ph.D., University of California.– Assistant professor of English
- Shelley Bradfield – B.A., Andrews University; B.A., M.A., Rand Afrikaans University; Ph.D. 2010, Indiana University. – Associate professor of communication studies
- Anya Z. Butt – B.A., Mount Holyoke; M.Sc., University of Toronto; Ph.D 1999, University of Nevada. – Professor of biology
- Anna Christensen- B.A. Northwestern College, Orange City, IA, A.M., Ph.D. Washington University, St. Louis- Lecturer of philosophy
- Amanda Clark—B.A., Simpson College; M.S., Drake University—Instructor of education
- Karen Cleveland - B.A. Central College; M.A., Ph.D. 2008 Fuller Theological Seminary. - Lecturer of psychology
- Jennifer Counts- B.A. Luther College; M.Ed., Drake University—Instructor of education
- Stanley E. Dahl – B.M., Iowa State University; M.M. 1997, Arizona State University. – Senior lecturer of music
- Kris DeWild - B.A., Central College; GC 2005, Drake University. - Lecturer of music
- Jennifer A. Diers – B.A., University of Northern Iowa; M.Ed., University of North Carolina; Ph.D. 2008, Iowa State University. – Associate professor of education
- Joshua A. Doležal – B.A., King College; M.A., Ph.D. 2005, University of Nebraska-Lincoln. – Professor of English
- Dennis M. Doyle – B.A., University of Northern Iowa; M.S., North Texas State University; Ph.D. 1988, Southern Illinois University. – Professor of communication studies
- Leslie Duinink – B.A., Central College; M.S. 1994, Indiana State University. – Associate professor of exercise science
- James F. Dunne – B.S., Grove City College; Ph.D. 2011, Iowa State University. – Assistant professor of chemistry
- Ellen J. DuPré – B.S., Mankato State University; Ph.D. 1992, Wright State University. – Professor of biology
- Gabriel Espinosa – B.A., Central College; M.M. 1995, University of Northern Texas. – Associate professor of music
- Robert D. Franks – B.S., Northwest Missouri State University; M.S., Ph.D. 1992, Iowa State University. –Professor of computer science
- Stephen A. Fyfe – B.A., Central College; M.S., Ph.D. 1995, Iowa State University. – Professor of computer science
- Chad Garber—B.S., M.E., 2017, Iowa State University—Lecturer of physics
- Ashley N. Garr – B.S., Truman State University; M.S., Ph.D. 2012, University of Minnesota. – Associate professor of chemistry
- Elizabeth Golovatski –B.S., St. Ambrose University; Ph.D. 2011 University of Iowa. - Assistant professor of physics
- Russell E. Goodman – B.S., M.S., University of Texas, Arlington; Ph.D. 2002, University of Oklahoma. – Professor of mathematics/computer science
- Andrew D. Green – B.A., Wartburg College; M.A., Ph.D. 2005, University of California – Riverside. – Professor of political science
- Shelli Green – B.A., Central College; M.S. 2009, Southwest Minnesota State University. – Clinical instructor of exercise science
- Alan Hastings—B.A., Michigan State University, Ph.D. 2016, Michigan State University—Assistant professor of education
- Catherine A. Haustein – B.A., Central College; M.S., M.F.A., Ph.D. 1982, University of Iowa. – Professor of chemistry
- Michael (Cody) Huisman– B.A., Central College; D.C. 2011, Palmer College of Chiropractic. – Assistant professor of exercise science
- Meryl Irwin– B.A., Concordia College; M.A., University of Nebraska; Ph.D., University of Iowa. – Lecturer of communication studies
- Mark J. Johnson – B.A., St. Olaf College; M.A., Ph.D. 1994, University of Wisconsin, Madison. –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. 1997, West Virginia University. – Mark and Kay DeCook Endowed Chair in Character and Leadership Development, Professor of psychology
- Kate Kanne, B.S. South Dakota State University, M.F.A. 2016 Minnesota State University. - Lecturer of theatre
- Nicole Kaplan – B.A., M.A., Ph.D. 1996, The University of North Carolina at Chapel Hill.– Professor of French
- Mathew R. Kelly – B.F.A., University of New Hampshire; M.F.A. 1994, Syracuse University. – Associate professor of art
- Terence J. Kleven – B.A., University of Calgary; M.A., Ph.D. 1990, McMaster University. – Professor of religion
- Kathy E. Korcheck – B.S.E., M.A., Kent State University; Ph.D. 2007, Washington University. – Professor of Spanish
- Cynthia K. Krenzle – B.M., University of Wisconsin – Stevens Point; M.M., Kent State University; D.M.A. 2004, University of Wisconsin – Madison. – Associate professor of music
- Allison Krogstad – B.A., North Central College; M.A., Ph.D. 1999, University of Minnesota. – Professor of Spanish
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