



PRINCIPIA COLLEGE
CATALOG

2013 - 2014

Principia College

**CATALOG
2013 — 2014**

Principia College
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Principia College is a coeducational and diverse institution where men and women of the Board of Trustees, administration, faculty, and staff, as well as the members of the student body, are eligible for responsibility regardless of gender, race, color, ethnicity, citizenship, or national origin, and are eligible to enjoy equally all the opportunities which The Principia is able to provide. Principia College recognizes that men and women as children of God reflect the intelligence and strength of their Maker, and that all men and women have equal opportunity and equal ability in the sight of God.

Principia College admits students of any gender, race, color, national and ethnic origin to all the rights, privileges, programs, and activities generally accorded or made available to students at the school. It does not discriminate on the basis of gender, race, color, national and ethnic origin in administration of its educational policies, admissions policies, scholarship and loan program, or athletic and other school-administered programs.

Principia College reserves the right, as necessary, to withdraw courses at any time and to change fees, regulations, and calendars affecting admission and registration, requirements affecting graduation and curricula, and any other regulations affecting the student body. Such changes, and the dates they become effective, will be decided by proper college authorities and may affect both present and prospective students.

**Principia College is accredited by the
Higher Learning Commission
and is a member of the
North Central Association of Colleges and Schools.
www.ncahlc.org 800.621.7440**

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Academic Calendar for 2013-2014

Fall Semester 2013

August 7-9	New Faculty Orientation
August 12	Faculty return to college
August 12	New international students arrive
August 12	New and returning student athletes arrive*
August 13	President's College Staff Chapel Meeting
August 14-15	Academic Deans' Workshop
August 16	New students arrive
August 16-18	New Parent Orientation
August 16-23	New Student Orientation
August 23	New Employee Orientation
August 23	Joint Staff Meeting (Elsah Campus)
August 23	Continuing students return
August 26	First day of classes
August 30	Summer break interterm grades due by noon
September 2	Convocation
September 6	Drop/Add period ends
September 6	Last day to submit late applications for January 2014 graduation
September 30	September graduation
October 5-8	Fall Break (no classes)
October 14	Midterm and incomplete grades due by noon
October 17-20	Homecoming
October 21	Advising for Spring 2014 registration begins
October 25	Winter break and Spring 2014 off-campus independent course contracts due to ACA by 5:00 p.m.
November 4	Registration for Spring 2014 opens according to priority days
November 8	Last day to withdraw from a Fall 2013 credit class
November 8	Internship final learning contracts for Spring 2014 due to ACA by 5:00 p.m.
November 27 - Dec 1	Thanksgiving Break (no classes)
December 6	Last day of classes
December 9-11	Final examination days
December 11	Graduation applications for January 2015 due
December 16	Final grades due by 9:00 a.m.

*Students participating in sports camps should check with their respective coaches for specific dates and times.

Spring Semester 2014

January 11	New students arrive
January 11-17	New Student Orientation
January 13	Faculty return to college
January 15-16	Academic Deans' Workshop
January 17	Joint Staff Meeting (St. Louis Campus)
January 17	Continuing students return
January 20	First day of classes

January 24	Winter break interterm grades due by noon
January 27	Winter Convocation
January 31	Drop/Add period ends
January 31	January graduation
January 31	Last day to submit late applications for May 2014 graduation
March 7	Midterm and incomplete grades due by noon
March 8-16	Spring break (no classes) (wk 8)
March 17	College classes resume
March 21	Summer break and Fall 2014 off-campus independent course contracts due to ACA by 5:00 p.m.
March 24	Advising for Fall 2014 registration begins
April 3-6	Parent's weekend
April 4	Last day to withdraw from a credit class
April 7	Registration for Fall 2014 opens according to priority days
April 11	Internship final learning contracts for summer break and Fall 2014 due to ACA by 5:00 p.m.
May 2	Last day of classes
May 5-7	Final examination days
May 7	All work for any student expecting to graduate this term must be completed by 5:00 p.m.
May 7	Applications for May 2015 and September 2015 graduation due
May 8	Graduating senior grades due by noon
May 9	Commencement rehearsal
May 9	Baccalaureate
May 10	Commencement
May 12	Non-graduating student grades due by 9:00 a.m.
May 12	Academic Deans' Workshop
May 13	President's Workshop

Academic Calendar for 2014-2015**

Fall Semester 2014

August 6-8	New Faculty Orientation
August 11	Faculty return to college
August 11	New international students arrive
August 11	New and returning student athletes arrive*
August 12	President's College Staff Chapel Meeting
August 13-14	Academic Deans' Workshop
August 15	New students arrive
August 15-17	New Parent Orientation
August 15-22	New Student Orientation
August 22	New Employee Orientation
August 22	Joint Staff Meeting (Elsah Campus)

August 22	Continuing students return
August 25	First day of classes
September 1	Convocation
September 5	Drop/Add period ends
October 4-7	Fall Break (no classes)
October 13	Midterm grades due by 9:00 a.m.
October 16-19	Homecoming
November 3	Spring semester registration opens
November 7	Last day to withdraw from a credit class
November 26-30	Thanksgiving Break (no classes)
December 5	Last day of classes
December 8-10	Final examination days
December 15	Final grades due by 9:00 a.m.

*Students participating in sports camps should check with their respective coaches for specific dates and times.

Spring Semester 2015

January 7-9	New Faculty Orientation
January 7	New international students arrive
January 10	New students arrive
January 10-16	New Student Orientation
January 12	Faculty return to college
January 14-15	Academic Deans' Workshop
January 16	Joint Staff Meeting (St. Louis Campus)
January 17	Continuing students return
January 19	First day of classes
January 26	Winter Convocation
January 30	Drop/Add period ends
March 6	Midterm grades due by noon
March 7-15	Spring Break (no classes) (wk 8)
March 16	College classes resume
March 30	Spring Convocation
April 2-5	Parents Weekend
April 10	Last day to withdraw from a credit class
April 14	Registration for Fall 2015 opens according to priority days
May 1	Last day of classes
May 4-6	Final examination days
May 6	All work for any student expecting to graduate this term must be completed by 5:00 p.m.
May 7	Graduating senior grades due by noon
May 8	Student Awards Ceremony
May 8	Baccalaureate
May 9	Commencement
May 11	Non-graduating student grades due by 9:00 a.m.
May 11-12	Academic Deans' Workshop
May 12	President's College Workshop

**Some dates on the 2014-2015 academic calendar are projections, and are subject to adjustment.

Final Examination Schedule (Fall 2013)

Time Slot	Meeting Days	Meeting Time	Exam Day	Exam Time
M1	Mon., Wed., Fri.	8:00 – 8:50 am	Tue.	8:00 – 10:00 am
M2	Mon., Wed., Fri.	9:00 – 9:50 am	Tue.	10:30 am – 12:30 pm
M3	Mon., Wed., Fri.	10:00 – 10:50 am	Wed.	8:00 – 10:00 am
M4	Mon.	11:30 am – 12:20 pm	Mon.	6:00 – 8:00 pm
M5	Mon., Wed., Fri.	2:20 – 3:10 pm	Mon.	8:00 – 10:00 am
M6	Mon., Wed., Fri.	3:20 – 4:10 pm	Mon.	10:30 am – 12:30 pm
M7	Mon. – Fri.	4:20 – 6:30 pm	Mon.	6:00 – 8:00 pm
M8	Mon.	7:30 – 10:20 pm	Tues.	6:00 – 8:00 pm
T1	Tues., Thur.	8:00-9:15 am	Tues.	1:00 – 3:00 pm
T2	Tues., Thur.	9:25 – 10:40 am	Tues.	3:30 – 5:30 pm
T3	Tues., Thur.	12:05 – 1:20 pm	Wed.	1:00 – 3:00 pm
T4	Tues., Thur.	1:30 – 2:45 pm	Mon.	1:00 – 3:00 pm
T5	Tues., Thur.	2:55 – 4:10 pm	Mon.	3:30 – 5:30 pm
W1	Wed., Fri.	11:30 am – 12:45 pm	Wed.	10:30 am – 12:30 pm
W2	Wed., Fri.	12:55 – 2:10 pm	Wed.	3:30 -5:30 pm

Final Examination Schedule (Spring 2014)

Time Slot	Meeting Days	Meeting Time	Exam Day	Exam Time
M1	Mon., Wed., Fri.	8:00 – 8:50 am	Tue.	8:00 – 10:00 am
M2	Mon., Wed., Fri.	9:00 – 9:50 am	Tue.	10:30 am – 12:30 pm
M3	Mon., Wed., Fri.	10:00 – 10:50 am	Wed.	8:00 – 10:00 am
M4	Mon.	11:30 am – 12:20 pm	Mon.	6:00 – 8:00 pm
M5	Mon., Wed., Fri.	2:20 – 3:10 pm	Mon.	8:00 – 10:00 am
M6	Mon., Wed., Fri.	3:20 – 4:10 pm	Mon.	10:30 am – 12:30 pm
M7	Mon. – Fri.	4:20 – 6:30 pm	Mon.	6:00 – 8:00 pm
M8	Mon.	7:30 – 10:20 pm	Tues.	6:00 – 8:00 pm
T1	Tues., Thur.	8:00-9:15 am	Tues.	1:00 – 3:00 pm
T2	Tues., Thur.	9:25 – 10:40 am	Tues.	3:30 – 5:30 pm
T3	Tues., Thur.	12:05 – 1:20 pm	Wed.	1:00 – 3:00 pm
T4	Tues., Thur.	1:30 – 2:45 pm	Mon.	1:00 – 3:00 pm
T5	Tues., Thur.	2:55 – 4:10 pm	Mon.	3:30 – 5:30 pm
MW	Mon., Wed.	12:55 am – 2:10 pm	Wed.	10:30 am – 12:30 pm

The final examination periods for all courses are two hours long. Exams for multi-slot classes will be scheduled during the exam slot for the first class meeting time only.

SECTION 1

General Information

College Mission

The Purpose of Principia is to serve the Cause of Christian Science (*Education at The Principia*, p. 227).

The mission of Principia College is to provide students of Christian Science with a comprehensive, co-educational program of liberal arts and sciences. The college is committed to academic excellence and character education. It is also dedicated to the spiritual, intellectual, moral, social, and athletic development of each student. In this context, Principia offers its students an international perspective and challenges them to be ethically strong in service to the world community.

A Brief History

As a young mother, Mary Kimball Morgan was concerned about the moral and spiritual dimensions of education for her two sons. In addition to basic, practical education, she wanted an environment for them which would foster sound moral values and a yearning for spiritual growth. Finding no established institution which met these criteria, she began in 1897 to teach the two youngsters herself.

As other Christian Scientists learned of Mrs. Morgan's informal school and its goals, they asked if she would teach their children. Soon, her classroom had to move from the loft of her carriage house in St. Louis to a two-room store to accommodate fifteen students and two teachers.

In 1906 Principia graduated its first high school class. In 1912 it added a junior college—one of the first in the nation. And in 1934 Principia's new four-year liberal arts college at Elsah, Illinois, graduated its first class.

From those early days, Principia has grown to two modern campuses enrolling about 1,200 young Christian Scientists from all states and many other countries.

The inspiration which led Mary Kimball Morgan to establish Principia, and to dedicate more than fifty years to its orderly expansion, is a lasting legacy of love for thousands of current and future Principians.

Principia's purpose, policies, and history are found in *Education at The Principia*, by Mary Kimball Morgan, and *As the Sowing*, by Edwin S. Leonard Jr.

Institutional Affiliation

Principia College is an accredited private, co-educational liberal arts and sciences college for Christian Scientists. It is not formally affiliated with the Christian Science church. Principia College is one of the two educational units in the Greater St. Louis area owned and operated by The Principia Corporation, a pro-forma decree (non-profit) corporation established in the State of Missouri in 1898 and incorporated in 1912. The corporation also operates Principia School, which includes pre-kindergarten through high school, in St. Louis County.

Accreditation

Principia College is accredited by the Higher Learning Commission (HLC) of the North Central Association of Colleges and Schools (NCA). Principia has maintained this accreditation consistently since 1923.

About Campus Resources

The Principia College campus covers 2,600 acres with over four miles of bluffs overlooking the Mississippi River north of St. Louis, Missouri. The unique bluff prairies on campus are a registered Illinois Natural Heritage Landmark. The campus has received national recognition for its unique design. A noted San Francisco architect, Bernard Maybeck, designed the original buildings for the Elsah campus. These special buildings include the Chapel and six of the eleven student houses. Principia College was designated on April 19, 1993, as a National Historic Landmark for its fine Maybeck architecture. The group of Maybeck-designed buildings at Principia represents the final phase of Bernard Maybeck's career and is considered his finest expression of collegiate design, drawing from colonial American, medieval, and American vernacular stone building traditions.

Men and women live either in single-gender houses or on separate halls or floors of the same house. There are also cottages which are used as housing for non-traditional students, education programs, and special projects.

All student houses and five of the eight academic buildings have computer facilities for general use or specially equipped labs for student use. Most of these 150 computers are available to students 24 hours a day, seven days a week. The Marshall Brooks Library is open according to posted hours for students and the public. All of the buildings and houses are networked and have hard-wired and wireless Internet access. Each student attending Principia is provided an email address that is to be used for all official business with Principia.

The School of Nations building is noted for its unique classroom atmosphere. Eight rooms have been designed to capture the architectural flavor of different countries. The School of Nations building also houses the 21st-Century Classroom with the latest in classroom technology.

The Science Center was completed in August 1997 and houses programs in biology and natural resources, chemistry, computer science, engineering science, geology, mathematics, physics, and sustainability. The facility contains modern labs in each program, a tropical aviary, a greenhouse, computer facilities, a resource center, and study areas. The building is a leading regional example of “green” (environment-friendly) architecture. The St. Louis Chapter of the American Institute of Architects gave it the 2000 Honor Award for Sustainable Design. Our research-quality telescope (computer-controlled, sixteen-inch, one-ton Ritchey-Chretien design) is housed across campus with its own observing platform and dome.

The Marshall Brooks Library is central to academic life at Principia College. Open seven days a week during the term, the library offers an extensive book collection, private study carrels, reservable rooms for group meetings, presentation suites, and a host of computers, laptops, copiers, printers, and a high-speed scanner. The library also offers round-the-clock access to over 57,000 electronic journals and over 163,150 e-books. The resources go beyond those of a traditional library to include the Principia Archives and the Principia Collections of artifacts and fine art in support of scholarly research. The library provides an atmosphere conducive to learning and scholarship. During the day the library is staffed by professional researchers who are available in person, online, or by phone to assist with research. In the evening the library is staffed with tutors who can assist with writing and research.

The Davis-Merrick Center for the Performing Arts is home for the Music, Theatre and Dance, and Mass Communication Departments as well as Media Services.

The Davis Music Wing contains listening rooms, a state-of-the-art audio/visual-equipped classroom, an electronic music studio, ten practice rooms, an ensemble rehearsal room, teaching studios, and Davis Music Hall, that serves performance, rehearsal, and classroom needs and is equipped with a large-screen audio/visual system. Principia College is designated an “all-Steinway school” because of its numerous Steinway pianos throughout the Music Department and in Wanamaker Hall. A Steinway concert grand piano is located in Cox Auditorium. A concert practice carillon is housed in Davis, and carillon lessons are available free of charge. In addition to the Davis-Merrick facilities, the Jean L. Rainwater Carillon, with 39 Eijsbouts bells, and the 34-rank Martin Ott tracker pipe organ are housed in the College Chapel. The world-class 56-rank Casavant tracker pipe organ was installed in Cox Auditorium in 2006.

The Davis Drama Wing includes a state-of-the-art sixty-foot square black-box theatre, seating up to 150 people. Surrounding the theatre are a costume shop, scene shop, two dressing rooms and a “green room.” Another practice space is located above the theatre where students can rehearse and “workshop” theatre pieces. Dance studios are located in Morey Field House and two smaller studios in Hay Field House. Classes and rehearsals are held in all three studios and Davis Theatre. Large-cast productions are held in Cox Auditorium.

The Merrick Wing provides a state-of-the-art working laboratory for students of mass communication which includes classrooms, radio and television production studios, a computer laboratory, and video editing suites. In addition, the Merrick Wing houses the Media Services Department and the student publication *The Pilot*, as well as Principia’s Internet Radio station.

The Media Services Center is located in the lower level of the Merrick Wing. The center responds to the audio, video, and multi-media needs of the community by providing equipment and personnel to support academic, athletic, cultural, and social events around the campus. Additionally the center has audio and video production facilities, which are used by professors and students for class and individual academic projects, as well as by the center to produce recordings that promote/archive Principia College activities. These production facilities include five video edit suites, a sound recording studio and control room, and a television studio and control room.

Athletic facilities include Coach Crafton Athletic Center and Natatorium, Hay Field House, Hexberg Tennis Center, six outdoor tennis courts, as well as baseball, softball, and soccer game fields, plus practice fields for varsity and club sports. The state-of-the-art Coach Crafton Athletic Center offers indoor training for all 17 intercollegiate sports programs. This training field house has a 200-meter track, two sport courts, batting cages, two well-equipped weight rooms, and spacious locker rooms. The natatorium, which houses an NCAA compliant indoor swimming pool with 1m and 3m diving boards, is located adjacent to the athletic center. The Hay Field House provides basketball and volleyball courts, team locker rooms, general fitness center, climbing wall, and racquetball and squash courts. The Hexberg Tennis Center provides four indoor, air-conditioned courts for year-round play.

Howard Center, referred to as “the concourse,” is a center for student activities. The dining room, the Piasa Pub, and student mailboxes, the College Store, and Out of Bounds (a recreation center) are housed on the upper level. Mail and Copy Services, the Jam Factory (a musical performance locale), and Campus Security are located on the lower level.

About Academics

Principia College offers academic programs leading to either a Bachelor of Arts or a Bachelor of Science degree. Each of these degrees has its own requirements, described in the academic programs section of this catalog (Section 2).

Principia's faculty members consider teaching their primary purpose. Their research, writing, and professional activities complement and deepen their teaching. Small classes allow faculty to enjoy a lively interaction with students. These stimulating exchanges extend beyond the classroom, laboratory, or studio to informal visits in their offices, at home, or by telephone.

Principia is on the semester system. We have two sixteen-week terms per year: fall and spring semesters. Each semester consists of fourteen weeks of classes, one week of in-term break, and an exam week at the end of the semester.

Course credit is measured in semester hours. A semester hour represents three hours of student work per credit per week for 14 weeks. Depending on the method of instruction, the ratio between contact time and student work outside of class varies. No academic credit is given to PE. One PE course is comprised of a minimum of 42 hours of activity (three hours per week for 14 weeks).

To be considered a full-time student, a student must carry a minimum of twelve semester hours per semester. A normal academic load is fifteen semester hours per semester, which allows a student to complete the required 120 semester hours in four years. Students are expected to complete their degrees within eight semesters. In order to remain enrolled beyond eight semesters, a student must petition for extended study.

Each incoming student works closely with a new-student advisor in the Academic and Career Advising Office. These advisors help students select courses each semester, explore possible majors, plan a full academic program, and explore opportunities outside the classroom. A student may declare a major at any time after new student orientation. Once a major has been declared, the student will be advised by a faculty member in that academic program. Some minors also require that students declare a minor advisor.

The college offers extensive help to students for improving their learning skills. The Learning Excellence Center (LEC) as part of the Teaching/Learning Excellence Center, provides students help with reading, writing, quantitative reasoning, classroom, study, homework, and time management skills. Students with academic conditional admittance, those on academic probation, and students with a cumulative grade point average less than 2.0 may be required to attend LEC sessions and improve their learning skills.

Majors, minors, and courses available at Principia College are described in Sections 2 and 3 of this catalog. Students desiring to go beyond regular curricular offerings should consult the sections in this catalog on independent study (pp. 190-191) and special majors (p. 74).

Principia also offers three types of off-campus programs: Principia abroads, field programs, and academic internships. These are described at the end of the Academic Programs section of this catalog (see pp. 80-81).

Intercollegiate Athletics

The mission of the Principia athletic program is to offer students a vigorous physical activity curriculum that encourages spiritual growth and character development, creates opportunities to learn and master new skills, and provides a forum for achieving competitive excellence. The goal of Principia's athletic program is to help students maintain a balance between intellectual pursuits and a competitive athletic enterprise that complements the development of the whole person.

Principia offers nine intercollegiate programs for women and eight for men. There are women's teams in volleyball, soccer, cross-country, basketball, swimming and diving, tennis, indoor track and field, outdoor track and field, and softball. Men compete in soccer, cross-country, basketball, swimming and diving, baseball, tennis, indoor track and field, and outdoor track and field. Principia is a member of the National Collegiate Athletic Association (NCAA), Division III, and the St. Louis Intercollegiate Athletic Conference.

Physical Education

Principia provides students with a broad-based curriculum of lifetime physical education courses which support the graduation requirement. (See p. 15 for a description of the GEPE attribute. See pp. 136-139 for the list of PE course offerings.)

College-Wide Learning Outcomes of Principia College: Defining a Liberal Education

The curricular and co-curricular programs at Principia College are designed for students to be lifelong learners, thinkers, and problem-solvers, to draw out spiritual and moral qualities indispensable to growth in Christian Science, and to cultivate an understanding of service to the Cause of Christian Science in meeting the global needs of the 21st century. To accomplish this, the College has established the following outcomes for its graduates. Students graduating from Principia College will:

1. Demonstrate a depth and breadth of knowledge.
2. Demonstrate critical and generative thinking.
3. Demonstrate the ability to communicate effectively.
4. Be intentional learners.
5. Be effective members of communities.
6. Act on the basis of Principle.

The Principia Pledge

The Principia Pledge is a part of the application which every applicant signs. Students may be asked to symbolically reaffirm their commitment to this Pledge and/or the Principia Community Commitment at some later signing:

I commit to serve God and humanity through the study and healing practice of Christian Science, expressed in principled thought and action, unselfed love, and moral courage.

Principia Standards

Principia's standards hinge on the principles set forth by Mary Baker Eddy, the Discoverer and Founder of Christian Science, and by Mary Kimball Morgan, who established The Principia.

Mrs. Eddy originally called her teachings “moral science” and repeatedly stated that strong morals are indispensable to the successful practice of Christian Science. Her writings include many references to honesty, purity, temperance, fiscal responsibility, obedience to the Golden Rule, and abstinence from addictive substances. The following examples help to elucidate Principia's moral standards in their spiritual context: *Science and Health with Key to the Scriptures*, pages x:30, 115:26, 453:16, 449:11; *The First Church of Christ, Scientist and Miscellany* page 114:3.

Reflecting Mrs. Eddy's teachings, Mary Kimball Morgan believed that a Principian's behavior should be characterized by high standards of integrity. In a message originally directed to college men, but equally relevant to women, she challenged each to consider these questions:

Are you the man who has learned to act from Principle in all that he does; one who has learned to regulate his conduct according to the demands of Principle so that he is not swayed by impulse, by mortal opinions, or by human will-power; one who does not make a god of his own selfish desires but has the aim of being of service to his fellowman; one whose outlook on life is bigger than his own personal interests, a life above pettiness and worry; one who constantly subordinates his animal nature to his finer instincts, thus training himself to strengthen only those qualities which make for mental and moral cleanliness and purity of character?

Do you believe that youth has to sow its wild oats? The farmer who believed he had to sow wild seed with his good seed would reap unfruitful crops. We reap as we sow. Every act determines how much of a success a young man is going to be. He who compromises with error throws his weight by that much into the wrong scale (*Education at The Principia*, p. 196).

The Matthew Code

A valuable tool in resolving conflict in any Christian community, the Matthew Code (Matthew 18:15-17) states that one should love his neighbor enough to talk directly with him/her if there is a problem. Please talk to your resident counselor if you have questions about how to use the Matthew Code to work with someone. These conversations are subject to the same rules as confidential counseling.

Student Ombudsman

Principia's Student Ombudsman is available to listen to and work with students who have tried unsuccessfully to resolve an issue regarding their experience at Principia through other channels. The ombudsman works with students to resolve issues whether they are with a peer, a faculty member, an advisor, or a Resident Counselor.

The ombudsman treats each situation with confidentiality and neutrality, helping the student understand and clearly state the issue, encouraging a metaphysical approach, as well as assisting the student through whatever steps need to be taken for an issue to be resolved fairly and amicably. The ombudsman may help by assisting in clarification, gathering data and hearing pertinent information from all parties involved, setting meetings, or facilitating a mediation process.

The Student Ombudsman is part of Principia College's program to fulfill the NCA required system for handling student complaints and grievances. A dean may also be involved in order to help resolve the complaint.

The Student Ombudsman may be contacted in the ACA office on the Terrace level of the School of Government.

Requirements for Remaining Enrolled at Principia

In addition to signing the Principia Pledge, students will be asked to sign the Principia Community Commitment (reproduced below).

Principia Community Commitment

- Strive — to understand and express God in all you do
- Conquer — "all that is unlike God" (Science and Health, p. 262)
- Love — "God...and your neighbor as yourself" (Luke 10:27)
- Give — unselfishly

Rationale

As a member of the Principia community, I understand there are things all Principia community members are expected to do during school semesters as well as on breaks: to STRIVE to understand and express God in all I do; to work to follow Mary Baker Eddy's directive to CONQUER "all that is unlike God," in myself and in this community; to LOVE God and my neighbor as myself; and to GIVE unselfishly.

The innate qualities of dominion, honesty, respect, purity, love, charity, chastity, intelligence, and grace are to be unfolded as one conquers all that is not in line with God's view of man and the world. Throughout Mary Baker Eddy's writings, she states that selfishness, lust, envy, jealousy, hatred, self-will, self-justification, and the claim that matter has power are to be denied and overcome. I am committed to work towards unfolding this spiritual dominion through reliance on and practice of Christian Science for healing during my Principia College years.

I understand the Principia community is here to help me as my expression of dominion expands. I am expected to strive for this dominion, and the members of this community will hold me accountable to my best, spiritual selfhood. This being the case, I understand there are some behaviors that could be grounds for discipline. Behaviors not in line with demonstrating spiritual dominion are: acts of hatred or bullying, sexual activity (including pre-marital or extra-marital sex, whether heterosexual or homosexual), dishonesty, and the use of material substances such as alcohol, drugs, tobacco, and medicine.

By signing this community agreement, I am stating that I acknowledge and agree with all of the above and that I am committed to learning about my own spiritual dominion through Christian Science and to help, expect, and challenge others to do the same.

Academic Integrity and Performance

A Principian is expected to pursue a life of integrity. Students are responsible for doing their own academic work and making satisfactory progress. Instances of cheating or plagiarism are referred to the Scholastic Committee. Poor academic performance or a breach of academic integrity could result in academic suspension. Students on academic suspension are not allowed to remain in break housing.

Financial Integrity

Students are responsible for paying their Principia bills in a timely manner. Instances of delinquency will be referred to the Financial Standards Committee. A violation of financial integrity could result in financial suspension. Students on financial suspension are allowed to be employed on campus and stay in break housing after the end of the term in which they are suspended, but must leave campus before students move back into regular housing. After clearing their financial suspension, students are required to make the scheduled payment on their established payment plan before starting the upcoming term and to keep their account current for the rest of the school year. Falsification of information on applications for financial aid or scholarships may result in social discipline and/or the loss of Principia-provided aid (scholarships, loans, need-based grants, work-related grants, or an employee tuition discount).

Spiritual Reliance

“Members of the faculty, staff, and student body will be expected to rely on Christian Science for healing” (*Education at The Principia*: Policy number 4). A student using medicine, either prescribed or over-the-counter may be asked to honorably withdraw until such time as they are free from the use of the medicine. In certain circumstances, temporary use of doctor-prescribed medicine is compassionately regarded (see *Science and Health*, p. 444:7-10). Under such circumstances, the college will try to find a way to help a student complete as much of the current term’s academic work as possible, although remaining at Cox Cottage may not be an option. Please contact your resident counselor to discuss options. Students who rely on medicine beyond one term will be asked to temporarily withdraw until such usage is discontinued. A withdrawal is not a suspension and does not negatively affect the student’s record.

Spiritual Defense

Principia expects every student to contribute to the spiritual strength and well-being of the community through the study of the Bible Lesson, prayer during Quiet Time, and attendance at church services. Quiet Time is 20 minutes set aside during every academic day when the entire community spends time prayerfully supporting Principia and those connected to it.

Prevention of Graduation

A graduating senior found responsible for a Principia Community Commitment violation may be prevented from graduating, even if all academic requirements have been completed. The student may re-apply for graduation through the Registrar’s Office once the disciplinary conditions have been met.

Parental Notification

Principia reserves the right to contact parents as it deems appropriate in disciplinary situations and in health-related challenges. When a case is forwarded to formal discipline, the charged student will be required to inform his/her parents of the possible impending disciplinary consequences.

SECTION 2

Academic Programs

Introduction

Principia offers academic programs leading to the Bachelor of Arts or Bachelor of Science degree. This section describes degree requirements, the programs through which these requirements are met, and the intended student learning outcomes associated with specific programs. For a summary of the requirements described here in full, see the charts at the end of the description of the all-college degree requirements. (See pp. 21-22.)

All-College Degree Requirements

Student Responsibility for Requirements

Students have direct online access to their own academic records via BannerWeb. It is the student's responsibility to check this record for accuracy each semester and to be certain that he or she is registering for the courses necessary to complete the degree requirements. Students should consult their advisors or the staff of the Registrar's Office with any questions regarding these requirements. In addition, Degree Works tracks a student's progress toward graduation and should be checked regularly for updates.

Major

In order to insure depth of study, a student must complete one of the majors corresponding to the degree being pursued. All the majors available at Principia are listed on page 23 and are described on the pages which follow.

Total Semester Hours

A student must earn a total of 120 semester hours. Transfer work, credit by examination, Advanced Placement, College Level Examination Program (CLEP), and International Baccalaureate Examination credits may be included according to the regulations governing these options found on pages 187-190.

Grade Point Average

At the time of graduation from Principia College a student must have an overall grade point average of 2.000 (the equivalent of a C average) or higher. Only grades earned in credit courses at Principia College are used in computing the grade point average. (See also pp. 181-182.)

Residency

A student must be enrolled, full- or part-time, under direct supervision of Principia faculty or staff, for a total of at least three semesters, earning a minimum of 36 semester hours. Also, a student must be enrolled for two of the three semesters immediately prior to graduation under direct supervision (including abroads, but not internships) of Principia faculty or staff.

Students pursuing two degrees must fulfill two additional semesters in residence, being enrolled for a minimum of five semesters and earning a minimum of 66 semester hours at Principia, under direct supervision of Principia faculty or staff.

Purpose of the Residency Requirement

We require a student to be enrolled for at least three semesters to ensure a full Principia experience which includes:

1. Living and learning in a community of people applying Christian Science to personal and academic challenges;
2. Growing in response to the educational demands and standards of such a community; and
3. Benefiting from the support provided to help community members meet those demands.

We also require that a student be enrolled for two of the three semesters immediately prior to graduation under direct supervision (including abroads, but not internships) of Principia faculty or staff to ensure that:

1. A student is on campus during most of the junior and senior years. (This is prime learning time because it is the period in which most of the integration of one's education takes place. Students should be working directly with our faculty at this time.)
2. A student is on campus during this prime contribution time. (This is likely to be the time students make the greatest contribution to community life.)
3. A student is fulfilling The Principia Pledge and living by the Principia Community Commitment.

Moral Reasoning Seminar

Moral reasoning is an essential element of character education. The seminar meets for a total of 30 hours in small groups facilitated by a member of the Office of Student Life. During the seminar, students:

- explore the importance of morality and moral reasoning to Christian Science;
- deepen insight into how their motives and acts impact themselves, others, their relationships, community, and society;
- articulate their reasoning on several moral dilemmas and hear

- the reasoning of others;
- learn of the most common ethical values and resolution principles shared by people around the world;
- develop their own model for making moral decisions that incorporates their purpose, values, and principles;
- consider both the usefulness and the limits of moral reasoning in decision making.

The 30-hour requirement is divided accordingly:

Freshman Year:

- 4 hours of introduction to core moral reasoning concepts

Sophomore or Junior Year:

- 20 hours of in-depth study and discussion of moral reasoning concepts

Senior Year:

- 6 hours of moral reasoning concepts applied to postgraduate decision-making

General Education Program

The general education program at Principia College provides foundational knowledge. It consists of:

- Distribution requirements
- Proficiency requirements
- Skill development requirements

A primary goal of our general education program is to help students further identify and articulate their values and purposes in learning—to practice self-knowledge and to take responsibility for their education. Another goal is to acquire a breadth of knowledge across a wide variety of academic fields.

The general education program is designed to meet the academic components of the College-Wide Learning Outcomes. (See College-Wide Learning Outcomes, p. 6.)

Liberal Arts Distribution Requirements (LADR)

The distribution requirements at Principia College are designed to provide breadth across a variety of disciplines in designated academic areas of the liberal arts. In addition students fulfill a non-credit distribution requirement in physical education. The outcomes for these courses are listed below. Each LADR course must address all the outcomes listed below for that area requirement.

Arts [GEA course attribute]

The study of arts develops the ability to recognize and experience the inspiration, vision, and creative process of the artist. Students completing an arts general education course will be able to:

1. Articulate their experiences with the arts intelligently.
2. Demonstrate an understanding of the historical context of the art studied.
3. Describe the roles of artists in society and how their particular art is expressed.
4. Use discipline-specific language to describe the arts studied.

Humanities [GEH course attribute]

The study of humanities has had a traditional and ongoing role in wrestling with the evolving cultural canon. They explore narratives, struggle with ideas, and are at home with difficult questions. Through the investigation of the values, knowledge, and experience of our humanity – articulated in history, languages, literature, philosophy, and religion – students completing a humanities general education course will be able to:

1. Analyze texts in the humanities.
2. Raise and respond to significant questions.
3. Demonstrate an understanding of diverse perspectives.

Math and Natural Sciences [GESL, GESN course attributes]

The study of natural sciences and mathematics cultivates understanding of and care for the environment; it motivates ethical decisions, and integrates critical and scientific thinking into every educational experience. Students completing a natural sciences general education requirement will be able to:

1. Practice the elements of scientific thinking by applying the scientific method.
2. Practice scientific skills such as sampling, measuring, estimating, calculating, and reporting.
3. Describe the relevance of science in society.
4. Formulate a hypothesis and test it by analyzing physical data and observations (Lab classes only).

Social Sciences [GESS course attribute]

The social sciences examine human behavior, including customs, institutions, and values, in order to understand and address social, educational, political, and economic problems. Students completing a social science general education course will be able to:

1. Generate questions and hypotheses about causes of human behavior.
2. Evaluate forces, needs, and/or beliefs influencing human behavior.
3. Describe social science methods used to study human behavior.

4. Recognize patterns within a set of observations/data about human behavior.
5. Articulate theories of human behavior.

Bible [GEB course attribute]

To fulfill the Bible requirement, students will develop an understanding of biblical literature including an overview of the varieties of literature in the Bible and their particular historical contexts. Students completing a Bible general education course will be able to:

1. Summarize biblical texts.
2. Use biblical research tools.
3. Analyze biblical texts in their literary and historical contexts.
4. Apply biblical texts to contemporary faith and life.

Physical Education [GEPE course attribute]

The physical education program provides students a broad range of physical activities that encourage spiritual growth and character development; these activities help students maintain a balance of intellectual pursuits and physical endeavors. Any student completing the physical education general requirement will be able to:

1. Demonstrate dominion over the mental and physical limitations associated with physical activity.
2. Perform proper movement and refined motor skills.
3. Practice the qualities of character associated with physical activity and achievement of a goal.

B.A. Liberal Arts Distribution Requirements (LADR):

- 8 courses selected from these academic areas as follows:
 - Each course must be from a different discipline
 - Each course must be 3 semester hours or more
 - 2 Arts [GEA attribute]
 - 2 Humanities [GEH attribute]
 - 2 Natural Sciences, 1 of which must be a lab course [GESL attribute for labs; GESN attribute for non-labs]
 - 2 Social Sciences [GESS attribute]
- 1 Bible [GEB attribute]
- 2 PE [GEPE attribute]
 - Non-credit courses to be completed in addition to the 120 academic hours
 - Each PE course requires a minimum of 42 contact hours

B.S. Liberal Arts Distribution Requirements (LADR):

- 5 courses selected from these academic areas as follows:
 - Each course must be from a different discipline
 - Each course must be 3 semester hours or more
 - 1 Arts [GEA attribute]
 - 1 Humanities [GEH attribute]
 - 1 Social Sciences [GESS attribute]
 - 2 courses from any of these areas [GEA, GEH, GESS attributes]
- 1 Bible [GEB attribute]
- Additional 24 semester hours of Math and Natural Sciences courses outside the major discipline (must include one lab course outside the major)
- 2 PE [GEPE]
 - Non-credit courses to be completed in addition to the 120 academic hours
 - Each PE course requires a minimum of 42 contact hours

Skill Development Requirements

The skill development program at Principia College is designed to provide foundational competencies in thinking and communicating.

First-Year Experience (FYE) Program

An FYE program consists of either a "1+1" FYE program that consists of one LADR course and one Integrated Learning Course (ILC) or three courses: two thematically-linked LADR content courses from different disciplines and one Integrated Learning Course (ILC) that embeds skill development within the content of the two LADR courses. This program is designed to enable students to enter the academic conversation, focusing on the goals and outcomes below.

Over-arching goals of FYE

1. Transition to college
2. Character unfoldment
3. Academic rigor
4. Thematic curriculum
5. Development of learning skills

Outcomes for FYE/ILC

Students who complete Principia College's FYE program will understand the deep connections between reading, writing, thinking, and speaking, as well as the recursive nature of these various skills. They will be able to make intentional choices about the ways they interact and approach their subsequent work in college. Students will:

1. Use academic research strategies.
2. Use criteria for evaluating information sources.
3. Understand how to use information in an ethical manner, including the proper citing of sources and the avoidance of plagiarism.
4. Identify key concepts in reading texts.
5. Summarize the development of ideas in texts, speeches, and/or other media (dance, music, art, etc.).
6. Use evidence to make conclusions and/or take positions.
7. Use appropriate discipline-specific conventions in writing and speaking.

Transfers who have completed at least two terms of full-time coursework with a cumulative GPA of 2.000 or higher are exempt from FYE. International enrichment students may participate in FYE on a space-available basis.

Proficiency Requirements

The proficiency requirements at Principia College are designed to provide training in fundamental, specific, rule-based competencies expected of college graduates.

Proficiency Requirements (B.A. and B.S. degrees):

All students are required to demonstrate proficiency in the following areas:

- Quantitative Reasoning
- Second Language
- Writing

Quantitative Reasoning

Students should develop quantitative reasoning skills because they are useful in life and because these skills are developed further in a variety of courses found throughout the curriculum. Incoming students who are not exempt will take the Quantitative Reasoning Test to determine their current knowledge of and skills in mathematics and quantitative reasoning.

Outcomes for the Quantitative Reasoning Test and GEQR courses:

1. Demonstrate hand-wrought and calculator-assisted arithmetic skill.
2. Understand ratios, percents, and proportions.
3. Understand how to draw inferences from data.
4. Understand how to interpret spatial information.
5. Understand how to reason with numbers and formulas.

Quantitative Reasoning Proficiency Requirement (B.A. and B.S. degrees):

Students may fulfill the quantitative reasoning requirement in one of the following ways:

- Test score of 4 on the Quantitative Reasoning Test
- Passing grade in a Principia College course with a GEQR attribute

The Quantitative Reasoning Test is scored as follows. Students who score:

Level 1 need to successfully complete MATH 099 followed by a course with the GEQR attribute. Students who score at Level 1 enroll in a two-hours-per-week, non-credit tutorial course (MATH 099) to strengthen their quantitative reasoning skills. These students will automatically be enrolled in MATH 099 in their third semester if they have not already successfully completed it. Upon completion of MATH 099 these students may enroll in a course that meets the GEQR outcomes.

Level 2 need to successfully complete a course with the GEQR attribute.

Level 3 may either request a retest of the Quantitative Reasoning Test within the first semester and achieve a score of 4 on the retake; or successfully complete a course with the GEQR attribute.

Level 4 have met the quantitative reasoning requirement.

Students are exempt from taking the Quantitative Reasoning Test and will receive a score of 4 if they receive:

- A score of 3 or greater on AB or BC Calculus Advanced Placement Examination.
- A score of 5 or greater on International Baccalaureate (IB) Examination in Mathematics (either standard or higher level).
- A passing grade in a college-level calculus course at an accredited college.
- Transfer credit from an accredited institution in a mathematics course that meets or exceeds the GEQR outcomes.
- A score of 650 on the math portion of the SAT or a score of 29 on the math portion of the ACT.

Second Language

This proficiency requirement is designed to enable students to attain a basic proficiency level in a language other than their own as defined in the outcomes.

Outcomes for Second Language:

1. Ask and respond to questions in spoken or written form in the target language.
2. Communicate about present, past, and projected (future) situations in the target language.
3. Demonstrate an awareness of the world regions and cultures of the different target languages, and how language and culture are linked.
4. Demonstrate the skills of the language learning process.

Second Language Proficiency Requirement (B.A. and B.S. degrees):

Students may fulfill the second language requirement in one of the following ways:

- Placement beyond 105/110 level on a placement test administered by the Languages and Cultures faculty
- Test score of 3 or greater on Advanced Placement language test other than English
- Native language competency other than English
- Passing grade in a Principia College course with a GE2L attribute (105 or 110 level)
- Grade of C– or higher in the final course of an eight semester hour or more first-year language sequence from an accredited college

Should students wishing to take additional course work in a language offered on campus not qualify at the level indicated by their transfer work, the transfer credit must be rescinded in order for them to be eligible to register for a Principia course at the same skill level as a transferred course. Placement testing does not affect completion of the second language proficiency requirement unless a student requests rescinding of the transfer credit.

Writing

This proficiency requirement is designed to enable students to attain a basic proficiency level in writing in their work throughout the curriculum. Students will demonstrate the ability to use writing for both thinking and communicating.

1. Students will demonstrate their understanding that writing is a tool for thinking by:
 - Using writing strategies to discover their own ideas.
 - Using writing strategies to understand and respond to concepts and texts.

- Maintaining a distinct voice and viewpoint in academic writing while ethically incorporating material from other sources.
 - Using claims and evidence to answer questions, solve problems, or take a position.
2. Students will demonstrate their understanding that writing is a tool for communicating by:
 - Providing logical support for arguments and interpretations.
 - Using discipline-appropriate writing conventions and genres to provide guidance for readers.
 - Writing with an understanding that academic research involves entering an ongoing conversation among experts in a field.

Writing Proficiency Requirement:

All students will fulfill the writing proficiency requirement by submitting two portfolios:

- Writing Fundamentals Portfolio
- Major Portfolio

Writing Program Policy

1. First-time college students and transfers who take FYE are required to submit a Writing Fundamentals Portfolio during their FYE program their first term on campus to demonstrate their level of competence in basic research and writing skills before beginning intensive writing in their majors. Transfer students who are exempt from FYE must submit their Writing Fundamentals Portfolios within their first two terms on campus. It is each student's responsibility to enroll within this timeframe in a course that will provide the opportunity to produce the required writing samples and to submit the portfolio by the end of that term. The Writing Fundamentals Portfolio may be submitted only once.
2. A student whose Writing Fundamentals Portfolio does not demonstrate an acceptable level of competence or who fails to submit during the required term will be required to meet with his or her advisor(s) and the writing program director to work out a writing plan designed to address the student's unique needs and to prepare the student to meet the demands of upper division work. The writing program director, in conjunction with the advisor(s), will have the prerogative to direct the registrar to enroll the student in up to three credit hours of academic work in a writing-intensive course or courses appropriate to the student's needs. To meet this requirement, the course work must be successfully completed by the student. At the end of each subsequent term, the student, the advisor(s), and the writing program director will meet, as needed, to review the student's progress with writing. Further course work may be recommended in these meetings. The meetings will cease

when the advisor(s) and the writing program director determine that the student has demonstrated a satisfactory level of competence in writing required by the student's discipline.

3. Students must complete the Major Portfolio for each of their majors. When a student has multiple majors and the major faculty determine that it is appropriate, the requirements for these portfolios can be coordinated and consolidated to avoid duplication.

Summary of Degree Requirements - Bachelor of Arts

Completion of one B.A. major

120 semester hours

2.000 minimum cumulative GPA

Residency

Moral Reasoning

General Education requirements

B.A. Liberal Arts Distribution requirements (LADR):

- 8 courses selected from these academic areas as follows:
 - Each course must be from a different discipline
 - Each course must be 3 semester hours or more
 - 2 Arts [GEA attribute]
 - 2 Humanities [GEH attribute]
 - 2 Natural Sciences, 1 of which must be a lab course [GESL attribute for labs; GESN attribute for non-labs]
 - 2 Social Sciences [GESS attribute]
- 1 Bible [GEB attribute]
- 2 PE [GEPE attribute]
 - Non-credit courses to be completed in addition to the 120 academic semester hours
 - Each PE course requires a minimum of 42 contact hours

Skill Development Requirement:

- First Year Experience Program (FYE)

Proficiency Requirements:

- Quantitative Reasoning
- Second Language
- Writing

Summary of Degree Requirements - Bachelor of Science

Completion of one B.S. major

120 semester hours

2.000 minimum cumulative GPA

Residency

Moral Reasoning

General Education requirements

B.S. Liberal Arts Distribution requirements (LADR):

- 5 courses selected from these academic areas as follows:
 - Each course must be from a different discipline
 - Each course must be 3 semester hours or more
 - 1 Arts [GEA attribute]
 - 1 Humanities [GEH attribute]
 - 1 Social Sciences [GESS attribute]
 - 2 courses from any of these areas [GEA, GEH, GESS attributes]
- 1 Bible [GEB attribute]
- Additional 24 semester hours of Math and Natural Sciences courses outside the major discipline (must include one lab course outside the major)
- 2 PE [GEPE attribute]

Non-credit courses to be completed in addition to the 120 academic semester hours

Each PE course requires a minimum of 42 contact hours

Skill Development Requirement:

- First Year Experience Program (FYE)

Proficiency Requirements:

- Quantitative Reasoning
- Second Language
- Writing

Majors and Minors

The majors and minors listed below are described in the pages that follow. Most of these programs also offer a minor, and there are four minors in programs for which there is no major.

Bachelor of Arts Majors

Art (Studio Art)	History
Business Administration	Mass Communication
Computer Science	Mathematics
Dual Language	Music
Economics	Philosophy
Educational Studies	Political Science
English	Religion
Environmental Studies	Sociology and Anthropology
French	Spanish
Global Perspectives	Theatre

Bachelor of Science Majors

Biology	Engineering Science
Chemistry	Mathematics
Computer Science	Physics

Minors in programs with no major

Art History	Management Information Systems
Asian Studies	Sustainability
Dance	Women's and Gender Studies
Geology	

Students interested in majors not listed above, or who are interested in designing their own major, may explore special major options. (See p. 74.)

Interdisciplinary Cooperation

Because of the interdisciplinary nature of some of our programs, faculty from one discipline will sometimes teach in another area because of special expertise or particular focus in a specific course. Faculty will be listed in this catalog under the academic programs in which they regularly teach.

Art and Art History

David D. Coughtry, Professor

Margaret M. D'Evelyn, Associate Professor

Daniel D. Kistler, Assistant Professor

Duncan Martin, Professor

Danne P. Rhaesa, Assistant Professor

Art (studio art) and art history offer two entirely separate but complementary programs of study.

The art and art history programs are based upon the liberal arts goals of helping students find the value of artistic enrichment through a study of historical context, aesthetic theory, and applied skill building. The premise behind art and art history classes is to welcome all students to explore topics in art and to disprove stereotypes that limit the creative process to a talented few. In these programs, students' goals are served with curriculum that keeps professional careers and lifelong learning in mind.

Courses in studio art place specific emphasis upon the process of making art, the qualities which support being a productive artist in society, and the role of art to enrich the individual. Taken as a whole, the art major features learning themes which include character development, experience with varied media, an understanding of foundational concepts of compositional form, development of individual content, and service to society and global causes. The pursuit of excellence is always at the forefront of all endeavors.

Within the structure of the art major, all students develop a focused portfolio based on content, creative skills, and verbal communication in accord with their goals. This portfolio continues to develop throughout the program and is honed during the junior and senior years through upper level courses, a creative project, and a two-part capstone seminar. Students who intend to pursue graduate degrees or who expect to enter professional activities directly following graduation from Principia need to supplement the listed major requirements with additional course work offered in the art and art history program and elsewhere in the college curriculum to meet the needs of their direction. Advisors work closely with students to help them prepare for these goals. Though a professional internship in the arts is not a requirement for graduation, its value cannot be overstated; students are encouraged to pursue an internship especially during the summers to supplement the studio program.

Courses in art history trace the innovations, aspirations, and achievements of individuals and groups. As well as revealing the significance of works of painting, sculpture, architecture, and other visual arts, art history's approaches to the interpretation of art through critical theory can be useful to the study of other disciplines. Besides enlarging students' understanding of their individual cultural heritage, art history sharpens the students' capacity to discern between valid and invalid imagery in

our culture. Through visual, textural, written, and oral venues, students experience the skills of contextual and comparative analysis. The rich variety of the visual arts, including but not limited to western traditions, offers relevant connections to all facets of 21st-century society.

To receive transfer credit toward studio art requirements, the student must submit a catalog description of the course along with a representative portfolio of work produced in that course. Up to 18 semester hours of transfer work may be credited towards the requirement for an art major and six for a minor.

Elective credit is granted for successful completion of Advanced Placement examinations in studio art. For consideration towards the art major requirements, the submission of a portfolio is required.

Studio art classes carry lab fees that are published in Section 3 of the catalog. Some of these fees include the cost of classroom materials. Most courses will require the purchase of some personal art supplies.

Students majoring in art may minor in art history, but no courses can count toward both the art major and the art history minor.

For any repeatable course listed under the electives section for the ARTS major or minor, a maximum of six semester hours may be counted for any one course.

The B.A. major in Art requires 15 courses:

—One introductory course from the following:

ARTS 102	Visual Fundamentals
ARTS 103	Three Dimensional Design

Seven required core courses:

—ARTS 150	Drawing I
—ARTS 170	Graphic Design I
—ARTS 230	Color Studies
—ARTS 302	Figure Studies
—ARTS 401	Creative Research Project
—ARTS 495	Portfolio Seminar
—ARTS 496	Capstone Writing Seminar

—Four electives from the following:

ARTS 175	Print Design
ARTS 210	Oil Painting I
ARTS 220	Watercolor Painting I
ARTS 250	Drawing II
ARTS 270	Graphic Design II
ARTS 280	Printmaking
ARTS 285	Illustration
ARTS 290	Web Design

ARTS 295	Sustainable Design
ARTS 299	Experimental New Media Seminar
ARTS 301	Portraiture
ARTS 304	Figure Modeling
ARTS 310	Oil Painting II
ARTS 320	Watercolor Painting II
ARTS 330	Studio Seminar
ARTS 350	Drawing III
ARTS 360	Figurative Painting
ARTS 370	Advanced Design Practices
ARTS 402	On-Location Studies
ARTS 404	Advanced Series

Three art history courses:

- One 100-level art history course
- One 200-level art history course
- One 300-level art history course

A minor in Studio Art requires eight courses:

—One introductory course from the following:

ARTS 102	Visual Fundamentals
ARTS 103	Three Dimensional Design

—ARTS 150 Drawing I

—One of the following:

ARTS 170	Graphic Design I
ARTS 175	Print Design

—ARTS 230 Color Studies

—One of the following:

ARTS 250	Drawing II
ARTS 302	Figure Studies

—One elective from the following:

ARTS 175	Print Design
ARTS 210	Oil Painting I
ARTS 220	Watercolor Painting I
ARTS 250	Drawing II
ARTS 270	Graphic Design II
ARTS 280	Printmaking
ARTS 285	Illustration
ARTS 290	Web Design
ARTS 295	Sustainable Design
ARTS 299	Experimental New Media Seminar

ARTS 301	Portraiture
ARTS 304	Figure Modeling
ARTS 310	Oil Painting II
ARTS 320	Watercolor Painting II
ARTS 330	Studio Seminar
ARTS 350	Drawing III
ARTS 360	Figurative Painting
ARTS 370	Advanced Design Practices
ARTS 402	On-Location Studies
ARTS 404	Advanced Series

Two art history courses:

- One 100-level art history course
- One 200-level art history course

A minor in Art History requires six courses:

- One introductory course from the following:

ARTH 100	Intro to Western Art to 1400
ARTH 101	Intro: Western Art 1440-Present

- One non-western art history course:

ARTH 110	Survey Africa/Asia/Americas
ARTH 230	Asian Art

- Three 200-level art history courses
- One 300-level art history course

Among the required 200- and 300-level art history courses, at least one must be in pre-17th century art and/or architecture, and one in post-17th century art and/or architecture, including courses in American art and/or architecture.

Asian Studies

Faculty from several disciplines support this program.

The minor in Asian Studies is designed to develop student understanding of this area of the world that has grown in strategic, economic, and cultural importance (as well as population) over the past century. Asia is defined broadly to include China, Japan, Southeast and island Asia, South Asia (including India), Central Asia, and the Middle East. These regions embrace the religious influences of Buddhism, Confucianism, Taoism, Hinduism, and Islam (among many other religions). Our curriculum provides courses in art history, economics, history, politics, and religion.

The purpose of the minor is to foster breadth of knowledge about the region or a country in the region.

Courses offered on Principia abroads to Asia, as well as one-time

offerings and independent projects, may also apply toward the minor if approved by the director of Asian studies. The director may consult with the faculty teaching courses in support of the minor to determine the appropriateness of coursework.

A minor in Asian Studies requires a minimum of 18 semester hours (from at least three disciplines) with no more than 12 semester hours earned on the same abroad or travel-study program. Courses not on this list must be approved in advance by the director of Asian studies.

ARTH 230	Asian Art
ARTH 282	Islamic Art
ECON 231	Comparative Economic Systems
ECON 316	Economic Development
HIST 240	The History of Islam
HIST 281	China
HIST 283	Japan
HIST 335	Middle East
HIST 382	Modern China
HIST 386	India
LANG 100	Elementary Language Study
POLS 261	Politics of China
POLS 263	Topics in Asian Politics
REL 261	Living Religions of the East
SOAN 251	Anthropology of India

Biology and Natural Resources

Gregory L. Bruland, Associate Professor

Scott A. Eckert, Professor

Christine A. McAllister, Associate Professor

The Biology and Natural Resources (BNR) Department offers an ecologically based curriculum that exposes students to concepts, methods, and issues in field biology, environmental studies, and natural resource conservation. Using the natural heritage of Principia's 2,600 acre campus, the department emphasizes hands-on research and conservation activities – including prairie restoration, Mississippi River research, forest management, and local wildlife studies. The department is housed in the Science Center, with state-of-the-art greenhouse facilities and extensive zoological and botanical collections.

The department offers a B.S. major in biology, emphasizing ecology and ecological research. The added coursework in math and science makes this program especially appropriate for students interested in graduate study, or work in the environmental sciences. Programs within the department promote the development of citizenship, stewardship,

and a global perspective.

The BNR Department also offers a B.A. major in environmental studies, which allows students to broadly explore their interest in the environment. Environmental studies students may choose a special concentration in Geology if desired. The environmental studies major is particularly appropriate for those with career interests in environmental education, environmental law, public policy, natural resource management, or selected fields of graduate study.

There is a growing recognition of the importance that marine environments play in global ecological processes. To provide Principia students with the opportunity to study at a world-class marine laboratory, Principia has joined the Marine Science Education Consortium (MSEC), based at Duke University's Marine Laboratory (DUML). Over 34 schools (mostly four-year liberal arts colleges like Principia) in the consortium send students to DUML to take classes in a wide variety of marine science fields. Principia students wishing to attend a semester at DUML may apply through Principia's Biology and Natural Resources Department to take courses that will then be accepted for credit at Principia College through the normal processes in the Registrar's Office.

Students majoring in Environmental Studies, Geology concentration, may not minor in geology. Students majoring in biology may minor in geology.

The B.S. major in Biology requires 15 courses:

Bio-block courses taken concurrently:

- BNR 111 Introductory Botany
- BNR 112 Introductory Zoology
- BNR 191 Introduction to Ecology
- BNR 201 Methods in Research & Writing

Additional required courses:

- BNR 256 Conservation Genetics
- Two of the following advanced ecology courses:

- BNR 312 Grassland Ecology
- BNR 313 Forest Ecology
- BNR 315 Freshwater Ecology

Or another advanced ecology course approved by the dept.

- One of the following applied ecology courses:

- BNR 356 Global Change Biology
- BNR 380 Advanced Ecology Seminar
- BNR 390 Forest Resource Management
- BNR 391 Soil and Water Conservation
- BNR 403 Biology Research Experience

Or another applied ecology course approved by the department

- Two BNR electives at the 200-level or above
- CHEM 115 Introduction to Chemistry
- CHEM 260 Organic Survey
- MATH 164 Introduction to Statistics
- One mathematics elective
- BNR 050 BNR Service Learning

The B.A. major in Environmental Studies requires 14 courses. Students may earn either a B.A. in Environmental Studies, or a B.A. in Environmental Studies with a concentration in Geology by completing the following course requirements:

Bio-block courses taken concurrently:

- BNR 111 Introductory Botany
- BNR 112 Introductory Zoology
- BNR 191 Introduction to Ecology
- BNR 201 Methods in Research & Writing

Additional required courses:

- BNR 050 BNR Service Learning
- Three BNR or GEOL electives numbered above 200
- One advisor-approved advanced ecology course
- Two advisor-approved SOAN courses or EDUC 170 and one other EDUC course
- One of the following:
 - CHEM 111 Environmental Chemistry
 - CHEM 115 Introduction to Chemistry
 - CHEM 131 Fundamentals of Chemistry I
- MATH 164 Introduction to Statistics
- One of the following:
 - ECON 203 Principles of Microeconomics
 - ECON 271 Environmental Economics

The Geology concentration requires 14 courses:

Bio-block courses taken concurrently:

- BNR 111 Introductory Botany
- BNR 112 Introductory Zoology
- BNR 191 Introduction to Ecology
- BNR 201 Methods in Research & Writing

Additional required courses:

- GEOL 111 Introductory Geology
- GEOL 242 Historical Geology
- GEOL 301 Environmental Mapping & GIS
- GEOL 330 Sedimentary Geology
- Two of the following:
 - GEOL 185 Ice Age Mammoth Project
 - GEOL 225 Environmental Geology
 - GEOL 230 Nonrenewable Resources
- One of the following:
 - CHEM 111 Environmental Chemistry
 - CHEM 115 Introduction to Chemistry
 - CHEM 131 Fundamentals of Chemistry I
- One advisor-approved EDUC course or one advisor-approved SOAN course
- One of the following:
 - ECON 203 Principles of Microeconomics
 - ECON 271 Environmental Economics
- GEOL 050 Service Learning in Geology

The minor in Environmental Studies requires 20 semester hours of coursework within the BNR Department. One of the five courses may be a geology course. At least 12 semester hours must be in courses numbered 200 or higher. Potential minors should consult the biology and natural resources faculty in planning their academic programs.

Business Administration

James W. Bilsborrow, Professor

Linda A. Bohaker, Professor

Dale E. Matheny, Assistant Professor

Wesley B. Powell, Assistant Professor

Business administration is taught at Principia from the standpoint of concepts and principles. Learning these principles involves an integrated approach to the study of organizations, products, markets, resources, and governmental policies together in one educational package. Students graduating from this program should be able to demonstrate a solid understanding of core business principles, formulate and recommend solutions to complex business problems, communicate effectively both orally and in writing, and collaborate in a team environment.

To demonstrate these principles in action, students are encouraged to participate in an internship experience. Qualified junior and senior majors may choose to intern with a business firm to study the management process firsthand while earning credit toward the B.A. degree.

Since a knowledge of basic economics and financial accounting has widespread applications, non-majors are encouraged to take ECON 203 and BUAD 251 or BUAD 110.

Students are encouraged to declare their major during the first semester of their sophomore year. Any student declaring the business administration major after earning 60 semester hours must petition the department for approval of a graduation plan.

Business administration majors are encouraged to complete ECON 203, ECON 204, BUAD 251, BUAD 252, and BUAD 255 by the end of their sophomore year.

Business administration projects and independent study may be available by arrangement with business administration faculty.

A cumulative GPA of 2.000 or above in the 11 major-required courses is necessary to complete the major. Similarly, a cumulative GPA of 2.000 or above in the six courses required for the minor is necessary to complete the minor.

BUAD 430 (Strategic Management) must be taken at Principia College. The application of transfer course credit to the major or minor is considered on an individual basis.

1. For transfer students who have not yet attended Principia College: For a major, transfer students must take at least five classroom courses (minimum of 15 semester hours) from Principia business administration departmental faculty. Four of these courses must be numbered in the 300 or 400 level. For a minor, transfer students must take at least three classroom courses (minimum of nine semester hours) from Principia business administration departmental faculty. Two of these courses must be numbered in the 300 level.
2. For students who are currently enrolled or were once enrolled at Principia College: Students are expected to complete remaining major/minor courses at Principia. Exceptions must be pre-approved and will be considered only in cases of exceptional academic opportunity.

The B.A. major in Business Administration requires 11 courses:

—ECON 203	Principles of Microeconomics
—ECON 204	Principles of Macroeconomics
—BUAD 251	Financial Accounting
—BUAD 252	Managerial Accounting
—BUAD 255	Integrated Principles of Business
—BUAD 261	Business Statistics
—BUAD 320	Marketing
—BUAD 330	Management
—BUAD 360	Managerial Finance

—BUAD 430	Strategic Management
—One of the following:	
BUAD 215	Intro to Mgmt Info Systems
BUAD 310	Investments
BUAD 321	Marketing Research
BUAD 325	Advertising
BUAD 326	Multi-Channel Marketing
BUAD 340	Operations
BUAD 350	Business Law
BUAD 401	Business Consulting Practicum (minimum 3 semester hours)
PHIL 265	Business Ethics

A minor in Business Administration requires six courses:

—ECON 203	Principles of Microeconomics
—ECON 204	Principles of Macroeconomics
—BUAD 251	Financial Accounting
—BUAD 252	Managerial Accounting
—BUAD 320	Marketing
—BUAD 330	Management

Chemistry

Jeffrey B. Cornelius, Professor

Simon P. Hanson, Associate Professor

The emphasis in the chemistry program is on assisting the students to develop a working knowledge of basic chemical principles and to prepare them for possible careers or graduate training in chemistry.

The B.S. degree is appropriate for students interested in pursuing a professional career in chemistry or chemistry-related fields.

A typical range of undergraduate courses is offered. In addition to the formal coursework taken for the B.S. degree, chemistry majors may also elect to participate in one or more semesters of industrial experience or academic research.

The chemistry program is housed in the Science Center and includes four well-equipped, modern laboratories, a classroom, study areas, a computer room, and faculty offices. The arrangement is such that faculty and fellow students are readily available for consultation and assistance. The laboratories house modern instruments which may be used by all chemistry students.

We recommend an appropriate computer course. Additional courses in mathematics, physics, or applied chemistry may also be recommended.

The B.S. major in Chemistry requires 15 courses:

- CHEM 131 Fundamentals of Chemistry I
- CHEM 132 Fundamentals of Chemistry II
- CHEM 133 Fundamentals of Chemistry III
- CHEM 262 Organic Chemistry I
- CHEM 263 Organic Chemistry II
- One of the following:
 - CHEM 274 General Biochemistry
 - CHEM 301 Adv Environmental Chemistry
- CHEM 311 Phys Chem I: Thermodynamics
- CHEM 313 Phys Chem II: Quantum Chem
- CHEM 321 Applied Spectroscopy
- CHEM 333 Instrumental Analysis
- CHEM 441 Senior Research Project (minimum of three semester hours)
- MATH 181 Calculus I
- MATH 182 Calculus II
- PHYS 201 Phys for Scientists/Engrs I
- PHYS 202 Phys for Scientists/Engrs II

A minor in Chemistry requires six courses:

- CHEM 131 Fundamentals of Chemistry I
- CHEM 132 Fundamentals of Chemistry II
- CHEM 133 Fundamentals of Chemistry III
- One of the following:
 - CHEM 260 Organic Survey
 - CHEM 262 Organic Chemistry I
- Two chemistry electives numbered 250 or above

Computer Science

John W. Broere, Instructor

Thomas H. Fuller Jr., Professor

Kenneth R. Johnson, Professor

The science of computing is a rapidly growing field of study. Computers are used in almost every facet of life, and a grasp of their fundamentals can lead to challenging and rewarding activity in many fields. Principia's computer science course offerings stress the principles and theories that underlie computing.

Because of the foundational nature of CSCI 182 Intro to Data Structures, a student must earn a grade of C or better in this course (or get permission from the department) to continue as a computer science major.

To complete a major or minor offered by the Computer Science Department, a student must earn a GPA of 2.000 or higher for all the courses (required and elective) taken for that program.

For all majors and minors, if CSCI 181 is substituted for CSCI 171, the total semester hours required will be two less.

A student may not earn both a major in computer science and a minor in management information systems.

The B.S. major in Computer Science requires 14 courses:

—CSCI 171	Introduction to Programming
—CSCI 182	Intro to Data Structures
—CSCI 220	Programming Languages
—CSCI 240	Object-Oriented Programming
—CSCI 263	Computer Software Architecture
—CSCI 310	Software Engineering
—CSCI 320	Database Management Systems
—CSCI 330	Operating Systems
—CSCI 333	Computer Networking
—CSCI 380	Compilers
—CSCI 421	Computer Issues Seminar
—ENGR 262	Computer Hardware Architecture
—MATH 181	Calculus I
—MATH 261	Discrete Math

The B.A. major in Computer Science requires 11 courses:

—CSCI 171	Introduction to Programming
—CSCI 182	Intro to Data Structures
—CSCI 220	Programming Languages
—CSCI 240	Object-Oriented Programming
—CSCI 263	Computer Software Architecture
—CSCI 310	Software Engineering
—CSCI 320	Database Management Systems
—CSCI 333	Computer Networking
—CSCI 421	Computer Issues Seminar
—ENGR 262	Computer Hardware Architecture
—MATH 261	Discrete Math

A minor in Management Information Systems requires seven courses:

—BUAD 215	Intro to Mgmt Info Systems
—CSCI 171	Introduction to Programming
—CSCI 310	Software Engineering

- CSCI 320 Database Management Systems
- CSCI 421 Computer Issues Seminar
- Two courses from business administration or economics at the 200 level or above

Dual Language

Faculty from several disciplines support this program.

The dual language major is designed for students who want to achieve a working proficiency in two languages other than English. It may be combined with a second major as a support to another interest or career goal. The language training it provides, together with the appropriate socio-political and cultural background, is applicable to several career areas, including teaching, translating/interpreting, international business, and government service. Normally, students majoring in two languages will have developed some proficiency in one of these prior to coming to Principia, and they continue that language in addition to developing one other during their major program.

All language courses for the major must be at the 200 level or above. Some of the three culturally-related courses may fulfill general education liberal arts distribution requirements (LADR).

Majors in all languages are strongly urged to earn at least three semester hours in a cultural environment where that language is spoken natively through either a Principia abroad or an independent study abroad program.

Majors in French and Spanish are described separately in this section.

The B.A. Dual Language major consists of 15 courses:

- Six courses (including one literature or culture course) in one language other than English
- Four courses in a second non-English language
- Two electives in either or both of the target languages
- Three culturally-related courses:
 - Two histories related to non-English-speaking areas
 - One art history/political science/sociology related to international topics

Economics

Thomas L. Davidson, Assistant Professor

Economics is taught at Principia from the standpoint of concepts and principles. Learning these principles involves an integrated approach to the study of individual choice, markets of every kind, the physical environment, and the impact of governmental policies on these. Upon completion of this major, the student will be able to determine the appropri-

ate response to a broad range of economic issues at the household, firm, national, and international levels. The student will also be able to appreciate and appraise alternative perspectives on key economic issues.

Students are encouraged to declare their major before the end of their sophomore year. Any student declaring the economics major after earning 60 semester hours must petition the department for approval of a graduation plan.

A cumulative GPA of 2.000 or above in the ten major-required courses is necessary to complete the major. Similarly, a cumulative GPA of 2.000 or above is necessary to complete the minor.

Economics projects and independent study may be available by arrangement with economics faculty.

ECON 431 (Evolution of Economic Thought) must be taken at Principia College. The application of transfer course credit to the major or minor is considered on an individual basis.

1. For transfer students who have not yet attended Principia College: For a major, transfer students must take at least five classroom courses (15 semester hours) from Principia economics departmental faculty. For a minor, transfer students must take at least three classroom courses (9 semester hours) from Principia economics departmental faculty.
2. For students who are currently enrolled or were once enrolled at Principia College: Students are expected to complete remaining major/minor courses at Principia. Exceptions must be pre-approved and will be considered only in cases of exceptional academic opportunity.

The B.A. major in Economics requires 11 courses:

—ECON 203	Principles of Microeconomics
—ECON 204	Principles of Macroeconomics
—BUAD 251	Financial Accounting
—BUAD 261	Business Statistics
—ECON 303	Intermed Microeconomic Theory
—ECON 304	Intermed Macroeconomic Theory
—ECON 431	Evolution of Economic Thought
—Two of the following:	
ECON 231	Comparative Economic Systems
ECON 271	Environmental Economics
ECON 316	Economic Development
ECON 321	Money and Banking
ECON 331	International Economics

—One of the following:

- EDUC 260 Communication
- MCOM 140 Public Speaking
- THEA 102 Oral Interpretation

—One of the following:

- BUAD 215 Intro to Mgmt Info Systems
- EDUC/POLS/SOAN 215 Soc Science Research Methods
- MATH 181 Calculus I

A minor in Economics requires six courses:

- ECON 203 Principles of Microeconomics
- ECON 204 Principles of Macroeconomics
- BUAD 251 Financial Accounting
- Three electives chosen from BUAD 261 and economics courses at or above the 200 level.

Educational Studies

Nikki J. Gamrath, Assistant Professor

Lauren S. Hinchman, Assistant Professor

Winifred A. Needham, Assistant Professor

The Educational Studies major prepares students to contribute to a variety of educational contexts. This major does not lead to teacher certification, but graduates will be prepared to pursue a teaching certificate and/or Master's degree in Education. Graduates will gain in-depth knowledge of educational theory, and experience putting theory into practice through lesson design, classroom management, and building learning communities. Students will develop strong skills in communication, critical thinking, inquiry based teaching and learning, leadership, and the use of technology. These skills will be valuable to students who want to pursue consulting, training, facilitating, group management, and other leadership roles.

Educational Studies majors will visit a wide variety of schools which will contribute to their knowledge of the American educational system. Students will consider the role of teachers, learners, parents, community members, and leaders in educational reform. This topic will be explored in terms of both past and present efforts to design an educational system which supports learning for all students.

Graduates are encouraged to use the educational studies major to expand the potential use of the content gained in a second major.

A major in Educational Studies requires 12 courses (31-38 total SH):

- EDUC 260 Communication
- One of the following:
 - EDUC 221 Elem/Middle School Beg Intern
 - EDUC 222 Field Experiences in Education
 - EDUC 271 Sec/Middle School Beg Intern
- One of the following:
 - EDUC 220 Elem & Middle School Methods
 - EDUC 223 Classroom Methods & Management
 - EDUC 270 Sec & Middle School Methods
- One of the following:
 - EDUC 252 Teaching the Exceptional Child
 - EDUC 253 Dynamic Learning Communities
 - EDUC 352 Inclusive Learning Environment
- One of the following:
 - EDUC 250 Educational Psychology: Majors
 - EDUC 251 Educational Theory
- One of the following:
 - EDUC 320 Reading in Elem & Middle Schl
 - EDUC 325 Literacy Across the Curriculum
 - EDUC 370 Reading in Sec & Middle School

A 3 SH ENGL or WRIT course approved by the Education dept.
- EDUC 420 Capstone in Education
- Five of the following: (one course must be 300 level)
 - EDUC 120 Signs of the Times
 - EDUC 130 Outdoor Education
 - EDUC 170 Environmental Education
 - EDUC 184 Children and Society
 - EDUC 218 Education in America
 - EDUC 235 Outdoor Leadership
 - EDUC 254 Child & Adolescent Development
 - EDUC 278 Child & Adolescent Literature
 - EDUC 287 Character Education
 - EDUC 310 Global Education
 - EDUC 312 Teacher as Leader
 - EDUC 318 Advanced Methods of Teaching
 - EDUC 330 Math for Elem/Mid Sch Teachers
 - EDUC 345 Science/Soc Science Meth: K-9
 - EDUC 383 Adolescent Development
 - EDUC 388 Philosophy of Education

3 SH course approved by the Education department that poses critical questions concerning the ways in which social, political, and economic institutions affect individuals according to their race, gender, class, ability, or culture.

A minor in Educational Studies requires five courses:

- EDUC 260 Communication
- EDUC 287 Character Education
- Three other courses from Education course offerings totaling 9 semester hours or more. WRIT 350 is an acceptable substitution for one of these electives.

Engineering Science

Faculty from several disciplines support this program.

Principia College offers a Bachelor of Science major in engineering science in conjunction with an engineering degree from the University of Minnesota, the University of Southern California, or Southern Illinois University at Edwardsville. The B.S. in engineering science may also be awarded to students who complete the requirements below and those for an engineering degree at another university, provided that the program at the other university is approved by the director of the engineering program, and provided that a waiver of residency petition is approved by the College. Completion of this program generally takes five years. Students usually attend Principia for three years and then transfer for their last two years. The dual degree program is adapted to satisfy the curricular needs of both Principia and the cooperating universities. Students who complete the engineering science major requirements listed below, but not the full dual degree program, will receive a single non-ABET (Accreditation Board for Engineering and Technology) accredited degree in engineering science from Principia.

This program prepares students to confront the technical challenges facing society today. Principia provides the scientific principles and ethical basis; the university completes the education of the professional engineer.

The eight required, preparatory courses also fulfill the B.S. distribution requirement of 24 semester hours outside the major discipline.

Students should consult the current university bulletin and their engineering advisor about the entrance requirements for the specific engineering program they wish to pursue. The acceptance of Principia's dual degree students to the cooperating university's program is not automatic. They must apply during their junior year.

Also, dual degree students must individually petition to have Principia's residency requirement waived and submit satisfactory evidence that they are upholding The Principia Pledge during their two years at the coop-

erating university. Students must also complete the all-college degree requirements.

The B.S. major in Engineering Science requires 12 courses plus transfer of engineering courses:

Preparatory courses

- CHEM 131 Fundamentals of Chemistry I
- CHEM 132 Fundamentals of Chemistry II
- CSCI 171 Introduction to Programming
- MATH 181 Calculus I
- MATH 182 Calculus II
- MATH 283 Multivariable Calculus
- PHYS 201 Phys for Scientists/Engrs I
- PHYS 202 Phys for Scientists/Engrs II
- Completion of the first year of the two-year engineering program at a university approved by the director of the engineering program and successful transfer of at least 24 semester hours of engineering courses to Principia College as part of the engineering science major.
- Four courses in one of the following areas of concentration:

Chemistry concentration

- CHEM 133 Fundamentals of Chemistry III
- CHEM 262 Organic Chemistry I
- CHEM 263 Organic Chemistry II
- One of the following:
 - CHEM 311 Phys Chem I: Thermodynamics
 - CHEM 321 Applied Spectroscopy

Computer Science concentration

- CSCI 182 Introduction to Data Structures
- ENGR 262 Computer Hardware Architecture
- Two of the following:
 - CSCI 240 Object-Oriented Programming
 - CSCI 263 Computer Software Architecture
 - CSCI 310 Software Engineering

Math concentration

- MATH 380 Differential Equations
- Three of the following:
 - MATH 273 Linear Algebra

MATH 355	Applied Advanced Calculus
MATH 360	Numerical Analysis
MATH 431	Complex Variables

Physics concentration

- PHYS 203 Phys for Scientists/Engrs III
- Three of the following:
 - ENGR 262 Computer Hardware Architecture
 - PHYS 283 Advanced Laboratory
 - PHYS 301 Classical Mechanics
 - PHYS 303 Electricity & Magnetism I
 - PHYS 305 Quantum Mechanics I

Other Engineering Options

Students who wish to obtain only an engineering degree should work with their engineering advisor and an advisor at the school from which they intend to graduate to match courses from our freshman and sophomore years to the requirements of the engineering school. After two years at Principia, these students would then apply to transfer their credits to that engineering school and obtain their engineering degree there. The decision to transfer Principia courses to the other school resides with the transfer institution. In addition, students may opt to complete a four-year B.S. major at the College (e.g., chemistry, computer science, mathematics, or physics) and then transfer to the university for two more years to complete an engineering degree.

English

Sara J. McDaniel, Instructor

Dinah S. Ryan, Associate Professor

Heidi J. Snow, Associate Professor

The English department offers diverse courses, programs, and activities to encourage students to cultivate original, creative, and analytical voices. Students in the major become active participants in a community involved in intellectual and artistic practice. The English department builds this community through regular on- and off-campus events - student readings, visits from authors, trips to St. Louis for book talks and readings, and abroad programs. Currently, the department offers two abroad programs: one focused on the creative arts in Prague and one focused on Shakespeare in England. Students may earn a major or minor in English with concentrations in Literary Studies or Creative Writing.

At least four of the courses taken for either concentration of the English major must be at the 300 or 400 level. To complete a major or minor offered by the English department, a student must earn a GPA of 2.0 or

higher for all the courses (required and elective) taken for that program.

For a major, transfer students who have not yet attended Principia College must take at least five classroom courses (15 semester hours) from Principia English Department faculty. Four of these courses must be numbered at the 300 or 400 level.

It is recommended that English majors who are also secondary education majors take a Shakespeare course and a U.S. literature course before their education intermediate block.

The B.A. major in English with a concentration in Literary Studies requires 14 courses:

- ENGL 150 Introduction to the Major
- Two courses focused on a chronological or regional presentation of literature (from two different time periods or regions)
- Two courses focused on a genre study of literature
- Two courses focused on voices of difference (colonial, post-colonial, women's literature, Native American, polyvocal, etc.)
- One single author course
- ENGL 388 Literature and Critical Theory
- ENGL 399 Capstone Proposal
- ENGL 400 Capstone in Literature
- Three electives from English department or World Literature offerings

The B.A. major in English with a concentration in Creative Writing requires 14 courses:

- ENGL 150 Introduction to the Major
- One course focused on either a chronological or regional presentation of literature
- One course focused on a genre study of literature
- One course focused on voices of difference (colonial, post-colonial, women's literature, Native American, polyvocal, etc.)
- One single author course
- One of the following:
 - ENGL 242 Theory as Practice
 - ENGL 243 Theory as Practice on Location
- ENGL 351 Adv Creative Writing Seminar
- ENGL 388 Literature and Critical Theory
- ENGL 399 Capstone Proposal
- ENGL 401 Capstone in Creative Writing

(Note: may be taken as a one semester hour course if taken in conjunction with ENGL 400: Capstone in Literature for a combined total of three semester hours.)

- One complete two-course sequence from the following:
 - ENGL 240 and 290 Poetry I and II
 - ENGL 241 and 291 Fiction I and II
- Two additional courses chosen from the English department or World Literature offerings

A minor in English in Literary Studies requires six courses:

- One course focused on a regional or chronological presentation of literature
- One course focused on a genre study of literature
- One course focused on voices of difference (colonial, post-colonial, women's literature, Native American, polyvocal, etc.)
- One single author course
- Two electives from English department or World Literature offerings

A minor in English in Creative Writing requires six courses:

- One of the following:
 - ENGL 242 Theory as Practice
 - ENGL 243 Theory as Practice on Location
- One course focused on voices of difference (colonial, post-colonial, women's literature, Native American, polyvocal, etc.)
- One single author course
- One complete two-course sequence from the following:
 - ENGL 240 and 290 Poetry I and II
 - ENGL 241 and 291 Writing I and II
- One additional course chosen from the English Department's creative writing courses

French

Hélène Diaz Brown, Professor

Students choosing to major in French may elect one of two concentrations: French Language or French and Francophone Studies.

The French Language concentration is focused on the French language, with an emphasis on all fundamental language skills: oral fluency and comprehension, and the ability to write correct French and to understand various texts written in French.

The French and Francophone Studies concentration offers an emphasis on French culture and on the Francophone world, through literature, film, and other media, while preparing students for oral fluency in the language and an ability to write correct French.

Both French major concentrations will also equip students with knowl-

edge of major aspects of French history and civilization and with an understanding of French society and of the Francophone world, through literature, film, and other media.

This major may also include recommended courses from other disciplines such as history, political science, and art history, some of which may also fulfill liberal arts distribution requirements (LADRs). The program is designed to be compatible with other majors such as education, business administration, global perspectives, history, and political science. Such combinations can lead to a broad range of career choices.

At least one course of study abroad is strongly recommended for both concentrations.

Independent studies, projects, and seminars in French are available as contract courses.

The B.A. major in French with a concentration in French Language requires 33 semester hours at the FREN 204 level and above from the following courses:

—Nine semester hours from the following:

FREN 204	Intermediate French I
FREN 205	Intermediate French II
FREN 210	Intermediate Writing Review
FREN 216	Intermediate Conversation
FREN 220	Contemporary French Society
FREN 225	Intermediate Grammar I
FREN 226	Intermediate Grammar II
FREN 230	Language and Culture Abroad II
FREN 241	French Pronunciation

—12 semester hours from the following:

FREN 250	French Cultural Studies
FREN 255	Textual Analysis and Writing
FREN 260	Reading French Through Time
FREN 270	Intro to French Literature
FREN 310	Advanced French
FREN 316	Advanced French Conversation
FREN 325	Advanced French Grammar
FREN 330	Language & Culture Abroad III

—Nine semester hours from the following:

FREN 300	Love, Reason, and Monarchy
FREN 320	Topics in French Literature
FREN 340	Image & Power in 19th C France
FREN 350	20th Century: Mind Revolutions

FREN 360 Seminar in French Literature

FREN 470 Capstone

—Three semester hours from any of the above categories

To complement the French language concentration, one or more of the following courses taught in English is strongly recommended:

ARTH 203 Medieval Art

ARTH 205 Topics in Art History

ARTH 235 19th Century European Art

ENGL 388 Literature and Critical Theory

HIST 228 History of France

WLIT 179 Reading French Society in Film

The B.A. Major in French with a concentration in French and Francophone Studies requires 33 semester hours:

21 semester hours at the FREN 204 level or above chosen from the following courses to be taught in French:

—Six semester hours from the following:

FREN 204 Intermediate French I

FREN 205 Intermediate French II

FREN 216 Intermediate Conversation

FREN 220 Contemporary French Society

FREN 225 Intermediate Grammar I

FREN 230 Language and Culture Abroad II

—15 semester hours from the following:

FREN 250 French Cultural Studies

FREN 255 Textual Analysis and Writing

FREN 260 Reading French Through Time

FREN 270 Intro to French Literature

FREN 300 Love, Reason, and Monarchy

FREN 310 Advanced French

FREN 330 Language & Culture Abroad III

FREN 340 Image & Power in 19th C France

FREN 350 20th Century: Mind Revolutions

FREN 360 Seminar in French Literature

FREN 470 Capstone

—Nine semester hours from the following complementary courses:

ARTH 235 19th Century European Art

ENGL 388 Literature and Critical Theory

HIST 228 History of France

HIST 260 From Renaissance to Revolution

HIST 264 Revolutionary Europe 1800-1914

HIST 313 Africa

SOAN 290 African Cultures
 WLIT 179 Reading French Society in Film

—Three semester hours from any of the above categories

A minor in French Language requires six courses at the 204 level and above. At least one of these courses must be in French literature.

Only courses taught in the French language can be applied to a French language minor. No more than two transfer courses may be applied to the French language minor.

A minor in French and Francophone Studies requires six courses. At least four of these courses must be taught in French with the remaining two courses taken from the list of complementary courses made available for the major in French and Francophone studies.

No more than two transfer courses may be applied to the French and Francophone studies minor.

The French Language certificate requires:

- Completion of three courses (nine semester hours) in French at the 204 level or above
- Achievement of at least intermediate proficiency level on an ACTFL (American Council on the Teaching of Foreign Languages) official, nationally-normed Oral Proficiency Interview (OPI) test

To qualify for the certificate, the student must earn a grade of C or higher in each of the courses. At least two of the courses must be taken at Principia. The ACTFL proficiency test result will further define the certificate and will be indicated on the student's transcript.

Each student is responsible for the cost of the proficiency test, which must be taken with a certified OPI tester at a local university or by phone (call monitored by the Languages and Cultures Department). Principia faculty cannot administer the test.

Geology

Janis D. Treworgy, Professor

A minor in geology is offered. Also a geology concentration is offered under the environmental studies major. (See Biology and Natural Resources pp. 28-31.) A student may not earn both a minor in geology and a major in environmental studies (geology concentration).

The minor program in geology provides students with the two fundamental courses in geology, an upper level geology course, and experience with GIS mapping software as well as the opportunity to gain experience in other areas, including mineral and energy resources, environmental geology, and a hands-on vertebrate paleontologic project. Class activities

develop student skills in methodologies ranging from mineral, rock, and fossil identification to analysis of geologic structures, stratigraphic relations, and depositional systems. Field activities accompany the geology courses.

A minor in Geology requires six courses:

- GEOL 111 Introductory Geology
- GEOL 242 Historical Geology
- GEOL 301 Environmental Mapping & GIS
- GEOL 330 Sedimentary Geology
- Two of the following:
 - GEOL 185 Ice Age Mammoth Project
 - GEOL 225 Environmental Geology
 - GEOL 230 Nonrenewable Resources

Global Perspectives

Faculty from several disciplines support this program.

Global Perspectives at Principia is the study of contemporary issues that are truly global in scope. The focus is on the complex problems raised by these issues. The purpose is to educate professionals who can communicate and work across the boundaries of the traditional bodies of knowledge to solve complex global problems. Students with a major in global perspectives may choose to work for agencies trying to solve complex problems on the ground, or they may prefer to become scholars working to understand how to think about and address complex global issues.

Seven courses taken in an area of concentration include theory, methods, and content from two disciplines.

Students meeting the language study and proficiency requirement in a Western language must demonstrate proficiency at the 205 level or above. Students meeting this requirement through a non-Western language must demonstrate proficiency by completion of study at a level appropriate for the demands of the particular language. Criteria for language proficiency are determined by the Department of Languages and Cultures. Any transfer work applied to this requirement must meet institutional transfer policies administered by the Registrar's Office.

GLBL 431 is highly recommended as an elective for both majors and minors.

The B.A. major in Global Perspectives requires 13 courses plus language proficiency and an international experience:

- GLBL 225 Global Studies I
- GLBL 226 Global Studies II
- GLBL 270 World Focus Seminar (taken twice)

- GLBL 497 Research Methods
- GLBL 498 Research Capstone Seminar
- Seven courses determined by student and advisor selected from two disciplines in order to provide in-depth knowledge in a selected area of focus
- Language study and proficiency
- International experience approved by the Global Perspectives advisory board.

A minor in Global Perspectives requires seven courses:

- GLBL 225 Global Studies I
- GLBL 226 Global Studies II
- GLBL 270 World Focus Seminar
- One theory and/or methods course
- Three courses in an issue area of the student's choice

History

Elise K. McCurties, Assistant Professor

Faith G. Paul, Professor

Gregory W. Sandford, Professor

Historians explore the unfolding of human action through time. Students in Principia's History Department explore historical thinking, master historical knowledge, engage in historical research and analysis, develop a global perspective, bridge the disciplines, practice ethics for historians, and learn to communicate effectively within the discipline of history.

The History Department offers programs of study in American, European, and non-Western history in conjunction with courses offered in literature, languages and culture, economics, political science, religion, philosophy, and sociology that enrich and complement the course offerings in history.

Fundamental to historical thinking and the practice of history is the theoretical perspective of historians that the flow of human thought and endeavor through time is enduring, contingent, complex, eventful, and heterogeneous. Therefore historians, as well as faculty and students in Principia's History Department, give particular attention to chronology, sequence, and contextualization. Because much of what historians are focusing on today is global, and complex issues need to be analyzed through the lens of multiple disciplines, particular attention is given to developing a global perspective with cultural sensitivity, and to incorporating the thinking, methods, and findings from multiple disciplines into the historical narrative. Ethical issues within this narrative and the ethics of historians as they conduct and convey their research are emphasized.

Students complete an area of focus to develop depth of knowledge in a field of history of particular individual interest. Examples of possible

focus areas include: society and the arts, globalization, democratization, or the Americas in a regional and world context. Other areas of focus may be proposed to the department and will be considered where faculty expertise and campus resources can support the focus area. At least four of the six courses in the focus area must be history courses. Two may be in other disciplines with the approval of the student's history advisor.

Courses taken in the introductory core may be applied to the area of focus if the student received a grade of B or higher in those courses. Students are required to take four upper division courses in addition to the capstone courses, HIST 497 and HIST 498.

It is strongly recommended that history majors study a Western or non-Western language, to the 205-level for a Western language, and to an appropriate level for a non-Western language. If a student chooses to study a language not offered at the College, he or she should consult with the Department of Languages and Cultures and the registrar about transfer of credit.

History minors must complete HIST 297 with a grade of C or higher. It is recommended that at least one course for the minor be in American history, one in European history, and one in non-Western history. The remaining courses should be selected to create depth in one of the above areas.

The B.A. major in History requires 14 courses:

Introductory history core:

—One American history course from the following:

HIST 160	U.S. in the 20th Century
HIST 202	American Revolution
HIST 203	U.S. Civil War Era

—One European history course from the following:

HIST 255	The Middle Ages
HIST 260	From Renaissance to Revolution
HIST 264	Revolutionary Europe 1800-1914
HIST 265	20th Century Europe

—One non-Western history course from the following:

HIST 189	Global Religions & History
HIST 240	The History of Islam
HIST 281	China

Additional required courses:

- HIST 270 History Focus Seminar (taken twice)
- HIST 297 Historical Thinking & Research
- Six courses in a focus area
- HIST 497 Designing Capstone Research
- HIST 498 Capstone Research & Writing

A minor in History requires six courses:

- HIST 270 History Focus Seminar
- HIST 297 Historical Thinking & Research
- Four additional courses selected in conjunction with the student's advisor

Mass Communication

Paul Van Slambrouck, Associate Professor

Joan T. Wesman, Assistant Professor

Paul R. Wesman, Assistant Professor

Mass communication is a powerful force for change in the world today. Rapid advances in technology have opened global opportunities for communication with greater numbers of people than ever before. However, technological advances are far ahead of knowledge of the impacts of these powerful tools. As a result, the demand today is for individuals who are educated in the liberal arts and sciences and who have mastered the principles as well as the practical skills of mass communication.

Housed in the state-of-the-art Merrick Wing facility, the mass communication program grounds students in an understanding of both theoretical underpinnings and the practical applications of mass media. At the completion of the junior year, students are required to complete an academic internship.

The B.A. major in Mass Communication. Students choosing to major in mass communication may elect one of two areas of concentration.

The Journalism concentration requires 15 courses, including practical experience, and a minor:

Five required core courses:

- MCOM 110 Intro to Mass Communication
- MCOM 210 Media Reporting and Writing
- MCOM 301 Mass Media in Society
- MCOM 302 Media Law and Ethics
- MCOM 411 Adv Topics in Communication
- Three of the following advanced media writing courses:
 - MCOM 224 Feature Writing
 - MCOM 226 Opinion Writing
 - MCOM 240 Broadcast Journalism
 - MCOM 266 Public Relations Writing
 - MCOM 322 Advanced Reporting and Writing
 - MCOM 339 Multi-Platform Storytelling

—One of the following visual media courses:

- MCOM 181 Photography Fundamentals
- MCOM 281 Photojournalism
- MCOM 282 Intermediate Photography
- MCOM 292 Video Production
- MCOM 293 Corporate Video
- MCOM 388 The Photographic Essay
- MCOM 392 Documentary Video

—One of the following:

- ARTS 170 Graphic Design I
- ARTS 175 Print Design
- ARTS 290 Web Design
- MCOM 140 Public Speaking
- MCOM 235 Communication Seminar
- MCOM 236 Mrs. Eddy and The C.S. Monitor
- MCOM 241 Television Workshop
- MCOM 242 Speech Skills for the Media
- MCOM 251 Radio Broadcasting
- MCOM 263 Public Relations
- MCOM 354 Advanced Radio Broadcasting

—MCOM 400 Internship

—Practical experience requirement - at least four semesters of public service in:

- MCOM 028 Newspaper Production
- MCOM 228 Newspaper Practicum

—Completion of a minor in an academic field that would serve as an area of writing specialization (i.e. political science, environmental studies, sociology and anthropology, economics, business administration, global perspectives, etc.).

The Multi-Platform concentration requires 15 courses, including practical experience:

Six required core courses:

- MCOM 110 Intro to Mass Communication
- MCOM 210 Media Reporting and Writing
- MCOM 263 Public Relations
- MCOM 301 Mass Media in Society
- MCOM 302 Media Law and Ethics
- MCOM 411 Adv Topics in Communication

—One of the following visual media courses:

- MCOM 181 Photography Fundamentals

MCOM 281	Photojournalism
MCOM 282	Intermediate Photography
MCOM 292	Video Production
MCOM 293	Corporate Video
MCOM 388	The Photographic Essay
MCOM 392	Documentary Video

—One of the following graphics production or design courses:

ARTS 170	Graphic Design I
ARTS 175	Print Design
ARTS 290	Web Design

—One of the following advanced media writing courses:

MCOM 224	Feature Writing
MCOM 226	Opinion Writing
MCOM 240	Broadcast Journalism
MCOM 266	Public Relations Writing
MCOM 322	Advanced Reporting and Writing
MCOM 339	Multi-Platform Storytelling

—One of the following broadcasting or speech courses:

MCOM 140	Public Speaking
MCOM 241	Television Workshop
MCOM 242	Speech Skills for the Media
MCOM 251	Radio Broadcasting
MCOM 354	Advanced Radio Broadcasting

—One additional course from:

Any of the lists above

BUAD 326	Multi-Channel Marketing
MCOM 235	Communication Seminar
MCOM 236	Mrs. Eddy and The C.S. Monitor

—MCOM 400 Internship

—Practical experience requirement - at least three semesters, two of which should be for non-credit, of public service in:

MCOM 028	Newspaper Production
MCOM 042	Television Production
MCOM 052	Radio on Air
MCOM 053	Radio Station Management
MCOM 228	Newspaper Practicum
MCOM 246	Television Practicum
MCOM 283	Yearbook Editing

A minor in Mass Communication requires 10 courses, including practical experience:

- MCOM 110 Intro to Mass Communication
- MCOM 210 Media Reporting and Writing
- One of the following visual media courses:
 - MCOM 181 Photography Fundamentals
 - MCOM 281 Photojournalism
 - MCOM 282 Intermediate Photography
 - MCOM 292 Video Production
 - MCOM 293 Corporate Video
 - MCOM 388 The Photographic Essay
 - MCOM 392 Documentary Video
- One of the following advanced media writing courses:
 - MCOM 224 Feature Writing
 - MCOM 226 Opinion Writing
 - MCOM 240 Broadcast Journalism
 - MCOM 266 Public Relations Writing
 - MCOM 322 Advanced Reporting and Writing
 - MCOM 339 Multi-Platform Storytelling
- One of the following:
 - MCOM 236 Mrs. Eddy and The C.S. Monitor
 - MCOM 241 Television Workshop
 - MCOM 242 Speech Skills for the Media
 - MCOM 251 Radio Broadcasting
 - MCOM 263 Public Relations
 - MCOM 354 Advanced Radio Broadcasting
- One additional MCOM course at the 200 level or above
- Practical experience - at least four semesters of public service in:
 - MCOM 028 Newspaper Production
 - MCOM 042 Television Production
 - MCOM 052 Radio on Air
 - MCOM 053 Radio Station Management
 - MCOM 228 Newspaper Practicum
 - MCOM 246 Television Practicum
 - MCOM 283 Yearbook Editing

Mathematics

Thomas H. Fuller Jr., Professor

Stephen G. Hinthorne, Professor

Catherine A. Hooper, Assistant Professor

Andrew T. Parker, Associate Professor

Mathematics is the study of pattern and structure of numbers and shapes with special emphasis on deductive reasoning and proof. The Mathematics Department offers programs that lead to a Bachelor of Science in mathematics, a Bachelor of Arts in mathematics, and a minor in mathematics. The department also supports, through various service courses, other departmental programs requiring mathematics.

The B.S. degree program prepares students to do graduate work in applied fields and to enter careers in applied mathematics.

For students who plan to teach mathematics at the middle or high school level, the Education Department offers a secondary education major with a certification in mathematics. Students must major in both education and mathematics and should declare the B.A. major in mathematics. These students take MATH 304 (Synthetic Geometry) as well as certain methodology courses in secondary education.

In addition to secondary education majors, the B.A. major in mathematics is designed to prepare students for graduate work in the field of mathematics.

All mathematics majors (both B.S. and B.A.) must complete a core of mathematics required courses with a 2.000 grade point average. This core consists of: single-variable calculus (MATH 181 and 182), multivariable calculus (MATH 283), linear algebra (MATH 273), history of mathematics (MATH 211), and a course in mathematical proofs (MATH 220). Students who minor in mathematics must complete the required courses with a 2.000 grade point average in the minor.

The major programs differ in the required elective options and some required courses more appropriate to the B.A. degree program at the upper division level. Both major programs require a Senior Capstone course and paper for completion of the major. This course is usually taken in the fall semester of the senior year.

A minor in mathematics supports most majors by developing computational skills, problem solving, skill in using mathematical tools, and application in an area of interest.

Independent study courses, such as general topology, can be arranged with the mathematics faculty.

Students who would like to learn more about the history, development, and application of mathematical topics to other disciplines may choose to take MATH 110 (Mathematical Applications) or MATH 111 (A Survey of Mathematics).

The B.S. major in Mathematics requires 13 courses:

- MATH 181 Calculus I
- MATH 182 Calculus II
- MATH 211 History of Mathematics
- MATH 220 Mathematical Proofs
- MATH 273 Linear Algebra
- MATH 283 Multivariable Calculus
- Five courses from:
 - MATH 261 Discrete Math
 - MATH 355 Applied Advanced Calculus
 - MATH 360 Numerical Analysis
 - MATH 364 Mathematical Statistics
 - MATH 380 Differential Equations
 - MATH 431 Complex Variables
- One approved elective
- MATH 415 Senior Capstone

The B.A. major in Mathematics requires 12 courses:

- MATH 181 Calculus I
- MATH 182 Calculus II
- MATH 211 History of Mathematics
- MATH 220 Mathematical Proofs
- MATH 273 Linear Algebra
- MATH 283 Multivariable Calculus
- One of the following:
 - MATH 261 Discrete Math
 - MATH 364 Mathematical Statistics
- MATH 304 Synthetic Geometry
- MATH 374 Algebraic Structures
- MATH 432 Real Analysis
- One approved elective
- MATH 415 Senior Capstone

A minor in Mathematics requires six courses with an average grade of C or above:

- MATH 181 Calculus I
- MATH 182 Calculus II
- One of the following:
 - MATH 211 History of Mathematics
 - MATH 220 Mathematical Proofs

- MATH 273 Linear Algebra
- MATH 283 Multivariable Calculus
- One of the following:
 - MATH 261 Discrete Math
 - MATH 304 Synthetic Geometry
 - MATH 320 Elementary Number Theory
 - MATH 364 Mathematical Statistics

Music

James H. Hegarty, Associate Professor

Marie G. Jureit-Beamish, Professor

Laura G. Parker, Assistant Professor

Joseph D. Van Riper, Assistant Professor

Music Department goals provide for and encourage artistic development in music, encourage inner growth, contribute to excellence in church music, and develop an appreciation for the rich variety of musical expression and thought that contributes to a greater understanding among peoples through the following learning outcomes. Students will:

- Perform and express themselves creatively both on and off campus.
- Demonstrate essential historical and theoretical concepts in music.
- Demonstrate character unfoldment through their professional and personal growth.
- Demonstrate an appreciation of multicultural musical styles.

Offerings are designed to give both majors and non-majors a broad introduction to music through performance, history, theory, and appreciation. The courses required of the music major provide a solid preparation for graduate study in music.

A grade of C or better must be attained in each of the following courses in order to complete the major: MUS 139 or 140, 160, 170, 265, 266, 275, and 276.

The B.A. major in Music requires 14-15 courses:

- One of the following:
 - MUS 139 Fundamentals: Beginning
 - MUS 140 Fundamentals: Advanced
- MUS 160 Musicianship I
- MUS 170 Music Theory I
- MUS 213 Music of the World
- MUS 265 Musicianship II
- MUS 266 Musicianship III

- MUS 275 Music Theory II
- MUS 276 Music Theory III
- MUS 321 Music History I
- MUS 322 Music History II
- MUS 391 Form and Analysis
- Two of the following:
 - MUS 101 Symphonic Masterworks
 - MUS 102 Operatic Masterworks
 - MUS 200 Topics in Music History
 - MUS 201 Beethoven: The Great Master
 - MUS 203 American Musical Theater
 - MUS 204 The Jazz Tradition in America
 - MUS 205 The Creative World of Mozart
 - MUS 207 Popular Music in America
 - MUS 209 Songs through Time
 - MUS 227 Field Studies in Music
 - MUS 206 Student Recital and/or MUS 303 Junior Recital for a total of 3-5 SH

- One of the following*:
 - MUS 401 Senior Project: Composition taken concurrently with MUS 407 Recital Program Notes
 - MUS 402 SR Project: Music Research
 - MUS 403 SR Project: Adv Performance taken concurrently with MUS 407 Recital Program Notes
 - MUS 404 Senior Project: Analysis
 - MUS 405 SR Project: Performance/Research
 - MUS 406 SR Project: Music Recital taken concurrently with MUS 407 Recital Program Notes

*Normally a student will enroll in a senior capstone for two consecutive semesters in consultation with the music faculty.

Piano Proficiency Requirement

The Music Department recognizes the essential need of its majors to have acquired a certain basic skill level on the piano in order to be successful students of music. This requirement supports the student’s work towards a solid grounding in music at the undergraduate level. The following steps will help students complete this requirement in a timely and meaningful way.

1. Students are strongly encouraged to enroll in piano lessons as early as possible to prepare for completion of the Piano Proficiency

Exam.

2. Majors should pass the Piano Proficiency Exam as early as possible. If the student has not passed the exam by the end of the fourteenth week of fall semester of the sophomore year, he or she will be enrolled in piano lessons beginning in the spring semester of the sophomore year.
3. The student must continue to take piano lessons through the semester in which he or she passes the exam. It is expected a student will complete the exam by the end of the junior year.

Studio Lesson Requirement

Studio lessons are available through the department. Degree-seeking students must register for MUS 120 (50-minute lessons) or MUS 130 (25-minute lessons). However, if registering for studio lessons for credit takes them beyond 18 semester hours in a particular semester, they may register for the non-credit numbers MUS 040 and MUS 044 that semester. Any combination of instruments in any combination of 50- or 25-minute lessons may be taken. Non-degree seeking students may register to take studio lessons for non-credit. All lessons, with the exception of carillon, carry a fee.

Music majors are required to take studio lessons (MUS 120 or 130, MUS 040 or 044) each semester in which they are declared music majors. All performance majors are required to take MUS 120 or MUS 040. All music majors are required to participate in choir or orchestra each semester in which they are declared music majors, with a minimum of four semesters.

A minor in Music requires eight courses:

—One of the following:

MUS 139	Fundamentals: Beginning
MUS 140	Fundamentals: Advanced
MUS 160/170	Musicianship I/Music Theory I
MUS 265/275	Musicianship II/Music Theory II

—One of the following:

MUS 100	Intro to the Art of Music
MUS 321	Music History I
MUS 322	Music History II

—Four music electives (at least three semesters hours each)

—Two semesters of studio lessons or faculty-directed ensemble

A student wishing to complete a music minor should consult with the chair of the program, who will assist the student in selecting a music advisor according to the interests of the student.

Preparation for future studies in music education

While Principia College does not offer a music education program, it is recommended that students who wish to pursue post-baccalaureate study in music education be advised about their individual choice of study by music and education faculty. All students interested in the post-baccalaureate study of music education are strongly recommended to pursue the following work during the course of their music major:

One year of applied voice lessons	
MUS 180	Instrumental Techniques
MUS 182	Choral Conducting
MUS 281	Instrumental Conducting

Philosophy

Crystal R. Allen, Assistant Professor

Christopher B. Young, Assistant Professor

Philosophy is the study of deep, meaningful, timeless questions concerning the nature of knowledge, justice, reality, goodness, beauty, and truth. What is real? How can we know anything? What actions are morally just?

Understanding and grappling with these questions can help students in all other disciplines and in any career. Courses in philosophy are specifically designed to encourage broad-minded, critical, and compassionate thinking about the world and humanity's place therein. Students will read and study the ideas of philosophers, religious thinkers, and political leaders. Equally important, they will learn how to be philosophers themselves.

Four courses for the major must be taken at the 300 level or above. No course can fill more than one requirement and particular courses to fulfill each category are determined in advising.

The B.A. major in Philosophy requires 10 courses:

- One course in critical thinking and logic
- Two courses in history of philosophy
- Two courses in value theory (axiology)
- One course with a non-western focus (from any discipline)
- Two philosophy electives
- PHIL 421 Seminar in Philosophy
- PHIL 440 Capstone in Philosophy

A minor in Philosophy requires five courses: The course work must be spread judiciously across at least these areas of philosophy: ethics, epistemology, metaphysics, and the history of philosophy. The particular course of study is to be worked out individually between student and advisor; thus, the minor in philosophy requires that students be advised by a member of the Philosophy Department faculty.

Physics

Jonathan S. Langton, Assistant Professor

An undergraduate degree in Physics serves many careers. On one level it may lead to research or teaching. On another level it provides the basic discipline necessary for a technical career in engineering. On yet another level it provides a basis for management, business, law, or politics. A physics major requires a broad background in physics, chemistry, mathematics, and communication.

CSCI 171 is recommended for all physics majors. It is also recommended that students considering graduate study in physics or a related field complete a capstone worth at least six semester hours. Furthermore, PHYS 304 and PHYS 306 are strongly recommended for students considering graduate study in physics or a related field; PHYS 351 is recommended for students considering graduate study in astronomy or astrophysics.

The B.S. major in Physics requires 19 courses:

- CHEM 131 Fundamentals of Chemistry I
- MATH 181 Calculus I
- MATH 182 Calculus II
- MATH 273 Linear Algebra
- MATH 283 Multivariable Calculus
- MATH 355 Applied Advanced Calculus
- MATH 380 Differential Equations
- PHYS 201 Phys for Scientists/Engrs I
- PHYS 202 Phys for Scientists/Engrs II
- PHYS 203 Phys for Scientists/Engrs III
- PHYS 204 Phys for Scientists/Engrs IV
- PHYS 283 Advanced Laboratory
- PHYS 301 Classical Mechanics
- PHYS 303 Electricity & Magnetism I
- PHYS 305 Quantum Mechanics I
- PHYS 307 Statistical Mechanics
- PHYS 401 Research
- Two of the following:
 - CHEM 311 Phys Chem I: Thermodynamics
 - PHYS 304 Electricity & Magnetism II
 - PHYS 306 Quantum Mechanics II
 - PHYS 351 Astrophysics
 - PHYS 352 Computational Physics

A minor in Physics requires six courses:

- PHYS 201 Phys for Scientists/Engrs I
- PHYS 202 Phys for Scientists/Engrs II
- PHYS 203 Phys for Scientists/Engrs III
- PHYS 204 Phys for Scientists/Engrs IV
- PHYS 283 Advanced Laboratory
- One physics course numbered 301 or higher

Note that MATH 181 and MATH 182 are prerequisites for PHYS 201-204, and MATH 283 is required for most 300-level physics courses.

Political Science

Julie Blase, Associate Professor

Brian D. Roberts, Professor

John W. Williams, Associate Professor

Political science is the systematic study of government, politics, and the policy process. It focuses on power—its pursuit, exercise, and restraints. It involves analysis of structures, functions, processes, and systems of government and their interrelationships; of political behavior, such as elections and public opinion; and of the formation of public policy—including the conflicts and compromises involved, as well as the merits of policies that are the ever-changing results of the political process.

The program provides two concentrations: Politics and Policy, and International Relations. Non-majors can take either concentration as a minor. The Politics and Policy concentration focuses on core fields of political science including American government and politics, international relations, comparative politics, political philosophy, and methodology. This concentration is strong preparation for law school. The International Relations concentration considers issues of global significance, such as why nations go to war, when countries cooperate, the evolution of the world economy, the role of democratic ideals in different regions of the world, and how security can be achieved. Among the topics considered are the enduring influence of history and how culture, technology, and religion influence political identity.

Theory and practice are emphasized in both concentrations. American politics courses combine study with fieldwork in the surrounding areas. Students have undertaken internships in Washington, DC, around the United States, and abroad. They also have opportunities to represent Principia at nationwide conferences on domestic and international issues.

Transfer students, for a major in either concentration, must take at least four courses (12 semester hours) from Principia political science faculty. Two of these courses must be at the 300 level.

Independent study courses on and off campus are available to majors by arrangement with political science faculty. No more than nine semes-

ter hours of independent study taken off campus can be applied toward the requirements of the major or three semester hours for the minor.

The foreign language requirement for the major can be met by testing out at the required level of proficiency. Testing is done by the Languages and Cultures Department. Students whose native language is not English are exempt from the foreign language requirement.

The B.A. major in Political Science with a concentration in Politics and Policy requires 11 courses:

- POLS 120 American Government & Politics
- POLS 152 Politics Among Nations
- EDUC/POLS/SOAN 215 Soc Science Research Methods
- Eight political science electives (including at least three at the 300 level)

The B.A. major in Political Science with a concentration in International Relations requires 14 courses:

- POLS 120 American Government & Politics
- POLS 152 Politics Among Nations
- EDUC/POLS/SOAN 215 Soc Science Research Methods
- POLS 252 U.S. Foreign Policy
- Seven of the following political science courses (including at least three courses at the 300 level):
 - POLS 254 Latin American Politics
 - POLS 255 Contemporary European Politics
 - POLS 261 Politics of China
 - POLS 263 Topics in Asian Politics
 - POLS 264 Russia and the FSU
 - POLS 265 Contemporary Issues (if international topic)
 - PHIL/POLS 280 Classics of Political Thought
 - POLS 300 Rev: Politics of Violent Change
 - POLS 348 U.S. and Global Security
 - POLS 352 International Relations Theory
 - POLS 354 Globalization: Theory/Practice
 - POLS 365 Advanced Issues (if international topic)

(Additional international or comparative political science electives or maximum of one 200 or 300-level non-international or non-comparative political science course may be applied toward this concentration with approval of the department chair.)

—One of the following history courses:

HIST 216	Ancient Greece and Rome
HIST 218	German History
HIST 220	Civilization
HIST 222	Latin America
HIST 224	Mexico
HIST 228	History of France
HIST 240	The History of Islam
HIST 252	Britain
HIST 260	From Renaissance to Revolution
HIST 264	Revolutionary Europe 1800-1914
HIST 265	20th Century Europe
HIST 275	South African History
HIST 281	China
HIST 283	Japan
HIST 290	World History
HIST 310	The Cold War
HIST 313	Africa
HIST 333	Russia
HIST 335	Middle East
HIST 354	20th C U.S. Foreign Relations
HIST 382	Modern China
HIST 386	India

(Additional modern history courses may be applied toward this concentration with approval of the Political Science Department chair; these courses examine the historical roots of political, social, and economic behavior and thought that explain international political activities and public policy.)

—One of the following economics courses:

ECON 231	Comparative Economic Systems
ECON 316	Economic Development
ECON 331	International Economics

—At least one foreign language course at the 200 level or above (not including literature courses taught in English)

A minor in Political Science consists of six or seven courses in one of the following concentrations:

The Politics and Policy concentration requires six courses:

- POLS 120 American Government & Politics
- POLS 152 Politics Among Nations

—Four political science electives (including at least one at the 300 level)

The International Relations concentration requires seven courses:

- POLS 120 American Government & Politics
- POLS 152 Politics Among Nations
- Three political science electives, from above list (including at least one at the 300 level)
- One history course, from above list
- One of the following economics courses:
 - ECON 231 Comparative Economic Systems
 - ECON 316 Economic Development
 - ECON 331 International Economics

Religion

Michael W. Hamilton, Assistant Professor

Barry R. Huff, Assistant Professor

Heather Martin, Assistant Professor

William B. Stock, Professor

Discovering the richness of scriptural texts, comparing the beliefs and practices of world religions, analyzing the history of the great monotheistic faiths, and understanding the history of the Christian Science movement in its social, political, and religious contexts -- these expeditions of mind and heart are part of the study of religion at Principia College. As you travel on the academic journey of biblical and religious studies, you'll be guided and challenged by faculty, whose purpose is not to indoctrinate but to liberate, not to tell you what to think but to free you to think courageously, inquisitively, and compassionately. Your engagement with the vital questions of meaning, community, ethics, and spirituality will prepare you to contribute significantly to a world impacted at every level by religion.

Students focusing on biblical studies for their senior project take REL 300 to meet the requirement for a methodology course while students focusing on other areas of religious studies enroll in HIST 297.

A single topics course may be used to meet only one major or minor requirement. Additional offerings of REL 304 or REL 310 covering different topics may be applied to other requirements.

At least one course in the religion minor must be at or above the 300 level.

The B.A. major in Religion requires 11 courses:

- Two courses in biblical studies, one of which must be at or above the 200 level:
 - REL 101 Introduction to the Bible
 - REL 110 The Old Testament
 - REL 120 The New Testament

REL 200	Women in the Bible
REL 215	The Hebrew Prophets
REL 218	Wisdom Literature and Psalms
REL 222	The Bible and the Environment
REL 224	Christian Gospels
REL 227	Paul the Apostle
REL 300	Biblical Interpretation
REL 304	Topics in Biblical Studies

—One course in history of religions:

REL 231	History of Christianity
REL 260	Religion in America
REL 261	Living Religions of the East

—One course from one of the following areas: philosophy of religion, history of religions, comparative religions, religious ethics, or religion and culture:

HIST 189	Global Religions & History
HIST 240	The History of Islam
PHIL 252	Philosophy of Religion
REL 225	The Bible & Comparative Ethics
REL 230	Faith and Film
REL 231	History of Christianity
REL 260	Religion in America
REL 261	Living Religions of the East
REL 310	Topics in Religious Studies
REL 332	The Life of Mary Baker Eddy

—One course in methodology:

HIST 297	Historical Thinking & Research
REL 300	Biblical Interpretation

—One of the following:

REL 304	Topics in Biblical Studies
REL 310	Topics in Religious Studies

—Four of the following:

Any of the courses listed in one of the categories above

—REL 401 Capstone Project (minimum of two semester hours)

A minor in Religion requires five courses:

—Two courses in biblical studies:

REL 101	Introduction to the Bible
REL 110	The Old Testament
REL 120	The New Testament
REL 200	Women in the Bible
REL 215	The Hebrew Prophets
REL 218	Wisdom Literature and Psalms
REL 222	The Bible and the Environment
REL 224	Christian Gospels
REL 227	Paul the Apostle
REL 300	Biblical Interpretation
REL 304	Topics in Biblical Studies

—One non-biblical religion course:

HIST 189	Global Religions & History
HIST 240	The History of Islam
PHIL 252	Philosophy of Religion
REL 225	The Bible & Comparative Ethics
REL 230	Faith and Film
REL 231	History of Christianity
REL 260	Religion in America
REL 261	Living Religions of the East
REL 310	Topics in Religious Studies
REL 332	The Life of Mary Baker Eddy

—Any two additional courses listed in one of the categories above

Second Languages

Faculty from several disciplines support this program.

Study of languages other than their own enables students to communicate intelligently with people of diverse cultures and to value multiple approaches to history, literature, and life.

Elementary language courses prepare students to communicate in everyday situations, introduce them to customs, history, and geography, and lay a foundation for further language study.

Beginning at the intermediate level, students will develop the ability to use the language well enough to understand and articulate cultural values and to interact intelligently with people of different cultures. Students will thus progress towards the goals of becoming world citizens and of working cooperatively with the global community.

The study of literature in the original languages is begun at the intermediate level of language courses, providing a foundation for deeper

enjoyment of the works studied in more advanced courses. Literature courses offered in English translation enable students to become acquainted with literature in languages in which they are not versed.

All language courses for the major must be at the 200 level or above. Some of the three culturally related courses may fulfill general education liberal arts distribution requirements (LADR).

Majors in all languages are strongly urged to earn at least three semester hours in a cultural environment where that language is spoken natively through either a Principia abroad or an independent study abroad program.

Majors in French and Spanish, and the Dual Language Major are described separately in this section.

Sociology and Anthropology

Jackie R. Burns, Professor

William Omari Miller, Associate Professor

Sally A. Steindorf, Assistant Professor

When people are exposed to different ways of thinking and behaving, they learn not only about another way of life, but they gain valuable insights about themselves. With this principle in mind, the goal of the Sociology and Anthropology Department is to incorporate into each course knowledge about cultures and societies outside the student's experience.

In so doing, the aim is to develop critical thinking and analysis; research and writing skills; empathy and compassion; and appreciation for diversity. A first and most important step in solving social problems is to understand their nature. Such understanding is enhanced through contrast and through exposure to multiple perspectives.

Students enrolled in sociology and anthropology courses will:

- Understand the interplay between structural forces and individual life chances;
- Analyze the dynamics of race, social class, gender, and culture;
- Learn social research methods;
- Think theoretically and critically about social issues;
- Apply sociological concepts and methodologies;
- Demonstrate social responsibility.

These skills and abilities are also developed through community service programs, field trips, and off-campus internships.

Majors are prepared to continue academic work at the graduate level in anthropology, sociology, social work, criminal justice, or other applied human service professions and to use their skills immediately in the workplace. Majors and minors pursue careers in many areas, such as law, international or intercultural relations, journalism, and various public service professions.

The B.A. major in Sociology and Anthropology requires a minimum of 36 semester hours (14 courses):

- SOAN 050 Community Service Program
- SOAN 110 Intro to the SOAN major
- SOAN 160 “Race” and Ethnicity
- SOAN/WOM 170 Gender Paradigms
- SOAN 180 Social Stratification
- Non-Western Culture: One of the following courses:
 - SOAN 240 Native American Cultures
 - SOAN 251 Anthropology of India
 - SOAN 270 Indigenous Cultures
 - SOAN 290 African Cultures
- EDUC/POLS/SOAN 215 Soc Science Research Methods
- SOAN 300 Social Theory
- SPST 301 Investigating Career Options
- SOAN 395 Internship
- SOAN 399 Capstone Proposal
- SOAN 400 Senior Capstone Seminar
- Six additional semester hours of non-contract courses

Of the 14 courses required for the major, at least two courses (six hours) must be non-contract upper division courses numbered 301-385.

A minor in Sociology and Anthropology requires a minimum of 16 semester hours (seven courses):

- SOAN 050 Community Service Program
- SOAN 110 Intro to the SOAN major
- SOAN 160 “Race” and Ethnicity
- SOAN/WOM 170 Gender Paradigms
- SOAN 180 Social Stratification
- Non-Western Culture: One of the following courses:
 - SOAN 240 Native American Cultures
 - SOAN 251 Anthropology of India
 - SOAN 270 Indigenous Cultures
 - SOAN 290 African Cultures
- Three additional semester hours of non-contract courses

Of the seven courses required for the minor, at least one course (three hours) must be a non-contract upper division course numbered 301-385.

Spanish

Duncan Charters, Professor

Cecily E. Lee, Associate Professor

Serena Seid-Graham, Assistant Professor

The rapid growth in the Spanish-speaking populations of the United States and Latin America means that more of today's graduates can expect to find their lives and professions touched by the Spanish language and Hispanic culture. In this environment Spanish becomes increasingly important to every student.

A major in Spanish enables the student to use Spanish effectively as a means of communicating with native Spanish speakers in all parts of the Spanish-speaking world. It also equips the student to understand the cultural, social, and literary backgrounds of the Hispanic peoples, as preparation for positions in the diplomatic service, international business, social and community welfare, and bilingual and second language teaching.

Students majoring or minoring in Spanish may elect one of two concentrations: Spanish Language or Hispanic Studies.

For the Spanish Language major concentration, students must complete at least eleven courses taught in Spanish for a minimum of 31 semester hours. One class taught in English or partially in Spanish is allowed towards the major if a significant course component requires work directly in Spanish. A minimum of one course for the Spanish language major must be taken in a native environment, although a full semester of study abroad is highly recommended. Courses at the appropriate level offered abroad by accredited institutions may be substituted for required or elective courses by approval of the Spanish faculty, provided they have been officially transferred in for credit through the Registrar's Office.

The Hispanic Studies major concentration also requires a total of eleven courses for a minimum of 31 semester hours, at least eight taught in Spanish and up to three area studies courses taught in English. Other courses, internships, or on-site experiences require prior review by program faculty if proposed as a substitute for the specified classroom work.

Students placing at the SPAN 216 level or above may opt for credit by examination for the equivalent of SPAN 205 or SPAN 236 in either concentration.

Spanish majors are encouraged to take, in addition, as many Hispanic studies courses offered in other departments as they can in order to strengthen their background for the major. For options, see the listing for the Hispanic studies concentration.

Minors in Spanish Language and Hispanic Studies require six three-semester hour courses, at least four of these being from Principia's own program offerings.

Only courses taught in Spanish can be applied to a minor in Spanish

Language, whereas one course taught in English may be counted towards fulfilling the minimum requirements for the Hispanic Studies minor. Students are encouraged to include as many additional area studies courses as possible.

No more than two transfer courses can count towards either concentration of the Spanish minor.

The B.A. major in Spanish with a concentration in Spanish Language requires 11 courses (31 semester hours):

- SPAN 204 Grammar and Conversation
 - SPAN 205 Intermediate Review
 - SPAN 216 Oral Expression & Conversation
 - SPAN 260 Intro to Hispanic Literature or any approved literature course offered in Spanish
 - SPAN 315 Advanced Grammar & Composition
 - SPAN 410 Highlights of Hispanic Culture
 - SPAN 470 Spanish Capstone
 - One of the following advanced language courses:
 - SPAN 306 Advanced Oral Expression
 - SPAN 316 Advanced Conversation
 - SPAN 325 Advanced Span Language Study
 - SPAN 336 Lang Wkshp Abroad: Advanced
 - One of the following Spanish literature courses:
 - SPAN 371 Classical Spanish Literature
 - SPAN 372 Modern Hispanic Literature
 - SPAN 380 Spanish Literature Seminar
 - One of the following Hispanic culture courses:
 - SPAN 220 Hispanic Civilization
 - SPAN 230 Hispanic Culture
 - SPAN 330 Hispanic Culture Sem: Topics
 - One of the following electives:
 - SPAN 210 Practical Spanish
 - SPAN 236 Lang Wkshp Abroad:Intermediate
 - SPAN 240 Composition
 - SPAN 241 Phonetics & Diction
 - SPAN 318F Adv Methods Teaching Spanish
 - SPAN 355 Spanish Film
- Any additional course from the categories listed above

Secondary and Middle School Spanish teacher certification requires all courses specified for the Spanish language concentration above, with the following additional requirements:

- LANG 335 Introduction to Linguistics
- SPAN 241 Phonetics & Diction
- SPAN 318F Adv Methods Teaching Spanish
- SPAN 335 Spanish Applied Linguistics

No new candidates for teacher certification will be accepted beginning Fall 2013.

A minimum of one semester of study abroad in a Spanish-speaking environment or an equivalent, subject to approval, is required. All candidates for secondary certification are encouraged to take as many additional Hispanic area studies and culture courses as possible from the college offerings, currently in Spanish, history, political science, and sociology.

See Education for a description of the assessment and evaluation system for teacher certification. Secondary and middle school Spanish teacher candidates who do not meet the benchmark requirements must successfully complete remedial work with Spanish and Education faculty to remain fully admitted to a teacher certification program. This work may include Spanish content area courses individually prescribed by Spanish faculty. A list of these courses may be found in Principia's Secondary Education Handbook, available in the Spanish program and Education Department offices.

Each candidate for teacher certification is required to take an Oral Proficiency Interview conducted by a certified and approved external examiner of the American Council on the Teaching of Foreign Languages (ACTFL) to determine that the candidate has reached the NCATE standard for an advanced level of oral proficiency in Spanish.

The B.A. major in Spanish with a concentration in Hispanic Studies requires 11 courses:

- SPAN 204 Grammar and Conversation
- SPAN 205 Intermediate Review
- SPAN 216 Oral Expression & Conversation
- SPAN 260 Intro to Hispanic Literature or any approved literature course offered in Spanish
- SPAN 315 Advanced Grammar & Composition
- SPAN 410 Highlights of Hispanic Culture
- SPAN 470 Spanish Capstone
- One of the following advanced language courses:
 - SPAN 306 Advanced Oral Expression
 - SPAN 316 Advanced Conversation

- SPAN 325 Advanced Span Language Study
 - SPAN 336 Lang Wkshp Abroad: Advanced
 - One of the following Hispanic culture courses:
 - SPAN 220 Hispanic Civilization
 - SPAN 230 Hispanic Culture
 - SPAN 330 Hispanic Culture Sem: Topics
 - Two of the following electives:
 - HIST 221 Immigration and Acculturation
 - HIST 222 Latin America
 - HIST 224 Mexico
 - POLS 254 Latin American Politics
 - SOAN 160 “Race” and Ethnicity*
 - SOAN 245 Studies in Culture*
- *with Hispanic culture included

A minor in Spanish Language requires six courses:

- SPAN 204 Grammar and Conversation
- SPAN 205 Intermediate Review
- SPAN 216 Oral Expression & Conversation
- One advanced language course
- One literature or culture course taught in Spanish
- One elective course taught in Spanish

A minor in Hispanic Studies requires six courses:

- SPAN 204 Grammar and Conversation
- SPAN 205 Intermediate Review
- SPAN 216 Oral Expression & Conversation
- One advanced language course
- One Hispanic literature or culture course taught in English or Spanish
- One Hispanic area studies elective course, taught in English or Spanish

The Spanish Language certificate requires:

- Completion of three courses (nine semester hours) in Spanish at the 204 level or above
- Achievement of an intermediate proficiency level on the nationally normed Oral Proficiency Interview (OPI) of the American Council on the Teaching of Foreign Languages (ACTFL).

To qualify for the certificate, the student must earn a grade of C or higher in each of the courses. At least two of the courses must be taken at Principia. The ACTFL proficiency test result will be included on the certificate and will be indicated on the student's transcript.

Each student is responsible for the cost of the OPI, which must be taken with a certified ACTFL approved tester at a local university or by phone arranged through LTI (Language Testing Institute) with the call proctored by a faculty member of the Languages and Cultures Department. Principia faculty may not administer the OPI interview for an official rating.

Special Major Program

Faculty from several disciplines support this program.

Students may produce a major not currently offered at Principia College. These special majors are built either from existing courses offered at Principia or a combination of courses from Principia and other institutions. Recent examples of special majors include: art history, range science, and film. To participate in this program, students must work with a faculty sponsor to develop an original plan for a major that must be approved by a special major advisory committee and the College Curriculum Committee. All special majors must also follow the same degree requirements for the B.A. or the B.S. For more information on the special major program please contact the special major program chair or Academic and Career Advising (ACA).

Principia College does not offer special minors.

Sustainability

Faculty from several disciplines support this program.

The purpose of the interdisciplinary minor in sustainability is to provide an opportunity for students and faculty to focus their intellectual inquiry on issues and problems related to global and local sustainability. This minor is designed to complement a student's major degree discipline as it integrates across disciplines, emphasizes interconnections between society and the environment, and builds a community of faculty and students committed to seeking sustainable solutions to some of the world's most pressing problems. We define "Sustainable development [as] development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1983, called the Brundtland Commission).

Students complete an introductory course, one course in each of four components, and a final culminating sustainability project. Courses in the social sphere will look at how human behavior and relations, ethical and theological values, and societal organization function as related to increasing sustainability. Courses in the economic sphere deal with

sustainable business practices and governance systems that lead to sustainable societies. Courses in the environmental sphere analyze environmental issues and seek solutions to today's resource needs while also conserving for future generations. Applications courses focus on ways human and mechanical systems of everyday life can be designed to reduce resource consumption and environmental damage. They ask the question: How can we build a more sustainable community through reducing use of resources, recycling materials, conserving energy, and being innovative?

Courses listed as part of the sustainability minor address at least one of the sustainability minor learning outcomes and include a significant project or assignment looking at sustainability from the perspective of the course discipline.

A minor in Sustainability requires six courses:

- SUS 151 Introduction to Sustainability
- One course on the social sphere from the following:
 - EDUC 170 Environmental Education
 - ENGL 180 Environmental Themes
 - REL 222 The Bible and the Environment
 - SOAN 235 Environmental & Social Change
 - SOAN 265 The Sociology of Sustenance
 - SOAN 270 Indigenous Cultures
- One course on the economic sphere from the following:
 - BNR 255 Natural Resources Management
 - ECON 271 Environmental Economics
- One course on the environmental sphere from the following:
 - BNR 190 Global Environmental Issues
 - BNR 291 Sustainable Development
 - CHEM 111 Environmental Chemistry
 - GEOL 225 Environmental Geology
 - GEOL 230 Nonrenewable Resources
 - PHYS 177 Environmental Physics
- One course on production, systems, and the built environment from the following:
 - ARTH 232 Art of the Italian Renaissance
 - ARTS 295 Sustainable Design
 - CHEM 201 Environmental Testing
 - ENGR 180 Project Management
 - SUS 250 Energy and Living Systems
- SUS 401 Sustainability Project

Theatre and Dance

Hilary R. Harper-Wilcoxon, Assistant Professor

Patrick N. McCreary, Assistant Professor

John O'Hagan, Associate Professor

Christine Calkins Steele, Assistant Professor

The performing arts have a vital role to play in a liberal arts education, the community, and in society. The Department of Theatre and Dance provides thoughtful, high-end training that develops artistic, professional, and life skills. Students have multiple opportunities to exercise their performance training in the classroom, on stage, and in the wider community.

Because the arts of theatre and dance are a synthesis of all of the arts, theatre and dance students are encouraged to take as many courses as possible in the related areas of art history, studio art, and music.

Courses listed as optional for one requirement may not be substituted for another requirement unless stated in the catalog. Courses regularly offered in the theatre curriculum may not be taken by independent contract. All practicum classes require proper registration for student participation. The maximum transferable credit for a major in theatre is five courses or 15 semester hours. The maximum transferable credit for a minor in theatre or dance is two courses or six semester hours. Non-credit theatre and dance production courses are not transferable.

The B.A. major in Theatre requires a minimum of 16 courses:

- THEA 101 Acting I
- THEA 201 Acting II
- THEA 120 Intro to Technical Theatre
- THEA 140 Stagecraft
- THEA 225 Voice and Speech
- THEA 230 Theatre Movement
- THEA 272 The History of Theatre
- THEA 420 Directing
- One of the following:
 - ENGL 286 History of English Drama
 - THEA 210 Dramatic Literature
- Two of the following:
 - THEA 301 Acting III
 - THEA 340 Advanced Voice and Movement
 - THEA 352 Thea Practicum Mainstage Staff
 - THEA 353 Thea Practicum Studio Staff
- One of the following:
 - DANC 250 Dance History

- ENGL 279 Shakespeare I
 - ENGL 315 Shakespeare II
 - THEA 260 Theatre Topics
 - THEA 325 Voice for the Actor
 - THEA 360 Acting Shakespeare
 - THEA 401 Advanced Acting Topics
 - THEA 402 Spec Creative or Research Proj
 - THEA 494 Theatre or Dance Internship
 - Six semester hours in theatre practicum, two semester hours of which must be THEA 354 or THEA 355 (Thea Practicum Crew):
 - THEA 350 Thea Practicum Mainstage Cast
 - THEA 351 Thea Practicum Studio Cast
 - THEA 352 Thea Practicum Mainstage Staff
 - THEA 353 Thea Practicum Studio Staff
 - THEA 354 Thea Practicum Mainstage Crew
 - THEA 355 Thea Practicum Studio Crew
 - Two of the following dance technique courses:
 - DANC 043 Dance: Ballet I
 - DANC 044 Dance: Ballet II
 - DANC 045 Dance: Ballet III
 - DANC 048 Dance: Jazz I
 - DANC 080 Dance: Modern I
 - DANC 081 Dance: Modern II
 - DANC 082 Dance: Modern III
 - DANC 083 Dance as Movement
- Foil Fencing may be substituted in place of one dance class.

A minor in Theatre requires a minimum of eight courses:

- THEA 101 Acting I
- One of the following:
 - THEA 120 Intro to Technical Theatre
 - THEA 140 Stagecraft
- One of the following:
 - THEA 210 Dramatic Literature
 - THEA 272 The History of Theatre
- Three of the following:
 - THEA 120 Intro to Technical Theatre
 - THEA 140 Stagecraft
 - THEA 201 Acting II
 - THEA 210 Dramatic Literature

THEA 225	Voice and Speech
THEA 230	Theatre Movement
THEA 260	Theatre Topics
THEA 272	The History of Theatre
THEA 301	Acting III
THEA 401	Advanced Acting Topics
THEA 420	Directing

—Three semester hours total from the following:

THEA 350	Thea Practicum Mainstage Cast
THEA 351	Thea Practicum Studio Cast
THEA 352	Thea Practicum Mainstage Staff
THEA 353	Thea Practicum Studio Staff
THEA 354	Thea Practicum Mainstage Crew
THEA 355	Thea Practicum Studio Crew

—One of the following dance technique courses:

DANC 043	Dance: Ballet I
DANC 044	Dance: Ballet II
DANC 045	Dance: Ballet III
DANC 048	Dance: Jazz I
DANC 080	Dance: Modern I
DANC 081	Dance: Modern II
DANC 082	Dance: Modern III
DANC 083	Dance as Movement

A minor in Dance requires 11 courses:

- DANC 250 Dance History
- DANC 370 Dance Practicum Cast (4 semester hours total)
- THEA 230 Theatre Movement

—Two of the following:

ARTS 230	Color Studies
DANC 330	Dance Composition
DANC 371	Dance Practicum Staff (3 semester hours total)
MCOM 292	Video Production
MUS 100	Intro to the Art of Music
MUS 101	Symphonic Masterworks
MUS 102	Operatic Masterworks
MUS 139	Fundamentals: Beginning
MUS 203	American Musical Theater
MUS 204	The Jazz Tradition in America
MUS 228	Great Composers & Their Culture

- | | |
|----------|----------------------------|
| MUS 321 | Music History I |
| THEA 101 | Acting I |
| THEA 120 | Intro to Technical Theatre |
- Five dance technique classes from the following:
- | | |
|----------|-------------------|
| DANC 044 | Dance: Ballet II |
| DANC 045 | Dance: Ballet III |
| DANC 081 | Dance: Modern II |
| DANC 082 | Dance: Modern III |

Women's and Gender Studies

Faculty from several disciplines support this program.

Women's and gender studies is by definition an interdisciplinary field. Gender is studied as a social construction that needs to be examined in conjunction with race and class. The field recognizes that culture and history shape and inform gender roles and experiences. Some of the basic questions considered are: What roles have women played in the sciences, the arts, politics, religion, and other fields? What issues have women and men faced because of their gender? How have these issues affected their lives, their words, their study, their status, and diverse societies in their cross-cultural relations? The goal of women's and gender studies is to explore these questions from a variety of perspectives.

The two elective courses must be outside the discipline of sociology and anthropology and must be selected from two different disciplines.

A minor in Women's and Gender Studies requires six courses:

- Two of the following:
- | | |
|--------------|------------------------------|
| SOAN/WOM 170 | Gender Paradigms |
| SOAN/WOM 335 | Gender & Masculinity |
| SOAN/WOM 365 | Global Perspectives of Women |
- SOAN/WOM 360 Gender Theories
- WOM 410 Senior Seminar
- Two electives from the following:
- | | |
|----------|--------------------------------|
| ENGL 253 | Gender Studies in Literature |
| PHIL 222 | Feminist Philosophy |
| POLS 240 | Women in Politics |
| REL 200 | Women in the Bible |
| WLIT 179 | Reading French Society in Film |

Off-Campus Programs

Principia offers three types of off-campus academic credit programs through the Principia Abroad office and Academic and Career Advising (ACA):

- Principia abroads and field programs (Principia Abroad)
- Academic internships (ACA)
- Independent Course contracts (ACA) when off campus or inter-term

Principia abroads, directed by a Principia faculty member, are interdisciplinary, experiential learning programs in a foreign country. These unique academic programs help students to deepen their understanding of other peoples, to gain a clearer sense of intercultural differences and similarities, and to stretch their own perceptions of themselves and the world. Students are also challenged to meet the demands that come with living, traveling, and working together as a group.

Field programs are directed by a Principia faculty member and are similar in many ways to Principia abroads. Field programs, however, are conducted in the United States.

Academic internships give students the opportunity to participate in work environments while receiving academic credit. Students work with a Principia College faculty member who assists in developing the learning contract, maintains contact with the student during the internship, and gives a grade based on the learning contract.

To be eligible for an off-campus internship, students must be in good academic standing. Exceptions must be approved by Scholastic Committee. The academic department sponsoring the internship determines the level of writing proficiency required for a specific internship.

At least six months prior to the intended internship, a qualified student should:

- Develop a resumé and cover letter. Visit the ACA website and look under Career Resources for resumé samples and templates, or use the Optimal Resumé link.
- Begin to research possible internship locations. Look under Internship Opportunities on the ACA website for online listings, attend ACA workshops, or meet with ACA for additional help.

At least one term prior to the intended internship, a qualified student should:

Weeks 1-9:

- Come to ACA office to discuss internship plans and pick up the

internship application, status of finances, and learning contract packet.

- Finalize an internship location and confirm a field sponsor.

Week 10:

- Meet with your advisor(s) to go over the internship application and brief them on where and when you plan on interning. Obtain your advisors' signature(s) on the application and begin to work on the internship contract. Submit rough draft to ACA by Friday at 5:00 p.m.
- Meet with the financial aid director to complete your financial paperwork.
- Turn in application, financial paperwork, international student petition (if applicable) by Friday at 5:00 p.m.

Week 11:

- Submit the learning contract by Friday with phase I signatures.

Week 12:

- Obtain phase II signatures.

Week 13:

- Meet with ACA for final steps.

Check the published academic calendar for specific due dates.

For information on tuition charges see Fees and Personal Expenses, pp. 173-174.

SECTION 3

Courses of Instruction

Introduction

The following pages list the courses in the college's curriculum. A list of subjects and their corresponding subject codes appears on page 85. Descriptions of major and minor programs begin on page 23.

Course Numbering

Course numbers reflect the level of students for which the course is primarily designed and offered. Please see pages 194-195 for a fuller explanation of the course numbering system.

001-099: Non-credit; open to all levels.

100-199: Introductory level; most appropriate for underclassmen.

200-299: Intermediate level; most appropriate for sophomores and juniors.

300-399: Advanced level; most appropriate for upperclassmen.

400-499: Advanced independent or seminar courses; most appropriate for upper-class majors.

Credit Value

The number to the right of the title indicates the amount of credit the course carries.

- Semester Hours (SH) count toward the 120 semester hours required for graduation.
- No Credit indicates courses that carry no academic credit.

Requirement Codes

An attribute code in the brackets [] to the far right of the course subject heading and number indicates that the course will fulfill one of the general education requirements that became effective Fall 2011. Attribute codes in parentheses () indicate that the course fulfills one of the distribution requirements for students completing requirements in effect prior to Fall 2011. Please see pages 13-15 for the current requirements and the appropriate catalog for previous requirements.

Fees

When a course has a special Fee (for laboratory materials, etc.), the Fee is listed at the end of the course description. The Fees are subject to change. Consult the course schedule for the Fee in effect when a course is taught.

Prerequisites

If a course requires special preparation or background, the prerequisite will be listed in the course description. Any prerequisite may be waived at the discretion of the instructor. Students are encouraged to consult faculty directly to determine preparedness.

Schedule of Courses

Most courses are taught at least once a year. Others are offered in alternate years. Some are offered only upon sufficient demand, by independent contract, or on off-campus programs.

A course schedule for the current term is available online or can be viewed on the bulletin board outside the Registrar's Office. A tentative course schedule for the following term is also available.

The college reserves the right to add, remove, or modify the courses in its curriculum.

Subject Headings

Art: Art History
 Art: Studio Art
 Biology and Natural Resources
 Business Administration
 Chemistry
 Computer Science
 Dance
 Economics
 Educational Studies
 Engineering Science
 English
 French
 General Education
 Geology
 German
 Global Perspectives
 History
 Languages and Cultures
 Mass Communication
 Mathematics
 Music
 Philosophy
 Physical Education: Academic Courses
 Physical Education: Activity Courses
 Physical Education: Varsity Sports
 Physics
 Political Science
 Religion
 Russian
 Science
 Sociology and Anthropology
 Spanish
 Special Studies
 Sports Management
 Sustainability
 Theatre
 Women's and Gender Studies
 World Literature
 Writing

Subject Codes

ARTH
 ARTS
 BNR
 BUAD
 CHEM
 CSCI
 DANC
 ECON
 EDUC
 ENGR
 ENGL
 FREN
 GEN
 GEOL
 GER
 GLBL
 HIST
 LANG
 MCOM
 MATH
 MUS
 PHIL
 PHED
 PE
 PVAR
 PHYS
 POLS
 REL
 RUSS
 SCI
 SOAN
 SPAN
 SPST
 SMGT
 SUS
 THEA
 WOM
 WLIT
 WRIT

Art: Art History**ARTH 100 Intro to Western Art to 1400 3.0 SH [GEA] (ART)**

This course surveys the visual arts in their many facets from prehistoric times from ancient Mesopotamia, Egypt, Greece, Rome, through medieval Europe. Sometimes known as "from caves to cathedrals," this course introduces students to fundamental principles for the study of art and art theory, and the verbal language that unites the visual arts.

ARTH 101 Intro:Western Art 1400-Present 3.0 SH [GEA] (ART)

This survey course begins with the Renaissance in Northern Europe and Italy, and chronologically studies the major innovators in painting, sculpture, architecture, and other visual arts, introducing students to principles for approaching art history and theory, including the verbal language that unites the visual arts.

ARTH 110 Survey Asia/Africa/Americas 3.0 SH [GEA] (ART)

This course surveys the art of southeast Asia, Chinese and Korean art, Japanese art, art of the Americas, and the art of Africa from their beginnings to the present. It introduces artistic vocabulary, methods for understanding the meaning of the various works, the cultural context in which these works were formed, and the role of the artist in society.

ARTH 132 Themes in Renaissance Art 3.0 SH [GEA] (ART)

This course studies the art and architecture of Italy and Northern Europe from 1300 to 1600, focusing on the changing forms of education available to artists, the impact of liberal arts education on artists' and architects' lives and works, and how artists and architects became recognized as independent creative individuals.

ARTH 200 Ancient Art 3.0 SH [GEA] (ART)

This course explores the sculpture, architecture, and other visual arts of the ancient classical world, beginning with the earliest Greek cultures, giving special attention to issues of art and life in the various centers.

ARTH 203 Medieval Art 3.0 SH [GEA] (ART)

This course opens with Early Christian and Byzantium art and architecture, explores the abstractions of Islamic works, manuscript production, the idealistic world of Charlemagne, majestic Romanesque cathedrals and castles, and the color, light, and space of Gothic cathedrals across Europe.

ARTH 205 Topics in Art History 3.0 SH [GEA] ()

This course is designed to provide a close look at specific topics in the history of art. Topics might include courses linked to local exhibitions of important works, traditions of special interest to abroad programs, or courses organized around the special expertise of visiting faculty. The title will be extended to describe the current topic. May be taken more than once provided the topics differ.

ARTH 230 Asian Art 3.0 SH [GEA] (ART)

This course examines bronzes, ceramics, paintings, sculpture, and architecture of the Asian world within their social and historical contexts.

ARTH 232 Art of the Italian Renaissance 3.0 SH [GEA] (ART)

This course thematically treats the variety of visual art created in Italy in the 15th and 16th centuries, including works by the world-famous Leonardo da Vinci, Michelangelo, Raphael, and Andrea Palladio. It also explores the achievements of many other artists in the major centers - Florence, Rome, and Venice - and in courtly settings.

ARTH 234 17th - 18th Century Art 3.0 SH [GEA] (ART)

This course explores paintings, sculpture, architecture, and other visual art in Europe from 1600 to the art of the revolutions at the end of the 18th century. Works of some of the world's best-known artists are examined - from Bernini and Vermeer to David and Houdon - with special attention to the emergence of influential women artists such as Artemesia Gentileschi and Angelica Kauffmann.

ARTH 235 19th Century European Art 3.0 SH [GEA] (ART)

This course studies the life and work of artists living in Spain, France, Germany and Great Britain during the nineteenth century, with an emphasis on how their art was influenced by different national perspectives.

- ARTH 237 20th Century Art** 3.0 SH [GEA] (ART)
This course examines the major artistic movements of the 20th century including Fauvism, Cubism, Expressionism, Abstract Expressionism, and performance art. The role of historical and cultural context in shaping artistic expression is a focus, along with the initiative of individual artists.
- ARTH 257 Architecture in America** 3.0 SH [GEA] (ART)
A study of the many forms that architecture in the USA has taken from its creative origins in the post-Revolutionary world to contemporary concerns for environmental issues. The course traces the variety of architecture in the USA as a reflection of our changing sense of identity from coast to coast, not overlooking the complex figure of Bernard Maybeck at Principia.
- ARTH 258 Art in the USA** 3.0 SH [GEA] (ART)
This course traces the innovations and achievements of visual artists in the USA from the eighteenth through the twenty-first centuries with particular emphasis on artists' responses to themes such as wilderness, the growth of cities, the industrial revolution, war and peace, women's rights, urban life, and internationalism.
- ARTH 260 History of Photography** 3.0 SH [GEA] (ART)
This course explores the history of photography from its early-19th-century origins to the present with special attention to the innovations of such major figures as Daguerre and Niépce, Henry Fox Talbot, Nadar, Stieglitz, and Ansel Adams, through Cindy Shearman, Andy Warhol, and early-21st-century photographers.
- ARTH 282 Islamic Art** 3.0 SH [GEA] (ART)
This course traces Islamic art from its beginnings in the Arabic peninsula, its rise in Syria and Palestine, and its expansion west into Egypt, Spain, and North Africa, and east into Iraq, Iran, and India.
- ARTH 285 20th Century Architecture** 3.0 SH [] (ART)
This course covers major movements of 20th-century architecture including the Arts and Crafts movement, Modernism, Organic Functionalism, Post-Modernism, and contemporary movements, as well as urban planning.
- ARTH 300 Adv Studies/Ancient** 3.0 SH [] (ART)
This course studies current issues in ancient Greek and Roman art and architectural history. Topics treated thematically will vary, and the title will be extended to describe the current topic. The emphasis is on research/writing, oral presentation, and theoretical approaches. May be repeated up to a total of six semester hours provided the topics differ.
- ARTH 304 Advanced Topics in Art History** 3.0 SH [] (ART)
This course examines current issues in art history. Topics related thematically will vary, and may relate to special exhibitions at the St. Louis Art Museum or other local museums. The emphasis is on research/writing, oral presentation, and theoretical approaches. The title will be extended to describe the current topic. May be repeated up to a total of 12 semester hours provided the topics differ.
- ARTH 332 Adv Studies/Medieval & Renaiss** 3.0 SH [] (ART)
This course studies current issues in Medieval and Renaissance art history. Topics treated thematically will vary, and the title will be extended to describe the current topic. The emphasis is on research/writing, oral presentation, and theoretical approaches. May be repeated up to a total of six semester hours provided the topics differ. Prerequisite: Either ARTH 203 or ARTH 232 and one other Art History course at the 200 level.
- ARTH 354 Adv Studies/17th-18th C Art** 3.0 SH [] ()
This course studies current issues in 17th- and 18th-century art history. Topics treated thematically will vary, and the title will be extended to describe the current topic. The emphasis is on research/writing, oral presentation, and theoretical approaches. May be repeated up to a total of six semester hours provided the topics differ.

ARTH 355 Adv Studies/19th-20th C Art 3.0 SH [] (ART)
 This course studies current issues in 19th- and 20th-century art history. Topics treated thematically will vary, and the title will be extended to describe the current topic. The emphasis is on research/writing, oral presentation, and theoretical approaches. May be repeated up to a total of six semester hours provided the topics differ.

Art: Studio Art

ARTS 102 Visual Fundamentals 3.0 SH [GEA] (ART)
 Introduction to the components of visual expression: subject matter, form, and content. Topics include composition, perspective theory, line/value drawing, and basic color exploration. Practice includes studio as well as on location work outside of regular class hours. **Fee=\$50.00**

ARTS 103 Three Dimensional Design 3.0 SH [GEA] (ART)
 Introduction to three-dimensional design; this hands-on approach to materials offers an in-depth exploration of aesthetic problems in space. Students are challenged with ideas that will build awareness of the limitless potential of shaping space and how that new understanding can contribute to a more creative life. **Fee=\$75.00**

ARTS 150 Drawing I 3.0 SH [GEA] (ART)
 Continued study of line and value sketching, including additional perspective and composition studies focusing primarily on the development of facility through graphite and ink pen medium. Emphasizes both technical and abstract observations. **Fee=\$30.00**

ARTS 170 Graphic Design I 3.0 SH [GEA] (ART)
 Introduction to aspects of graphic design with emphasis on the development of problem-solving skills. Form and content are explored with focus on the thought process which underlies graphic design. Application of computer software as it applies to the discipline. Various projects include logo design, poster design, and typography. **Fee=\$50.00**

ARTS 175 Print Design 3.0 SH [] ()
 This course covers digital imaging concepts and provides students with the foundation to develop skills across different applications and media types. Develops skills in using photographs, illustrations, and words to create advertisements, brochures, and other printed materials. Explores the fundamental principles of design. Students practice skills individually and in teams. Critical class for students considering a career in graphic design. **Fee=\$45.00**

ARTS 210 Oil Painting I 3.0 SH [] (ART)
 An introduction to technical and formal approaches to painting within the oil medium. Practice includes studio as well as on-location work, with emphasis on color-value control and composition. The class will study and emulate how painters think or see by examining issues of artistic perception, fidelity and interpretation considered significant in contemporary and past painting traditions. Prerequisites: ARTS 102 and ARTS 150. **Fee=\$50.00**

ARTS 220 Watercolor Painting I 3.0 SH [GEA] ()
 Introduction to various watercolor techniques and the thought process which accompanies issues of painting. Practical emphasis on composition, color and value relationships, and coordination with a transparent medium. This studio course will require that a majority of work be completed outside of the studio class time. Prerequisites: ARTS 102 and ARTS 150. **Fee=\$50.00**

ARTS 230 Color Studies 3.0 SH [] ()
 Course emphasizes the seeing of color interaction through practice primarily with color papers and work with pigments. Focus on the expression of light, space, movement, and mood. Includes some history of color theory and introduction to color strategies and painting. Prerequisite: ARTS 102. **Fee=\$50.00**

ARTS 250 Drawing II **3.0 SH** **[] (ART)**
 Development of visual skills that deepen the student's ability to find the dynamics of abstraction in the landscape and still-life. A large portion of the term will involve on-location drawing in graphite with the remaining portion of the term devoted to studio rendering techniques in graphite. Emphasis on compositional analysis. Prerequisite: ARTS 150. Fee=\$40.00

ARTS 251 The Language of Drawing **4.0 SH** **[GEA] (ART)**
 An immersive study of on-location drawing practices and techniques where drawing becomes a tool for observation and recording of cultures, historical sites, and landscapes. Drawing will also be explored as a vehicle to communicate content. This course develops skills in composition, observation, facility with mixed-media, drawing terminology, critiquing, and perspective. Offered only on abroad programs.

ARTS 255 Field Research Journal **3.0 SH** **[] ()**
 An in-depth focused study of techniques and processes for visual observation and recording of information in the field (defined as outside a studio environment). Mapping, writing, memory drawing, diagramming, and other methods will be explored, learned, and used. Students use the journal to organize data, problem solve ideas and prepare ideas for communicable visual solutions. Offered only on the Fall 2013 Greece & Turkey Abroad.

ARTS 256 Exhibition Project Management **1.0 SH** **[] ()**
 This course is designed to develop skills in the layout and design of a visual exhibition. Students will apply the general principles of effective communication, develop skills in organizing and managing content, and develop skills in working as a creative team. An understanding of planning, research, and audience will be emphasized. Offered only on the Fall 2013 Greece & Turkey Abroad.

ARTS 270 Graphic Design II **3.0 SH** **[] ()**
 Builds on Graphic Design I but becomes more technical with the media used and more intricate with the assignments given. Emphasis is placed on the quality of concept achieved. Explores type design, thematic development, portfolio presentation, and computer skills. Prerequisite: ARTS 170. Fee=\$45.00

ARTS 280 Printmaking **3.0 SH** **[] ()**
 Introduction to the three basic printmaking areas: relief, monoprints, and screen printing. Emphasis is placed on the student's original development of ideas and imagery. Aesthetic and theoretical issues related to the development of printmaking will also be addressed. Prerequisite: ARTS 102, or ARTS 103, or ARTS 150. Fee=\$75.00

ARTS 285 Illustration **3.0 SH** **[] ()**
 An introduction to the broad based thinking skills required to illustrate verbal communication in various manifestations. Several formats will be utilized reflecting the instructor's strengths: book, poster design, musical interpretation, scientific rendering, and communication arts. Mixed media will frequently be engaged. Emphasis is on the book as an art form-as a valuable professional activity. Prerequisites: ARTS 102, ARTS 150, and ARTS 220. Fee=\$40.00

ARTS 290 Web Design **3.0 SH** **[] ()**
 Introduction to the design and management of web sites with an emphasis on the development of design strategy processes. This course builds skills in understanding the terminology, principles, and concepts of design, color, and visual thinking as applied to web design. Students survey and critique existing web sites, develop a body of graphic and typographic information, and develop and publish their own web sites. Prerequisite: ARTS 170.

ARTS 295 Sustainable Design **3.0 SH** **[] ()**
 This course is based on the analysis of how green design is delivered in the building environment. It is designed to model the breadth of cooperation required with solving sustainability problems; it explores the principles developed by the most energy conscious building practices currently in force. The course teaches basic visual communication skills, green terminology, drafting practices, and culminates in a group-designed net-zero energy structure. Prerequisite: ARTS 102 or ARTS 103. Fee=\$30.00

- ARTS 299 Experimental New Media Seminar 3.0 SH [] ()**
Examines a specific topic in studio art practices that may include sound, video, photography, motion, design, and installation. The course is built around the special expertise of the faculty. The title will be extended to describe the current topic. May be repeated once up to a total of six semester hours provided the topics differ. Prerequisites: ARTS 102 or ARTS 150 or ARTS 170.
- ARTS 301 Portraiture 3.0 SH [] ()**
For the student seeking experience in drawing the human form. Focus includes grounding in specific drawing skills, including ability to represent proportion, anatomic architecture, and volume, and experience with various mediums. Learning about major practitioners of the genre will instill an appreciation for portraiture - it's usefulness and influence as an important art form for content in past and present art traditions and cultures. Prerequisite: ARTS 150 or permission of the instructor. **Fee=\$50.00**
- ARTS 302 Figure Studies 3.0 SH [] ()**
The human figure as a vehicle for exploring issues of fine drawing. Includes proportions, anatomy, gesture, content, and some historical background. May be repeated with instruction at increasingly advanced levels. Prerequisite: ARTS 102 or ARTS 150. **Fee=\$100.00**
- ARTS 304 Figure Modeling 3.0 SH [] ()**
This course introduces students to fundamental principles of modeling a figure from a live model. These include studies in scale, proportion, surface interpretation, and gesture. Students will engage with historical, cultural, and aesthetic aspects of the traditions of modeling. All assignments (readings, writing, and modeling) will build to the culmination of an original figurative work for the student's expressive portfolio. May be repeated up to two times for a total of nine semester hours, however, only six semester hours may be counted toward the Art major or minor. Prerequisite: ARTS 102 or ARTS 103. **Fee=\$100.00**
- ARTS 310 Oil Painting II 3.0 SH [] ()**
Builds on knowledge gained during the introductory course. Oil II constitutes a further development of skills and image making paired with strong emphasis on research, critical discourse, and experimentation in handling of medium. Students will develop research and production models that reflect contemporary painting practices. Prerequisite: ARTS 210. **Fee=\$50.00**
- ARTS 320 Watercolor Painting II 3.0 SH [] ()**
Focused introduction to the process of developing large studio paintings based upon varied field observations, advanced watercolor techniques, and critique skills. Concentration on development of individual style or "point of view." This studio course will require that a majority of work be completed outside of the studio class time. Prerequisite: ARTS 220. **Fee=\$50.00**
- ARTS 330 Studio Seminar 1.0 - 6.0 SH [] ()**
Group study of selected topics in art. The title will be extended to describe the current topic. May be offered for variable credit from one to six semester hours. May be repeated up to a total of six semester hours provided the topics differ. **Course fee varies.**
- ARTS 350 Drawing III 3.0 SH [] ()**
An intense exploration of the relationship of visual language to content in art via mixed drawing media. Production of several different series formats and a focused preparation of a portfolio quality series are covered during the term. Preparation of an aesthetic statement. Prerequisites: ARTS 150 and either ARTS 250 or one painting course. **Fee=\$30.00**
- ARTS 360 Figurative Painting 3.0 SH [] ()**
For the seasoned art major who benefits from painting and is ready to revisit the figure within new technical and aesthetic contexts in painting. The theme centers around portraiture but includes the whole figure - the first half comprised of working directly from the model with frequent critiques. Includes exploration of conceptual content and creation of a large scale painting. May be repeated once with instruction at an increasingly advanced level. Prerequisites: ARTS 210 or ARTS 220, and ARTS 302. **Fee=\$85.00**

ARTS 370 Adv Design Practices 3.0 SH [] ()
 Graphic design knowledge/skills previously gained are applied toward complex design problems and development of integrated design practices that explore levels of visual impact and advanced problem-solving design strategies. Assignments are organized around special projects and current trends and business practices in the graphic design field. Instructional methods include lectures, discussions, demonstrations, readings, practical exercises, group projects, and critiques. Prerequisites: ARTS 170 and ARTS 270. **Fee=\$45.00**

ARTS 401 Creative Research Project 3.0 - 6.0 SH [] ()
 An in-depth focused study in the visual arts shaped by previous studio art course work. Teaching methods include critical readings in professional art journals, open studio practice, weekly critique, and museum/studio field trips. Students present research and creative output in critique sessions with other students and at least one studio art faculty. May be offered for variable credit from three to six semester hours. May be taken twice up to a total of six semester hours. Prerequisite: six ARTS courses.

ARTS 402 On-Location Studies 1.0 - 6.0 SH [] ()
 Offered by permission of the program faculty to students enrolled in field-oriented classes such as internships or off-campus independents. Course work provides opportunity for in-depth, individual research based upon previous studio classes at Principia College. May be offered for variable credit from one to six semester hours. May be repeated up to a total of six semester hours.

ARTS 404 Advanced Series 1.0 - 6.0 SH [] ()
 A course designed for advanced students who would benefit from the production of a cohesive body of work, commonly referred to as a "series." The student prepares a portfolio which reveals consistent use of visual language, content-based purpose, and exhibition caliber results. The class functions as an independent with the addition of a seminar component. Students apply for the class by submitting a written application to the art department identifying the series format options. May be offered for variable credit from one to six semester hours. May be repeated up to a total of six semester hours. For junior and senior students who have completed eight or more art major requirements.

ARTS 495 Portfolio Seminar 1.0 - 3.0 SH [] ()
 Portfolio ingredients such as a digital representation of senior's work, résumés, post-college options, etc. are focused towards professional goals. At the culmination, students present a quality exhibit for the community. The preceding term students will submit proposals with their portfolios to contract for the level of creative work they expect to achieve. May be offered for variable credit from one to three semester hours. Taken concurrently with ARTS 496. **Fee=\$50.00**

ARTS 496 Capstone Writing Seminar 2.0 SH [] ()
 This course involves the preparation of four writing components for art majors in studio: an aesthetic statement, a character essay, a research paper, and a verbally supported visual portfolio. Students are taught the components for completing the statement and the paper; the essays include prompts but are otherwise written without faculty assistance. Taken concurrently with ARTS 495. **Fee=\$20.00**

Biology and Natural Resources

BNR 050 BNR Service Learning No Credit [] ()
 Students volunteer in positions as naturalists, outdoor teachers, land managers, research technicians, and community recyclers. Projects may serve Principia or other communities or outside agencies such as the Two Rivers National Wildlife Refuge.

BNR 111 Introductory Botany 4.0 SH [] (BNR)
 Introduction to basic plant structure and function, with emphasis on the processes of photosynthesis, growth, respiration, and reproduction. Includes a survey of the plant kingdom, from algae to flowering plants, focusing on life cycles and ecology of representative plants. Must be taken concurrently with BNR 112, BNR 191 and BNR 201. Designed primarily for students intending to major in biology or environmental studies.

BNR 112 Introductory Zoology 4.0 SH [] (BNR)

Survey of animal kingdom and the animal-like protists, including basic structure, life history, ecology, and classification of major groups. Emphasis is given to invertebrates, although vertebrate groups are covered near the end of the course. Introduction to laboratory techniques and scientific writing are stressed.

BNR 120 Plants and Society 4.0 SH [GESL] (BNR)

Explores basic plant biology, plant culture, from house plant care to home gardening to large-scale agriculture. Topics include introductory plant physiology, the impacts of light, temperature, soil, and fertilizer on plant growth, and pest control. Special emphasis is placed on the development and environmental impacts of large-scale agriculture (including the development and use of genetically modified organisms in agriculture).

BNR 141 Intro to Marine Fisheries 4.0 SH [GESL] (BNR)

Students examine the broad diversity of life on earth by studying the major plant and marine animal taxa involved in making sushi: rice, kelp, corals and jellies, marine worms, echinoderms, crustaceans, mollusks, and cartilaginous and bony fish. Students unpack the theory of natural selection and consider how forces long ago shape present ecological dynamics of these organisms. They also examine modern day fishing/harvesting practices and consider sustainability as a function of species' evolutionary traits.

BNR 161 Field & Natural History 4.0 SH [GESL] (BNR)

Studies of local plants and animals in their natural environment and in their relation to humankind. Emphasis on conservation, nature interpretation, and observation and field research skills. **Fee=\$25.00**

BNR 190 Global Environmental Issues 3.0 SH [GESN] (MNS)

Exploration of major environmental issues that are global in scale. By examining topics such as deforestation, agriculture, climate change, and the worldwide decline of biological diversity, students will learn to think critically about environmental issues. They will also learn to recognize and sort through the many conflicting perspectives that surround most of these issues. Special emphasis is placed on the role of science in helping to identify and solve global environmental problems. Designed primarily for students intending to major in biology or environmental studies.

BNR 191 Introduction to Ecology 4.0 SH [GESL] (BNR)

Exploration of fundamental concepts relating to ecosystem structure and function, including the interactions of plant and animal populations within biological communities, and the role of abiotic factors in shaping those populations and communities. Emphasizes basic methods of field research, data analysis, and scientific writing. Must be taken concurrently with BNR 111, BNR 112, and BNR 201. Designed primarily for students intending to major in biology or environmental studies.

BNR 201 Methods in Research & Writing 4.0 SH [] ()

Course emphasizes a broad range of skills essential to successful work in biology or environmental studies. Skills include reading and analyzing scientific literature, designing and conducting lab and field research projects, data management and analysis, scientific writing, and presentation techniques. Must be taken concurrently with BNR 111, BNR 112, and BNR 191, as these courses provide the content themes that will serve as case studies for research writing. Designed primarily for students intending to major in biology or environmental studies.

BNR 220 Marine Biology 3.0 SH [] ()

This survey course covers a broad range of subject areas in marine biology, including basic oceanography, biology of life in the seas, and management/conservation of oceanic biological resources. Also focuses on learning about marine ecosystems (types, locations, and biological structure). Prerequisite: BNR 112.

BNR 230 Ornithology 4.0 SH [GESL] (BNR)

Study of birds: their structure, identification, classification, habits, life history, distribution, migration, methods of attraction, economic importance. Field identification and behavioral study of local species.

- BNR 231 Herpetology** 4.0 SH [GESL] ()
 A survey of the biology of reptiles and amphibians. Topics covered include evolutionary origins, morphology, life history, ecology, and identification, emphasizing Principia College campus species. Field work, collecting, and identifying the Principia herpetofauna constitute a significant portion of the course. Students undertake a research project on the amphibian or reptile of their choice.
- BNR 232 Wildlife Conservation** 3.0 SH [] (MNS)
 This course explores major local and global wildlife issues, focusing on the impacts of population growth, land use, tourism, development, and other human activities. This course also examines a range of conservation and planning strategies to protect wildlife species.
- BNR 236 Sea Turtle Biology** 3.0 SH [] (MNS)
 This course teaches the biology of sea turtles (evolution, anatomy, physiology, behavior, life history, and population dynamics) and their conservation needs. Basic ecological concepts are integrated with related topics of conservation and management of endangered species, the contributions of technology to the management of migratory marine species, and the role of research in national and international law and policy.
- BNR 236L Sea Turtle Biol and Cons Lab** 1.0 SH [] ()
 This course provides an optional laboratory experience for students enrolled in BNR 236. During spring break students travel to the Caribbean to study marine turtles. They assist in ongoing research, as well as interact with local resource managers, in a "real-world" context where the complexities of biodiversity conservation can be learned. Must be taken concurrently with BNR 236.
- BNR 245 Natural History** 2.0 - 4.0 SH [GESL] (BNR)
 This course focuses on the study of the natural history of flora and fauna in a specific country or region. Ecosystems studied may include: marine, alpine, forest, grasslands, riverine. Offered on Principia abroad only, with a star (*) grade until following midterm. May be offered for variable credit from two to four semester hours. The title will be extended to describe the current topic. May be taken more than once provided the topics differ.
- BNR 255 Natural Resources Management** 4.0 SH [] (BNR)
 This course focuses on the biological and physical science aspects of natural resource management at local, national, and global scales. Topics covered include management of soil, water, forest, and watershed resources. In the laboratory component, students will learn field measurement techniques and computer skills commonly used in managing natural resources as well as develop and write scientific lab reports.
- BNR 256 Conservation Genetics** 4.0 SH [] (BNR)
 Classical and modern genetic theory and technique, with an emphasis on the role of genetic variability in the development of species, and in the conservation of biodiversity. Prerequisite: BNR 111 or BNR 112.
- BNR 264 Sugarbush Management** 4.0 SH [GESL] (BNR)
 Course exposes students to historical, scientific, business, and conservation aspects of managing a maple-dominated woodland for syrup production. Central to this course is the planning and implementation of a small-scale "sugarbush" on the college campus, complete with tapping, evaporating, and marketing the final product.
- BNR 280 Plant Taxonomy** 4.0 SH [] (BNR)
 Study of plant families illustrated by their morphology and reproductive structures. Emphasis is on the development of skills used to identify and classify plants in the field. Prerequisite: BNR 111.
- BNR 290 Environmental Policy** 3.0 SH [] (MNS)
 This course includes the formulation and implementation of environmental policy, with special reference to the impact of political and economic factors. Specific consideration will be given to major environmental regulations.
- BNR 291 Sustainable Development** 3.0 SH [] (MNS)
 This course is a study of the global issues of sustainability. Through the readings, students develop a conceptual model of sustainable development, and apply that model to case studies in the west and in developing countries. Working through the Principia Center for Sustainability, the class takes on a special campus sustainability project.

BNR 312 Grassland Ecology 4.0 SH [] (BNR)

Exploration of the structure and function of grassland ecosystems. Topics include the evolutionary history of the grassland biome, interactions between plants and animals in grasslands, and the effects of fire, grazing, and climate on grasslands. Introduces students to key papers on grassland ecology, as well as current field research methods. Prerequisites: BNR 111 and BNR 191.

BNR 313 Forest Ecology 4.0 SH [] (BNR)

An exploration of the structure and function of forested ecosystems, with an emphasis on field research and scientific writing. Topics include succession, disturbance, landscape variation, nutrient cycling, tree identification, and ecosystem stability. This course builds on the fundamentals learned in Introduction to Ecology and introduces students to contemporary ecological thinking. Prerequisites: BNR 111 and BNR 191.

BNR 315 Freshwater Ecology 4.0 SH [] (BNR)

A survey course in the ecological functioning of lakes, rivers, streams, and wetlands. The course has a special focus on the great rivers of the Midwest, including their ecological and environmental problems. Students learn field skills needed to conduct ecological research and write scientific lab reports and a final research paper on freshwater ecosystem topics. Prerequisites: BNR 111 and BNR 191.

BNR 317 Wetland Ecology 4.0 SH [] ()

The study of bogs, fens, swamps, bottomland hardwood forests, salt marshes and mangroves with an emphasis on the formation, hydrology, biogeochemistry, and community dynamics of these systems. Management, policy, and restoration strategies will also be discussed. Students will learn field skills needed to conduct wetland research and write lab reports and a final research paper on wetland ecosystem topics. Prerequisites: BNR 111 and BNR 191.

BNR 325 Wildlife Management 4.0 SH [] (BNR)

This course is designed to give students an understanding of wildlife and conservation management methods. Covers techniques in population estimation, radio and satellite telemetry and other electronic data gathering methods as well as studying when and how to apply such methods. The course combines lecture and field work, with a heavy emphasis on the field work. Prerequisite: BNR 112.

BNR 340 Adv Natural History 2.0 - 4.0 SH [] (BNR)

An advanced course that focuses on natural history of flora and fauna in a specific country or region. It also focuses on the ecological dynamics of populations, communities, and ecosystems in the region. Case studies are drawn from a variety of systems including marine, freshwater, forest, grassland, alpine and other ecosystems. May be offered for variable credit from two to four semester hours. The title will be extended to describe the current country or region. May be taken more than once provided the regions differ.

BNR 356 Global Change Biology 3.0 SH [] ()

This course examines changes in the Earth's atmosphere, soils, and waters, the distribution of heat and precipitation, the continuity of landscapes, and exotic species invasions. Responses are examined at multiple levels of biological organization. Special attention is paid to positive and negative feedback loops. The course relies on current scientific literature and requires synthesis of diverse physical and biological sciences. Prerequisites: BNR 111, BNR 112, BNR 191, BNR 201, and any 300-level BNR course.

BNR 360 Vertebrate Zoology 4.0 SH [] ()

Studies include the evolutionary development of vertebrates, from their origins to the divergence of groups. It focuses on comparative anatomy to understand common ancestral linkages. Students study the broad diversity of modern vertebrates, including life histories, physiology, and ecological adaptations. Laboratory work focuses on anatomy as well as key features of the major vertebrate groups. Prerequisite: BNR 112.

BNR 362 Conservation 2.0 - 4.0 SH [GESN] (MNS)

This course focuses on how natural resources of a given country are managed. Students study conservation management strategies of representative ecosystems as well as species management and the interface of native culture and resource conservation. Offered on Principia abroads only, with a star (*) grade until following midterm. The title will be extended to describe the current country. May be offered for variable credit from two to four semester hours.

BNR 380 Advanced Ecology Seminar 1.0 - 3.0 SH [] (MNS)

Offered when regular or visiting faculty are available to work with students on selected topics in ecology. Recent topics have included ecological modeling and soils ecology. The title will be extended to describe the current topic. May be offered for variable credit from one to three semester hours. May be taken more than once provided the topics differ.

BNR 381 Adv Natural Resources Seminar 1.0 - 3.0 SH [] (MNS)

Offered when regular or visiting faculty are available to work with students on selected topics in natural resources conservation. The title will be extended to describe the current topic. May be offered for variable credit from one to three semester hours. May be taken more than once provided the topics differ.

BNR 390 Forest Resource Management 4.0 SH [] (BNR)

A course in the ways we manage forest lands to provide an array of goods and services to mankind. This course teaches the concepts of sustainable forestry and the field techniques that allow the manager to evaluate, plan, and implement forest management activities. Students learn specific skills in forest measurements, applied silviculture, and the use of management decision support tools. Prerequisite: BNR 313.

BNR 391 Soil and Water Conservation 3.0 SH [] (MNS)

Past and present issues in soil and water conservation will be examined. Principles of erosion, conservation tillage, irrigation, and drainage will be discussed. Current issues such as water conflicts, integrated watershed management, and green roofs will also be covered.

BNR 400 Senior Thesis Seminar 1.0 SH [] ()

This course is designed to assist senior biology and environmental studies majors as they design, conduct, and plan for the presentation of a capstone project. Weekly class activities may include presentations from the research librarian, discussions with BNR faculty about project design and methodology, preparation of an annotated bibliography and coaching on presentation skills and technology. Students develop a formal research proposal and a plan for the project. Open only to biology or environmental studies majors.

BNR 401 Senior Thesis 1.0 - 6.0 SH [] (MNS)

Project selected in accordance with student's qualifications, interests, and needs. May be taken for variable credit from one to six semester hours. May be taken more than once with BNR department chair approval. May be repeated up to a total of 12 semester hours. Prerequisite: five or more BNR courses numbered above 150 including BNR 400.

BNR 402 Internship 1.0 - 6.0 SH [] (MNS)

An opportunity to gain practical experience in biology, natural resource conservation, environmental policy, consulting, and many other related environmental fields. Recent student internships have included waterfowl research for the U.S. Fish and Wildlife Service, amphibian research in Puerto Rico, coyote behavior studies in Yellowstone, and aquarium management at the New England Aquarium. May be taken for variable credit from one to six semester hours. May be taken more than once if topics differ. Offered on an independent contract basis.

BNR 403 Biology Research Experience 3.0 - 6.0 SH [] (BNR)

This course is designed to give the student the opportunity to conduct guided research as a research assistant in biology, natural resource conservation, or other environmental fields. The student will undertake original research while gaining practical experience as a research biologist. Depending on the project the student may spend some of, or the whole semester, off campus. May be taken for variable credit from three to six semester hours. May be repeated up to a total of nine semester hours. Open only to biology majors. Prerequisites: BNR 111, 191, and 201, and at least one of the following: BNR 312, 313, 315.

BNR 410 Senior Readings 3.0 SH [] ()

This course introduces students to seminal pieces of environmental literature and to cutting edge thinking on environmental problems. Students are responsible for reading assigned materials and participating in seminar discussions. The course challenges students to define and defend their personal values regarding environment and to become active citizens in the environmental issues facing society. Prerequisite: five BNR courses. Also listed as GEOL 410.

Business Administration

BUAD 110 Discovering Business 3.0 SH [GESS] (SSC1)

A course specifically designed for non-majors offering a new approach to the integrated discovery of basic business concepts. Students gain an understanding of how economics, entrepreneurship, management, marketing, accounting, finance, and business ethics all work together in the successful enterprise. Case studies involving companies, business leaders and entrepreneurs, as well as team projects, make business principles relevant for the student.

BUAD 215 Intro to Mgmt Info Systems 3.0 SH [] ()

Students increase their technical perspective of business by exploring the systems, information, people, strategies, and technology delivery models that drive companies' critical digital infrastructure. Through the use of case studies and projects students analyze and practice the roles of IT manager, business user, technology vendor and consultant in the context of enterprise software solutions, networks, digital media, and data platforms.

BUAD 251 Financial Accounting 4.0 SH [] ()

Stresses the recording and analysis of business transactions. The accounting cycle and preparation of those financial statements required for evaluating the financial status of proprietorships and corporations are emphasized. Also covers specific categories of assets, liabilities, and equity, including corporations. Includes Excel applications and an Internet-based practice set. Prerequisite: ECON 203 (with a grade no lower than C).

BUAD 252 Managerial Accounting 3.0 SH [] ()

Builds on the accounting principles studied in BUAD 251. The primary emphasis is the use of accounting for internal management. Cost accounting systems, accounting information for managerial decisions, tax considerations and capital budgeting are stressed. Prerequisite: BUAD 251 (with a grade no lower than C).

BUAD 255 Integrated Principles of Bus 4.0 SH [] ()

Students gain an understanding of how the functions of a business enterprise - management, marketing, accounting, finance, and information technology - are interrelated and interdependent. Students are assigned to a small business team in which they apply their understanding to the development of a business plan for a new venture. Prerequisite: BUAD 251 (with a grade no lower than C).

BUAD 261 Business Statistics 3.0 SH [] ()

This course covers descriptive statistics, probability and frequency distributions, sampling and statistical investigations, introduction to statistical inference, time series analysis, simple linear regression and correlation as applied to business decision making. Prerequisite: BUAD 251; concurrent registration permitted.

BUAD 310 Investments 3.0 SH [] (SSC1)

Investment instruments including common stock, corporate and government bonds, mutual funds, options; determination of value; security analysis; investment philosophies; historical returns; crowd behavior and the lessons of history; emphasis on value-based, long-term investing. Prerequisite: BUAD 251.

BUAD 320 Marketing 3.0 SH [] (SSC1)

An introduction to the principles of creating value for customers and building and managing strong, profitable customer relationships. Students study the nature of consumer and business-to-business markets and the role of strategic marketing planning, marketing research, pricing, distribution, and advertising. Students study and analyze contemporary cases to understand how marketing principles are used to guide decision-making in organizations. Prerequisite: BUAD 251 (with a grade no lower than C).

BUAD 321 Marketing Research 3.0 SH [] ()

Emphasizes the role of marketing research in marketing management. Topics included are research design, test marketing, secondary sources, survey research, questionnaire design and data analyses, attitude measurement, statistical tests, and product, pricing, and promotional research. Course includes major market research project. Offered on demand. Prerequisite: BUAD 320.

BUAD 326 Multi-Channel Marketing 3.0 SH [] ()
 Interdisciplinary course open to students majoring in Business Administration or Mass Communication. The course addresses changes in the marketing environment and how an integrated approach is necessary for success. Students integrate outbound channels such as cable, radio, public relations, print, direct mail, and email with inbound channels such as blogs, social media, website optimization, and pay-per-click for superior results. Prerequisite: business administration majors: BUAD 320; mass communication majors: MCOM 263.

BUAD 330 Management 3.0 SH [GESS] (SSCI)
 A seminar course that evaluates several major management models that have been employed internationally over the past several decades. The works of noted thought leaders in management philosophies and business models are examined and compared to current management theory and practice. The qualities required of management to be effective in planning, organizing, leading, and controlling organizations on an ethical basis are identified and stressed.

BUAD 340 Operations 3.0 SH [] ()
 Covering both a firm's operations and supply chain management, topics include production, logistics, quality, capacity, and inventory management. This course incorporates many applied quantitative business methods such as optimization, forecasting, and business process design. Prerequisite: BUAD 261.

BUAD 350 Business Law 3.0 SH [] (SSCI)
 Fundamentals of business law. Law as a process for resolving and preventing business problems. Study of impact of law and government regulations on business organizations and activities. Practical exercise in negotiating contracts, handling lawsuits, and understanding legal principles.

BUAD 351 Intermediate Accounting 3.0 SH [] ()
 Builds on the accounting principles studied in BUAD 251 and BUAD 252. The primary emphasis is on intermediate financial accounting principles: statement preparation, asset accounting, liabilities and stockholder's equity accounting. Application as well as theory. Offered on demand. Prerequisite: BUAD 252 (with a grade no lower than C).

BUAD 360 Managerial Finance 3.0 SH [] (SSCI)
 Fundamentals of financial management of the business enterprise. Needs for funds; financial planning; cost of capital; capital structure; dividend policy; capital budgeting; long-term financial and corporate securities; financial aspects of expansion, reorganization. Prerequisites: ECON 204, BUAD 252 (with a grade no lower than C) and BUAD 261.

BUAD 400 Seminar 1.0 SH [] ()
 A seminar in selected topics in business administration or economics. The contents will vary, and the title will be extended to describe the current topic. May be taken more than once provided the topics differ.

BUAD 401 Business Consulting Practicum 1.0 - 3.0 SH [] ()
 Group participation in an on-going project providing business consulting services to companies involved in retail, manufacturing, and services. Project integrates and applies students' knowledge to financial, marketing, and management situations. May be offered for variable credit from one to three semester hours. May be taken more than once, up to a total of 12 semester hours.

BUAD 404 Business Mgt Study Project 3.0 - 9.0 SH [] ()
 Offered on a field program or on a contract basis. May be offered for variable credit from three to nine semester hours. Work done independently with a corporation or other organization.

BUAD 430 Strategic Management 4.0 SH [] ()
 Integration of the functional areas of business management in formulating and implementing the policies of the enterprise. Topics included are mission statements; industry analysis; internal SWOT analysis; corporate, business, and functional level strategies; generic and grand strategies; restructuring; and strategic control. Course includes a capstone research paper. Prerequisites: completion of all other business administration major requirements.

Chemistry

CHEM 111 Environmental Chemistry **4.0 SH [GESL] (CHEM)**

Introduction to environmental problems and the chemical aspects of these concerns. Basic concepts of chemistry are introduced in the context of environmental issues. Designed to develop an awareness of environmental issues and to use that information as informed global citizens and voters. Includes labs.

CHEM 114 Chemistry of Art Objects/Media **4.0 SH [GESL] (CHEM)**

Selected fundamentals of chemistry relevant to the creation, conservation, and preservation of art objects. Survey of pigments, dyes, paints, ceramics, glassy and metallic media, paper, lithography, engraving, and fresco. Other topics will include conservation, the museum environment, scientific examination of art, forgery detection by scientific means, and safety in the studio. Includes labs.

CHEM 115 Introduction to Chemistry **4.0 SH [GESL] (CHEM)**

A one-semester introduction to chemistry relevant to biology and environmental science. Students learn how understanding chemical concepts and chemical reactions is important to biology and environmental science. Includes labs. Prepares students for taking Organic Survey. Prerequisite: High School Algebra II.

CHEM 131 Fundamentals of Chemistry I **4.0 SH [GESL] (CHEM)**

First of a three-course introductory sequence in chemistry. Develops problem-solving and research skills. Includes atomic structure, stoichiometry, bonding, gases, liquids, and solids. Includes labs. Students should consider taking MATH 181 concurrently. Prerequisites: Score of 3 on Math Placement Exam or equivalent (including being excused from test or passing course such as Math 110).

CHEM 132 Fundamentals of Chemistry II **4.0 SH [] (CHEM)**

Second part of the introductory chemistry sequence. Introduction to physical chemistry including solutions, kinetics, equilibrium concepts, acid-base chemistry, thermodynamics, and electrochemistry. Includes labs. Prerequisite: CHEM 131.

CHEM 133 Fundamentals of Chemistry III **4.0 SH [] (CHEM)**

Third part of the introductory chemistry sequence. Topics covered include nuclear, organic, and descriptive chemistry of metals and non-metals. Introduces laboratory methods of quantitative analysis and instrumentation. Topics include titrimetric and gravimetric methods of analysis, statistical treatment of data, error propagation and analysis, and instrumental techniques of chromatography and spectroscopy. Includes labs. Students should consider taking MATH 182 concurrently. Prerequisites: CHEM 131 and CHEM 132.

CHEM 201 Environmental Testing **4.0 SH [GESL] (CHEM)**

Application of chemistry to field analysis of contaminants in the environment. Focuses on writing a site assessment manual for testing of air, water, and soil. Includes labs. Prerequisite: high school chemistry or equivalent.

CHEM 260 Organic Survey **4.0 SH [] (CHEM)**

Principal classes of organic compounds, nomenclature, properties, reactions, essentials or structure and mechanisms. Applications to biological systems. Includes labs. Prerequisite: CHEM 115 or CHEM 131.

CHEM 262 Organic Chemistry I **4.0 SH [] (CHEM)**

First of a two-course sequence on organic chemistry. Includes major classes of organic compounds, nomenclature, structure and properties, acid-base theory, spectroscopy, stereochemistry, thermodynamics, reactions, and mechanisms. Includes labs. Prerequisite: CHEM 133.

CHEM 263 Organic Chemistry II **4.0 SH [] (CHEM)**

A continuation of CHEM 262. Includes labs. Prerequisite: CHEM 262.

CHEM 274 General Biochemistry **4.0 SH [] (CHEM)**

Molecular components of cells, metabolic and energy transfer pathways, biosynthesis, molecular genetics. Includes labs. Prerequisite: CHEM 260 or CHEM 262.

CHEM 301 Adv Environmental Chemistry 4.0 SH [] ()
 Study of the chemistry of air, water, and soil and how industries and activities affect the chemical balances in nature. Includes a laboratory section which concentrates on environmental chemical analysis. Prerequisite: BNR 191 or CHEM 133 or CHEM 201.

CHEM 311 Phys Chem I: Thermodynamics 4.0 SH [] (CHEM)
 The study of classical thermodynamics both from a theoretical and an experimental viewpoint. Topics include gas laws, enthalpy, entropy, liquids, solutions, mixtures, kinetic rates, and mechanisms. Includes labs. Prerequisites: CHEM 133 or PHYS 204.

CHEM 313 Phys Chem II: Quantum Chem 4.0 SH [] (CHEM)
 Quantum mechanics is developed from simple systems to the hydrogen atom to molecules. Valence bond theory, molecular orbital theory, and group theory are used along with spectroscopy to explore atomic and molecular structure. The laboratory includes one research project. Includes labs. Prerequisites: CHEM 133 and PHYS 202.

CHEM 321 Applied Spectroscopy 4.0 SH [] (CHEM)
 The study of interaction of electromagnetic radiation with matter in order to elucidate its structure. Various spectroscopic techniques, including NMR, EPR, IR and atomic absorption, will be applied to identify the structures of organic and inorganic compounds. Includes labs. Prerequisites: CHEM 262 and CHEM 311.

CHEM 333 Instrumental Analysis 4.0 SH [] (CHEM)
 Theory and use of analytical instruments, including infrared, UV-visible, atomic absorption and nuclear magnetic resonance spectrometers, and the gas-liquid chromatograph. Emphasis will be on laboratory use of the instruments and the interpretation of results for molecular structure determination, compound identification, and quantitative analysis. Includes labs. Prerequisites: CHEM 133 and CHEM 263.

CHEM 441 Senior Research Project 1.0 - 6.0 SH [] (CHEM)
 Research under faculty supervision. May receive a star (*) grade, with final grade being assigned on completion of the project. May be offered for variable credit from one to six semester hours. May be repeated multiple times, but only six semester hours may be used to fulfill major or minor requirements. Open only to chemistry majors.

Computer Science

CSCI 170 Intro to Computer Science 4.0 SH [GESN] (MNS)
 Modern computing concepts, components, history from the abacus to the modern PC. Introduction to computer arithmetic, logic, circuits, a low-level language and a high-level language, elementary systems, peripherals, networks and ethics. Encourages presentation development and delivery. Addresses the fear of technology. Does not teach computer applications (such as word processing) but explores the science of computing. Does not count toward the CSCI major or the MIS minor.

CSCI 171 Introduction to Programming 4.0 SH [GESN] (MNS)
 Focus on fundamental concepts of problem solving by analyzing problems and using a computer language (C++ or Java) as a tool to design, code, document, and test solutions, learned through textbook study, lectures, examples, and considerable practice in the computer science programming laboratory. Professional approaches are emphasized. (A student may receive credit for only one of the courses CSCI 171 or CSCI 181.)

CSCI 181 Accelerated Intro Programming 2.0 SH [] (MNS)
 Students entering the computer science program with considerable programming experience may take this course as a replacement for CSCI 171 as a major requirement. Prerequisite: successful completion of a programming competency test. (A student may receive credit for only one of the courses CSCI 171 or CSCI 181.)

CSCI 182 Intro to Data Structures 4.0 SH [] (MNS)
 In-depth coverage of programming concepts, with emphasis on data structures, including arrays, structs, class objects, stacks, queues, and lists. Algorithms and complexity analysis for searching and maintaining sorted and unsorted lists. Explicit pointer data type and dynamic allocation of memory. Introduction to object-oriented programming and recursive functions. Prerequisite: CSCI 171 or CSCI 181.

CSCI 201 Programming Strategies 1.0 SH [] (MNS)

Open to students with at least two programming courses who would like to gain a knowledge of team-oriented programming strategies that enable them to solve problems quickly and accurately. This knowledge is useful in many fields of problem-solving, but will also prepare them for the ACM Scholastic Programming contest. The course emphasizes fast analysis, design, and coding. May be taken up to four times.

CSCI 220 Programming Languages 4.0 SH [] (MNS)

A survey and comparison of programming languages, learned through study and considerable programming practice. Intended to form the programming language basis for courses in object-oriented programming and database management systems. Prerequisite: CSCI 182.

CSCI 240 Object-Oriented Programming 4.0 SH [] (MNS)

Students design, code, document, and debug computer programs using classes, object-oriented design, inheritance, polymorphism, and recursion. Demonstrate problem-solving skills using object-oriented concepts. Create program scripts in both Windows and UNIX environments. Prerequisite: CSCI 220.

CSCI 263 Computer Software Architecture 3.0 SH [] (MNS)

Topics include assembler language programming, system organization, parallelism and serialization, pipelining, memory management, recursion, and microprocessor design. Prerequisite: ENGR 262.

CSCI 310 Software Engineering 3.0 SH [] (MNS)

Methodologies for developing and maintaining large complex software systems. Case studies and team exercises are included. Focus on complete software life cycle, including specification, design, implementation, testing, debugging, and documentation. Prerequisite: CSCI 171 or CSCI 181.

CSCI 320 Database Management Systems 4.0 SH [] (MNS)

The utilization of database systems within organizational settings. Includes features of database management systems, various data models, database design, normalization, relational algebra, SQL, query optimization, various indexing techniques, and data integrity and recovery issues. Prerequisite: BUAD 215 or CSCI 240.

CSCI 330 Operating Systems 3.0 SH [] (MNS)

The inner workings of several popular multiprogramming operating systems are compared. Topics include processor scheduling, device management, memory management, and parallel processing. Prerequisite: CSCI 263.

CSCI 333 Computer Networking 3.0 SH [] (MNS)

Introduction to Local Area and Wide Area computer networks. Topics include network topologies, ISO protocols, Ethernet, TCP/IP, and network support for distributed computing. The course emphasizes the science of networking (as opposed to network administration). Prerequisite: CSCI 171 or CSCI 181.

CSCI 340 Advanced Algorithms 4.0 SH [] ()

Survey of algorithms, with an emphasis on the application of algorithmic theory to the solution of practical problems. Categories include algorithm taxonomy, greedy algorithms, dynamic programming, divide-and-conquer, and intelligent search. Various specific algorithms exemplifying these categories are drawn from a variety of application areas such as compression, encryption, graph problems, sorting, computational geometry, and string matching. Prerequisite: CSCI 240.

CSCI 380 Compilers 4.0 SH [] (MNS)

Concepts necessary for designing and developing a compiler. Topics include lexical analysis, parsing, semantic analysis, symbol table management, and code generation. Students will implement a small compiler as a project. Prerequisites: CSCI 240 and CSCI 263.

CSCI 410 Capstone Proposal 1.0 SH [] (MNS)

Students research and prepare a capstone proposal in preparation for completing a computer science capstone project. The proposal must be approved by the computer science faculty prior to taking CSCI 415.

CSCI 415 Capstone **3.0 SH** [] (MNS)
 A student-designed project with a significant programming component which pulls together the student's major. Choices include independents, internships, or group projects. Prerequisite: CSCI 410.

CSCI 421 Computer Issues Seminar **3.0 SH** [] ()
 An examination and discussion of pressing computer issues facing society. Topics include personal impact, societal impact, artificial intelligence, privacy, and ethics. Majors from other disciplines are encouraged to take this course if they have taken any other computer science course.

Dance

DANC 043 Dance: Ballet I **No Credit** [GEPE] (PE)
 Introduction to the basic principles and vocabulary of ballet. Flexibility, strength, and control are emphasized.

DANC 044 Dance: Ballet II **No Credit** [GEPE] (PE)
 Provides the intermediate dancer with ongoing training in ballet technique. Emphasis is on center work and adagio.

DANC 045 Dance: Ballet III **No Credit** [GEPE] (PE)
 Provides the more advanced dancer with an upper-level technique class emphasizing pointe work and petit allegro.

DANC 048 Dance: Jazz I **No Credit** [GEPE] (PE)
 Introduction to the basic principles and vocabulary of jazz technique and rhythm.

DANC 080 Dance: Modern I **No Credit** [GEPE] (PE)
 Introduction to the basic principles and vocabulary of modern dance. Emphasis is on individual expression through the use of improvisation, modern dance technique, and rhythm.

DANC 081 Dance: Modern II **No Credit** [GEPE] (PE)
 Builds on the basic modern dance techniques and allows greater exploration of improvisation and movement sequences.

DANC 082 Dance: Modern III **No Credit** [GEPE] (PE)
 Continuation of DANC 081. Further development of modern technique and improvisation and floorwork. Exploration of different styles of modern dance, e.g. Limón, Graham, and others.

DANC 083 Dance as Movement **No Credit** [GEPE] (PE)
 This introductory course is provided to train the student-dancer in spatial awareness, weight transfer, and basic studio-dance movement. It is a generic dance class designed to enable dancers to make connections between basic pedestrian movement and dance vocabulary movements.

DANC 200 Topics in Dance History **3.0 SH** [GEA] (ART)
 A comprehensive study of a notable topic in dance history whether it is a choreographer, particular period of dance, or specific topic, e.g., Politics and Dance, Antony Tudor. Students will be introduced to a particularly relevant viewpoint that includes historical context, analysis, and viewing. The title will be extended to describe the current topic. May be taken more than once if topics differ.

DANC 250 Dance History **3.0 SH** [GEA] ()
 An introduction to western dance history. Periods covered include, but are not limited to, the Baroque, Romantic, and Classical ballet eras and the Modern and Post Modern eras. Both ballet and modern dance luminaries are studied. Video is used and an emphasis is placed on historical context as regards dance styles and periods.

DANC 330 Dance Composition 3.0 SH [] ()

A course designed to introduce the student to the fine art of composition for dance. Respected texts are used to guide the students through the process of creating work for the stage. Students identify key components of effective composition, practice these principles, and produce pieces that illustrate their skill as choreographers.

DANC 370 Dance Practicum Cast 1.0 - 3.0 SH [] ()

Practical application in a dance production of classroom courses in a performance setting. Students participate in all aspects of a performance experience from auditions to learning and creating (if chosen as a choreographer) choreography, through the rehearsal process to the final mainstage performances for the community. May be offered for variable credit from one to three semester hours. May be taken more than once.

DANC 371 Dance Practicum Staff 1.0 - 3.0 SH [] ()

A dance production course designed to give students hands-on experience in assisting the director and, in certain cases, the technical director. Professionalism, self-discipline, strong communication skills, and team work are stressed. May be offered for variable credit from one to three semester hours. May be taken more than once.

Economics

ECON 203 Principles of Microeconomics 3.0 SH [GESS] (SSCI)

An introduction to economics with special emphasis on microeconomic concepts. These focus on decision-making by individuals and organizations such as firms, government departments, and supra-national organizations. Students develop economic perspectives on a wide variety of topics - examples include the minimum wage, environmental legislation, Social Welfare policy, and entrepreneurship. First course in the economics and in the business administration majors' sequence.

ECON 204 Principles of Macroeconomics 3.0 SH [] (SSCI)

Continues the study of economic theory and analysis begun in ECON 203. Major topics include aggregate demand and supply, money, employment, economic growth, monetary and fiscal stabilization policy, national income and product accounts, inflation, and international economics. The assumptions of Keynesian, neoclassical, monetarist, and "supply-side" programs are also explored. Prerequisite: ECON 203.

ECON 231 Comparative Economic Systems 3.0 SH [GESS] (SSCI)

Examines resource allocation systems of various nations; stresses comparison of free market, social democratic, market socialist, and centrally planned economies.

ECON 271 Environmental Economics 3.0 SH [GESS] (SSCI)

This course provides an economic perspective on natural resource and environmental issues. Topics such as sustainability, pollution, allocation of non-renewable resources, ecosystem management, and global climate change are examined using two different approaches: traditional economic theory; and ecological economics, which considers economic activity in the context of the biological and physical systems in which it occurs.

ECON 303 Intermed Microeconomic Theory 3.0 SH [] (SSCI)

Builds on principles studied in ECON 203. Emphasis is on understanding the primary economic determinants of a firm's profitability: the elasticity of its demand curve, its cost structure, and the structure of the industry/market the firm is in. Students will develop their understanding of these concepts through individual and team research on real companies and through guest lectures. Prerequisites: ECON 203 and ECON 204.

ECON 304 Intermed Macroeconomic Theory 3.0 SH [] (SSCI)

Builds on the principles studied in ECON 204. Focus is on the use of the long-run Classical and short-run fixed price analyses to explore the alternative policy options available to government in its attempts to promote economic welfare. Prerequisites: ECON 203 and ECON 204.

ECON 316 Economic Development 3.0 SH [GESS] (SSCI)

This course focuses on the economic factors and processes that can contribute to economic growth and development. Topics covered include: the role of population growth, free markets vs. market controls, the role of education, sources of capital for development (domestic saving vs. foreign investment) and the impact of government economic policies (fiscal and monetary). The course examines economies in Africa, Asia, and Latin America to communicate the enormity and complexity of the task of economic development.

ECON 321 Money and Banking 3.0 SH [] (SSCI)

Principles of money and the monetary system; commercial bank and thrift operations; central banking and monetary management. Prerequisites: ECON 203 and ECON 204.

ECON 331 International Economics 3.0 SH [] (SSCI)

Studies the influence on economic activity of free international trade, tariffs, trade blocs, exchange rate systems, and immigration policies. Examines international institutions such as cartels, multinational corporations, and common market systems. Prerequisite: ECON 203.

ECON 431 Evolution of Economic Thought 3.0 SH [] (SSCI)

Historical development of economic thought from its origins to the present. Open only to economics majors.

Educational Studies

EDUC 049 Health and Schools Examination No Credit [] ()

This requirement involves review of materials from human development, Beginning Block, and Intermediate Block course work to pass an objective test in school health.

EDUC 100 Professional Portfolio Prep 1.0 SH [] ()

Completion of program portfolio and professional portfolios necessary to obtain an initial teaching certificate, begin work on a standard teaching certificate, and secure a teaching position. Portfolios are prepared to demonstrate knowledge of Illinois Professional Teaching Standards and Illinois Content Area Standards specific to a teacher candidate's certification area. Multiple opportunities are given for preparation and presentation of credentials in professional settings. Designed as part of the Principia Senior Teaching Candidate Internship. Prerequisite: EDUC 049 and successful completion of Intermediate Block courses.

EDUC 120 Signs of the Times 3.0 SH [GESS] (SSCI)

A liberal arts foundations course centered around a contemporary national and world issue. Using a cross-curricular approach to analysis and problem solving, students critically read current and classic material, write extensively, discuss actively, and work collaboratively with other members of the class. Students also explore the attitudes, skills, and behaviors that contribute to success in a changeable college experience. The contemporary issue that the class focuses on could change from year to year, but the purpose and process will remain the same. The title will be extended to describe the current issue. This course is designed to encourage a successful transition to the breadth and depth of college learning and living at Principia.

EDUC 130 Outdoor Education 3.0 SH [GESS] (SSCI)

This course is designed to give students in-depth exposure to a wide variety of skills applicable to the outdoor educator. Students gain a strong foundation in group facilitation, team building, leadership, group processing, debriefing, diversity, and Leave No Trace outdoor ethics. Hands-on skills include knot tying, fire building, camping, and ropes course work. Fee=\$25.00

EDUC 140 Writing for College Students 2.0 SH [] ()

A study of basic college reading and writing competencies. This course examines how current conventions for reading, writing, and speaking communicate meaning, as well as multiple comprehension strategies writers employ to control these conventions.

EDUC 170 Environmental Education 3.0 SH [GESS] (SSCI)

This course integrates ecological concepts with theories about teaching and learning. Students gain practical experience designing and delivering creative hands-on learning units. Students learn how to adapt these lessons and methods to a variety of different age groups, settings, and outcomes. Course material focuses on constructivist teaching methods, eco literacy, and "green" teaching. **Fee=\$25.00**

EDUC 183 Adolescence and Society 3.0 SH [GESS] (SSCI)

Human growth and development of middle through high school age children, emphasizing the perceptions of adolescents in wider societal contexts such as government, corporate culture, literature, mass media, and cultural traditions. Includes researching and evaluating definitions of adolescence from a variety of perspectives given by the humanities and social sciences. Individual research projects include a focus on adolescent literature.

EDUC 184 Children and Society 3.0 SH [GESS] (SSCI)

Human growth and development from birth through late elementary-aged children, emphasizing the perceptions of children in wider societal contexts such as government, corporate culture, literature, theatre, mass media, and cultural traditions. Includes researching and evaluating definitions of childhood from a variety of perspectives given by the humanities, arts, and social sciences. Individual research projects include a focus on children's literature and the direct observation of children's behavior.

EDUC 215 Soc Science Research Methods 4.0 SH [GESS] (SSCI)

Explores qualitative research methods used in the social sciences. Students conduct social science research projects to learn various designs, their strengths and weaknesses, and their applications. Students collect, analyze, and interpret data, as well as test hypotheses and develop theories. Also listed as POLS 215 and SOAN 215.

EDUC 218 Education in America 3.0 SH [] ()

An exploration of American education through historical, philosophical, and political lenses. Students will be exposed to a variety of readings which will develop their understanding of the past, present, and future of education in America.

EDUC 219 School Law 2.0 SH [] ()

Study of U.S. school law as it applies to the daily life of a school teacher. Emphasis is given to the rights of marginalized cultures and ethnicities in the United States as a result of race, class, gender, ability, and other differences. Prerequisite: EDUC 260.

EDUC 220 Elem & Middle School Methods 3.0 SH [] ()

General methods of teaching at the elementary and middle school levels with emphasis on group process communication skills, organization, and development of instructional materials, planning skills, and evaluation strategies. Taught from a critical perspective rich in multi-cultural awareness, learning theory, historical content, and student-faculty collaboration. EDUC 221 is taken concurrently, providing a clinical practice experience in a middle school classroom. Extensive field experiences at educational sites are also included. Prerequisite: EDUC 260. **Fee=\$200.00**

EDUC 221 Elem/Middle School Beg Intern 2.0 SH [] ()

Opportunity to observe firsthand how educational theory and methods, as well as knowledge of human development, affect the learning experiences of students in a middle school setting. The beginning intern gains 120 hours of clinical experience while assisting a middle school teacher with the day-to-day individual and community needs of middle school students. Special attention is given to issues of school law and health education that occur every day in school. Taken concurrently with other Beginning Block courses. Prerequisite: EDUC 260.

EDUC 222 Field Experiences in Education 2.0 SH [] ()

Students gain firsthand experiences in public, private, and alternative schools. Course will include extensive and frequent field trips to observe a variety of educators implement classroom methods and management strategies. They will also observe and reflect upon the influence of race, gender, and socioeconomic differences in the classroom. Prerequisite: EDUC 260. **Fee=\$100.00**

- EDUC 223 Classroom Methods & Management 3.0 SH [] ()**
 This course will provide students with a strong foundation in best practices in education which are rooted in educational theory and cultural awareness. This includes methods of unit and lesson design, classroom management approaches, development of learning environments, and pedagogical strategies. Prerequisite: EDUC 260.
- EDUC 235 Outdoor Leadership 2.0 - 4.0 SH [] ()**
 Exploration of outdoor education in an experiential and hands-on way with an emphasis on the application of its related theories, skills, and methods. Emphasis will be on experiential, environmental, and adventure education. Core competencies of outdoor leadership will include facilitation skills, technical skills, decision-making skills, teambuilding, self awareness, safety and risk management, diversity mindfulness, and environmental stewardship. Offered on Principia abroad or field programs only. May be offered for variable credit from 2-4 semester hours. The title will be extended to reflect the specific country, region, or focus topic.
- EDUC 250 Educational Psychology: Majors 3.0 SH [] (SSCI)**
 Application of general principles of psychology to educational settings. Theories of teaching and learning and the study of curriculum in a critical, historical, and social context are included. Consideration of such educational issues as race, class, gender, methodology, research, evaluation, assessment, management, and learning processes are also examined. Taken as part of Beginning Block. Prerequisite: EDUC 260.
- EDUC 251 Educational Theory 3.0 SH [] ()**
 Addresses critical questions related to teaching and learning: What is learning? How do people learn? How do I learn best and how does that inform my practice? Through an exploration of selected educational theorists, students will explore and question their own beliefs about teaching and learning. These theories are evaluated through the lenses of cultural, racial, socioeconomic, and gender differences. Prerequisite: EDUC 260.
- EDUC 252 Teaching the Exceptional Child 3.0 SH [] (SSCI)**
 Study of exceptional and special needs examined in the context of mainstreaming/inclusion of all learners in regular school settings. Specific focus on 1) children and adolescents seen as gifted, physically-challenged, or learning and emotionally disabled; 2) multi-cultural, class, and gender issues; 3) health care needs of school children; 4) legal and policy issues, including the use of Individual Education Program (IEP). Taken as part of Beginning Block. Prerequisite: EDUC 260.
- EDUC 253 Dynamic Learning Communities 2.0 SH [] ()**
 Students will research and practice communication, collaboration, and professionalism in the context of learning communities. Students will participate in complex dialogs, group interactions, decision making, and visioning. These skills will be applied to individual and group learning needs, and the design of safe and inviting learning environments. Awareness and appreciation of diversity and multiple perspectives will be included. Prerequisite: EDUC 260.
- EDUC 254 Child & Adolescent Development 3.0 SH [] ()**
 Study of the development of children from childhood to adolescence in diverse school contexts. Study is grounded in related development theory and school issues related to physical, social, and cognitive development. Applicable Illinois standards for middle school teachers are addressed. Prerequisite: EDUC 260.
- EDUC 260 Communication 3.0 SH [GESS] (SSCI)**
 Introduces study of oral communication in large and small groups. Techniques and theories of oral communication, as well as interaction with readings, process activities, and dialogue with communication professionals form the course content. Verbal and nonverbal communications skills are developed through practiced large and small group interactions. Emphasis is given to learning about communication in a variety of social contexts, as well as cultural and ethnic awareness in communication. Public school classroom applications are introduced.

EDUC 270 Sec & Middle School Methods 3.0 SH [] ()

General methods of teaching at the middle and secondary school levels with emphasis on group process communication skills, organization, and development of instructional materials, planning skills, and evaluation strategies. Taught from a critical perspective rich in multi-cultural awareness, learning theory, historical content, and student-faculty collaboration. EDUC 271 is taken concurrently providing extensive travel to educationally related sites and field experience in a classroom. Prerequisite: EDUC 260.

EDUC 271 Sec/Middle School Beg Intern 2.0 SH [] ()

Opportunity to observe firsthand how educational theory and methods, as well as knowledge of human development, affect the learning experiences of students in a middle school setting. The intern gains 120 hours of clinical experience while assisting a middle school teacher with day-to-day individual and community needs of middle school students. Special attention is given to issues of school law and health education that occur every day in school. Taken concurrently with other Beginning Block courses. Prerequisite: EDUC 260.

EDUC 278 Child & Adolescent Literature 3.0 SH [GESS] (WLIT)

An introductory study of literature for children and adolescents ranging from picture books through adolescent literature. The course includes study of literary themes and forms, the genre, and ethnically and culturally diverse authors and their literature. The course may be interesting to prospective teachers, librarians, and parents as well as English majors. Students can expect to discuss and critique themes and issues found in children's literature. Plot, setting, characterization, and the other literary elements are considered as rich criteria for literary analysis. Applicable Illinois standards for elementary and middle school teachers will be addressed.

EDUC 287 Character Education 3.0 SH [GESS] ()

Exploration of philosophical and practical theory and issues about character growth focused by approaches to character education at The Principia. What is character education in today's contemporary culture? Special historical, social, political, religious emphasis, based on Mary Kimball Morgan's writings, as well as a wide array of readings on related moral theorists.

EDUC 310 Global Education 3.0 SH [] ()

Explores historical and contemporary issues in educational systems around the world. Course will examine international education through political, social, and cultural lenses. Students will compare and evaluate the progress of education on a global scale.

EDUC 312 Teacher as Leader 3.0 SH [] ()

Teachers with effective leadership skills are needed in a variety of educational settings. This course will focus on learning about and developing positive teacher dispositions and associated character traits applicable to classroom and administrative settings. Students will participate in an in-depth exploration of leaders in the field of education.

EDUC 318E Adv Methods of Teaching: Engl 4.0 SH [] ()

A course for prospective middle or high school English/Language Arts teachers offering an in-depth look at teaching English, including methods, material, schooling practices, curriculum design, and classroom management. Consideration of concepts used to think about teaching English curriculum, including theory and practice of teaching and learning grammar, writing, reading, and literature. The course looks at how teachers assess and account for content, school climate, student needs, skills, interests, and special language problems. Attention is also given to the social and cultural diversity of the public classroom today. Individual projects include focus on adolescent literature. Prerequisites: EDUC 219, EDUC 250, EDUC 252, and either EDUC 220 and EDUC 221 or EDUC 270 and EDUC 271 (with a grade no lower than C in each course).

EDUC 318F Methods of Teaching a 2nd Lang 4.0 SH [] ()

Theory and practice of teaching a second language. Language acquisition and applied linguistics; traditional and contemporary methodologies and practical techniques; curriculum, proficiency development and testing; class observations at the college, middle and high school level; demonstration classes and micro-teaching experience. Individual projects include focus on children's literature appropriate to the language taught. Taught in English. Prerequisites: EDUC 219, EDUC 250, EDUC 252, and either EDUC 220 and EDUC 221 or EDUC 270 and EDUC 271 (with a grade no lower than C in each course).

EDUC 318M Adv Methods of Teaching: Math 4.0 SH [] ()

A course for prospective middle and high school math teachers, offering an in-depth training at teaching math, including methods, materials, the teacher's role, schooling practices, and curriculum design. Students' needs, skills, interests, and special learning problems as they relate to learning math are addressed. Attention is also given to the social and cultural diversity of the public classroom today. Taken as part of Intermediate Block. Prerequisites: EDUC 219, EDUC 250, EDUC 252, and either EDUC 220 and EDUC 221 or EDUC 270 and EDUC 271 (with a grade no lower than C in each course).

EDUC 320 Reading in Elem & Middle Schl 3.0 SH [] ()

This course promotes an understanding of reading and language development in the context of the whole school curriculum. Includes a study of what reading is, how it occurs, and how it is taught, including approaches to reading instruction, language arts, methodology, informal assessment, and evaluation. Special attention given to learning needs and the social and cultural diversity of public classrooms. Individual research projects include focus on children's literature. Taken as part of Intermediate Block with EDUC 321 and EDUC 330. Prerequisites: EDUC 219, EDUC 250, EDUC 252, and either EDUC 220 and EDUC 221 or EDUC 270 and EDUC 271 (with a grade no lower than C in each course).

EDUC 321 Elem School Intermed Intern 2.0 SH [] ()

During this 120-hour internship, teacher candidates engage in clinical practice across the whole range of teaching/learning content in an elementary school classroom. In addition to assisting a teacher, interns practice approaches to teaching subjects appropriate to elementary content areas. Special attention is given to issues of school law and health education that occur every day in school. Taken as part of Intermediate Block. Prerequisites: EDUC 219, EDUC 250, EDUC 252, and either EDUC 220 and EDUC 221 or EDUC 270 and EDUC 271 (with a grade no lower than C in each course).

EDUC 325 Literacy Across the Curriculum 3.0 SH [] ()

Reading and writing instruction and methods in the context of all content areas. Includes a study of what literacy is, how it occurs, and different philosophies of how it can be taught. This course uses a student-centered approach where students examine their own experiences in literacy training and their own literacy traits.

EDUC 330 Math for Elem/Mid Sch Teachers 3.0 SH [] ()

This course focuses on understanding mathematical thinking and best current practices through experiencing math. Considers methodology, materials, integration with total curriculum. Special attention given to special learning needs and the social and cultural diversity of public classrooms.

EDUC 345 Sci/Soc Science Methods: K-9 3.0 SH [] ()

This course focuses on understanding elementary science and social science concepts through study of the human and physical geography of the Mississippi River Valley (e.g., settlement patterns, transport routes, river processes, human management, intervention). Also considers methodology, materials, and integration of science and social science content within the elementary/middle school curriculum described by national and state standards for science and social science instruction. **Fee=\$25.00**

EDUC 352 Inclusive Learning Environment 2.0 SH [] ()

Instructional theory and methodology focused on establishing classroom environments that include all students. Strategies for curriculum, instruction, and management modifications for students with differing learning needs are taught in accord with Illinois Professional Teaching Standards in special education for all Illinois schoolteachers. Topics include identification and remediation of the most common special needs that affect students; responsibility of classroom teachers to structure learning environments where exceptional students can be valued and successful; relationships between special para-educators, school administrators, families, and classroom teachers that help exceptional children; legislation at federal and state levels that governs special education; analysis of how exceptional students learn in a variety of academic settings; examination of multicultural and linguistic differences in learning. Prerequisites: EDUC 320, EDUC 321, EDUC 330, EDUC 345 (with a grade no lower than C in each course).

EDUC 370 Reading in Sec & Middle School 3.0 SH [] ()

This course promotes an understanding of reading and language development in the context of the whole school curriculum. Includes a study of what reading is, how it occurs, and how it is taught, including approaches to reading instruction, language arts, methodology, informal assessment, evaluation. Special attention given to special learning needs and the social and cultural diversity of public classrooms. Individual research projects include focus on adolescent literature. Taken as part of Intermediate Block with EDUC 318 and EDUC 371. Prerequisites: EDUC 219, EDUC 250, EDUC 252, and either EDUC 220 and EDUC 221 or EDUC 270 and EDUC 271 (with a grade no lower than C in each course).

EDUC 371 Secondary Sch Intermed Intern 2.0 SH [] ()

During this 120-hour internship, teacher candidates engage in clinical practice across the whole range of teaching/learning activities in a secondary school classroom. In addition to assisting a teacher, interns practice approaches to teaching subjects appropriate to their content areas. Special attention is given to issues of school law and health education that occur every day in school. Prerequisites: EDUC 219, EDUC 250, EDUC 252, and either EDUC 220 and EDUC 221 or EDUC 270 and EDUC 271 (with a grade no lower than C in each course).

EDUC 383 Adolescent Development 3.0 SH [] (SSCI)

Human growth and development of children of middle through high school age, emphasizing the impact of wider societal contexts on social, moral, intellectual, and language development. Includes researching and evaluating definitions of adolescence from a variety of social science perspectives including the perspective of educational theory. Examines how adolescence is a component in contemporary school and society issues.

EDUC 388 Philosophy of Education 3.0 SH [] ()

Study of classic and contemporary philosophies of education. A beginning, personal philosophy of education is produced.

EDUC 420 Capstone in Education 2.0 - 3.0 SH [] ()

Students will independently design and present a project that includes application of theory and reflects their interest area in education. Projects may be portfolios, case studies, research projects, or field work. Proposals must be approved and supervised by the Education department faculty. May be offered for variable credit from two to three semester hours. Prerequisite: EDUC 260.

EDUC 440 El/Mid Stu Teach: Instr & Mgt 6.0 SH [] ()

This course emerges from 10 to 13 weeks of student teaching in an elementary or middle school. Emphasizes planning, implementing, reflecting, and assessing teaching and teaching products. Teaching products incorporate a variety of instructional strategies, including information technology, that enable all students to learn the elementary and middle school content specified in the Illinois Learning Standards. Also emphasizes the ability to manage the classroom to ensure orderly, constructive atmosphere that supports learning for all students. Prerequisites: EDUC 049 (with a grade no lower than C) and successful completion of Intermediate Block education courses.

EDUC 441 El/Mid St Tch: Learning Commun 4.0 SH [] ()

Building and sustaining a learning community that enables diverse students to be comfortable, valued, engaged, and challenged in the context of 10 to 13 weeks of teaching in an elementary or middle school classroom. The following communication skills are evident and develop within the learning community: listening, receiving and giving feedback, collaboration, problem solving, planning, risk taking, and building trust. Prerequisites: EDUC 049 (with a grade no lower than C) and successful completion of Intermediate Block education courses.

EDUC 442 El/Mid St Tch:Hum Div & Lrn Th 4.0 SH [] ()

Application of general learning theory and cultural knowledge of ethnic, gender, ability, and style difference in an elementary or middle school classroom. All instructional activities and assessments are justified by educational theory and are culturally sensitive to all members of the learning community. Instructional strategies and assessments are adapted to the needs of students with individualized education plans. All instruction occurs in the context of a 10 to 13 week student teaching period. Prerequisites: EDUC 049 (with a grade no lower than C) and successful completion of Intermediate Block education courses.

EDUC 490 Sec/Mid Stu Teach: Instr & Mgt 6.0 SH [] ()

The course of study emerges from 10 to 13 weeks of student teaching in a secondary or middle school. Emphasizes planning, implementing, reflecting, and assessing teaching and teaching products. Teaching products incorporate a variety of instructional strategies, including information technology, that enable all students to learn the middle school and secondary content area curriculum specified in the Illinois Learning Standards. Also emphasizes the ability to manage the classroom to ensure an orderly, constructive atmosphere that supports learning for all students. Prerequisites: EDUC 049 (with a grade no lower than C) and successful completion of Intermediate Block education courses.

EDUC 491 Sec/Mid St Tch: Learning Commun 4.0 SH [] ()

Building and sustaining a learning community that enables diverse students to be comfortable, valued, engaged, and challenged in the context of 10 to 13 weeks of teaching in a secondary or middle school classroom. The following communication skills are evident and developing within the learning community: listening, receiving and giving feedback, collaboration, problem solving, planning, risk taking, and building trust. Prerequisites: EDUC 049 (with a grade no lower than C) and successful completion of Intermediate Block education courses.

EDUC 492 Sec/Mi St Tch: Hum Div & Lrn Th 4.0 SH [] ()

Application of general learning theory and cultural knowledge of ethnic, gender, ability, and style differences in a secondary or middle school classroom. All instructional activities and assessments are justified by educational theory and are culturally sensitive to all members of the learning community. Instructional strategies and assessments are adapted to the needs of students with individualized education plans. All instruction occurs in the context of a 10 to 13 week student teaching period. Prerequisites: EDUC 049 (with a grade no lower than C) and successful completion of Intermediate Block education courses.

Engineering Science

ENGR 060 Engineering Seminar Non-Credit No Credit [] ()

Non-credit version of ENGR 260. The title will be extended to describe the current topic.

ENGR 160 Intro Engineering Profession 1.0 SH [] ()

Exploration of engineering, including fields of engineering; expectations of engineering schools; and engineering topics such as time management, project management, design, modeling, computing, fabrication, and ethical issues.

ENGR 180 Project Management 3.0 SH [] (MNS)

A hands-on course for learning the basic principles of planning, implementing, and managing a project. Students will participate as team members in a community-based project and will analyze the project, integrating what they are learning with their personal experience. The course will emphasize problem solving, effective communication, ethics, and citizenship.

ENGR 260 Engineering Seminar 1.0 SH [] ()

Topics will vary based on the needs and interests of the students and instructor, and the title will be extended to describe the current topic. May be taken eight times up to a total of eight semester hours provided the topics differ. Prerequisite: ENGR 160.

ENGR 262 Computer Hardware Architecture 5.0 SH [] (CSCI)

Digital electronic logic explored in theory and laboratory from simple switching to electronic architecture of digital computers. Topics include electronic valving and switching, logic-gate design, Boolean algebraic proofs of gate equivalence, counters, registers, arithmetic, operations, memory addressing and information transfer, microprogramming, interfacing and control. Prerequisite: MATH 261.

ENGR 279 Engineering Project Proposal 1.0 SH [] ()

Students research and prepare an engineering project proposal in preparation for ENGR 280. The proposal must be approved by engineering science faculty prior to taking ENGR 280. May be taken four times up to a total of four semester hours provided the projects differ. Prerequisite: ENGR 180.

ENGR 280 Engineering Projects 1.0 - 6.0 SH [] (MNS)
 A hands-on course that allows students to learn vital lessons through active participation in a project. Topics may vary between offerings and are chosen according to needs and interests of students and instructor. The title will be extended to describe the current topic. May be offered for variable credit from one to six semester hours. May be taken eight times up to a total of 48 semester hours regardless of the topic. Prerequisite: ENGR 180 or ENGR 279.

English

ENGL 150 Introduction to the Major 1.0 SH [] ()
 Required of all majors. This course invites students to explore the theoretical, philosophical, or creative groundings of the English major. Students read a central text focused on these questions and respond metacognitively. From this examination, students create a proposal of study designed to help them engage productively and cohesively in their areas of interest in and out of the major.

ENGL 178 Renaissance Themes 3.0 SH [GEH] (LIT)
 This course explores the major themes of Renaissance thought. It includes readings from both Italian and English Renaissance writers.

ENGL 180 Environmental Themes 3.0 SH [GEH] (LIT)
 Readings (essays, poetry, and short stories) focus on the theme of nature and how it relates to human culture. The wide variety of roles that nature has played in literature are examined. Reflective writing, analytical writing, and creative writing are used to explore and communicate ideas.

ENGL 182 Intro to Creative Nonfiction 3.0 SH [GEA] (LIT)
 An introduction to the art and craft of creative nonfiction. Students study the elements of creative nonfiction and apply that study to their own creative writing. Students read published essayists and write multiple creative nonfiction essays themselves, including essays of place, portraits, and memoir.

ENGL 202 Understanding Poetry 3.0 SH [GEH] (LIT)
 Selections from four to five major poets designed to equip students with a variety of reading strategies.

ENGL 204 Understanding Short Fiction 3.0 SH [GEH] (LIT)
 Selections from several major short fiction writers from a range of historical periods and cultural backgrounds, designed to equip students with a variety of critical reading strategies.

ENGL 232 The Gothic Novel 3.0 SH [GEH] (LIT)
 The study of a specific kind of literature which began to flourish in the middle decade of the eighteenth century and which remains with us today in horror films and novels. The course traces the development of this literature, mainly in the form of the novel, from its beginnings in sentimentality and basic conventions, through romanticism and the addition of psychological elements, to modern existential and sociological themes.

ENGL 234 The Language of Film 3.0 SH [GEH] (LIT)
 The course serves to acquaint students with basic film theory and terminology as tools for the analysis of film as a type of text.

ENGL 240 Poetry Writing I 3.0 SH [GEA] ()
 An introduction to the art and craft of poetry writing. Students study formal poetics and apply that study to their own creative writing. A substantial portion of the course is devoted to writers' workshop in which students read and critique each other's poetry. Students also read and write about the work of important contemporary poets in order to discover and understand the ways in which these writers apply formal poetics in their work.

- ENGL 241 Fiction Writing I** **3.0 SH [GEA] (I)**
 An introduction to the art and craft of fiction writing. Students study the elements of short fiction and apply that study to their own creative writing. A substantial portion of the course is devoted to writers' workshop in which students read and critique each other's short stories. Students also read and write about the work of important contemporary fiction writers in order to discover and understand the ways in which these writers use such elements as pacing, structure, voice, dialogue, character, and scene in their work.
- ENGL 242 Theory as Practice** **3.0 SH [GEH] (LIT)**
 This class explores the links between critical theory and creative practice in contemporary literature and visual culture. Regarding critical theory as a creative practice, students investigate the ways in which writers and artists pose creative problems, solve them by developing working methods based on ideas, and cultivate distinct voices through inventive and informed reformulation of extant practices and theoretical models.
- ENGL 243 Theory as Practice on Location** **3.0 SH [GEH] (LIT)**
 This class explores the links between critical theory, creative practice, and cultural context. The location in which the course is taught determines its focus and usually includes interaction with working artists and writers. The title will be extended to describe the current location. May be taken more than once provided the locations differ. Offered only on Principia abroads and field programs.
- ENGL 253 Gender Studies in Literature** **3.0 SH [GEH] (LIT)**
 Analyzes texts (which may include fiction, films, poetry, and essays) by authors from a range of cultural backgrounds that focus on and question the dominant gender roles of their time and place. These texts may span historical eras or focus on one particular period. Students examine the literature primarily through the lens of feminist and gender theories and historical context.
- ENGL 256 U.S. Literature to 1860** **3.0 SH [GEH] (LIT)**
 A survey of European-American writers, including Puritans, Transcendentalists, and reactionary writers, as well as early slave narratives and traditional Native American texts in translation.
- ENGL 257 U.S. Literature 1860-1940** **3.0 SH [GEH] (LIT)**
 An exploration of the rise of naturalism, realism, and modernism in U.S. literature from the end of the Civil War to the beginning of World War II.
- ENGL 258 U.S. Literature Since 1940** **3.0 SH [GEH] (LIT)**
 Explores texts by a diverse range of authors vis-a-vis geography, ethnicity, religion, gender, and sexuality, focusing on the experimental nature of their writing, the questions they raise about U.S. identity and history, and the social and political concerns they address, including the Civil Rights and feminist movements, the Vietnam War, and the emergence of gay culture and identity.
- ENGL 260 Scottish Literature** **3.0 SH [GEH] (LIT)**
 Introduces students to Scottish literature. The course emphasizes literature written in the 18th and 19th centuries, though literature before and after that period may also be addressed. Emphasis is placed on issues of Scotland's complex relationship with England and the English language.
- ENGL 262 Postcolonial Literature** **3.0 SH [GEH] (LIT)**
 Explores literature and theory by writers from previously colonized countries. These texts may span a variety of geographic areas, such as the West Indies, South Asia, Africa, and Ireland, or may focus in depth on writers from one particular continent. Texts by white Europeans writing from the perspective of the colonizing power may be included as a basis for comparison.
- ENGL 263 Literature of Conflict** **3.0 SH [GEH] (LIT)**
 A study of the literature of conflict, with emphasis on war literature and its related literature of dislocation, social disruption, and dissent.

- ENGL 264 Southern Literature** **3.0 SH [GEH] (LIT)**
A study of the literature of the southern United States with emphasis on both contemporary writers and such writers as James Dickey, Ralph Ellison, William Faulkner, Zora Neale Hurston, Harper Lee, Carson McCullers, Flannery O'Connor, Walker Percy, Eudora Welty, and Richard Wright.
- ENGL 265 Native American Literature** **3.0 SH [GEH] (LIT)**
This course centers on texts from the Native American Renaissance in the 1960s to the present, by writers such as N. Scott Momaday, Leslie Marmon Silko, Sherman Alexie, and Louise Erdrich. The class may also include some traditional Native American texts in translation, as well as examples of representations of Native Americans by European-American writers and filmmakers.
- ENGL 278 Shakespeare in England** **3.0 SH [GEH] ()**
Taught as part of an abroad program, this course introduces students to the life and writings of William Shakespeare. Besides studying plays in a classroom setting, students attend productions at the Globe Theatre and the Royal Shakespeare Theatre. Students also undertake intensive research at the British Library and the Shakespeare Birthplace Trust regarding a single character from a Shakespearean play. This course fulfills the single author requirement for English major or minor students.
- ENGL 279 Shakespeare I** **3.0 SH [GEH] (LIT)**
This course offers an overview of Shakespeare's writings including both his poetry and his plays. The course is designed to help students gain confidence in reading Shakespeare's work and to understand it in the context of both his culture and our own.
- ENGL 280 English Renaissance Literature** **3.0 SH [GEH] (LIT)**
Surveys English literature from the mid-1500s to 1660.
- ENGL 283 Romantic Literature** **3.0 SH [GEH] (LIT)**
Examines the important themes of the English Romantic period and their cultural contexts through the study of the works of poets and prose writers of the period.
- ENGL 284 Victorian Literature** **3.0 SH [GEH] (LIT)**
Explores texts of the period, focusing on questions of nationalism, colonialism, religion, gender roles, and sexual orientation, and emerging psychological and evolutionary theories, by considering how authors such as Bronte, Eliot, Dickens, and Wilde reflected the dominant ideologies of their day and called them into question.
- ENGL 285 Modern British Literature** **3.0 SH [GEH] (LIT)**
Fiction, poetry, and drama of the 20th century, with emphasis on writers such as Yeats, Eliot, Conrad, Woolf, and Beckett.
- ENGL 286 History of English Drama** **3.0 SH [GEH] (LIT)**
This course examines English drama from the medieval period to the 21st century both as literature and as performance. This course is usually taught on an abroad program to England.
- ENGL 290 Poetry Writing II** **3.0 SH [] ()**
An intermediate-level poetry-writing seminar for students familiar with the formal elements and techniques of poetry writing. Emphasis is placed on beginning to cultivate distinct voices as writers, more advanced study of poetics, and research about poets and their creative processes. Students produce a number of original poems within the writer's workshop structure of the course. Prerequisite: ENGL 240.
- ENGL 291 Fiction Writing II** **3.0 SH [] ()**
An intermediate-level fiction-writing seminar for students familiar with the formal elements and techniques of fiction writing. Emphasis is placed on beginning to cultivate distinct voices as writers, more advanced study of narrative elements and structures, and research about fiction writers and their creative processes. Students produce a number of original short stories within the writer's workshop structure of the course. Prerequisite: ENGL 241.

- ENGL 314 18th Century Literature** 3.0 SH [] (LIT)
Study of the development of the literature of the long eighteenth century (1660 to 1800), including the rise of the novel, restoration and eighteenth century drama, and trends in both poetry and prose.
- ENGL 315 Shakespeare II** 3.0 SH [] (LIT)
Examines Shakespeare's plays through either specific themes or critical approaches. Some familiarity with Shakespeare's works will be helpful as the course is not a survey course but instead delves deeply into a select number of plays.
- ENGL 320 History of the English Novel** 3.0 SH [] (LIT)
Novels selected from early and late periods trace development of this form.
- ENGL 325 Film as Literature** 3.0 SH [] ()
The study of film as a text. Students read and apply film theory and literary criticism to the in-depth analysis of films as alternative narratives. Prerequisites: ENGL 234 and one additional English literature or world literature course.
- ENGL 330 Single Author** 3.0 SH [] (LIT)
Examines the work of a single author. Analyzes the style of the author and introduces major biographical or critical approaches to the author. The title will be extended to describe the current topic. May be taken three times provided the authors studied differ.
- ENGL 335 Contemporary Issues** 3.0 SH [] ()
An advanced seminar examining contemporary literature in the context of current critical debate. The title will be extended to describe the current topic. May be taken more than once provided the topics differ.
- ENGL 345 Creative Writing on Location** 3.0 SH [GEA] (ART)
Creative writing on location for students enrolled in an abroad or field program. Coursework provides opportunities for in-depth individual research and creative work based upon the cultural and programmatic content of the abroad or field program. The title will be extended to describe the current location. May be taken more than once provided the locations differ. Offered only on Principia abroads and field programs.
- ENGL 351 Adv Creative Writing Seminar** 3.0 SH [] ()
An advanced creative writing seminar for poets, fiction writers, and creative nonfiction writers. The course is organized as a community of serious writers who are beginning to develop portfolios of coherent work, exploring and articulating their influences, and expanding their practical understanding of what it means to maintain a creative literary practice. Prerequisites: one complete sequence in the creative writing series (ENGL 240 and ENGL 290) or (ENGL 241 and ENGL 291).
- ENGL 353 Literary Editing** 3.0 SH [] ()
A workshop in which students learn the fundamental skills and methods of arts/literary editing and are introduced to the issues involved in editing a literary publication (either print or electronic).
- ENGL 358 Seminar** 3.0 SH [] (LIT)
Centering upon a literary theme or form at the advanced level, this topics course is designed primarily for majors to engage in intense study or original research under the guidance of the professor. It is conducted with an emphasis on student-defined learning and incorporates sophisticated expectations for scholarship and scholarly writing. The title will be extended to describe the current topic. May be taken more than once provided the topics differ.
- ENGL 388 Literature and Critical Theory** 3.0 SH [] ()
The application of various critical theories to literary texts.
- ENGL 399 Capstone Proposal** 1.0 - 3.0 SH [] ()
Prepares students for their capstones. Students research possible topics and write a formal proposal for their capstones. Usually taken the semester preceding the capstone but can be taken concurrently. May be offered for variable credit from one to three semester hours. Prerequisite: ENGL 388 (may also be taken concurrently).

ENGL 400 Capstone in Literature 3.0 SH [] ()
Individual reading, research, and writing on a single literary issue or author culminating in an in-depth thesis essay. Required for the major.

ENGL 401 Capstone in Creative Writing 3.0 SH [] ()
This course is the culmination of the creative writing concentration in the English major. Students create a substantial and coherent body of original fiction or poetry, accompanied by an artist's statement. Students also read deeply the work of writers who have influenced them and conduct serious research about their work and working process. A public presentation - a reading or some other form of publication - at the completion of the capstone is encouraged. Prerequisites: one complete sequence in the creative writing series (ENGL 240 and ENGL 290 or ENGL 241 and ENGL 291) and ENGL 351.

French

FREN 104 Elementary French I 3.0 SH [] ()
In this first semester of the two-semester elementary sequence students learn from video, lab CD exercises, and classroom activity how to listen and speak, read and write French sentences. They describe themselves and others, and their present and future activities. They also begin work with the past tense and elements of French culture as they follow the video story.

FREN 105 Elementary French II 5.0 SH [GE2L] (FLAN)
In this second course of the two-semester elementary language sequence, students fulfill the general education second language requirement. They understand and speak, read, and write sentences and paragraphs in the present, future, and past tenses in order to function in everyday situations in French-speaking cultures they are beginning to learn about. Prerequisite: FREN 104 or placement.

FREN 130 Language and Culture Abroad I 3.0 - 6.0 SH [GE2L] (FLAN)
Elementary language study with native speakers at a French institute. May be offered for variable credit from three to six semester hours. Offered only on Principia abroad.

FREN 200 French Culture: Cinema 1.0 SH [] ()
Weekly watching and discussion of French/Francophone movies. Class taught in English, movies with subtitles, open to all students.

FREN 204 Intermediate French I 3.0 SH [] ()
Develops speaking, reading, and writing skills. Culture and history used as basis for reading and speaking. Prerequisite: FREN 105 or placement.

FREN 205 Intermediate French II 3.0 SH [] ()
Development of fluency and accuracy in oral and written expression, through reading and listening comprehension. Prerequisite: FREN 204 or placement.

FREN 210 Intermediate Writing Review 1.0 SH [] ()
Allows students to develop their writing skills and to review some aspects of French grammar, through weekly compositions based on written texts or video material. May be taken four times. Counts toward the French major only once.

FREN 216 Intermediate Conversation 3.0 SH [] ()
Discussions on issues of French/Francophone civilization and culture, through video watching, conversation and reading, with an emphasis on developing oral comprehension skills. Prerequisite: FREN 204.

FREN 220 Contemporary French Society 3.0 SH [GESS] (SSCI)
An analysis of contemporary French society focusing on social class/power, gender, immigration/ethnicity, plus the religious and educational systems. Students who complete all assignments in French receive credit towards a French major. May be offered on campus as well as on Principia abroad.

- FREN 225 Intermediate Grammar I** 3.0 SH [] ()
Exercise in grammar and style. This course reinforces the student's foundation in written French at the intermediate level, as a preparation for further studies in French or as a refresher course. Prerequisites: FREN 204 and FREN 205, or placement.
- FREN 226 Intermediate Grammar II** 1.0 SH [] ()
Exercises in grammar and style to complement and strengthen the student's foundation in grammar at the intermediate level. Prerequisites: FREN 204 and FREN 205 or placement.
- FREN 230 Language and Culture Abroad II** 3.0 - 6.0 SH [] ()
Intermediate language study with native speakers at a French institute. May be offered for variable credit from three to six semester hours. Offered only on Principia abroad.
- FREN 241 French Pronunciation** 1.0 SH [] ()
Introduction to French phonetic theory and practice of pronunciation of modern French. Prerequisites: FREN 255 and either FREN 250 or FREN 260.
- FREN 250 French Cultural Studies** 3.0 SH [] ()
Develops reading skills and understanding of Francophone literature. Prepares students for further study of French literature. Prerequisite: FREN 205.
- FREN 255 Textual Analysis and Writing** 3.0 SH [] ()
Develops style and grammatical correctness; intensive work on creative writing with some reading. Includes practice in textual analysis and analytic writing about literary texts. Prerequisite: FREN 205, FREN 225, or FREN 226.
- FREN 260 Reading French Through Time** 3.0 SH [] (WLIT)
This course approaches French literary history as a textual journey through time, using excerpts of major French literary texts from the Medieval to the contemporary period. Students develop reading, writing, oral, and analytical skills in French at the intermediate level. Prerequisites: FREN 205 and FREN 255.
- FREN 270 Intro to French Literature** 3.0 SH [GEH] ()
This course covers genre studies across the centuries, from the classics to the modern period, with the reading of complete works related to French culture. Students learn to analyze texts and improve their oral and written expression. Prerequisites: FREN 255 and either FREN 250 or FREN 260.
- FREN 300 Love, Reason, and Monarchy** 3.0 SH [GEH] (WLIT)
Genre studies in 17th and 18th century literature showing how power, love, and reason interplay in the French society of absolute monarchy. Prerequisites: FREN 255 and either FREN 250 or FREN 260.
- FREN 310 Advanced French** 3.0 SH [] ()
Intensive analytical grammar and reading. Develops writing skills. Prerequisites: three French courses above FREN 205 or placement.
- FREN 316 Advanced French Conversation** 1.0 SH [] ()
Reading, conversation, and writing on topics of French/Francophone culture and history.
- FREN 320 Topics in French Literature** 1.0 SH [] ()
Allows students to develop their reading skills and to broaden their knowledge of French literature. May be taken up to four times, with the consent of the instructor. Counts only once toward the French major.
- FREN 325 Advanced French Grammar** 1.0 SH [] ()
Course develops writing skills at the advanced level, focusing on grammar through exercises. Prerequisite: two French courses at the 200 level.
- FREN 330 Language & Culture Abroad III** 3.0 - 6.0 SH [] ()
Advanced language study with native speakers at a French institute. May be offered for variable credit from three to six semester hours. Offered only on Principia abroad.

FREN 340 Image & Power in 19th C France 3.0 SH [] (WLIT)
 This course looks at images of power and the power of images in 19th century France through a study of major literary movements using printed texts, paintings, and film. Develops an understanding of certain 19th century authors - Chateaubriand, Stendahl, Balzac, Flaubert, Baudelaire, Maupassant, Zola, and others - based on the reading of novels, short stories and poetry of the period, in their cultural context. This course develops reading, oral, written, and analytical skills. Prerequisites: FREN 255 and either FREN 250 or FREN 260.

FREN 350 20th Century: Mind Revolutions 3.0 SH [] (WLIT)
 This course looks at the twentieth century in France as an era of mental revolutions that helped to transform France and the French-speaking world. Reading of major literary authors of the period as well as oral and written textual analysis of the texts in their cultural contexts. Prerequisites: FREN 255 and either FREN 250 or FREN 260.

FREN 360 Seminar in French Literature 3.0 SH [] ()
 Seminar in a particular topic of French literature. Offered upon sufficient demand. The title will be extended to describe the current topic. Prerequisite: FREN 255 or FREN 260.

FREN 470 Capstone 1.0 - 3.0 SH [] ()
 This independent course consists primarily of self-directed research concerning French literature or culture. After research and reading of original texts dealing with a topic (primary and secondary sources), the student writes a capstone paper, but will also demonstrate, through other review and written or oral tests, mastery and understanding of essential aspects of the French language and culture. Open to French majors. Prerequisites: at least two of the following: FREN 300, FREN 340, FREN 350.

General Education

GEN 101 FYE: Integrated Learning 3.0 SH [] ()
 This foundational course is used to develop, practice, and apply college-level reading, critical thinking, writing, information literacy, and speaking skills. As part of each FYE program, this course serves as a bridge to integrate learning between the two content areas of the specific FYE program. Students complete an annotated bibliography, a written research project, and a presentation.

Geology

GEOL 050 Service Learning in Geology No Credit [] ()
 Students volunteer in some capacity to assist in educational outreach in geology and/or environmental studies or in research as a technician. Projects may serve Principia or other communities or outside agencies.

GEOL 111 Introductory Geology 4.0 SH [GESL] (GEOL)
 This course studies the internal and external processes that form and shape the Earth as we see it today and interprets the resulting landforms. Internal processes include tectonic plate movement, volcanoes, earthquakes, and mountain building. External processes include weathering, erosion, streams, wind, ocean currents, and glaciers. Labs cover mineral and rock identification and topographic and geologic map reading. Field trips reinforce material covered in class.

GEOL 170 Geology 4.0 SH [GESL] (GEOL)
 Covers geologic topics specific to a country or region. Topics include the Earth's physical features, tectonic history, depositional environments, and mineral and water resources. Topics will be related to their influence on human activities in a region. The title will be extended to describe the current topic. May be taken four times up to a total of 12 semester hours provided topics differ. Offered on Principia abroads or field programs only.

GEOL 180 Geologic Field Studies 4.0 SH [GESL] (GEOL)
 Field study and related lab work for a special geologic project. Involves library research and careful record keeping and reporting of scientific findings. Offered upon demand. The title will be extended to describe the current topic. May be taken more than once provided topics or depth of research differ. May be taken three times up to a total of 12 semester hours.

GEOL 185 Ice Age Mammoth Project 4.0 SH [GESL] (GEOL)
Field and/or lab work involved in excavating and preparing bones of an Ice Age mammoth found on campus. Topics include basic principles of vertebrate paleontology and stratigraphy, evolution of Proboscideans and other megafauna through time and space, study of glaciers and their impact on the landscape, and climate change during the Ice Age.

GEOL 205 Introduction to Oceanography 4.0 SH [GESL] (GEOL)
An introductory survey of oceanography as an interdisciplinary marine science. Topics include geological features and structures of ocean basins; the chemistry of seawater; heat, circulation, the carbon cycle, and air-sea interactions as they relate to climate; and biological processes in the sea.

GEOL 225 Environmental Geology 3.0 SH [GESN] (MNS)
Geology from the perspective of the interrelationship of humanity and the Earth and the value of understanding the Earth in land use planning. Topics include geologic hazards, such as earthquakes, volcanoes, landslides, coastal erosion; water supply and contamination issues; waste management; hazardous geologic materials; mineral and energy resource issues; and global changes.

GEOL 230 Nonrenewable Resources 3.0 SH [GESN] (MNS)
Survey of Earth's nonrenewable energy and material, as well as water resources - their occurrence in or on the Earth's crust, how they are extracted, processed, and used, and the impacts of these steps on the environment.

GEOL 242 Historical Geology 4.0 SH [GESL] (GEOL)
The geologic history of the Earth and the historical development of plants and animals. This includes the movement of the tectonic plates over the past 750 million years and the consequent shaping of continents and their mountain belts and sedimentary basins. Labs cover rock and fossil identification, physical and biostratigraphic correlation of rock units. Focus is on the Paleozoic Era and on using stratigraphic evidence seen in lab samples and reinforced in the field to interpret the local geologic history. Recommend taking GEOL 111 first.

GEOL 280 Geologic Field Investigations 1.0 - 4.0 SH [] ()
Field investigation and related lab work for a special geologic project. Involves library research and record keeping and reporting of scientific findings. Offered on demand. The title will be extended to describe the current topic. May be taken three times up to a total of 12 semester hours provided topics or depth of research differ. Prerequisite: GEOL 111 or GEOL 242.

GEOL 301 Environmental Mapping & GIS 4.0 SH [] (MNS)
Introduction to the concepts, techniques, and applications of mapping and monitoring the environment. Students become familiar with the uses of topographic maps, aerial photography, satellite imagery, Global Positioning Systems (GPS), and Geographic Information Systems (GIS). Students design and implement an ecosystem mapping project. Prerequisite: at least one geology or 200-level field biology course.

GEOL 330 Sedimentary Geology 4.0 SH [] ()
Principles of stratigraphy, sedimentary processes, characteristics, and relationships among marine and non-marine depositional systems, facie analysis, stratigraphic analysis, and basin analysis. Laboratory includes textural analysis, sedimentary structures, and use of electric logs in subsurface mapping. Prerequisites: GEOL 111 and GEOL 242.

GEOL 400 Senior Thesis Seminar 1.0 SH [] ()
This course is designed to assist senior environmental studies majors with a geology track as they design, research, and prepare to do their capstone project. Outcomes include a project design and methodology, an annotated bibliography, and a research proposal. Open only to environmental studies majors.

GEOL 410 Senior Readings 3.0 SH [] ()
This course introduces students to seminal pieces of environmental literature and to cutting edge thinking on environmental problems. It challenges students to define and defend their personal values with regard to the environment and to become active citizens in the environmental issues facing society. Prerequisite: five GEOL courses. Also listed as BNR 410.

GEOL 411 Senior Thesis 1.0 - 6.0 SH [] (MNS)
 Project selected in accordance with student's qualifications, interests, and needs. Project may be a component of an internship. May be offered for variable credit from one to six semester hours. May be taken three times up to a total of six semester hours. Prerequisites: GEOL 111, GEOL 242, GEOL 330, GEOL 400, and two additional GEOL courses.

German

GER 104 Elementary German I 5.0 SH [] ()
 Understanding, speaking, reading, and writing of simple German. Emphasis on gaining command of the German sentence structure in the present tense, speaking idiomatic German, and absorbing elements of German culture.

GER 105 Elementary German II 5.0 SH [GE2L] (FLAN)
 This second semester of the elementary language sequence continues the goals of the first semester with an emphasis on the acquisition and practice of the past and future tenses in written and spoken German. Prerequisite: GER 104 or placement.

Global Perspectives

GLBL 225 Global Studies I 3.0 SH [GEH] ()
 This course introduces students to issues that are global in scope and that raise complex problems that need to be considered with the concepts and tools of more than one discipline.

GLBL 226 Global Studies II 3.0 SH [GESS] ()
 This course introduces students to how a complex global problem is approached differently by three or more disciplines in terms of questions asked, theoretical perspectives applied, methods used to gather data and research a question, and recommendations proposed. Students also develop an individual plan of study for completing their global perspectives major or minor. Prerequisite: GLBL 225.

GLBL 270 World Focus Seminar 1.0 SH [] ()
 Students develop an awareness of the major problems of the world and the way in which these problems are interconnected through the study of geography and current events. May be taken four times up to a total of four semester hours.

GLBL 431 Worldography 3.0 SH [] ()
 A seminar involving critical reading and discussion of eight outstanding books on different world-encompassing issues. Seminar conducted by selected faculty. Open only to global perspectives majors.

GLBL 497 Research Methods 3.0 SH [] ()
 Research preparation for the capstone project in global perspectives. Students work extensively with research methodologies, library, and Internet resources. Work culminates in a proposal for capstone research. Open only to global perspectives majors.

GLBL 498 Research Capstone Seminar 3.0 SH [] ()
 Individual research and writing on the research question developed in GLBL 497. Course work culminates in a research paper written under the supervision of faculty advisor(s) and evaluated by the global perspectives faculty. Prerequisite: GLBL 497.

History

HIST 111 Historical Perspectives 3.0 SH [GEH] (HIST)
 Develops a particular historical theme or subject for the exploration of the nature and purpose of history and what the historian does. Analyzes the connection between historical study and the modern world. The title will be extended to describe the current topic. May be taken twice provided the topics differ.

- HIST 116 Self and Others** 3.0 SH [GEH] ()
This course explores how in relationships with others we either create open space to accommodate different people, ideas, attitudes, and values or we erect fences to separate and isolate. Using a historical lens, issues of race, ethnicity, nationality, gender, language, and immigration are explored. Explores how individual attitudes shape society and how society shapes individual thought and action.
- HIST 150 The Holocaust** 3.0 SH [GEH] (HIST)
A study of the historical background and causes that led to the attempt by Nazi Germany to exterminate European Jewry and other minorities, and the implications of this experience for Europe in particular and humankind in general.
- HIST 160 U.S. in the 20th Century** 3.0 SH [GEH] (UHIS)
The transition from a rural to an urban and industrial society and the emergence of the United States as a world power. Topical treatment of problem areas in modern U.S. history.
- HIST 189 Global Religions & History** 3.0 SH [GEH] (HIST)
The course emphasizes the importance of global religions on the world political scene with greater relevance to the historical roots of religious and political disputes in such hotly-contested areas as Israel, India-Pakistan, Northern Ireland, Sudan, and South Sudan.
- HIST 195 People of Courage** 3.0 SH [GEH] (HIST)
Course explores people of courage who took dramatic initiatives, often facing tradition, hostility, prejudice, and skepticism, and made a lasting contribution to humanity. Students study the people and their times, the conditions and environment within which they worked.
- HIST 202 American Revolution** 3.0 SH [GEH] (UHIS)
Discusses the late colonial period, the revolutionary war, and the emerging republic. Focuses on the issues surrounding the emergence of the new democracy in North America, with emphasis on the period from 1754-1800. Students who take HIST 202 or 203 may not take HIST 205, and students who take HIST 205 may not take HIST 202 or 203.
- HIST 203 U.S. Civil War Era** 3.0 SH [GEH] (UHIS)
The great cultural tragedy of 19th-century American experience. Focus is on the causes and effects of divergent growth patterns of South and North including a careful examination of American slavery; personalities of the sections; political, social, and military activities of the war; specific focus on Abraham Lincoln's impact on the crisis. Students who take HIST 202 or 203 may not take HIST 205, and students who take HIST 205 may not take HIST 202 or 203.
- HIST 205 American Revolution:Then&Now** 3.0 SH [GEH] (HIST)
This course looks at the American Revolution as a work in progress from colonial anticipations and concerns through the Civil War which brought contemporary closure to two outstanding issues, slavery and states' rights, and then to more contemporary issues under the Constitution and Bill of Rights: free speech, religious freedom, individual liberty, equal opportunity, the right to bear arms, and privacy. Students who take HIST 202 or 203 may not take HIST 205, and students who take HIST 205 may not take HIST 202 or 203.
- HIST 216 Ancient Greece and Rome** 3.0 SH [GEH] (HIST)
A study of the classical Greek and Roman civilization from the age of Homer to the fall of Rome. Emphasis is placed on Athenian democratic institutions and cultural achievements and on Roman political, economic, and judicial developments.
- HIST 218 German History** 3.0 SH [GEH] (HIST)
A survey of the key persons, events, and issues which have shaped the course of German history from the time of Charlemagne through the fall of the Berlin Wall.
- HIST 220 Civilization** 3.0 - 5.0 SH [GEH] ()
The application of historical method to the observation, description, and survey of a national culture. Each time the course is taught, it focuses on a particular nation and the title will be extended to describe the current civilization studied. May be taken more than once provided the cultures studied are different. Taught only on Principia abroad programs.

HIST 221 Immigration and Acculturation 3.0 SH [GEH] (HIST)

Using a historical lens, students are introduced to major periods of immigration in America and the issues of immigration at each point in time. Students examine and use data sets to see how social scientists gather, interpret, and report data on immigration and acculturation at the local, state, and national level.

HIST 222 Latin America 3.0 SH [GEH] (HIST)

Background and historical development of Latin American countries of South and Central America. Emphasis is placed on understanding their historic and present importance to the U.S., difficulties they face, and issues of current importance.

HIST 224 Mexico 3.0 SH [GEH] (HIST)

The history of Mexican political, economic, and social developments from the Spanish conquest to the present. Emphasis is placed on the 1910-1920 Revolution and issues that affect Mexican-United States relations today.

HIST 227 Women in American History 3.0 SH [GEH] (HIST)

This course examines women's lives in the United States from the colonial period to the present. Themes include the private and family experiences of women, the nature of women's work and education, and the political and civic role of women. The class also looks at how differences of class, ethnicity, and race have affected women's experiences.

HIST 228 History of France 3.0 SH [GEH] (HIST)

A survey of France's central role in the shaping of European civilization from pre-Roman times to the present day. The course traces France's development through the consolidation and centralization of the nation-state, the French revolutions of the 18th and 19th centuries, and France's modern struggle to accommodate to a powerful Germany within an increasingly integrated Europe.

HIST 234 Radicalism in Modern America 3.0 SH [GEH] (HIST)

The course examines radical organizations on both sides of the political spectrum. Focuses on the individuals and groups that decided only radical actions could solve America's problems. The class covers the 19th century to the present, with a focus on the Ku Klux Klan, the Populists, the Communist Party, and the Weather Underground Organization.

HIST 235 African American History 3.0 SH [GEH] (HIST)

This course surveys African American history from the Atlantic slave trade through the present day. Students examine the social, economic, intellectual, and political forces that shaped the lives of African Americans, as well as the ways African Americans shaped the course of United States history. A particular focus is African Americans' long fight for civil rights.

HIST 240 The History of Islam 3.0 SH [GEH] (HIST)

This course explores the roots of the Muslim religion in the Middle East and its rich cultural legacy. It also examines the complex and sometimes bitter relationship of Islam to the West. While the course highlights the achievements of the Ottoman and Mughal empires in Turkey and India respectively, it also serves to address the current ideological contest between Western secularism and Islamic fundamentalism as reflected in the current controversies over Jihad.

HIST 245 Oral History & Public Memories 3.0 SH [GEH] (HIST)

Examines how oral history and memory studies shed light on how we understand and make sense of our past. Trains students to conduct oral history and memory studies interviews. Prepares students to work for museums and other non-profit organizations that seek to create and sustain memories about the past.

HIST 252 Britain 3.0 SH [GEH] (HIST)

A survey of British history from the time of Roman occupation to the 21st century. There is a particular focus on the role of the monarchy, the emergence of Britain's political and social structure in an analysis of the revolutionary nature of British history, and the collapse of the empire at the end of World War II.

HIST 255 The Middle Ages 3.0 SH [GEH] (HIST)

The events, ideas, and people that shaped the foundations of Western civilization. This course covers the period from the fall of the Roman Empire until the Renaissance of the 15th century. Topics include the evolution and legacy of feudalism, the rise of towns, the growth of national monarchies, the medieval church and its influence, the Crusades, and the intellectual contest between faith and reason.

HIST 260 From Renaissance to Revolution 3.0 SH [GEH] (HIST)

This survey examines the events and changes in thought that shaped the modern European world and its global impact between the end of the Middle Ages about 1400 C.E. and the American and French Revolutions at the end of the 18th century. Major topics include the Renaissance, the Protestant Reformation, the scientific revolution, the growth of nation-states, Europe's global expansion, the Enlightenment, and the movement toward democracy and industrial society by the close of this period.

HIST 264 Revolutionary Europe 1800-1914 3.0 SH [GEH] (HIST)

This course focuses on the dramatic political, economic, and social transformations of 19th century Europe with special emphasis on France, Germany, and Britain. It examines new thought patterns that took form in the many "isms" of these times and their implications for the contemporary world. Covers the period from the French Revolution to World War I.

HIST 265 20th Century Europe 3.0 SH [GEH] (HIST)

An examination of the major developments in Europe since World War I with special emphasis on Germany and the Soviet Union. The course investigates the continuing development of new thought patterns, especially those that result from reactions to World Wars I and II.

HIST 270 History Focus Seminar 1.0 SH [] ()

This seminar develops an awareness of major problems/issues in the world today, including a geographical understanding of those problems/issues and an historical understanding of the way in which they are interconnected. May be taken four times up to a total of four semester hours.

HIST 274 Race and Racism in America 3.0 SH [GEH] (HIST)

This course examines the historical construction of race and how this system of exploitation and exclusion has developed throughout American history. The course looks at the creation, categorization, cementation, and implementation of racial categories through the experiences of African Americans, Native Americans, Asian Americans, Mexican Americans, and Jewish Americans.

HIST 275 South African History 3.0 SH [GEH] (HIST)

The course explores the complicated pattern of race relations in South Africa, intensifying under the apartheid system and the country's emergence as a fully democratic state in the modern era.

HIST 281 China 3.0 SH [GEH] (HIST)

Past political, social, and cultural characteristics which help to explain the nature of present-day challenges in China.

HIST 282 German Democracy Before Hitler 3.0 SH [GEH] (HIST)

An examination of the reasons for the failure of Germany's first experiment with democracy in 1918-33. Students consider the effects of the Versailles Treaty, German political traditions and attitudes, contemporary cultural and intellectual trends, economic factors, and the international context. They also try to identify criteria that help determine success or failure for a fledgling democracy.

HIST 283 Japan 3.0 SH [GEH] (HIST)

Survey of the political, economic, social, intellectual, and foreign policy aspects of Japanese history from 600 AD to the present. Particular focus is placed on Japan's attempts to establish a central government prior to 1600, as well as Japan's quest for national identity and security in the 20th century.

HIST 288 The Age of FDR 3.0 SH [GEH] (HIST)

This class focuses on how all Americans endured and eventually prevailed over the dual travails visited on their country between 1929 and 1945: the Great Depression and World War II.

HIST 289 American Biography 3.0 SH [GEH] (HIST)

Biographical studies form the core for the study of American history. Lesser known Americans also played pivotal roles in that history, and this class examines four of them. The class also examines how the role of character played out in their lives and if they can serve as role models today.

HIST 290 World History 3.0 SH [GEH] (HIST)

This course explores the concept of global civilization and studies the patterns and trends found in the emergence, development, and fall of civilizations in an increasingly interconnected world.

HIST 297 Historical Thinking & Research 3.0 SH [] (HIST)

Students are introduced to the discipline as a way of thinking and an evolving body of research. The development of history as a field of study is explored through the following topics: what is history; an introduction to historiography, the theory of history, the practice of history, locating sources, using quantitative data in historical research, bridging the disciplines, utilizing a multicultural lens with cultural sensitivity, recognizing moral issues, the ethics of the profession. Open only to history and religion majors and minors.

HIST 301 Social Issues and the Courts 3.0 SH [GEH] (HIST)

This course looks at current social issues such as free speech, abortion, privacy, affirmative action, crime, hate speech, "taking," and states' rights from the perspective of evolving discussions of the meaning of the United States Constitution/Bill of Rights in society and in the courts. The focus is on legal reasoning in U.S. Supreme Court cases and the attempt to balance historical and evolving interpretations of the Constitution with the contemporary circumstances that generated the legal cases.

HIST 302 Seminar: American Revolution 3.0 SH [] (HIST)

Investigation and analysis of the historiography of the American Revolution relating to specific historical issues. Focus is on researching, writing, and discussing major political, economic, and social problems of 18th century America.

HIST 303 Seminar: Civil War & Reconstr 3.0 SH [] (HIST)

Investigation and analysis of the historiography of the Civil War and Reconstruction period. Focus is on researching, writing, and discussing major political, economic, and social problems of the United States during the period from 1820 to 1895.

HIST 305 Seminar: 20th Century America 3.0 SH [] (HIST)

Investigation and analysis of the historiography of 20th century America relating to specific historical issues. Focus is on researching, writing, and discussing major political, economic, and social problems of 20th century America.

HIST 310 The Cold War 3.0 SH [] (HIST)

An examination of the causes, development, and eventual resolution of the U.S. - Soviet confrontation from the breakdown of the World War II alliance to the disintegration of the Soviet Union. Topics include the division of Germany and Europe, the Korean conflict, the nuclear arms race, superpower competition for the Third World, detente, and the reasons for the Soviet Union's ultimate collapse.

HIST 313 Africa 3.0 SH [GEH] (HIST)

A survey of ancient civilizations, to the European conquest and colonization of the continent, to contemporary liberation and modernization. Source readings include anthropological studies.

HIST 333 Russia 3.0 SH [GEH] (HIST)

A survey analyzing the origins of Russian nationality, the rise of the Muscovite Tsarist state, Imperial development from Peter the Great to the Revolution of 1917, the Soviet System and its fall.

HIST 335 Middle East 3.0 SH [GEH] (HIST)
Past political, social, and cultural circumstances which explain the nature of present problems.

HIST 354 20th C U.S. Foreign Relations 3.0 SH [] (HIST)
This course concentrates on the emergence of the U.S. as a great power and its growing global role in the 20th century, especially regarding major junctures such as World War I, World War II, and post-war arrangements arising from these conflicts. Considers the U.S.'s economic influence as well as more traditional political and security issues.

HIST 363 Conflict in Amer: The 1960s 3.0 SH [GEH] (HIST)
Analysis of the history of the United States during the 1960s, with emphasis on events reflecting social, cultural, and political conflict and protest. Analyzes pre-1960s trends and post-1960s effects. Covers social movements, political protest and radicalism, Vietnam, civil rights, music, and the counterculture.

HIST 382 Modern China 3.0 SH [] (HIST)
A study of the major historical events in China from WWI to the present. Culture, politics, economics, and social factors are some of the key focal areas of concern. Offered only on Principia Abroads.

HIST 386 India 3.0 SH [GEH] (HIST)
Past political, social, religious, and cultural characteristics which help to explain the nature of present-day problems.

HIST 397 Interdiscp Research History 3.0 SH [] ()
Students explore the disciplinary sources of the data historians; incorporate them in their narratives; and are able to ask the pertinent questions about the source of the underlying data, methods of analysis, and strengths and limitations of the generalizations for the specific situation the historian is addressing. Students do this through participation in a group research project.

HIST 402 Reading in History 3.0 SH [] ()
Individual reading in student-selected and faculty-approved topics in history. Designed for majors seeking to deepen their knowledge of a specific field of history.

HIST 431 Historiography 3.0 SH [] ()
Critical readings of a selection of historical works focused on a common theme. Seminar conducted by the entire history faculty. Prerequisite: 3.0 GPA.

HIST 497 Designing Capstone Research 3.0 SH [] ()
Advanced research methods in history for senior history majors as they initiate their capstone research. Includes topic selection, research techniques including use of Internet resources, bibliographic development, and library skills.

HIST 498 Capstone Research & Writing 3.0 SH [] ()
Advanced research methods for senior history majors as they conduct their research and complete their history capstone requirement.

Languages and Cultures

LANG 100 Elementary Language Study 1.0 - 6.0 SH [] ()
An introductory-level course to one of the world languages. The course title will be modified to reflect the language. Languages recently taught include Arabic, Chinese, Japanese, Portuguese, Russian, Esperanto, Greek, and Hindi. Offered either on campus or Principia abroad. May be repeated in any combination of languages up to a maximum total of six semester hours, with no more than a total of three semester hours in any single language. May not count toward any language major.

LANG 335 Introduction to Linguistics 2.0 SH [] ()
 This course provides an introduction to linguistics, or the science of language. This discipline includes phonology, morphology, and syntax as well as semantics or the study of meaning. Students learn about different schools of linguistics and how this science can be applied to the understanding and teaching of languages.

Mass Communication

MCOM 028 Newspaper Production No Credit [] ()
 Participation in reporting and writing of weekly articles and involvement in the production and technical aspects, such as graphics, layout, and advertising, of publishing *The Pilot*, the college's bi-weekly newspaper. For writers, reporters, business, and production staff.

MCOM 042 Television Production No Credit [] ()
 Participation in television production activities at the college under the supervision of the faculty advisor.

MCOM 052 Radio on Air No Credit [] ()
 Participation in broadcast activities of the college's radio station, Principia Internet Radio.

MCOM 053 Radio Station Management No Credit [] ()
 Participation in the operations of the college's radio station, Principia Internet Radio. Prerequisite: MCOM 052.

MCOM 110 Intro to Mass Communication 3.0 SH [] ()
 Provides an exposure to today's wide range of mass media. Subjects covered include the history, organization, economics, and practices of mass communication - such as print, broadcast, film, Internet, and social media. A heavy emphasis is placed on the importance of developing critical thinking and media literacy skills, to help students interpret media messages in an intelligent, balanced, and realistic way.

MCOM 140 Public Speaking 3.0 SH [] ()
 Provides opportunities to develop effective oral communication skills applicable in many settings including on the job, in management and leadership, and other professional, academic, or community environments. Includes speeches of introduction, informative speeches, persuasive speeches, group discussions, speech research and organization, audience analysis, and delivery skills, such as voice, gesture, movement, and confidence in front of an audience.

MCOM 181 Photography Fundamentals 3.0 SH [GEA] ()
 A foundation course to learn the craft of digital photography. Students learn how to tell stories visually while developing their photographic skills by learning how to control their cameras and the photographic process. The nature of assignments range from photojournalism to the fine-art type. Fee=\$65.00

MCOM 210 Media Reporting and Writing 3.0 SH [] ()
 A beginning course for those aspiring to work in the media or in a media-related field such as public relations. Students have intensive training in interviewing, gathering information, and writing in a clear, news style. They learn to edit and critically evaluate media writing as well as write to a standard worthy of publication in print or on-line.

MCOM 224 Feature Writing 3.0 SH [] ()
 Instructs students in writing a wide variety of feature stories, ranging from the types commonly associated with newspapers to those in print, broadcast, and online magazine formats. Prerequisite: MCOM 210.

MCOM 226 Opinion Writing 3.0 SH [] ()
 For students who have mastered the basics of news writing, this class explores the foundations of expressing advocacy and opinion on topics of contemporary significance. Students practice writing and editing editorials, op-ed columns, and reviews.

MCOM 228 Newspaper Practicum 0.5 - 1.0 SH [] ()
Practicum for writers/reporters, editors, and staff of *The Pilot*, the college newspaper. May be offered for variable credit from .5 to one semester hour. May be taken six times up to a total of six semester hours.

MCOM 235 Communication Seminar 3.0 SH [] ()
This course is tailored to examine recent developments, social trends, and shifting technologies not covered in the regular mass communication curriculum. It could utilize the special areas of expertise when taught by visiting faculty in addition to using the core skills of current faculty. The title will be extended to describe the current topic. May be taken twice provided the topics differ. Prerequisites: MCOM 110 and MCOM 210.

MCOM 236 Mrs. Eddy and The C.S. Monitor 3.0 SH [] ()
This course explores the historical context in which Mary Baker Eddy founded *The Christian Science Monitor*. This includes examination of the period of yellow journalism, relevant developments in Mrs. Eddy's life, and the *Monitor's* impact in the world of media.

MCOM 240 Broadcast Journalism 3.0 SH [] ()
This course introduces students to the processes, skills, and ethics of developing, writing, delivering, and producing journalistic content for the broadcast media. Topics covered may include the following: on-air news writing; adapting print news for on-air delivery; producing feature stories and interviews for radio and television. Prerequisite: MCOM 210.

MCOM 241 Television Workshop 3.0 SH [] ()
Students plan, write, videotape, edit, anchor, and produce a television news program for broadcast to the community. Topics may range from news to election coverage. **Fee=\$25.00**

MCOM 242 Speech Skills for the Media 3.0 SH [] ()
Provides students with a variety of speech skills that would be useful to them in media professions. Among the skills included are interviewing on and off camera, radio and television news reading, extemporaneous speaking, oral reading, group discussion, and impromptu speaking.

MCOM 246 Television Practicum 0.5 - 1.0 SH [] ()
Develops television skills through experience working on special broadcasting projects under supervision of mass communication faculty. Experience is gained through active participation in television shows such as, "Principia in Preview," a "live" weekly information program broadcast to the campus. May be offered for variable credit from .5 to one semester hour. May be taken six times up to a total of six semester hours.

MCOM 251 Radio Broadcasting 3.0 SH [] ()
Using Principia Internet Radio (PIR) facilities, students create, produce, direct, voice, and operate their own live radio programs and create promotional materials in a variety of formats. Emphasis on effective communication of ideas. Students in the workshop also assist each other in critiquing and improving their work on a regular basis.

MCOM 263 Public Relations 3.0 SH [] ()
This introductory class instructs students in the theory and techniques of public relations practice: why organizations must deal effectively with various publics, how to write a news release, how to interact with the media. Corporate and agency public relations are both examined. Case studies that highlight effective public relations strategies are considered. A special section on crisis communications is included.

MCOM 266 Public Relations Writing 3.0 SH [] ()
Students learn to write effectively across a variety of formats and media used by today's public relations professionals. Various forms include press releases; public service announcements; query, pitch, and cover letters; media alerts; features; newsletters; backgrounds; and elements of public relations presentations. There is particular emphasis on strategizing and crafting persuasive public relations messages. Prerequisite: MCOM 263.

MCOM 281 Photojournalism 3.0 SH [] ()
An applied study of how photojournalists report the news in a visual form. Working in digital photography, students learn how to capture the peak moment while refining their sense of content, aesthetics, news judgment, and ethics. Prerequisite: each student must supply a digital single lens reflex camera. **Fee=\$90.00**

MCOM 282 Intermediate Photography 3.0 SH [] ()

This course is both a theoretical and a practical study of photography with a particular focus on lighting. Through a critical study of the current and past masters of photography, students work toward defining their own vision and photographic portfolio. Prerequisite: each student must supply a digital single lens reflex camera. **Fee=\$90.00**

MCOM 283 Yearbook Editing 1.0 SH [] ()

Practicum for the editor(s) of *The Sheaf*, the college yearbook. A team approach is encouraged. May be taken twice. Prerequisite: member of *The Sheaf* editing staff.

MCOM 284 Photography Practicum 1.0 SH [] ()

Practicum for staff photographers of *The Sheaf*, the college yearbook. Students receive focused instruction on photography including composition, working with subjects, and ethics in photography. May be taken more than once up to a total of four semester hours.

MCOM 286 On-Location Digital Media Prod 4.0 SH [] ()

An introduction to graphic design with an emphasis in digital media and design. Develops basic skills in designing with photographs, illustrations, and typography for print and digital media devices. Strategies and processes are examined and developed for work on location. Fundamental design principles are explored in depth. To be taught only on an abroad program.

MCOM 292 Video Production 3.0 SH [] ()

A foundation course exploring video production in both a theoretical and practical way. Through hands-on assignments, students develop their skills in camera operation, audio, lighting, and editing, as well as gaining experience expressing messages and stories visually. Prior knowledge or production experience is not necessary. **Fee=\$20.00**

MCOM 293 Corporate Video 3.0 SH [] ()

Students study the theoretical approaches to creating the very specific video messages that companies and organizations use to deliver corporate messages to internal and external target audiences. Includes practical experiences producing corporate videos for clients on or off campus. Prior knowledge or production experience is not required. **Fee=\$20.00**

MCOM 301 Mass Media in Society 3.0 SH [] ()

Explores the relationship between media and society, in particular how one can influence the other. Looks at theories of media impact as well as methods of research to determine those impacts. Includes readings and discussion of contemporary media controversies. Builds a foundation for understanding the power, and limits, of media. Prerequisite: MCOM 110.

MCOM 302 Media Law and Ethics 4.0 SH [] ()

Study of the legal and ethical foundations of mass media, as well as how they are changing. Explores the constitutional issues of free press and privacy, as well as the regulation of broadcasting and advertising. Taught as a lab course using case studies. Prerequisite: MCOM 110.

MCOM 322 Advanced Reporting and Writing 3.0 SH [] ()

The advanced study of print and web journalism, including practice of various styles of writing, ranging from editorials and investigative reporting to features and blogging. Also explores traditional and emerging organizational structures of newsrooms, web sites, and other journalistic entities. Prerequisite: MCOM 210.

MCOM 339 Multi-Platform Storytelling 3.0 SH [] ()

Course explores the proliferation of new media forms driving the growth of trans-media or multi-platform storytelling. The course teaches both storytelling across different media using the same source material and complex (multi-dimensional) storytelling across multiple media. Prerequisite: MCOM 210 or MCOM 240.

MCOM 354 Advanced Radio Broadcasting 3.0 SH [] ()

Using the facilities of Principia Internet Radio (PIR), students develop advanced techniques to create, produce, direct, voice, and operate their own live radio programs and create promotional materials in a variety of formats. Emphasis on effective communication of ideas. Students in the workshop also assist each other in critiquing and improving their work on a daily basis. Prerequisite: MCOM 251.

MCOM 388 The Photographic Essay 4.0 SH [] ()

This advanced study of photojournalism occurs through working in depth on a specific project culminating in a photo story/essay. Through this course, students expand their photographic skills while further refining their sense of content, aesthetics, news judgment, and ethics. Prerequisites: MCOM 281, and each student must supply a digital single lens reflex camera. **Fee=\$105.00**

MCOM 392 Documentary Video 3.0 SH [] ()

Students add to skills learned in previous video classes as they learn to document reality in an informative and entertaining way, telling stories visually about real life. Prerequisite: MCOM 292 or MCOM 293. **Fee=\$20.00**

MCOM 400 Internship 3.0 - 10.0 SH [] ()

Students participate in an off campus pre-professional field experience in media, television, film, radio, photography, graphics, journalism, or public relations. Students have primary responsibility for locating an internship opportunity with the assistance of a Mass Communication faculty advisor.

MCOM 411 Adv Topics in Communication 3.0 SH [] ()

This seminar for juniors and seniors is built around the reading and study of historical and contemporary key non-fiction texts in the field of mass communication linked to a theme, such as the history of media, the foundational differences across the globe, and theories about media impact. The title will be extended to describe the current topic. May be taken twice provided the topics differ. Prerequisites: MCOM 110 and MCOM 301.

Mathematics

MATH 099 Basic Math Tutorial No Credit [] ()

A two hour per week, non-credit guided tutorial for students who do not score Level 2 or higher on the Quantitative Reasoning Test.

MATH 110 Mathematical Applications 3.0 SH [GEQR] (MNS)

Applications of elementary mathematics in the fields of management, social sciences, information sciences, statistics, physical and life sciences, and economics. Mathematical topics may include graph theory, linear programming, statistics, probability, voting systems, fair division, game theory, apportionment methods, coding methods, cryptography, logic, problems of scale, symmetry, patterns, tilings, exponential models and other growth models in finance, business, and biology, and astronomical models. Prerequisite: Level 2 or higher on the Quantitative Reasoning Test.

MATH 111 A Survey of Mathematics 3.0 SH [GEQR] (MNS)

A conceptual and historical overview of mathematics. A survey of selected topics such as: what mathematics is; numeration; elementary number theory; math and music; geometry and art; loans and payment plans; numbers, equations, and graphs; counting and probability; statistics; and geometric modeling. Intended for non-science majors. Prerequisite: Level 2 or higher on the Quantitative Reasoning Test.

MATH 143 Precalculus 3.0 SH [] (MNS)

Investigates properties of functions, techniques for solving equations and inequalities and graphing. Emphasizes polynomial, rational, algebraic, exponential, logarithmic, and circular functions as well as conic sections. Prerequisite: MATH 110, MATH 111, or Level 4 on the Quantitative Reasoning Test.

MATH 164 Introduction to Statistics 3.0 SH [GEQR] (MNS)

Descriptive statistics including measures of central tendency, measures of dispersion, correlation and regression; basic concepts of probability; inferential statistics including estimation and hypothesis testing. Applications in biological and social sciences. Prerequisite: MATH 110, MATH 111, or Level 2 on the Quantitative Reasoning Test.

MATH 181 Calculus I 5.0 SH [] ()

First semester of single-variable calculus. Includes a review of properties of elementary functions, limits, derivatives, applications of derivatives, continuity, the definite integral, basic antiderivative formulas, the Mean Value Theorem, and the Fundamental Theorem of Calculus. Prerequisite: MATH 143.

- MATH 182 Calculus II** **5.0 SH** **[]** **()**
 Second semester of single-variable calculus. Includes a review of Calculus I, techniques of integration, applications of the definite integral, an introduction to differential equations, parametric equations, polar coordinates, and the theory of infinite sequences and series, including tests for convergence and Taylor Series. Prerequisite: MATH 181.
- MATH 200 Foundations of Number** **3.0 SH** **[]** **(MNS)**
 A study of the language, history, and structure of our number system; an in-depth look at arithmetic algorithms; introduction to problem-solving techniques; elementary data analysis. Intended for elementary education majors. (A student may receive credit for only one of the courses MATH 200 or MATH 203.) Prerequisite: MATH 110, MATH 111, or Level 4 on the Quantitative Reasoning Test.
- MATH 201 Geometry for Teachers** **3.0 SH** **[]** **(MNS)**
 A study of the language, history, and facts of plane and solid geometry; measurement facts and applications; basic constructions, transformations, and similarity; tessellations, regular polyhedral and fractals; introduction to coordinate geometry. Intended for elementary education majors. (A student may receive credit for only one of the courses MATH 201 or MATH 203.) Prerequisite: MATH 110, MATH 111, or Level 4 on the Quantitative Reasoning Test.
- MATH 211 History of Mathematics** **2.0 SH** **[]** **(MNS)**
 A concise history of mathematics. Includes topics from mathematics in early civilizations, Greek mathematics from classical, first Alexandrian, and second Alexandrian periods, Hindu and Arabic contributions, European Renaissance, the calculus controversy, non-Euclidean geometry, the rise of analysis, Gödel's Incompleteness Theorem, and the loss of certainty. Prerequisite: MATH 181 or taken concurrently.
- MATH 220 Mathematical Proofs** **2.0 SH** **[]** **()**
 Investigates the nature and structure of mathematical proofs found in calculus, algebra, and geometry. Includes set theoretic foundations, the rules of propositional logic, the principle of mathematical induction, and the nature of deductive reasoning. Analyzes various proofs from geometry, algebra, and calculus as well as provides students with practice in constructing such proofs. Prerequisite: MATH 182.
- MATH 261 Discrete Math** **3.0 SH** **[]** **(MNS)**
 Nature of proof, sets, graph theory, logic, Boolean algebra, functions and relations. Prerequisite: MATH 143.
- MATH 273 Linear Algebra** **3.0 SH** **[]** **(MNS)**
 Vector spaces, vector and matrix operations, determinants, linear transformations, systems of linear equations, change of basis, eigenvalues. Prerequisite: MATH 181.
- MATH 283 Multivariable Calculus** **4.0 SH** **[]** **(MNS)**
 Includes vector algebra and coordinate geometry in two and three dimensions, partial differentiation, directional derivatives, slope fields, multiple integration and applications, line and surface integrals, Lagrange multipliers, vector calculus including Green's, Divergence, and Stokes' theorems. Prerequisite: MATH 182.
- MATH 304 Synthetic Geometry** **3.0 SH** **[]** **(MNS)**
 An axiomatic development of Euclidean geometry using Hilbert's axioms; hyperbolic geometry and its models; a comparison of Euclidean, spherical, and hyperbolic trigonometries; may include an introduction to projective geometry. Prerequisite: MATH 273.
- MATH 320 Elementary Number Theory** **3.0 SH** **[]** **()**
 Divisibility theory of integers, primes and their distribution, theory of congruences, Fermat's "Little Theorem," Euler's phi function, quadratic reciprocity, perfect numbers and Mersenne primes, Fermat's "Last Theorem." Prerequisite: MATH 220.
- MATH 355 Applied Advanced Calculus** **3.0 SH** **[]** **(MNS)**
 Introduction to vector analysis: vector differential calculus, integral theorems, curvilinear coordinates. Fourier analysis: Fourier series and integrals, orthogonal functions, applications in boundary value problems. Offered every other year. Prerequisite: MATH 283.

MATH 360 Numerical Analysis 3.0 SH [] (MNS)

Theory and techniques for obtaining numerical solutions. Numerical methods are implemented by using computers. Topics include root-finding, interpolation, approximation of functions, numerical integration, differential and difference equation, applications in linear algebra, and error analysis. Offered every other year. Prerequisites: MATH 273 and MATH 283.

MATH 364 Mathematical Statistics 3.0 SH [] (MNS)

Probability, random variables, probability distributions, mathematical expectation, moments, moment generating functions, sampling distributions, Central Limit Theorem, estimation and hypothesis testing, correlation, curvilinear and multiple regression. Prerequisite: MATH 283.

MATH 374 Algebraic Structures 3.0 SH [] (MNS)

Group theory, Boolean algebra, rings, integral domains and fields. Offered every other year. Prerequisite: MATH 273.

MATH 380 Differential Equations 3.0 SH [] (MNS)

Linear differential equations, Laplace transform methods, series solutions, numerical solutions, introduction to partial differential equation, applications. Offered every other year. Prerequisite: MATH 182.

MATH 415 Senior Capstone 3.0 SH [] (MNS)

Synthesizes and extends material from courses in the major using topics such as integration, linearity, optimization, periodicity, and expansions. Open only to mathematics majors.

MATH 421 Math Seminar 1.0 SH [] (MNS)

A seminar in selected topics in mathematics. The contents will vary, and the title will be extended to describe the current topic. May be taken more than once provided the topics differ.

MATH 431 Complex Variables 3.0 SH [] (MNS)

Analytical functions, Cauchy's theorem, Taylor and Laurent series, residues, contour integration, integral transforms, conformal mapping. Prerequisite: MATH 283.

MATH 432 Real Analysis 3.0 SH [] ()

Formal development of the concepts of real analysis. Includes limits and continuity, sequence and series, uniform convergence, Riemann integral. Prerequisite: MATH 283.

Music

MUS 040 Applied Lessons (50 Minutes) No Credit [] ()

Applied instrumental or vocal instruction. Thirteen 50-minute lessons per semester, with two hours of practice daily. For applied music lessons for credit, refer to MUS 120. Fee=\$636.00

MUS 044 Applied Lessons (25 Minutes) No Credit [] ()

Applied instrumental or vocal instruction. Thirteen 25-minute lessons or equivalent per semester, with one hour practice daily. For applied music lessons for credit, refer to MUS 130. Fee=\$334.00

MUS 050 College Choir - No Credit No Credit [] ()

Preparation and performance of choral literature focusing on concepts of style, ensemble, and vocal production. Open to the entire community without audition.

MUS 051 Chorus for Musical No Credit [] ()

Preparation and performance of chorus parts for the musical production. By audition only. Offered only in semesters when there is a musical production.

MUS 052 Prin Music Tour - No Credit No Credit [] ()

Preparation of music literature for performance on tour focusing on style, ensemble, presentation, and tour logistics. Star (*) grade will be assigned until completion of the tour. Offered by invitation only. Offered on demand.

- MUS 053 Baccalaureate Choir** **No Credit** **[]** **()**
Preparation and performance of choral selections for the Baccalaureate service, held during commencement weekend. Offered only in semesters when there is a spring musical production. Open to the community without audition.
- MUS 061 Orchestra - No Credit** **No Credit** **[]** **()**
Preparation and performance of instrumental literature covering style, expressive interpretation, and ensemble. Open to the entire community.
- MUS 065 Jazz Ensemble** **No Credit** **[]** **()**
Reading and rehearsing music from various big band and combo styles. Special attention is given to style awareness, ensemble, and improvisation techniques. Open to the entire community.
- MUS 071 Chamber Music - No Credit** **No Credit** **[]** **()**
Small chamber ensemble, vocal or instrumental. May be taken more than once.
- MUS 080 Student Recital - No Credit** **No Credit** **[]** **()**
Thirty-minute recital on instrument or voice, demonstrating performance ability and understanding of various musical styles. Subject to music faculty approval. Prerequisite: demonstrated proficiency on instrument or voice.
- MUS 100 Intro to the Art of Music** **3.0 SH** **[GEA]** **(ART)**
Provides music listening skills, a knowledge of the elements and vocabulary of music, and an acquaintance with the styles and characteristics of classical music through the ages. Designed primarily for the non-major.
- MUS 101 Symphonic Masterworks** **3.0 SH** **[GEA]** **(ART)**
A survey of symphonic masterworks. Focuses on the style characteristics of the great symphonic composers, a study of symphonic forms, and listening to selected symphonic masterworks. For majors and non-majors.
- MUS 102 Operatic Masterworks** **3.0 SH** **[GEA]** **(ART)**
A survey of operatic masterworks. Focusing on the style characteristics of the great opera composers through viewing complete performances of the operas studied. For majors and non-majors.
- MUS 110 Introduction to Computer Music** **1.0 SH** **[]** **()**
Students learn to use the computer to create music. Various methods are presented including sound design and graphic software for sound creation and performance. Collaborative performance such as laptop orchestra is emphasized. May be taken six times up to a total of six semester hours.
- MUS 112 Music Recording Techniques** **1.0 SH** **[]** **()**
A study of the methods and techniques necessary to make basic and intermediate level acoustic audio recordings in a studio environment, including microphone placement, effects processing, mixing, basic mastering, and the use of the computer software. Study of the role of the producer and recording engineer is emphasized. May be taken six times up to a total of six semester hours.
- MUS 120 Applied Lessons (50 Minutes)** **1.0 SH** **[]** **()**
Applied instrumental or vocal lessons. Thirteen 50-minute lessons per semester, with two hours of practice daily. **Fee=\$636.00**
- MUS 130 Applied Lessons (25 Minutes)** **0.5 SH** **[]** **()**
Applied instrumental or vocal lessons. Thirteen 25-minute lessons per semester, with one hour of practice daily. **Fee=\$334.00**
- MUS 139 Fundamentals: Beginning** **3.0 SH** **[]** **()**
Study of notation, rhythm, meter, intervals, scales, and triads. Melodic and rhythmic dictation and sight-singing. No musical background is required.
- MUS 140 Fundamentals: Advanced** **3.0 SH** **[]** **()**
Study of notation, rhythm, meter, intervals, scales, and triads. Melodic and rhythmic dictation and sight-singing. Prerequisite: music background.

MUS 160 Musicianship I 2.0 SH [] ()
Sight-singing, melodic dictation, rhythmic studies, diatonic chord recognition, keyboard harmony. Taken concurrently with MUS 170. Prerequisite: MUS 139 or 140 (with a grade no lower than C).

MUS 165 Jazz Ensemble 1.0 SH [] ()
Reading and rehearsing music from various big band and combo styles. Special attention is given to style awareness, ensemble, and improvisation techniques. Open to the entire community. May be taken more than once.

MUS 170 Music Theory I 3.0 SH [] ()
A study of harmonic materials. Part-writing, tonal function, voice leading, harmonization of melody lines. Taken concurrently with MUS 160. Prerequisite: MUS 139 or MUS 140 (with a grade no lower than C).

MUS 180 Instrumental Techniques 3.0 SH [] ()
Techniques, characteristics, and usage of brass, woodwind, and string instruments. Acquisition of playing ability on one instrument from each group.

MUS 182 Choral Conducting 2.0 SH [] ()
Introduction to the basics of conducting choral music. Includes emphasis on conducting patterns, rehearsal pedagogy, vocal production, choral literature, score analysis, and choral performance practices.

MUS 200 Topics in Music History 3.0 SH [GEA] (ART)
A comprehensive study of a notable composer or topic of music history. The course serves to acquaint students with a significant body of music and its importance in music history. Includes historical context, analysis, and listening. The title will be extended to describe the current topic, e.g., Johannes Brahms, Women in Music, Charles-Marie Widor, Native American Music, Legendary Pianists. May be taken more than once provided the topics differ.

MUS 201 Beethoven: The Great Master 3.0 SH [GEA] (ART)
A survey of the life and music of Ludwig van Beethoven (1770-1827) including his symphonies, string quartets, piano music, chamber music, and *Fidelio*. No music background is required.

MUS 203 American Musical Theater 3.0 SH [GEA] (ART)
An overview of the development of the modern American musical theater with emphasis on the music, lyrics, composers, writers, producers, directors, and the history and folklore of "Broadway." No musical background is required.

MUS 204 The Jazz Tradition in America 3.0 SH [GEA] (ART)
Explores the connection between jazz music and its cultural and social contexts. The heritage of the lives and music of jazz artists is discussed. Traces the legacy of jazz from its roots in African and American music to current styles. No musical background is required.

MUS 205 The Creative World of Mozart 3.0 SH [GEA] (ART)
A survey of the music of Wolfgang Amadeus Mozart (1756-1791). An exploration of the beauty, peace, grandeur, drama, and grace of Mozart's operas, symphonies, piano concertos, chamber music, and choral music. No musical background is required.

MUS 206 Student Recital 1.0 - 5.0 SH [] ()
Thirty-minute recital on instrument or voice, demonstrating performance ability and understanding of various musical styles. Subject to music faculty approval. May be taken for variable credit from one to five semester hours. May be taken more than once. Prerequisite: demonstrated proficiency on instrument or voice.

MUS 207 Popular Music in America 3.0 SH [GEA] (ART)
A study of the popular music of America as the voice of the people in society and culture. The rich and varied styles of popular music are discussed in the context of the artists, recordings, and political events surrounding them. No musical background is required.

MUS 209 Songs through Time 3.0 SH [GEA] (ART)
Traces the development of solo song in Western culture. Includes discussion of the basic aspects of a song, important types of singing styles, and some famous singers. No musical background is required.

- MUS 213 Music of the World 3.0 SH [GEA] (ART)**
A selected survey of classical, popular, and folk music traditions from around the world. The role of music as ritual, mode of communication, and artistic expression is studied.
- MUS 225 Music Composition 1.0 SH [] ()**
Study of the methods and techniques of music composition including historical, social, cultural, and aesthetic considerations. Emphasis on preparation for students who intend to do a capstone in music composition. May be taken more than once.
- MUS 227 Field Studies in Music 3.0 SH [GEA] (ART)**
Field study of materials covered in music courses such as MUS 100, MUS 101, and MUS 102. Offered only as part of an abroad or field study program.
- MUS 228 Great Composers & Their Culture 3.0 SH [GEA] ()**
This course includes a study of the great composers and their individual cultures that will be experienced on a music abroad. A specialized survey of music, history, art, and culture directly related to countries visited and composers studied.
- MUS 250 College Choir 1.0 SH [] ()**
Preparation and performance of choral literature focusing on concepts of style, ensemble, and vocal production. May be taken more than once. Open to the entire community.
- MUS 251 Chorus for Musical 1.0 - 2.0 SH [] ()**
Preparation and performance of chorus parts for the musical production. By audition only. Offered only in semesters when there is a musical production. May be offered for variable credit from one to two semester hours. May be taken four times up to a total of eight semester hours.
- MUS 252 Principia Music Tour 1.0 - 2.0 SH [] ()**
Preparation of music literature for performance on tour focusing on style, ensemble, presentation, and tour logistics. Star (*) grade will be assigned until completion of the tour. May be offered for variable credit from one to two semester hours. May be taken more than once. Offered by invitation only.
- MUS 261 Orchestra 1.0 - 2.0 SH [] ()**
Preparation and performance of instrumental literature focusing on style, expressive interpretation, and ensemble. May be offered for variable credit from one to two semester hours. May be taken more than once. Open to the entire community.
- MUS 265 Musicianship II 2.0 SH [] ()**
Continuation of MUS 160. Taken concurrently with MUS 275. Prerequisite: MUS 160 (with a grade no lower than C).
- MUS 266 Musicianship III 2.0 SH [] ()**
Concentrates on practical musicianship, including harmonic and rhythmic exercises of increasing complexity. Literature from chant to 20th century, harmonic dictation, and intricate rhythms and keyboard skills are studied. Taken concurrently with MUS 276. Prerequisite: MUS 265 (with a grade no lower than C).
- MUS 271 Chamber Music for Credit 1.0 - 2.0 SH [] ()**
Small chamber ensemble, vocal or instrumental. May be offered for variable credit from one to two semester hours. May be taken more than once.
- MUS 275 Music Theory II 3.0 SH [] ()**
Analysis and exercises in common-practice harmony concentrating on advanced chromatic techniques and species counterpoint. Taken concurrently with MUS 265. Prerequisite: MUS 170 (with a grade no lower than C).
- MUS 276 Music Theory III 3.0 SH [] ()**
Analysis and exercises in two-part counterpoint. Study of 20th century styles including set theory, atonality, dodecaphony, and minimalism. Taken concurrently with MUS 266. Prerequisite: MUS 275 (with a grade no lower than C).

MUS 281 Instrumental Conducting 2.0 SH [] ()
Introduction to the basics of conducting instrumental music. Includes all essential beat patterns, expressive gestures, score-reading, learning of instrumental transpositions, and score reduction at the keyboard. May be taken four times up to a total of eight semester hours. Prerequisite: completion of piano proficiency requirement.

MUS 303 Junior Recital 1.0 - 5.0 SH [] ()
Thirty-minute recital of instrumental or vocal music demonstrating performance ability and understanding of various musical styles. Subject to music faculty approval. May be offered for variable credit from one to five semester hours. May be taken more than once. Prerequisite: demonstrated proficiency on instrument or voice.

MUS 321 Music History I 5.0 SH [GEA] (ART)
A study of musical styles and forms of the Medieval, Renaissance, Baroque, and Classic periods with considerable emphasis on listening to the music from these periods.

MUS 322 Music History II 5.0 SH [GEA] (ART)
A study of musical styles and forms of the Romantic period through the present, with considerable emphasis on listening to music from these periods.

MUS 391 Form and Analysis 3.0 SH [] (ART)
In-depth analysis of compositions from the Middle Ages to the present. Development of analytical techniques to enable the student to approach a piece of music and discover the essence of its structure, melody, harmony, texture, and style. Prerequisites: MUS 265 and MUS 275.

MUS 401 Senior Project: Composition 4.0 SH [] ()
An original composition prepared for performance, demonstrating competency in compositional devices and understanding of formal and idiomatic considerations. A written analysis is also required. Will receive a star (*) grade until the semester in which the composition is performed. May be taken twice. Must be taken concurrently with MUS 407. Prerequisite: piano proficiency.

MUS 402 SR Project: Music Research 5.0 SH [] ()
Fifty-page research paper on a special topic in music history or ethnomusicology. Will receive a star (*) grade until the semester in which the project is completed. May be taken twice. Prerequisite: piano proficiency.

MUS 403 SR Project: Adv Performance 4.0 SH [] ()
Sixty-minute recital of instrumental or vocal music demonstrating performance ability and understanding of various musical styles. Will receive a star (*) grade until the semester in which the recital is given. May be taken twice. Must be taken concurrently with MUS 407. Prerequisite: piano proficiency.

MUS 404 Senior Project: Analysis 5.0 SH [] ()
Analysis of a major work plus a paper presenting the analysis and placing the work in its historical and theoretical context. Will receive a star (*) grade until the semester in which the project is completed. May be taken twice. Prerequisite: piano proficiency.

MUS 405 SR Proj: Performance/Research 5.0 SH [] ()
Thirty-minute recital of instrumental or vocal music demonstrating performance ability and understanding of various musical styles plus a 25-page research/analysis paper of the music performed. May be taken twice. Will receive a star (*) grade until the semester in which the recital is given. Prerequisite: piano proficiency.

MUS 406 SR Project: Music Recital 1.0 - 4.0 SH [] ()
Thirty-minute (minimum) recital of instrumental or vocal music demonstrating performance ability and understanding of various musical styles. May be taken twice. Will receive a star (*) grade until the semester in which the recital is given. Open only to double majors in music and education. Must be taken concurrently with MUS 407. Prerequisites: demonstrated proficiency on instrument or voice, and piano proficiency.

MUS 407 Recital Program Notes 1.0 SH [] ()
 By writing program notes for the senior project, students learn how to use research and organizational skills to synthesize the knowledge gained during undergraduate study. Will receive star (*) grade until the term in which the project is completed. May be taken twice. Prerequisites: completion of phase four of all-college writing requirement and piano proficiency. Must be taken concurrently with MUS 401, MUS 403 or MUS 406.

Philosophy

PHIL 120 Critical Thinking 3.0 SH [] (RPHL)
 This course is an introduction to logic and basic argument. Students identify, analyze, evaluate, and construct basic arguments.

PHIL 150 Introduction to Philosophy 3.0 SH [GEH] (RPHL)
 An introductory inquiry into the nature of philosophy, examining various branches of the discipline, typically including epistemology, aesthetics, metaphysics, ethics, and philosophy of mind. Attention is given to both classic and contemporary philosophers. Primary source readings form the base of the course.

PHIL 170 Film and Philosophy 3.0 SH [GEH] (RPHL)
 This course is a survey of philosophical ideas as they appear in films and written texts. The course is not a philosophical study of film so much as it a study of philosophical ideas through film. Basic themes covered through film include but are not limited to ethics, free-will, metaphysics, and epistemology.

PHIL 220 Introduction to Ethics 3.0 SH [GEH] (RPHL)
 An exploration of western moral philosophy, focusing on issues of moral duty, rights, and the nature of the good. The course offers a critical survey of traditional ethical theories and provides an introduction to contemporary responses.

PHIL 221 Topics in Philosophy 3.0 SH [] (RPHL)
 A seminar for lower division students on a topic of current philosophic interest. The title will be extended to describe the current topic. May be repeated up to a total of six semester hours provided the topics differ.

PHIL 222 Feminist Philosophy 3.0 SH [] (RPHL)
 This course explores the connections between traditional western philosophy and recent feminist discourse. Students consider ways in which feminists have criticized traditional philosophy and ask whether these criticisms are justifiable. Students examine ways in which feminist scholars have infused the discipline of philosophy with revisions or alternatives to philosophical thinking and evaluate the validity of these new insights.

PHIL 223 The Problem of Evil 3.0 SH [] (RPHL)
 This course traces a long-standing issue of human thought: the problem of evil. Students use several philosophers' work on the subject in conjunction with both historical and theoretical situations that have motivated the age-long human question: why do bad things happen to good people?

PHIL 230 Philosophic Classics 3.0 SH [] (RPHL)
 An introduction to philosophy through the study of classic texts in philosophy.

PHIL 235 Philosophy and Race 3.0 SH [] (RPHL)
 Considers current philosophical thinking about race, ethnicity, identity, and culture. Examines the notion of race itself, and applies analytic and empathic skills to complex issues such as racial constructions, racial tensions, and public policies such as affirmative action.

PHIL 245 History of Philosophy Survey 3.0 SH [] (RPHL)
 A rapid survey of philosophy from earliest to most recent times to provide context and a timeline for other studies.

- PHIL 250 Contemporary Moral Problems 3.0 SH [] (RPHL)**
Introductory study of various moral and social problems facing society today. Topics may include abortion, capital punishment, euthanasia, animal rights, racial inequities, sexual orientation, pornography, and cloning. Readings in applied ethics and the critiquing of arguments form the basis for the course.
- PHIL 252 Philosophy of Religion 3.0 SH [] (RPHL)**
A philosophical analysis of concepts, claims, and arguments that have traditionally been employed in support of and in challenge to religious belief. Topics typically include proofs for God's existence, the problem of evil, arguments against belief in God, and the possibility of life after death.
- PHIL 255 Global Ethics 3.0 SH [] (RPHL)**
Course focuses on ethics and moral problems both as they relate to the world community and from various standpoints within that community. Ethical traditions from Africa, Asia, Europe, and Latin America are considered. Intercultural moral conflicts are examined from a wide array of religious, cultural, and moral vantage points. More sensitivity, understanding, and assessment of needs are stressed.
- PHIL 265 Business Ethics 3.0 SH [] (RPHL)**
This course focuses on major philosophical and ethical questions surrounding modern western business practices. Students receive a brief introduction to moral philosophy, become familiar with important literature in the field of business ethics, and begin to understand the place of morality in business.
- PHIL 275 Aesthetics 3.0 SH [] (RPHL)**
Philosophical inquiry into the nature of art, the aesthetic experience, and aesthetic appreciation.
- PHIL 280 Classics of Political Thought 3.0 SH [] (RPHL)**
Exploration of the most important writings of authors who have had a profound impact on the West's conception of politics. The emphasis is on original texts by authors such as Plato, Aristotle, Hobbes, Rousseau, Machiavelli, and Marx. Also listed as POLS 280.
- PHIL 311 Ancient & Medieval Philosophy 3.0 SH [] (RPHL)**
Philosophical ideas of the ancient and medieval worlds with emphasis on the Pre-Socratics, Plato, Aristotle, Augustine, and Aquinas.
- PHIL 312 17th & 18th C Philosophy 3.0 SH [] (RPHL)**
Philosophical ideas of the 17th and 18th centuries. Emphasized: rationalist and empiricist movements.
- PHIL 313 19th & 20th C Philosophy 3.0 SH [] (RPHL)**
Philosophical ideas of the 19th and 20th centuries. Emphasized: idealist, existential, pragmatic, and analytical movements.
- PHIL 320 Ethical Theory 3.0 SH [] (RPHL)**
This course in moral philosophy examines historical and contemporary ethical theories and their problems. Students study three classical theories (i.e., Aristotle's virtue ethics, Kant's deontology, and Mill's Utilitarianism) as well as more recent approaches concerning rights and justice (e.g., care ethics and discourse ethics). Prerequisite: three semester hours in philosophy.
- PHIL 321 Epistemology 3.0 SH [] (RPHL)**
Exploration of classical and contemporary theories of knowledge and truth inclusive of theories of mind.
- PHIL 402 Advanced Topics in Philosophy 1.0 - 3.0 SH [] ()**
This course is an advanced seminar for upper division students on a topic of current philosophical interest. The title will be extended to describe the current topic. May be offered for variable credit from one to three semester hours. May be repeated up to a total of six semester hours provided the topics differ. Prerequisite: PHIL 120.

PHIL 421 Seminar in Philosophy 3.0 SH [] ()
 A seminar in a selected problem or topic in philosophy. Course content varies from year to year. Research and writing techniques are developed. The title will be extended to describe the current topic. May be repeated up to a total of six semester hours provided the topics differ.

PHIL 440 Capstone in Philosophy 3.0 SH [] ()
 Independent reading, research, and writing on a topic of philosophical interest. The product is a high quality thesis paper demonstrating original thought, philosophical maturity, and depth. Required for the major.

Physical Education: Academic Courses

PHED 300 Lifeguard Training 2.0 SH [] ()
 Following the American Red Cross program, this course is designed to provide entry-level lifeguard participants with the knowledge and skills to prevent, recognize, and respond to aquatic emergencies and to provide care for a variety of emergency situations. Prerequisite: 15 years of age and successful completion of a swimming skills test. Taken concurrently with PE 061. **Fee=\$90.00**

PHED 301 Water Safety Instructor 2.0 SH [] ()
 Following the Red Cross program, this course is designed to train students to teach basic swimming styles, diving, and water safety courses through learning basic instruction methodology, lesson planning, and motivational skills. This class does not qualify students to be lifeguards or to teach lifeguarding. Prerequisite: 17 years of age, sound swimming skills, and I.H.S.E. Taken concurrently with PE 062. **Fee=\$100.00**

Physical Education: Activity Courses

PE 015 Foil Fencing No Credit [GEPE] (PE)
 An introduction to the skills and strategies of foil fencing as well as the rules, etiquette, and equipment.

PE 016 Ultimate Frisbee No Credit [GEPE] (PE)
 An introduction to the basic skills and strategies of ultimate Frisbee. Covers rules, scoring, and vocabulary.

PE 022 Tennis No Credit [GEPE] (PE)
 Students learn the basics of the game of tennis, its background, rules, strategies, strokes, terminology, and etiquette through short lectures, demonstration/instruction, and competition.

PE 025 Foil Fencing II No Credit [GEPE] (PE)
 Continuation of instruction in the sport of basic foil fencing. Additional instruction is given in technique and bouting.

PE 026 Baseball Theory and Practice No Credit [GEPE] (PE)
 Students learn the history, philosophy, and technique of America's favorite pastime. Students learn the historic and cultural perspective of the sport. The physical foundation of the game as well as the technical aspects of throwing, fielding, base running and hitting are also included. Students learn the language of the game: statistics, scoring, and nomenclature.

PE 029 Biking No Credit [GEPE] (PE)
 Designed to develop the skills and knowledge necessary to fully enjoy bicycling.

PE 030 Squash: Beginning No Credit [GEPE] (PE)
 An introduction to the basic skills and strategies of squash as well as vocabulary, rules, scoring, equipment, and etiquette.

PE 031 Racquetball: Beginning No Credit [GEPE] (PE)
 An introduction to the basic skills and strategies of racquetball as well as vocabulary, rules, scoring, equipment, and etiquette.

PE 034 Fitness Through Weightlifting **No Credit [GEPE] (PE)**
Teaches the use of machines and free weights in development of an individual exercise program. Course is suitable for beginners as well as experienced lifters.

PE 035 Circuit Training **No Credit [GEPE] (PE)**
Students engage in a variety of activities in order to develop aerobic strength. Students utilize the weight room in conjunction with medicine balls and isometric exercises.

PE 036 Triathlon **No Credit [GEPE] (PE)**
Develops and tests the student's abilities in swimming, biking, and running. Includes conditioning and technical instruction in all three areas.

PE 037 Fitness Exploration **No Credit [GEPE] (PE)**
Exposes students to a wide variety of lifetime physical activities. Includes conditioning and technical instruction. Activities may include, but are not limited to, jogging, biking, swimming, walking, hiking, in-line skating.

PE 038 Advanced Sports Training **No Credit [GEPE] (PE)**
Designed for students interested in learning and participating in a variety of training methods and modalities (i.e. plyometrics, balance, stability, bodyweight movement, weights/cables/medicine balls, physio-balls, etc.). Students engage in a circuit-style workout to enhance individual and group performance. Students also learn how to develop their own program based on their current activity level and future goals. This course is not for beginners.

PE 039 Volleyball: Beginning **No Credit [GEPE] (PE)**
An introduction to the fundamental skills and techniques of power volleyball. Including present status, vocabulary, rules, scoring, and strategy.

PE 040 Volleyball: Intermediate **No Credit [GEPE] (PE)**
Continuation of PE 039 at the intermediate level.

PE 050 Basketball **No Credit [GEPE] (PE)**
Focus is on the basic skills and strategies of basketball, including rules, scoring, etiquette, and vocabulary.

PE 051 Soccer **No Credit [GEPE] (PE)**
An introduction to the fundamental techniques and strategies, etiquette, vocabulary, and rules of soccer.

PE 052 Softball **No Credit [GEPE] (PE)**
Emphasizes the basic skills and strategies necessary to enjoy and understand the game of softball. Covers rules, scoring, and vocabulary.

PE 054 Fitness: Balance & Flexibility **No Credit [GEPE] (PE)**
This course focuses on strength, flexibility, coordination, concentration, and balance. Students learn and demonstrate various movements/exercises and skills, including but not limited to sustaining static positions, increasing individual flexibility, demonstrating balance and stability, and learning proper breathing technique.

PE 056 Power Walking **No Credit [GEPE] (PE)**
Establishes a discipline within the student by challenging her/him to improve fitness (i.e., endurance, flexibility, stamina) through a structured power walking program.

PE 057 Fitness in Swimming **No Credit [GEPE] (PE)**
Fitness class designed for qualified students. Course for students who want to develop their fitness through lap swimming. Students swim a minimum of 1500 yards per week. Prerequisite: swimming ability intermediate or above.

PE 058 Water Aerobics **No Credit [GEPE] (PE)**
A fitness class designed for hydro-aerobic movement activities in the water.

PE 061 Emergency Water Safety No Credit [GEPE] (PE)

An aquatics course which introduces people to increased awareness of water-related safety issues and an understanding of how to respond in an aquatic emergency; includes practical and written activities. Taken concurrently with PHED 300. Prerequisite: successful completion of American Red Cross Basic Water Safety or successful completion of a swimming skills test.

PE 062 Water Safety Instruction No Credit [GEPE] (PE)

Follows the Red Cross program for preparing qualified students to be swimming and lifesaving instructors. Taken concurrently with PHED 301.

PE 065 Swimming: Beginning No Credit [GEPE] (PE)

Designed to meet the individual skill needs of non- and beginning swimmers. Students are required to participate in 42 hours of supervised swimming instruction.

PE 066 Swimming: Intermediate No Credit [GEPE] (PE)

Designed to meet the individual skill needs of students. Develops proficiency of intermediate swimming technique.

PE 069 Water Polo No Credit [GEPE] (PE)

Provides an opportunity to develop the basic skills of water polo and to learn its strategies, rules, scoring, and vocabulary. Prerequisite: intermediate swimming ability.

PE 073 Rugby No Credit [GEPE] (PE)

This course exposes students to the basic skills, strategies, and fundamentals of competitive rugby. Students have the opportunity to compete against collegiate and club level teams sanctioned by USA Rugby and its affiliated unions.

PE 074 Lacrosse No Credit [GEPE] (PE)

This course exposes students to the basic skills, strategies, and fundamentals of competitive lacrosse. Students have the opportunity to compete against collegiate teams in the Central Plains Women's Lacrosse League of the Women's Division Intercollegiate Associates of US Lacrosse.

PE 085 Hiking/Backpacking No Credit [GEPE] (PE)

Designed to develop the skills and knowledge necessary to fully and safely enjoy hiking and/or backpacking. Offered periodically in association with off-campus programs.

PE 090 Trailrunning No Credit [GEPE] (PE)

An introduction to running outside over various terrains and under various conditions.

Physical Education: Varsity Sports

PVAR 083 Varsity Cross Country No Credit [GEPE] (PE)

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership and spirituality.

PVAR 085 Varsity Volleyball No Credit [GEPE] (PE)

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership and spirituality.

PVAR 086 Varsity Track and Field Indoor No Credit [GEPE] (PE)

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership and spirituality.

PVAR 087 Varsity Soccer No Credit [GEPE] (PE)

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership and spirituality.

PVAR 089 Varsity Basketball No Credit [GEPE] (PE)

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership and spirituality.

PVAR 090 Varsity Swimming No Credit [GEPE] (PE)

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership and spirituality.

PVAR 091 Varsity Diving No Credit [GEPE] (PE)

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership and spirituality.

PVAR 093 Varsity Tennis No Credit [GEPE] (PE)

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership and spirituality.

PVAR 094 Varsity Track & Field Outdoor No Credit [GEPE] (PE)

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership and spirituality.

PVAR 095 Varsity Baseball No Credit [GEPE] (PE)

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership and spirituality.

PVAR 096 Varsity Softball No Credit [GEPE] (PE)

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership and spirituality.

Physics

PHYS 121 Life in the Universe 4.0 SH [GESL] (PHYS)

Survey course covering the basics of astrobiology. Topics include the conditions necessary to support life, terrestrial life in extreme environments, the possibilities for life in our solar system, planetary habitability, and the Drake Equation and Fermi Paradox. Includes a lab component. Math at the level of high school algebra may be expected, but is not a primary focus of the course.

PHYS 151 Descriptive Astronomy 4.0 SH [GESL] (PHYS)

Application of elementary scientific principles to the study of the universe. Includes laboratories and evening observation sessions using departmental telescopes. Math at the level of high school algebra and geometry may be expected.

PHYS 161 Physics of Musical Sound 4.0 SH [GESL] (PHYS)

Principles and applications of sound for all students, musically inclined or not. Sources of sound, sound wave types and propagations, and aural perceptions of sound. Extensive examples of musical instruments and how they exhibit basic concepts of acoustics. Math at the level of high school algebra and geometry may be expected. Class includes one two-hour lab per week.

PHYS 177 Environmental Physics 3.0 SH [GESN] (MNS)

Physics governing the interaction between humanity and the environment; focuses on energy. Covers the basic physics of energy, methods of energy generation and use, and the relationship between environmental energy flows and climate. May include mathematics up to the level of high school algebra.

PHYS 201 Phys for Scientists/Engrs I 4.0 SH [GESL] (PHYS)

Introductory physics with calculus. Covers the major themes of physics, including mechanics, conservation laws, electricity, magnetism, waves, light, sound, relativity, early quantum theory, and thermodynamics. Laboratories approximately weekly. Emphasis on mechanics. Continues as PHYS 202, PHYS 203, and PHYS 204. Prerequisite: Completion of or concurrent enrollment in MATH 181. CHEM 131 recommended.

PHYS 202 Phys for Scientists/Engrs II 4.0 SH [] (PHYS)

Second term of introductory physics with calculus and laboratory. Emphasis on electricity and magnetism. Prerequisites: PHYS 201 and MATH 182.

PHYS 203 Phys for Scientists/Engrs III 4.0 SH [] (PHYS)

Third term of introductory physics with calculus and laboratory. Emphasis on electromagnetism and modern physics. Prerequisite: PHYS 202.

PHYS 204 Phys for Scientists/Engrs IV 1.0 SH [] ()

Fourth term in the introductory physics sequence with calculus; may be taken concurrently with PHYS 202, or at the end of the sequence. Emphasis on thermodynamics. Prerequisite: PHYS 201.

PHYS 231 Introduction to Cosmology 3.0 SH [GESN] (MNS)

The course focuses on the study of the universe as a whole. Topics include general relativity, the expansion of space, the distribution of galaxies, black holes, and the origin and fate of the universe. The emphasis is on conceptual understanding; however, math at the level of high school algebra and trigonometry is utilized.

PHYS 283 Advanced Laboratory 4.0 SH [] (PHYS)

Laboratory requirement for physics majors. Experiments in acoustics, optics, electrical measurement, spectroscopy, nuclear physics, and gravitation. Emphasis on techniques of measurement. Prerequisite: PHYS 203.

PHYS 301 Classical Mechanics 3.0 SH [] (MNS)

Advanced course in analytic mechanics, including analysis of systems of forces, acceleration, momentum, and energy. Emphasis on dynamics, including space and orbital mechanics. Full use is made of differential equations and vector analysis wherever appropriate. Prerequisite: PHYS 203 and MATH 283; MATH 380 strongly recommended. Offered in alternate years.

PHYS 303 Electricity & Magnetism I 3.0 SH [] (MNS)

Advanced course in electricity and magnetism, including electro-statics, magnetic induction, magnetostatics, and electromagnetic waves. Basic laws of Gauss, Ampere, Faraday, and Maxwell in their differential form. Vector analysis and differential equations are used throughout. Emphasis on solving boundary value problems, such as those appropriate to fields at interfaces between two media. Prerequisite: PHYS 203 and MATH 283; MATH 355 and MATH 380 strongly recommended. Offered in even years.

PHYS 304 Electricity & Magnetism II 3.0 SH [] (MNS)
Continuation of PHYS 303. Applications in astrophysics and ham radio will be included. Offered in even years. Prerequisite: PHYS 303.

PHYS 305 Quantum Mechanics I 3.0 SH [] (MNS)
A first year course in quantum mechanics. Topics may include wave functions, barrier potentials, harmonic oscillator, quantized angular momentum, hydrogen atom, perturbation theory, atoms and identical particles. Applications chosen from astrophysics, statistical mechanics, solid state physics, atomic physics, molecular physics, particle physics and nuclear physics. Prerequisites: PHYS 203 and MATH 182.

PHYS 306 Quantum Mechanics II 3.0 SH [] (MNS)
Continuation of PHYS 305. Prerequisite: PHYS 305.

PHYS 307 Statistical Mechanics 3.0 SH [] (PHYS)
A study of the application of classical and quantum mechanics to many-bodied systems. Explores the relationship between statistical mechanics and modern thermodynamics, fluid mechanics, solid state physics, and plasma physics. This course will develop the basic equations and concepts of statistical mechanics. Both classical and quantum distribution functions will be used to calculate the macroscopic properties of a system based on the detailed behavior of the microsystem. Prerequisites: MATH 283, PHYS 203, PHYS 204.

PHYS 351 Astrophysics 3.0 SH [] ()
Advanced course applying the laws of physics to astronomical phenomena. Star formation and evolution, formation of planetary systems, large-scale evolution, and eventual fate of the universe will be covered. Prerequisites: MATH 283, PHYS 203.

PHYS 352 Computational Physics 3.0 SH [] (MNS)
Application of computer modeling to complex physical systems. Subjects include numerical integration, the Monte Carlo method, genetic and simulated annealing algorithms, chaotic systems, fluid flow, and gravitational scattering. Of special interest to computer science students. Prerequisites: CSCI 171, MATH 283, PHYS 203.

PHYS 401 Research 1.0 - 6.0 SH [] ()
Experimental or theoretical research under faculty supervision. May receive a star (*) grade, with final grade being assigned upon completion of the project. May be offered for variable credit from one to six semester hours. May be repeated multiple times, but only six semester hours may be used to fulfill major or minor requirements.

Political Science

POLS 020 Model Illinois Government No Credit [] ()
Model Illinois Government is the annual intercollegiate simulation of the Illinois General Assembly, held each winter in the State Capitol. Students serve as the various elected officers of the executive and legislative branches of the state government.

POLS 021 Moot Court (Model IL Govt) No Credit [] ()
Teams of students prepare and argue appellate cases before mock state or U.S. Supreme Courts in the annual collegiate judicial simulations at state or national levels.

POLS 052 Model United Nations No Credit [] ()
Students simulate the actions of the various bodies of the United Nations - the General Assembly, the Security Council, the Economic and Social Council - in annual intercollegiate competition.

POLS 111 Intro to Political Behavior 3.0 SH [GESS] ()
Course considers how U.S. citizens form values, beliefs, and preferences toward politics and public policies. Sources of knowledge explored include family, the media, and political elites. The impact of participatory and deliberative processes that may contribute to or detract from tolerance of others is also examined. Specific attention is devoted to political ramifications of attitudes concerning race, ethnicity, and gender.

POLS 120 American Government & Politics 3.0 SH [GESS] (SSCI)

Study of the American political system and formation of public policy, primarily at the national level: political culture, constitutions and constitutionalism, democratic theory, federalism, public opinion, interest groups, political parties, the electoral system, Congress, the presidency, and the judicial system.

POLS 125 Moot Court: Reason & Argument 2.0 SH [] ()

Students prepare legal briefs and argue appellate cases before mock Illinois or U.S. Supreme Court in the intercollegiate judicial simulations at state or national levels. Students learn legal reasoning and analysis, learn to think under intense pressure, and develop oral argumentation skills. May be taken up to three times for a total of 6.0 SH. Prerequisite: POLS 120.

POLS 152 Politics Among Nations 3.0 SH [GESS] (SSCI)

Introduction to international politics, with emphasis on what causes conflict between nations, why nations cooperate, and how contemporary forces influence international politics.

POLS 215 Soc Science Research Methods 4.0 SH [GESS] (SSCI)

Explores qualitative and quantitative research methods used in the social sciences. Students conduct social science research projects to learn various research designs, their strengths and weaknesses, and their applications. Students collect, analyze, and interpret data, as well as test hypotheses and develop theories. Also listed as EDUC 215 and SOAN 215.

POLS 220 American Parties & Elections 4.0 SH [GESS] (SSCI)

Theoretical study of political parties, elections, and public opinion, supplemented with case studies, guest speakers, and field research. Students attend political rallies and conduct surveys. Taught in election years. (A student may receive credit for only one of the courses POLS 220 and POLS 221.)

POLS 225 Dynamics of U.S. Federalism 3.0 SH [GESS] (SSCI)

The study of the dynamics of intergovernmental relations among the national, state, and local governments, as practiced within the constitutional structure of federalism in the United States.

POLS 231 American Congress 3.0 SH [GESS] (SSCI)

Study of the representational nature, institutional structures, and deliberative processes of the United States Congress. Topics addressed include member goals and political resources, party organizations, the committee structures, legislative rules and procedures, and interbranch relations.

POLS 232 American Presidency 3.0 SH [GESS] (SSCI)

Study of the constitutional and prerogative powers, institutional arrangements, public dimensions, and policy-making roles of the modern presidency. The institution's relationships with the legislative and judicial branches as well as the federal bureaucracy are considered along with the impact individual presidents make on the exercise of power and authority.

POLS 240 Women in Politics 3.0 SH [GESS] (SSCI)

Examination of the experience of women in U.S. politics, particularly at the federal and state level. Considers the impact of gender on political participation, political attitudes, policy preferences, voting behavior, campaign styles, and institutional norms.

POLS 252 U.S. Foreign Policy 3.0 SH [GESS] (SSCI)

Values, process, and governmental institutions involved in the formulation of American foreign policy. In-depth analysis of American foreign policy since 1945 dealing with Cold War and post-Cold War challenges, the developing nations, and international organizations including the United Nations.

POLS 254 Latin American Politics 3.0 SH [] (SSCI)

Study of the historical, economic, and social forces influencing the politics of Latin America as a whole with special focus on the most politically significant countries.

POLS 255 Contemporary European Politics 3.0 SH [GESS] (SSCI)
Comparative survey of the political process and issues in Britain, France, and Germany: organization of political interests, decision-making processes, governmental bureaucracies, and political responses to social and economic change.

POLS 261 Politics of China 3.0 SH [GESS] (SSCI)
Study of the cultural, historical, and ideological origins of the People's Republic of China, the role of the Chinese Communist Party and its leaders, the structure and processes of its political institutions, and the nature of issues facing contemporary China, from rapid economic growth to human rights.

POLS 263 Topics in Asian Politics 3.0 SH [] (SSCI)
Focuses on government, politics, and public policies of one or more countries in Asia. Designed to deepen the student's work in political science, international relations, or Asian studies. Specific topics vary, from Southwest Asia to the Vietnam War to the politics of Japan. The title will be extended to describe the current topic. May be taken more than once provided the topics differ.

POLS 264 Russia and the FSU 3.0 SH [GESS] (SSCI)
Study of the cultural and historical origins of post-Soviet Russia and the various former Soviet republics, the person and rule of Vladimir Putin, the structure and processes of Russia's political institutions, and the nature of issues facing contemporary Russia, from reassertion of a global presence to the decline of democratic institutions.

POLS 265 Contemporary Issues 3.0 SH [] (SSCI)
Focuses on one or more current political issues. Designed to deepen the student's previous political studies. May focus on either domestic or international topics. The title will be extended to describe the current topic. May be taken more than once provided the topics differ.

POLS 280 Classics of Political Thought 3.0 SH [] (SSCI)
Exploration of the most important writings of authors who have had a profound impact on the West's conception of politics. The emphasis is on original texts by authors such as Plato, Aristotle, Hobbes, Rousseau, Machiavelli, and Marx. Also listed as PHIL 280.

POLS 300 Rev:Politics of Violent Change 3.0 SH [GESS] (SSCI)
Study of violent political change: its causes, frequency, varieties, process. Various revolutions and their leaders considered at length, including the classic revolutions (English, American, French, Bolshevik), Mao Zedong's Chinese Revolution, Che Guevara in Latin America, and Eastern Europe in the post-cold war era.

POLS 311 Political Behavior 3.0 SH [] ()
Seminar examines the nature of both political socialization and political participation of United States citizens. Influences on socialization studied include family, education, socioeconomic status, political elites and the media. Forms of participation include voting and membership in both interest groups and voluntary civic organizations. Prerequisite: POLS 120.

POLS 325 The Legal Process 4.0 SH [] (SSCI)
How the nature of law, including its history, development, and efficient administration, affects our political system. Modern American legal system is studied with the idea of understanding law as ongoing process - how the process works and its political ramifications. Useful for students considering law school.

POLS 330 American Constitutional Law 3.0 SH [] (SSCI)
Study of the politics and law of the U.S. Supreme Court. Selected Supreme Court cases are analyzed to show how court decisions shape the American constitutional system of government. Useful for students considering law school.

POLS 332 Presidential Leadership 3.0 SH [] ()

Seminar examines personal, public, constitutional, and institutional sources of power modern presidents utilize in their attempts to lead their various constituencies - the public, the legislative branch, and the federal bureaucracy. In addition to the critical analysis of various models of modern presidential leadership, students also conduct case studies of presidential leadership during the modern presidency (1945-present). Prerequisite: POLS 120.

POLS 340 Public Policy Analysis 4.0 SH [] (SSCI)

Survey of the policy process (agenda setting, adoption, implementation, and evaluation) and conceptual approaches to policy analysis. Seminar addresses specific policy topics and broader theoretical concerns. Prerequisites: POLS 120 and POLS 215.

POLS 348 U.S. and Global Security 3.0 SH [GESS] (SSCI)

Explores traditional and non-traditional threats in a globalized world and the options for response; how the concept of security is evolving to take into account global technological, social, and political developments; the role of the military in U.S. political culture.

POLS 352 International Relations Theory 3.0 SH [] (SSCI)

Advanced study of the means and methods of theory construction in the field of international relations. Prerequisite: POLS 152. Open only to political science majors.

POLS 354 Globalization: Theory/Practice 3.0 SH [] (SSCI)

Explores globalization and its many facets from both practical and theoretical viewpoints, including the processes and institutions that cause and advance globalization; evaluating the utility of current theories to explain globalization; debating the effects of globalization.

POLS 365 Advanced Issues 3.0 SH [] (SSCI)

Advanced study and analysis of one or more current political issues. Designed to deepen the advanced student's previous political studies. May focus on domestic or international topics. The title will be extended to describe the current topic. May be taken more than once provided the topics differ.

Religion

REL 101 Introduction to the Bible 3.0 SH [GEB] (BIBL)

An overview of the literature, history, and theology of the Bible, with special focus on the varieties of literature in the Bible, their relationship with one another, and their particular historical contexts. (A student who receives credit for either REL 110 or REL 120 may not receive credit for REL 101 and vice versa.)

REL 110 The Old Testament 3.0 SH [GEB] (BIBL)

Introduction to the Hebrew Scriptures as history, as literature, and as a statement of faith. God's covenant with Israel forms a unifying motif, seen against the background of the ancient Near East. A brief overview of the New Testament is also included. (A student may receive credit for only one of the courses REL 101 or REL 110.)

REL 120 The New Testament 3.0 SH [GEB] (BIBL)

An introductory overview of the thought-world, times, texts, and teachings of the New Testament, with special focus on its enduring relevance and impact, the identity of Jesus, and what it means to be his follower. A brief overview of the Old Testament is also included. (A student may receive credit for only one of the courses REL 101 or REL 120.)

REL 200 Women in the Bible 3.0 SH [GEH] (BIBL)

This course identifies women in the biblical and apocryphal narratives, the socio-historical and cultural factors that affect their presentation, and the various approaches that feminists take in applying exegetical and interpretive techniques to identify bias, engage in critical and faithful reflection, and create awareness of how this literature impacts modern understandings of women and women's roles. Prerequisite: REL 101, REL 110, REL 120, or one course with a BIBL attribute completed before Fall 2011.

- REL 215 The Hebrew Prophets** 3.0 SH [GEH] (BIBL)
 Prophecy as a quest for leadership and as insight into social and moral conditions in Israel before, during, and after the exile. Prerequisite: REL 101, REL 110, REL 120, or one course with a BIBL attribute completed before Fall 2011.
- REL 218 Wisdom Literature and Psalms** 3.0 SH [GEH] (BIBL)
 Close reading of Psalms, Proverbs, Job, and Ecclesiastes, with reference to wisdom traditions of the ancient Near East. Prerequisite: REL 101, REL 110, REL 120, or one course with a BIBL attribute completed before Fall 2011.
- REL 222 The Bible and the Environment** 3.0 SH [GEH] (RPHL)
 This course critically examines and interprets relevant biblical texts within the context of the current ecological crisis with the intent of articulating a biblical case that responds to the challenge to live faithfully and responsibly as stewards of the Earth and its resources. Prerequisite: REL 101, REL 110, REL 120, or one course with a BIBL attribute completed before Fall 2011.
- REL 224 Christian Gospels** 3.0 SH [GEH] (BIBL)
 An examination of the origins and development of Christian gospels in and outside the New Testament canon, as historical, literary, and theological products of the early Church, and of their contemporary interpretations. Prerequisite: REL 101, REL 110, REL 120, or one course with a BIBL attribute completed before Fall 2011.
- REL 225 The Bible & Comparative Ethics** 3.0 SH [GEH] (BIBL)
 A survey of systems of biblical ethics and their basis in the Hebrew and Christian scriptures serves as the basis for comparative study of other religious and secular systems of ethics, and the interaction between ethical teachings of world religions. Prerequisite: REL 101, REL 110, REL 120, or one course with a BIBL attribute completed before Fall 2011.
- REL 227 Paul the Apostle** 3.0 SH [GEH] (BIBL)
 An exploration of the life, letters, thought and impact of the prolific and controversial apostle. The book of Acts, Paul's letters and those attributed to him, are examined in order to better understand both the man and the message. Prerequisite: REL 101, REL 110, REL 120, or one course with a BIBL attribute completed before Fall 2011.
- REL 230 Faith and Film** 3.0 SH [GEH] (RPHL)
 Students will develop evaluative and critical skills for use in their encounter with the medium of film. These skills will be applied both to films with explicitly religious and spiritual themes, as well as to films in which such themes are more hidden and implicit. Theories of film criticism and biblical scholarship and sensitivity will be employed as students view, discuss, review, and research a variety of popular films. Prerequisite: REL 101, REL 110, REL 120, or one course with a BIBL attribute completed before Fall 2011.
- REL 231 History of Christianity** 3.0 SH [GEH] (RPHL)
 An exploration of the Christian churches from their beginnings in the apostolic period to their most recent expressions in the twenty-first century. The course considers how Christianity has shaped societies and how societies have shaped Christianity. Major movements, leading figures, theological developments, and religious trends will be examined to better understand the global spectrum of Christian expressions. Prerequisite: REL 101, REL 110, REL 120, or one course with a BIBL attribute completed before Fall 2011.
- REL 260 Religion in America** 3.0 SH [GEH] (RPHL)
 An historical survey of religious groups and movements that shaped and were shaped by the American experience.
- REL 261 Living Religions of the East** 3.0 SH [GEH] (RPHL)
 Introduction to religions of the non-western world, including Islam, Buddhism, Hinduism and Tao.
- REL 300 Biblical Interpretation** 3.0 SH [] (BIBL)
 An analysis and practicum of the methods scholars and others have used to interpret biblical literature, from antiquity to the present. Prerequisite: REL 101, REL 110, REL 120, or one course with a BIBL attribute completed before Fall 2011.

REL 304 Topics in Biblical Studies 1.0 - 3.0 SH [] (BIBL)

A seminar on a topic in biblical studies at the advanced level. The content varies, and the title will be extended to describe the current topic. May be offered for variable credit from one to three semester hours. May be repeated up to a total of nine semester hours provided the topics differ. Prerequisite: REL 101, REL 110, REL 120, or one course with a BIBL attribute completed before Fall 2011.

REL 310 Topics in Religious Studies 1.0 - 3.0 SH [] (RPHL)

A seminar on a topic in religious studies at the advanced level. The content varies, and the title will be extended to describe the current topic. Topic areas include comparative religions, history of religions, philosophy and ethics of religions, and religion in society. May be offered for variable credit from one to three semester hours. May be repeated up to a total of nine semester hours provided the topics differ. Prerequisite: at least one REL course.

REL 332 The Life of Mary Baker Eddy 3.0 SH [] (RPHL)

An historical survey of the life and times of Mary Baker Eddy, from her childhood through her work as Discoverer, Founder, and Leader of Christian Science. Prerequisite: completion of one course in religion, history, or philosophy.

REL 401 Capstone Project 1.0 - 3.0 SH [] ()

A selected topic, area, or problem providing opportunity for survey, investigation, research, creative activity, or approved travel-study. May be offered for variable credit from one to three semester hours. May be taken three times up to a total of six semester hours. Offered on an independent contract basis.

Russian**RUSS 104 Elementary Russian I 5.0 SH [] ()**

In this first semester of the two-semester elementary sequence students learn from video, CD exercises, and classroom activity, how to listen and speak, read and write, and understand Russian sentences in the present tense. This course includes an introduction to Russian culture through video and texts.

RUSS 105 Elementary Russian II 5.0 SH [GE2L] (FLAN)

In this second course of the two-semester elementary language sequence, students fulfill the general education second language requirement. Students understand and speak, read, and write sentences and paragraphs in the present, future, and past tenses in order to function in everyday situations in Russian-speaking countries. This course includes an introduction to Russian culture through video and texts. Prerequisite: RUSS 104.

Science**SCI 360 Current Science Literature 1.0 SH [] ()**

Introduction to the current scientific literature in field(s) of students' choice. Initial readings are selected by faculty. Students present findings orally. Readings are selected from peer-reviewed scientific journals, e.g. Physical Review, Journal of Geophysical Research, etc. May be taken four times up to a total of four semester hours.

Sociology and Anthropology**SOAN 050 Community Service Program No Credit [] ()**

In local, national, and international communities, with agencies, and institutions, students work together with others committed to meeting social needs. Students are encouraged to learn from those they serve, broaden their knowledge of diversity, develop social responsibility and realize their obligation to serve our global community.

SOAN 100 Intro to Global Sociology 3.0 SH [GESS] (SSCI)

An introduction to the basics of sociology as a way of understanding the world. This course is designed to provide a general introduction to the discipline of sociology. Although a domestic (US) sociological perspective is examined, a global sociological perspective is at the core of the course. Students will be introduced to the field by focusing on key sociological topics, including but not limited to social theory, the social construction of knowledge, socialization, social stratification, "race" and ethnicity, gender, culture, geography, religion, global social movements, globalization, global stratification, post-colonialism, and global ecology.

SOAN 110 Intro to the SOAN Major 1.0 SH [] ()

Required of all majors. Introduces students to the complementary yet distinct disciplines of Sociology and Anthropology. Explores the early theorists of each field and their connections to key concepts, terms of art, and research methodologies in each field. SOAN departmental outcomes and expectations will also be examined.

SOAN 130 Introduction to Archaeology 3.0 SH [GESS] (SSCI)

A survey course which explores theory, methods, and techniques for investigating, reconstructing, interpreting, preserving, and learning about human behavior in the past. It reviews human cultural chronology from the earliest Paleolithic ages, to the present, and examines the artifact remains. Throughout the course archaeology as anthropology and the relevance of archaeology to modern society and politics is emphasized.

SOAN 150 Intro to Cultural Anthropology 3.0 SH [GESS] (SSCI)

Introduction to the field of cultural anthropology. Explores various cultures around the world using some or all of the following as a basis of comparison: gender roles, language, social structure, family and kinship, identity, and spirituality. Also examines how cultures have been impacted by globalization.

SOAN 160 "Race" and Ethnicity 3.0 SH [GESS] (SSCI)

Examines the Native, African, Latino/Latina, Asian, and European American experience. Provides a critical and comparative analysis of the racial ideology and social construction of "race," its origins and present day consequences. Ethnicity, ethnic conflict, genocide, and conflict solutions are examined as well.

SOAN 170 Gender Paradigms 3.0 SH [GESS] (SSCI)

Examines underlying assumptions about male and female roles throughout history, then focuses on contemporary issues. Addresses the questions of why status differences exist between the sexes, how people are socialized into stereotyped sex roles, and how individuals can move beyond limitations imposed by prescribed sex roles. Also listed as WOM 170.

SOAN 180 Social Stratification 3.0 SH [GESS] (SSCI)

Explores some of the fundamental concepts and major theoretical issues involving social class and power at a global level. Topics include socio-economic inequality, class consciousness, power and privilege, social mobility, and the place of race and gender.

SOAN 200 Criminology and Criminal Law 3.0 SH [GESS] (SSCI)

Explores criminological theories, the criminal judicial system, and the consequences of crime in the United States and around the world. Typologies and case studies of crimes include, but are not limited to contemporary, historical, celebrity, corporate, crimes against humanity and "terrorism."

SOAN 215 Soc Science Research Methods 4.0 SH [GESS] (SSCI)

Explores qualitative and quantitative research methods used in the social sciences. Students conduct social research projects to learn various research designs, their strengths and weaknesses, and their applications. Students collect, analyze, and interpret data, as well as test hypotheses and develop theories. Also listed as EDUC 215 and POLS 215.

SOAN 220 Contemporary French Society 3.0 SH [GESS] (SSCI)

An analysis of contemporary French society focusing on social class/power, gender, immigration/ethnicity, plus the religion and educational systems. Students who complete all assignments in French will receive credit towards a French major. May be offered on campus as well as on Principia abroad.

SOAN 235 Environmental & Social Change 3.0 SH [GESS] (SSCI)

Examines the interface between social and environmental problems plus strategies to resolve such problems. Analyzes the impact of industrialization and globalization on humanity and ecosystems in traditional and more industrialized societies. Evaluates the feasibility of ecologically, economically, and socially sustainable rural and urban human settlement patterns.

SOAN 240 Native American Cultures 3.0 SH [GESS] (SSCI)

Develops an appreciation for Native North American cultures from a sociological and historical perspective. Examines common issues facing many Native Americans as they work to maintain their cultural practices and ways of knowing in the midst of a dominant Euro-American society. Explores contemporary political, socio-economic, and resource management issues related to ecological, economic, and social sustainability.

SOAN 244 Int'l Human Rights Law & Advcy 3.0 SH [GESS] (SSCI)

This course examines the global mechanisms, forces, and laws for promoting and protecting human rights; rights implementation via issues of evidence, ethics, and socio-political feasibility; legal concepts that apply to torture, political repression, war crimes and genocide, women's rights, children's rights, and violations of non-human rights; advocacy on behalf of those oppressed by violations of human and non-human rights law.

SOAN 245 Studies in Culture 1.0 - 3.0 SH [] (SSCI)

Analysis of selected cultures. The contents will vary, and the title will be extended to describe the current topic. May be offered for variable credit from one to three semester hours. May be taken more than once provided the topics differ.

SOAN 250 African American Cultural Hist 3.0 SH [GESS] (SSCI)

An historical and cultural exploration of the African American experience from African antiquity to the present.

SOAN 251 Anthropology of India 3.0 SH [GESS] (SSCI)

A survey of contemporary India that examines the society through an anthropological lens. Explores the lived experiences of socio-economic class, caste, gender roles, marriage, family life, religion, politics, and globalization in the context of both rural and urban India. Uses India as a starting point from which to discuss questions pertaining to understanding cultural difference.

SOAN 265 The Sociology of Sustenance 3.0 SH [GESS] (SSCI)

In this comprehensive overview the course will demonstrate why the subject of cibus (food for humans and non-humans) has emerged as a significant area of sociological/anthropological research and become essential to the study of sustainability. Drawing on interdisciplinary sources, explores the consequences raised by the relation of food and food consumption to inequality, diet, and food as a cultural symbol.

SOAN 270 Indigenous Cultures 3.0 SH [GESS] (SSCI)

Explores practices of indigenous peoples around the world and uses the lens of globalization to examine present day issues. Examines the process of "modernization" and its effects on the role of the state and cultural preservation. Explores the role of indigenous peoples' values and knowledge related to resource management and environmental sustainability as well as cultural preservation.

SOAN 280 Global Urban Studies 3.0 SH [] ()

This course examines urban areas (cities) in a global context and is divided into four parts: global cities defined, living in cities, the health of cities, and the future of cities. Primary emphasis will be placed on analysis of "slums" and "ghettos" as well as the sustainable cities global movement.

SOAN 290 African Cultures 3.0 SH [GESS] (SSCI)

A cultural view of Africa which studies the impact of colonialism and imperialism on contemporary African societies. In addition, the cultural influences of African liberation movements on the values and behavior of selected traditional peoples are analyzed.

SOAN 300 Social Theory 3.0 SH [] (SSCI)

Comparative historical study of ideas of individuals who have contributed significantly to the development of social and cultural thought globally. Includes classical and contemporary theorists. Also focuses on explanatory value of race, ethnicity, gender, social class, and culture theories.

SOAN 323 Refugees: Culture and Conflict 3.0 SH [GESS] (SSCI)

This course looks at refugee groups around the world along with governmental and non-governmental organizations that service refugees. Explores the kinds of conflicts leading ethnic groups to become refugees; the options for resettlement for refugee groups; the issues related to resettlement; as well as how refugee groups adapt culturally to their new surroundings during the resettlement process; how "race," class, and gender impact both how refugees experience conflict and their integration into new communities. This course is intended to be a service learning course in that students are encouraged to enroll in the SOAN 050 community service at the International Institute.

SOAN 325 Youth Advocacy Services 3.0 SH [] ()

Covers a wide range of youth and family issues in the USA and abroad, including child abuse and neglect, adoption and foster care, special needs children, families and children, and child welfare practices. Private and government efforts to respond to these issues are explored and evaluated.

SOAN 330 Social Field Work Methods 4.0 SH [] ()

Designed for students considering human service, social work, or alternative education as a profession. Students learn about the social work profession and various social service systems. Students learn how to identify problems necessitating social work services and then devote time to skill development in interviewing, counseling, observing, and case work. Prerequisite: Two of the following: SOAN 160, SOAN/WOM 170, SOAN 180.

SOAN 335 Gender & Masculinity 3.0 SH [] ()

This course examines the social construct of masculinity. What does it mean to be a male in contemporary American society? How does this compare with notions of manhood in other cultures and in other time periods? Readings include representative selections of the diverse literature on men and theories of masculinity. Prerequisite: SOAN/WOM 170. Also listed as WOM 335.

SOAN 340 Peace and Conflict 3.0 SH [GESS] (SSCI)

Study of non-violent methods used by organizations, cultures, and societies to resolve conflicts. Reasons for success/failure of such methods. Covers disarmament, justice, and universal human rights. Includes theoretical approaches and perspectives and the impact of laws on society.

SOAN 345 Advanced Studies in Culture 1.0 - 3.0 SH [] (SSCI)

Advanced analysis of cultures. The contents vary, and the title will be extended to describe the current topic. May be offered for variable credit from one to three semester hours. May be taken more than once provided the topics differ.

SOAN 360 Gender Theories 3.0 SH [] (SSCI)

Attempts to answer the questions of how and why gender oppression and discrimination occur. Covers a variety of theoretical perspectives and focuses on solutions for ending aggression and oppression. Prerequisite: SOAN/WOM 170. Also listed as WOM 360.

SOAN 365 Global Perspectives of Women 3.0 SH [GESS] ()

An in-depth study of the critical areas of concern for women's empowerment around the world. The course includes theoretical critiques of women's movements and methodologies. Also listed as WOM 365.

SOAN 375 Globalization and Culture 3.0 SH [] (SSCI)

Uses both theories and case examples to explore the concept of globalization through the lens of cultural anthropology. Analyzes the global flows of money, people, commodities, media, and ideas while considering how class, gender, and ethnicity affect the way globalization is experienced around the world.

SOAN 385 Ethnographic Research 4.0 - 6.0 SH [] (SSCI)

Qualitative research that includes participant observation and structured and unstructured interviews. Students will conduct independent field research of a student-selected, faculty-approved topic. They will then analyze the data they collect with the purpose of developing theories and writing an ethnography, a detailed description of a culture. May be offered for variable credit from four to six semester hours.

SOAN 390 Independent Study 1.0 - 12.0 SH [] ()

Individual study under faculty supervision in any aspect of sociology or anthropology. Allows exploration of topics not considered in regular courses, or advanced work in areas like human services, criminology, archaeology, community organization, race, ethnicity, social class, gender roles, or family studies. May be taken for variable credit from one to twelve semester hours. May be taken more than once if topics differ.

SOAN 395 Internship 3.0 - 12.0 SH [] (SSCI)

Field experience in social service agency, organization, or institution. Application of interpersonal and organizational skills, plus knowledge gleaned from courses. Includes field sponsor supervision, periodic self-assessments, final paper, and weekly faculty contact. May be taken more than once if topics differ. Any internship may extend beyond one semester if the total semester hours in that internship does not exceed 12 semester hours. If an internship is extended beyond one semester, the extension may be as few as two semester hours. Offered on an independent contract basis. Prerequisite: SPST 301.

SOAN 399 Capstone Proposal 2.0 SH [] ()

Prepares students for their capstones. Students research possible topics, write a formal proposal for their capstones, and defend this proposal orally to the SOAN department for feedback. Usually taken the semester preceding the capstone but can be taken concurrently. Prerequisite: SOAN 300.

SOAN 400 Senior Capstone Seminar 3.0 - 6.0 SH [] (SSCI)

Research projects which include the application of theory and library research to contemporary social issues. May be offered for variable credit from three to six semester hours. Prerequisite: SOAN 399.

Spanish

SPAN 100 Introduction to Spanish 1.0 SH [] ()

An introduction to Spanish and some of the skills required for learning a second language. Recommended for students with no previous study of Spanish and with no strong background in another language. May be taken three times. Prerequisite: placement and recommendation.

SPAN 104 Elementary Spanish I 3.0 SH [] ()

In this first semester of a two-semester elementary course, students become effective language learners as they develop basic communication skills in Spanish: reading, writing, listening, and speaking using the present tense. They are also introduced to the cultures of the Hispanic world.

SPAN 105 Elementary Spanish II 5.0 SH [GE2L] (FLAN)

Continuation from SPAN 104. Fulfills the all-college language requirement. The course focuses on developing sufficient oral communication skills for students to survive in daily life interactions with Spanish speakers and to expand simple communications to include speaking in the past and simple future. (A student may receive credit for only one of the courses SPAN 105 or SPAN 110.) Prerequisite: SPAN 104 or placement.

SPAN 110 Elementary Review 3.0 SH [GE2L] (FLAN)

Review of first year Spanish, with emphasis on basic grammatical structure and on development of ability to speak Spanish. Fulfills the general education second language requirement for students entering Principia with insufficient preparation for exemption from further language study. (A student may receive credit for only one of the courses SPAN 105 or SPAN 110.) Prerequisite: SPAN 104 or placement.

SPAN 136 Language Wkshp Abroad: Elem 3.0 - 6.0 SH [GE2L] (FLAN)
Elementary language study with native speakers at an academic institution in a Spanish-speaking country, in combination with on-campus study in the case of shorter stays abroad. May be offered for variable credit from three to six semester hours. Offered only on Principia abroads. Prerequisite: SPAN 104 or placement into SPAN 110.

SPAN 204 Grammar and Conversation 3.0 SH [] ()
Conversation, vocabulary and idiom building, grammar review. Prerequisite: SPAN 105, SPAN 110, or placement.

SPAN 205 Intermediate Review 3.0 SH [] ()
Continuing oral review and practice of the basic structures of Spanish. Develops pronunciation, listening comprehension, speaking, reading, and writing. Prerequisite: SPAN 204 or placement.

SPAN 210 Practical Spanish 3.0 SH [] ()
After the first-year language requirement, students have the opportunity through this course to develop their Spanish in a practical way. This includes working on understanding and using Internet sites for reading skills, the use of film and television broadcasts for listening-comprehension and cultural learning, and a major project looking at Hispanic culture in a special area of personal interest. Prerequisite: SPAN 105, SPAN 110, or placement.

SPAN 216 Oral Expression & Conversation 3.0 SH [] ()
Emphasis on a variety of activities developing oral expression, as well as listening comprehension. Prerequisite: SPAN 205 or placement.

SPAN 220 Hispanic Civilization 3.0 - 5.0 SH [] ()
This course, typically taught on a Principia abroad program to a Spanish-speaking area, requires study and work in Spanish to understand the historical and contemporary civilization of the area. The title will be extended to describe the current area being studied. May be taken more than once provided the area culture studied is different.

SPAN 230 Hispanic Culture 3.0 SH [] ()
Backgrounds of Spanish and Spanish-American culture. Special focus on contemporary Spanish-speaking cultures, including Hispanic culture in the United States. Taught in Spanish, with readings in Spanish and English. The title will be extended to describe the current culture studied. May be taken more than once provided the cultures studied differ. Prerequisites: SPAN 204 and SPAN 205.

SPAN 236 Lang Wkshp Abroad:Intermediate 3.0 - 6.0 SH [] ()
Intermediate language study with native speakers at an academic institution in a Spanish-speaking country, in combination with on-campus study in the case of shorter stays abroad. May be offered for variable credit from three to six semester hours, including credit by examination. Prerequisite: SPAN 102, SPAN 110, or placement.

SPAN 240 Composition 3.0 SH [] ()
Writing in Spanish is the main activity of this course. Students will be supported in their writing activity with relevant grammatical explanations as evidenced by the needs shown in their writing. Some specific readings in Spanish will be used to generate ideas for creative writing. Prerequisite: SPAN 205 or placement.

SPAN 241 Phonetics & Diction 1.0 - 3.0 SH [] ()
Theory and practice of pronunciation of the Spanish of modern Spain and Spanish-America. Audio and computer programs used for drill, recording, self-criticism. May be offered for variable credit from one to three semester hours. May be taken twice up to a total of three semester hours.

SPAN 260 Intro to Hispanic Literature 3.0 SH [] (WLIT)
A basic introduction to reading in Spanish and to the literature of Spain and Spanish America. Significant works representing Spanish language poetry, drama, short stories, and essays are studied in a broad historical and cultural context. Prerequisites: SPAN 205.

- SPAN 306 Advanced Oral Expression 3.0 SH [] ()**
Advanced expression in Spanish through the use of drama, video, simulated situations. Discussion topics draw from current issues in the Hispanic world and human experience. Prerequisite: SPAN 216.
- SPAN 315 Advanced Grammar & Composition 3.0 SH [] ()**
Translation and free composition, based on an intensive study of grammar, verbs, and idioms. Prerequisites: SPAN 216.
- SPAN 316 Advanced Conversation 3.0 SH [] ()**
Advanced language study with a focus on developing conversational skills. Offered on Principia abroads and for credit by examination. Prerequisites: SPAN 216 and SPAN 315.
- SPAN 318F Adv Methods Teaching Spanish 4.0 SH [] ()**
Theory and practice of teaching Spanish. Language acquisition and applied linguistics; traditional and contemporary methodologies and practical techniques; national standards; curriculum development; proficiency criteria and testing; class observations; recorded videos of model classes; demonstration classes and microteaching experience. Taught in English, or in English and Spanish. Students complete a project and a major paper in Spanish.
- SPAN 325 Advanced Span Language Study 3.0 SH [] ()**
Continuing work in mastery of the spoken language, with emphasis on everyday vocabulary, colloquial expressions, and idioms; introduction to translating and interpreting (consecutive and simultaneous) between English and Spanish.
- SPAN 330 Hispanic Culture Sem: Topics 3.0 SH [] ()**
Advanced study of special topics in modern Hispanic culture. Readings and discussions of texts from authentic sources that reflect the uniqueness and diversity of the cultures studied through the use of movies, songs, media images, and art within historical, political, and social contexts. Allows some in-depth research on topics of special interest to students. The title will be extended to describe the current topic. May be taken twice up to a total of six semester hours provided the topics differ. Prerequisite: SPAN 230 and SPAN 315 or placement.
- SPAN 335 Spanish Applied Linguistics 1.0 SH [] ()**
Students study the phonetic, phonological, morphological, syntactic, and semantic rules of Spanish to understand what rules govern the intuitions of a native speaker in selecting how to structure utterances for communication to others and to learn how this knowledge helps us explain and teach ourselves and others. Prerequisite: SPAN 315. A strong knowledge of Spanish is expected.
- SPAN 336 Lang Wkshp Abroad: Advanced 3.0 - 6.0 SH [] ()**
Continuing development of advanced conversational skills, with extensive training in aural comprehension of the language as used in different parts of Spanish-speaking world. May be offered for variable credit from three to six semester hours. Prerequisite: SPAN 316. Offered for study abroad only.
- SPAN 335 Spanish Film 3.0 SH [] ()**
Combines the viewing and discussion of classic and contemporary Spanish films with the reading of related scripts and literature. In addition to written and oral responses to the films, students present either a brief acting project or a contemporary film from Spain or Latin America. Prerequisites: oral communication skills at least at the SPAN 216 level, along with some background in reading Spanish literature.
- SPAN 371 Classical Spanish Literature 3.0 SH [GEH] (WLIT)**
Selected masterpieces of Spanish literature before 1700. Prerequisite: SPAN 260 or other experience reading literature in Spanish.
- SPAN 372 Modern Hispanic Literature 3.0 SH [] (WLIT)**
Selected works from modern and contemporary literature of Spain and/or Latin America. Prerequisite: SPAN 260 or other experience reading literature in Spanish.

SPAN 380 Spanish Literature Seminar **3.0 SH** [GEH] (WLIT)
Seminar in a special topic of the literature of Spain or Spanish America. Examples: Cervantes' Don Quijote, contemporary Latin American short story. The title will be extended to describe the current topic. Prerequisite: two previous literature courses taught in Spanish. Offered upon sufficient demand.

SPAN 410 Highlights of Hispanic Culture **1.0 SH** [] ()
This lecture series sets in context the major achievements of Spanish-speaking peoples in Spain and Latin America from an historical, cultural, and literary perspective. Focuses on major achievements as well as general background knowledge. Besides providing this overview of culture for all Spanish majors, prepares Education majors for the state Spanish culture test. Prerequisite: one Spanish course at the 300-level.

SPAN 470 Spanish Capstone **3.0 SH** [] ()
An in-depth independent research project, typically consisting of a 20-page paper written in Spanish and utilizing sources in Spanish, and a public presentation of the findings during the last week of the semester.

Special Studies

SPST 081 PAC Executive Board **No Credit** [] ()
A non-credit course offered to members of the Public Affairs Conference Executive Board. All board members are engaged in substantive work for at least 25 hours during the semester in preparation for the annual conference. May be taken four times.

SPST 091 Career Conference **No Credit** [] ()
Intensive, three-day conference/seminar that helps students prepare for life after graduation. Includes lectures, seminars, hands-on sessions, interviews, and professional events that give students an introduction to the processes and procedures for internship and job searches, graduate school application processes, social media and its application to career development, and other related topics. May be repeated twice. **Fee=\$110.00**

SPST 260 Building Learning Communities **1.0 SH** [] ()
This course focuses on the theory and practice of developing learning communities. Theory emphasizes stages of group development, communication skills, principles of feedback, and conflict resolution. Practice includes skill development in listening and varied communication techniques. Students will participate in activities that support the development of a cohesive learning community within the context of a larger integrated experiential program.

SPST 280 Orientation Seminar **0.5 - 1.0 SH** [] ()
The orientation seminar is an opportunity for students to prepare academically, culturally, and logistically for upcoming abroads and field programs. Seminar meetings may include topics such as geography, cultural norms and standards, introduction to abroad course material, success strategies for studying abroad, or language orientation. Offered only in association with study abroads and field programs. The title will be extended to describe the current location. May be taken more than once if associated with a different abroad or field program. May be offered for variable credit from .5 to one semester hour. There will be a significant additional academic component when the course is offered for one semester hour. Prerequisite: acceptance on the associated abroad or field program.

SPST 281 Reentry Seminar **0.5 SH** [] ()
The reentry seminar is an opportunity for students to internalize, integrate, and formulate the personal and academic learning gained from their study abroad or field program experience. Through reflection, writing assignments, and the creation of a documentary presentation for the college community, students interpret and articulate their growth and experiences. Organizational skills needed to create a successful presentation are also developed. Offered only in association with study abroads or field programs. The title will be extended to describe the current location. May be taken more than once if associated with a different abroad or field program. Prerequisite: successful completion of the associated abroad or field program.

SPST 284 Field Studies 1.0 - 5.0 SH [] ()
 Offered only in association with Principia field programs, this course provides an interdisciplinary survey of contemporary issues in the destination city or region. These issues may include geography, cultural history, politics, economics, religion, foreign relations, environment, the arts, etc. The title will be extended to describe the current location. May be offered for variable credit from one to five semester hours. May be taken more than once if associated with a different location. Prerequisite: acceptance on the associated field program.

SPST 285 Country Studies 1.0 - 5.0 SH [] ()
 Offered only in association with Principia abroad programs, this course provides an interdisciplinary survey of contemporary issues in the destination country or countries. These issues may include geography, cultural history, politics, economics, religion, foreign relations, environment, the arts, etc. The title will be extended to describe the current location. May be offered for variable credit from one to five semester hours. May be taken more than once if associated with a different location. Prerequisite: acceptance on the associated abroad.

SPST 301 Investigating Career Options 2.0 SH [] ()
 Provides students with a comprehensive and strategic approach to career development. Students evaluate their strengths, research career options, and develop tools and resources with which to approach after-college experiences. Class sessions include researching the hidden job market, conducting a self-directed position search, developing and refining résumés, graduate school research and applications, live job interviews, field trips, and interviewing/negotiating strategies. **Fee=\$25.00**

SPST 375 Internship 3.0 - 9.0 SH [] ()
 An opportunity to gain practical experience in one's chosen field of study. Offered on an independent contract basis for students who wish to incorporate an internship into their special major. Designed in collaboration with the special studies program chair, the internship coordinator, and their faculty advisor. Also offered, without independent course contract, on some abroads and field programs as a course for program participants. Designed to provide students with work experience in their discipline within the larger academic and cultural focus of the abroad or field program. Students' work includes metacognitive journals, a portfolio of work, interviews with professionals, paper writing, and field sponsor supervision. May include a service-learning component. May be taken for variable credit from three to nine semester hours. May be taken more than once if the internships differ, up to a total of 15 semester hours.

SPST 405 Capstone Project 2.0 - 10.0 SH [] ()
 Capstone projects are selected in accordance with student qualifications, interests, and needs. Projects must be approved by the student's special major advisory committee. The contents will vary, and the title will be extended to describe the current topic. May be offered for variable credit from two to ten semester hours. May be repeated up to a total of ten semester hours with advisory committee approval. Open only to approved special majors nearing the completion of their program.

Sports Management

SMGT 360 Leadership 3.0 SH [] ()
 Designed to survey the dynamic nature of leadership. Goals include: to explore basic theories and concepts of leadership, to identify personal leadership styles and learn how to adopt and use them, to improve and expand one's range of leadership skills, and to develop a personal approach to effective leadership by integrating personal leadership style and experience with leadership theory.

SMGT 420 Focused Research in Sports Mgt 1.0 - 3.0 SH [] ()
 Designed to allow students the opportunity for focused research on topics of interest in one of four areas (marketing, operations, event and facility management, or leadership) within the field of sports management. May be offered for variable credit from one to three semester hours. May be repeated up to a total of six semester hours provided topics differ. Offered on an independent contract basis only.

Sustainability

SUS 151 Introduction to Sustainability 3.0 SH [] (MNS)

An introduction to the basic principles underlying the topic of sustainability. Students will use the ecosystems model of a nature's sustainable system to study energy, recycling, growth, and stability in human systems of the economy, manufacturing, resource use, and building design. The course includes guest lecturers to provide students with a view of sustainability issues from a multidisciplinary approach.

SUS 250 Energy and Living Systems 4.0 SH [] (MNS)

In this course students begin to think about the mechanical and living systems in everyday life and how to make them more sustainable. Students learn a systems approach to thinking as they focus on the home and building energy systems such as insulation, conservation measures, and home energy generation important to sustaining our modern way of life.

SUS 401 Sustainability Project 1.0 - 3.0 SH [] ()

Practical project under faculty supervision. May be offered on an independent contract basis. Will receive a star (*) grade, with final grade assigned on completion of the project. May be offered for variable credit from one to three semester hours. May be repeated up to a maximum of six semester hours which may apply to the sustainability minor.

Theatre

THEA 050 Thea Practicum Mainstage Cast No Credit [] ()

Practical application in a mainstage production of classroom courses in theatre performance. Students develop character, analyze text, research cultural and historical background, and engage with an ensemble through a rehearsal process in preparation for performance.

THEA 051 Thea Practicum Studio Cast No Credit [] ()

Practical application in a studio production of classroom courses in theatre performance. Students develop character, analyze text, research cultural and historical background, and engage with an ensemble through a rehearsal process in preparation for performance.

THEA 052 Thea Practicum Mainstage Staff No Credit [] ()

Practical application in a mainstage production of classroom work in the non-performance aspects of theatre, including stage management, assistant direction, choreography, dramaturgy, business management, publicity, etc. Students gain experience in the creative and technical aspects of production.

THEA 053 Thea Practicum Studio Staff No Credit [] ()

Practical application in a studio production of classroom work in the non-performance aspects of theatre, including design, stage management, assistant direction, choreography, dramaturgy, business management, publicity, etc. Students gain experience in the creative and technical aspects of production.

THEA 054 Thea Practicum Mainstage Crew No Credit [] ()

Practical application in a mainstage production of classroom work in technical theatre, including set and costume construction, and hanging and focusing lights, as well as additional crew work. Students gain practical experience in the technical aspects of production.

THEA 055 Thea Practicum Studio Crew No Credit [] ()

Practical application in a studio production of classroom work in technical theatre, including set, costume, and lighting design, set and costume construction, and additional crew assignments. Students gain practical experience in the technical aspects of production.

THEA 101 Acting I 3.0 SH [GEA] ()

Basic acting technique and improvisation methods. Includes voice work and stage movement.

THEA 102 Oral Interpretation 3.0 SH [GEA] (WLIT)

Instructs students in the necessary techniques for effective oral reading. Valuable for students of theatre, mass communication, and literature, as well as for others who want to make the written word come alive - at home, in business, or on the platform.

- THEA 120 Intro to Technical Theatre** **3.0 SH [GEA] ()**
 A project-based course focusing on technical disciplines within theatre which may include costuming, make-up, set design, lighting, and stage management. The course also may include work in scene painting, prop making, and basic construction techniques. **Fee=\$50.00**
- THEA 140 Stagecraft** **3.0 SH [] ()**
 An introduction to basic design and construction techniques, and may include scene painting and lighting, in support of department productions. **Fee=\$50.00**
- THEA 201 Acting II** **3.0 SH [] ()**
 Continues work done in THEA 101, with added emphasis on more advanced monologues and scene study. Some work may explore dramaturgy beyond contemporary naturalism. Prerequisite: THEA 101.
- THEA 210 Dramatic Literature** **3.0 SH [] (WLIT)**
 A survey of dramatic literature from the 5th century B.C.E. to present day. Representative plays will be read with emphasis on theatre as live performance. Discussions will explore the social, political, and cultural context of the plays and performance. Prerequisites: THEA 101 and THEA 201.
- THEA 225 Voice and Speech** **3.0 SH [GEA] ()**
 This course introduces vocal techniques, including Linklater voice work designed to "free the natural voice" of the student actor or public speaker. Through breathing, relaxation, alignment, and physical awareness exercises, students increase their ability to be expressive and honest in their vocal communication. Texts used include poetry, Shakespeare sonnets, and dramatic literature.
- THEA 230 Theatre Movement** **3.0 SH [GEA] ()**
 Focuses on movement techniques inspired by the demands of the stage. The content varies, and the title will be extended to describe the current topic. Topics covered can include: Alexander Technique, LMA/Bartenieff, Suzuki/Viewpoints. May be taken more than once provided the topics differ.
- THEA 260 Theatre Topics** **1.0 - 3.0 SH [] ()**
 Group study of selected topics in theatre. The title will be extended to describe the current topic. May be taken more than once provided the topics differ.
- THEA 272 The History of Theatre** **3.0 SH [] (ART)**
 The course examines the history of theatre within political, religious, socio-economic, and technological contexts. Both Western and non-Western influential theatrical venues, writers and their works, actors, designers, directors, and theoreticians are studied.
- THEA 285 Theatre Costuming** **3.0 SH [] ()**
 A comprehensive study of the history, design, and construction of theatrical costuming. Includes hands-on experience in the areas of design sketches and renderings, color, fabric, and lighting studies as well as field trips to local museums, theatre tours, and productions.
- THEA 301 Acting III** **3.0 SH [] ()**
 This course extends the performer's acting technique developed in Acting I and Acting II. Scene work includes some specific period styles and is worked to performance level. Specific emphasis is given to vocal and physical development of the characters performed. Prerequisites: THEA 101 and THEA 201.
- THEA 325 Voice for the Actor** **3.0 SH [] ()**
 Building on the skills developed in Voice and Speech, this class explores the Linklater vocal progression in greater depth and incorporates techniques of other voice teachers, such as Patsy Rodenburg and Cecily Berry. Students analyze and perform more challenging texts both individually and as an ensemble. Open only to theatre majors and minors. Prerequisite: THEA 225.

- THEA 340 Advanced Voice and Movement 3.0 SH [] ()**
 Students will build on skills developed in Voice and Speech and in Theatre Movement, deepening their understanding and practice of techniques necessary to the actor's craft. Prerequisites: THEA 225 and THEA 230.
- THEA 350 Thea Practicum Mainstage Cast 1.0 - 3.0 SH [] ()**
 Practical application in a mainstage production of classroom courses in theatre performance. Students develop character, analyze text, research cultural and historical background, and engage with an ensemble through a rehearsal process in preparation for performance. May be offered for variable credit from one to three semester hours. May be taken more than once.
- THEA 351 Thea Practicum Studio Cast 1.0 - 3.0 SH [] ()**
 Practical application in a studio production of classroom courses in theatre performance. Students develop character, analyze text, research cultural and historical background, and engage with an ensemble through a rehearsal process in preparation for performance. May be offered for variable credit from one to three semester hours. May be taken more than once.
- THEA 352 Thea Practicum Mainstage Staff 1.0 - 3.0 SH [] ()**
 Practical application in a mainstage production of classroom work in the management area including stage management, assistant direction, choreography, dramaturgy, business management, publicity, etc. Students gain experience in the creative and technical aspects of production. May be offered for variable credit from one to three semester hours. May be taken more than once.
- THEA 353 Thea Practicum Studio Staff 1.0 - 3.0 SH [] ()**
 Practical application in a studio production of classroom work in the non-performance aspects of theatre, including design, stage management, assistant direction, choreography, dramaturgy, business management, publicity, etc. Students gain experience in the creative and technical aspects of production. May be offered for variable credit from one to three semester hours. May be taken more than once.
- THEA 354 Thea Practicum Mainstage Crew 1.0 - 3.0 SH [] ()**
 Practical application in a mainstage production of classroom work in technical theatre, including set and costume construction, and hanging and focusing lights, as well as additional crew work. Students gain experience in the technical aspects of production. May be offered for variable credit from one to three semester hours. May be taken more than once.
- THEA 355 Thea Practicum Studio Crew 1.0 - 3.0 SH [] ()**
 Practical application in a studio production of classroom work in technical theatre, including set and costume construction, and hanging and focusing lights, as well as additional crew work. Students gain experience in the technical aspects of production. May be offered for variable credit from one to three semester hours. May be taken more than once.
- THEA 360 Acting Shakespeare 6.0 SH [GEA] (ART)**
 Trains students in the fundamentals of Shakespearean acting. Through workshops, lectures, and instruction from the Globe Theatre in London, the Shakespeare Birthplace Trust in Stratford-upon-Avon, and the Principia classroom, students learn the cultural and historical context of Shakespeare's plays and the fundamentals of textual analysis and performance. The course culminates in a full production of one of Shakespeare's plays. Offered only on Principia abroads.
- THEA 401 Advanced Acting Topics 3.0 SH [] ()**
 Advanced course in acting focused on specific performance techniques. Areas covered are style, audition techniques, improvisation, voice, movement, and specific acting methods such as the Chekhov Technique. Subject matter will change based on the needs of the students. The title will be extended to describe the current topic. May be taken more than once provided the topics differ. Prerequisites: THEA 101, THEA 201, and THEA 301.

THEA 402 Spec Creative or Research Proj 3.0 SH [] ()
 Advanced creative or research project in performance or scholarship. May be repeated for a maximum of twelve semester hours, three of which may apply toward the major or minor. Open only to theatre majors or minors.

THEA 420 Directing 3.0 SH [] ()
 Practical application of skills acquired in Acting I, II, and Practicum through working with actors to direct scenes and one-act plays. The fundamental directing principles of text analysis, communication, picturization, blocking, and design principles are learned and practiced. Prerequisites: THEA 101, THEA 201, either THEA 210 or THEA 272, and either THEA 301 or THEA 352.

THEA 494 Theatre or Dance Internship 3.0 - 15.0 SH [] ()
 Practical experience in one of the various areas of theatre and dance (management, performance, technical theatre, or dramaturgy). May be offered for variable credit from three to 15 semester hours. May be repeated up to a total of 15 semester hours.

Women's Studies

WOM 170 Gender Paradigms 3.0 SH [GESS] (SSCI)
 Examines underlying assumptions about male and female roles throughout history, then focuses on contemporary issues. Addresses the questions of why status differences exist between the sexes, how people are socialized into stereotyped sex roles, and how individuals can move beyond limitations imposed by prescribed sex roles. Also listed as SOAN 170.

WOM 335 Gender & Masculinity 3.0 SH [] ()
 This course examines the social construct of masculinity. What does it mean to be a male in contemporary American society? How does this compare with notions of manhood in other cultures and in other time periods? Readings include representative selections of the diverse literature on men and theories of masculinity. Prerequisite: SOAN/WOM 170. Also listed as SOAN 335.

WOM 360 Gender Theories 3.0 SH [] (SSCI)
 Attempts to answer the question of how and why gender oppression and discrimination occur. Covers a variety of theoretical perspectives and focus on solutions for ending aggression and oppression. Prerequisite: SOAN/WOM 170. Also listed as SOAN 360.

WOM 365 Global Perspectives of Women 3.0 SH [GESS] ()
 An in-depth study of the critical areas of concern for women's empowerment around the world. The course includes theoretical critiques of women's movements and methodologies. Also listed as SOAN 365.

WOM 410 Senior Seminar 3.0 SH [] ()
 The senior seminar serves to culminate the minor in women's and gender studies. A topic and/or experiential project is selected and treated in depth with readings, discussion, and/or implementation. Students bring with them to the course depth and variety from two electives in women's and gender studies. Prerequisites: SOAN/WOM 170, SOAN/WOM 360, and two electives in women's and gender studies.

World Literature

WLIT 131 Stories Around the Globe 3.0 SH [GEH] (WLIT)
 Students gain insight into different cultures as well as their own through careful reading and discussion of stories from different countries. Students explore the relationship between literature and culture in class discussions and writing.

WLIT 179 Reading French Society in Film 3.0 SH [GEH] (WLIT)
 This course looks at different aspects of French society through both literature and film. These texts serve as tools to both understand French society and to analyze the interplay between literary text and film. Taught in English. No prior experience with French necessary.

WLIT 231 Themes and Forms **3.0 SH [GEH] (WLIT)**
Centers on a literary theme or form on literature from around the world. The contents vary, and the title will be extended to describe the current topic or form.

WLIT 421 Masterpieces of World Lit **1.0 - 3.0 SH [] (WLIT)**
Close study of individual great works in the context of the development of literary tradition. Seminar conducted by English and foreign language faculty. May be offered for variable credit from one to three semester hours. Prerequisites: one English course and 3.0 GPA.

Writing

WRIT 091 Writing Seminar **No Credit [] ()**
The power of language to extend, shape, inspire, and clarify what we think and how we communicate is at the heart of the pre-term writing seminar. During this intensive workshop, students explore a wide range of reading and writing experiences: creative, analytical, reflective, and experimental. Students strengthen their skills in reading, writing, and thinking, and learn to communicate their ideas effectively and appreciate the various stages in the writing process.

WRIT 099 Phase Four Writing Seminar **No Credit [] ()**
A required course for students who have not completed phase four of the all-college writing requirement within 89 quarter hours and who have been red flagged two or more times. The purposes of this course are to assess writing strengths and needs and to work with writing faculty to achieve phase four competencies as soon as possible.

WRIT 120 Reading Words and the World **3.0 SH [GESS] ()**
This course focuses on the ethnographic study of reading behavior in social contexts. Students will read ethnographic studies, do ethnographic research, write life stories, discuss findings, and work with others to apply reading theory to success and survival in social contexts. Students will also examine reading behaviors that contribute to success and survival in college.

WRIT 151 Fundamentals of Acad Writing **2.0 SH [] ()**
A study of fundamentals applied by academic writers in the arts, natural sciences, social sciences, and humanities. This course examines how current conventions for reading and writing are used in disciplines associated with these subject areas. Students are introduced to thesis (persuasive) writing, revision strategies, and five habits of academic writing (analysis, narration, exploration, experimentation, and metacognition).

WRIT 152 Revising and Editing **2.0 SH [] ()**
A study of the different strategies for revising and editing text applied by academic writers in the arts, natural sciences, social sciences, and humanities. This course examines how accurate use of conventions for writing is determined in disciplines associated with these subject areas. Students are introduced to proof reading and application of revision strategies appropriate to different academic disciplines.

WRIT 153 Editing and Style **2.0 SH [] ()**
Course investigates different strategies for editing and revising text, particularly at the sentence and paragraph level, applied by academic writers in the arts, natural sciences, social sciences, and humanities. Writers will learn to understand and demonstrate versatility in writing and editing to add clarity, style, and authority to both academic and professional pieces of writing. Prerequisite: WRIT 152.

WRIT 154 Portfolio Strategies **1.0 SH [] ()**
This course, focused on revising and editing strategies, is designed to support students in preparing papers from previous classes at Principia for submission in the sophomore-level proficiency portfolio. Students will use papers from previous but not concurrent classes for the revision work in the class. May be taken twice. Prerequisite: FYE or equivalent.

WRIT 155 Grammar and Punctuation **2.0 SH [] ()**
This course provides instruction and practice in using current conventions of grammar and punctuation in academic and professional writing.

WRIT 156 Multilingual Literacy 2.0 SH [] ()

This course provides instruction and practice in the knowledge, skills, and dispositions necessary for academic reading and writing across multiple disciplines when English is not a native language. It addresses the needs and strengths of readers and writers who are multilingual.

WRIT 157 Research Fundamentals 2.0 SH [] ()

This course offers instruction and practice in the fundamental knowledge, skills, and dispositions necessary for college-level research. It encourages strategies and habits that help students to avoid unintentional plagiarism.

WRIT 158 Reading and Writing Inquiry 3.0 SH [] ()

This course provides instruction and practice in the knowledge, skills, dispositions, and strategies that readers and writers need for engaging with challenging academic texts across disciplines. Students will read texts on a pertinent topic and join the conversation through writing. The course encourages critical reading habits such as examining images, language and logic, asking critical questions, and weighing arguments.

WRIT 159 Journaling: Writer's Practice 2.0 SH [] ()

Application of journaling as a tool for thinking. This course also includes examination of types of journaling associated with five habits of successful writers: analysis, narrative, exploration, experimentation, and metacognition. Creative modes of thinking and writing are considered and connections to academic writing encouraged. Students develop journal writing into more polished, often creative, pieces.

WRIT 230 Analytical Reading 2.0 SH [] ()

Development of skills, approaches, and techniques for academic reading. Emphasis is placed on the thinking skills that contribute to analytical reading (e.g. questioning and making critical evaluations). May be taken three times.

WRIT 292 Reading the Liberal Arts 3.0 SH [] ()

Literacy strategies are linked to content knowledge from the major disciplines of students enrolled in this course to improve analytical thinking about difficult texts. Social science theory is examined to understand why strategies for analytical discourse make reading, writing, and research effective. Students must have declared an academic major. Recommended for students preparing for major portfolio or capstone research.

WRIT 350 Teaching the Writing Process 4.0 SH [] ()

Development of skills, strategies, and attitudes needed for tutoring, writing, and excelling at in-depth writing and research projects. Theories and philosophies of the writing and teaching processes are explored. Research skills are covered as well. Required for Writing Center tutors. Appropriate for students anticipating extensive writing in graduate school. Serves as an elective for Educational Studies minor.

SECTION 4

Admissions and Financial Aid

If you are a high school senior or graduate, a college student, or beyond college age and think you might like to attend Principia College, this section tells you how to apply. Applicants must be practicing Christian Scientists, as demonstrated through reliance on Christian Science for healing and through regular attendance in a Christian Science Church or Sunday School.

Personal Expectations

The aim of Principia College is to provide an educational environment which supports growth intellectually, spiritually, morally, socially, and physically. Once a student is on campus, he or she becomes a contributor to this atmosphere and an influence on others in the community. Students are therefore expected to:

- want to grow in Christian Science as a way of life;
- rely on Christian Science in time of need;
- uphold Principia's community goals, standards, and pledge;
- show concern for the welfare of others; and
- be able to take part freely — “intellectually, spiritually, morally, socially, and physically” in an active college program.

Please note that all applicants to Principia College must be active students of Christian Science. It is required that applicants will be free from any use of alcohol, tobacco, illegal substances, or medication in any form and/or from engagement in any premarital, homosexual, or extra-marital sexual activities for a period of six months prior to enrollment in the college. For those who have recently engaged in any of these activities, the six-month period of abstinence must begin at least six months prior to the actual enrollment date.

Academic Preparation

To ensure a smooth transition from high school to college, we recommend that students will have taken 16 academic courses in their high school program.

The following minimum distribution of high school courses is strongly recommended in preparation for Principia College.

- 4 years of English (composition, literature)
- 4 years of math, including pre-calculus or an equivalent (such as math analysis or college algebra)
- 3 years of natural science, including some lab work
- 2 years of history and social science (including U.S. history)
- 2 or 3 years of the same foreign language
- 2 years of academic electives (from any of the five academic categories above)

Incoming students are required to take the Quantitative Reasoning Test. Prospective students will receive more information as to how and when this will be administered.

In order to enroll in Principia College, students must submit evidence of graduation from high school by (1) a final transcript which shows that a high school diploma has been earned; or (2) a document showing that the GED (General Education Diploma) has been received. Students who take the GED must have a minimum total score of 2250 and no score below 450 on any of the five individual tests. (The maximum possible score for all five GED tests is 4000.)

Principia College strongly encourages all students to complete the senior year in high school. In the rare instance that a student needs or wants to forego the senior year, additional requirements for admission must be met. Please contact the Office of Admissions and Financial Aid for details.

Tests

SAT or ACT

All applicants to Principia College, including international applicants and transfers, are required to take either the new Scholastic Assessment Test (SAT) Reasoning Test, which consists of Math, Critical Reading and Writing sections, or the American College Testing Board Exam (ACT), including the optional Writing section. It is recommended that a student take these exams in the spring or early summer of the junior year in high school. Thus, if a student is not satisfied with the results, the test may be retaken during the first semester of the senior year (final year of secondary school for international students). All students should have the results of these tests sent to the Office of Admissions and Financial Aid at Principia College.

Transfer students who have completed at least one full year of college with above average grades may be exempted at the discretion of the Admissions Committee from taking the SAT or ACT. Those international students who hold Advanced-level or Advanced Subsidiary-level grades of an A or a B in both English language and mathematics are exempt from the SAT requirement.

Students may arrange to take these tests through their high school guidance counselor, by visiting their local library, or by contacting either of the following:

For the SAT:

**Educational Testing Service
College Board SAT Program
PO Box 8056
Mount Vernon, IL 62864-0208**

**Phone: 866.756.7346
website: www.collegeboard.org**

(Principia's College Board code is 1630.)

For the ACT:

ACT Registration Department
PO Box 414
Iowa City, IA 52243-0414

Phone: 319.337.1270
website: www.act.org

(Principia's ACT college code is 1118.)

TOEFL

International applicants are required to take the TOEFL exam (Test of English as a Foreign Language). Applicants who are native English speakers from the United Kingdom, Australia, New Zealand and non-French speaking Canada are not required to take the TOEFL exam. Additionally, applicants from anglophone African countries may be exempt from taking the TOEFL exam if they earned a C or better in English. If their SAT Critical Reading score is low, the TOEFL exam will be highly encouraged. U.S. citizens who attend secondary school outside of the U.S. where classes are not conducted in English are required to take the TOEFL exam. The TOEFL scores must be received by the Office of Admissions and Financial Aid before the application deadline. To arrange for this test, please contact:

TOEFL Services
Educational Testing Service
P.O. Box 6151
Princeton, NJ 08541-6151
USA
e-mail: toefl@ets.org
website: www.ets.org/toefl
FAX: 610.290.8972
Telephone: 609.771.7100

(Principia's TOEFL code is 1630.)

As previously stated, international applicants are also required to take the SAT Reasoning Test, which consists of Math, Critical Reading, and Writing sections, or the ACT examination, including the Writing Test.

How to Apply for Admission and Scholarships

Step 1:

Principia College accepts only online applications. No printed copies of the application are available. To apply, visit www.principiacollege.edu/apply and create an account. Once you establish a username and password, you can then fill out the application and submit it to Principia electronically. For your convenience, no application fee is required.

By completing the general application for admission, students will automatically be considered for academic scholarships. The information contained in the student's application file will be used to match the student

with the appropriate scholarship. This process will occur on a rolling basis as funds are available. No additional application is needed.

The Founders' scholarship requires submission of an application which is evaluated by the Scholarship Committee based on published information. The deadline to submit a Founders' scholarship application is March 1. Applications submitted after March 1 will be considered as funds are available. If you are applying for admissions after March 1, you must submit your Founders' application at the same time as your admissions application.

Reference forms are also available as PDF files at www.principiacollege.edu/admissions/apply/references. You can download these forms to your computer and print them out for your references, or your references can choose to complete the forms online.

Step 2:

Submit the application electronically as early as possible, beginning in the fall, to apply for the following year. Application deadlines for domestic students are as follows:

Fall Semester	March 1 for those applying for admission, scholarship, and financial aid. The online application will be available September 1, at which time the rolling admissions process will begin.
Spring Semester	December 15 for those applying for admission, scholarship, and financial aid.

For the most current information about the scholarship program, please visit www.principiacollege.edu/scholarships.

Step 3:

If you are applying for financial aid, the deadline is March 1 for complete applications, including current tax returns. For further information about financial aid, please contact the Office of Admissions and Financial Aid at 618.374.5187 or 800.277.4648 ext. 2813, or visit www.principiacollege.edu/finaid.

Spring semester admissions applicants who also plan to apply for financial aid must contact the Office of Admissions and Financial Aid regarding the deadline for submitting financial aid applications.

If you have additional questions about admissions or the scholarship programs, contact your admissions counselor or contact the Office of Admissions and Financial Aid:

Office of Admissions and Financial Aid
Principia College
Elsah, IL 62028-9799
Admissions phone: 800.277.4648, ext. 2802

Admissions phone: 618.374.5181
email: collegeadmissions@prin.edu
FAX: 618.374.4000
website: www.principiacollege.edu/admissions

First Time Freshmen

The following items, constituting a complete application for a first-time freshman, must be received by the Office of Admissions and Financial Aid before the application can be considered by the Admissions Committee:

- the on-line application (including personal, family, Christian Science, academic, extracurricular information, and a personal essay)
- two Christian Science references
- one academic reference
- guidance counselor reference (not applicable to transfers and most international students)
- SAT Reasoning Test or ACT scores, including the optional Writing section
- high school transcript, including courses in progress

Beginning September 1, notification of the Admissions Committee's decision will be emailed to the student followed by an official letter from the Dean of Enrollment Management. A waiting list is started when dorm spaces are no longer available; it is kept chronologically as applicants are accepted.

Once admitted, a deposit (an acknowledgment of acceptance) of US \$100 must be paid by May 1 to reserve space in the new student class (see Reservation Deposits, pp. 172-173). The deposit is waived for children of Principia's faculty and staff.

Housing assignments will be made by the Office of Student Life in June with notification to new students in July. Principia reserves the right to assign housing to attain a balance among athletes, scholars, and international students, etc.

Transfer Students

We welcome applications from students enrolled at other colleges who wish to transfer to Principia College. Please see page 12 for Principia's residency requirement which may affect transfers.

To apply as a transfer student, follow the regular admissions plan outlined above. You must also arrange to have an official final high school transcript and official college transcripts representing all previous college work sent to the Office of Admissions and Financial Aid, including a listing of college courses in progress.

In addition, if you have previously taken the SAT Reasoning Test or ACT, your scores must be forwarded to Principia. If you have not previously taken either test, please arrange to take one if you have not completed a full year of college with above average grades. Only the Office of Admissions and Financial Aid may grant exceptions.

Courses taken at other fully accredited colleges and universities are accepted for credit provided they parallel courses available at Principia and were completed with a grade of C- or higher. Students may consult with the Registrar's Office to determine what transfer work would be accepted.

International Students

Principia College welcomes qualified applicants from all countries. Two programs are available for international students: the regular degree program leading to a B.A. or B.S. degree and the one-year enrichment program designed for non-degree seeking students. International students must be 18 years of age or older prior to enrolling at Principia College. Canadian citizens and Permanent Lawful Residents follow the same application procedures as U.S. citizens. If applying for financial aid from Principia, international applicants who already hold a college or university degree are eligible only for the enrichment program. Students enrolled in the one-year enrichment program are not eligible to play varsity (competitive) sports at Principia per NCAA Division III regulations. All international applicants must have completed secondary school and have earned a diploma or certificate of completion, which makes them eligible for admission to higher or advanced education in their home country.

The application deadline for international students is January 15. Principia College must receive the application for admission, application for financial aid (if applicable), SAT or ACT exam scores and TOEFL scores (if applicable), prior to this application deadline. For further details about either program or to request an international application for admission, write to:

International Admissions Counselor
Principia College
1 Maybeck Place
Elsah, IL 62028-9703
USA
Telephone: 618.374.5179
e-mail: intladmissions@prin.edu
FAX: 618.374.4000
web site: www.principiacollege.edu/international

Non-Traditional Students

Principia welcomes students of any age provided admission requirements have been fulfilled. In order to ensure that Principia can best meet the needs of non-traditional students (students who are married, single parents, or 25 or older), we require that non-traditional students living in the U.S. visit Principia during the academic year prior to an admissions decision. Such issues as employment, financial aid, schooling for children, and housing needs can be discussed in person with appropriate officials at that time.

Returning Students

If it has been one year or more since a student last attended Principia, a new application is required. The following items constitute a complete application:

- the on-line application
- two new Christian Science references
- academic reference (if student has attended a college or university within the last six months)
- work reference (if student has not attended a college or university within the last six months)
- transcripts from all colleges and/or universities attended since last enrolled at Principia

If a student is returning after any suspension, an application including all the listed elements for returning students is required and additional requirements for admission may be necessary.

Financial Aid

In a real sense, every student admitted to Principia receives financial aid because income from tuition and fees covers less than 25% of Principia's operating budget. Income from our endowment and gifts from generous donors pay the balance.

Principia College provides a generous financial aid program which is based on individual family need. Grants, loans and employment are available to qualified students who submit applications by the due date. Applications submitted after this date will be considered and awards made as long as funds are available. Last year Principia awarded more than \$10 million in merit scholarships and need-based aid to approximately 90% of the enrolled students.

Application Process

The average financial aid package including merit scholarships for incoming freshman last year was \$24,700. Financial aid is not automatically renewed. A student must apply for each year that financial aid is requested. Financial aid is available through completion of a normal academic program for a maximum of eight semesters. Exceptions require special review and approval.

New students should submit their financial aid applications at the same time as their admissions application but no later than March 1. Applications received after that date will be considered and awards made as long as funds are available. Continuing students should submit complete financial aid packages no later than April 15.

The items shown below are needed to submit your application to the financial aid committee for consideration. Please email or fax them to:

Office of Admissions and Financial Aid
Principia College
1 Maybeck Place
Elsah, IL 62028-9720
FAX: 618.374.4000

1. College Scholarship Service PROFILE

The PROFILE is the nationally recognized method that Principia uses to assess eligibility for financial aid. You must complete the PROFILE online at www.collegeboard.com. Principia's CSS code number is 1630.

2. Principia's Application for Financial Aid (Returning Students Only)

Every returning student must complete the financial aid application in BannerWeb.

3. Income Tax Return

Every application must be accompanied by a complete copy of the parent's and the student's tax return for the most recent tax year. New students may submit last year's tax return for an estimated award.

After a student is admitted and upon receipt of all three documents mentioned above, the financial aid committee will notify students in writing about aid awarded.

The Office of Admissions and Financial Aid would be happy to answer your questions at any time. You may reach them at 618.374.5187 or 800.277.4648 ext. 2813. The email address is "finaid@principia.edu."

Application Process for International Students

Special funds are available to qualified international students. The student must complete the "Principia Application for Financial Aid for International Students" and the "Certification of Finances" form and submit them along with supporting documentation (i.e., tax forms, bank statement, verification of income) with their application for admission.

Components of Financial Aid Package

Grants – Grants are gifts that do not need to be repaid and are part of most financial aid packages.

Loans – Financial aid packages usually include a low-interest student loan. These loans are payable in monthly installments beginning nine months after graduation or when the student ceases to be enrolled in any educational institution at least half time.

Outside Resources

Students are encouraged to actively pursue outside sources of college funding from their community, employers, and civic organizations.

Conditions Governing Financial Aid Awards

Recipients of financial aid awards are required to maintain satisfactory academic progress (see p. 187) and to uphold community standards. Falsifying information on a financial aid application could result in immediate cancellation of all financial aid and could result in disciplinary suspension. Students who already hold a college degree are not eligible for financial aid.

Students interested in working on campus should contact the Human Resources Office for Hourly and Student Employment as soon as they arrive on campus. While it is not feasible for a student to cover the entire cost of a Principia education by working on campus, income earned through student employment can be a significant help toward meeting expenses.

Scholarships

Principia's generous donors provide financial support for several different types of scholarships for deserving students. Below is a list of the scholarships available this year:

Academic Scholarships

Scholarship Name	Annual Value	HS GPA	SAT Score	ACT Score
Trustee	full tuition	3.9	2030	30
Chairman's	$\frac{3}{4}$ tuition	3.8	1950	29
President's	$\frac{1}{2}$ tuition	3.7	1880	28
Dean's	$\frac{1}{4}$ tuition	3.6	1800	27

All of these scholarships are available to first-time freshmen; the Dean's scholarship is the only academic scholarship available to transfer students.

Arthur F. Schulz Scholarship

In 1982 The Principia Alumni Association established a special endowment fund in memory of Arthur F. Schulz Jr. for children and grandchildren of Principia alumni. This four-year scholarship is currently valued at \$4,500 each year and is awarded to both qualified first-time freshmen and transfer students.

Founders' Scholarship

Named for Principia's founder, Mary Kimball Morgan, and the many other dedicated educators committed to its ideals, the Founders' Scholarship is awarded to prospective students who have demonstrated a deep commitment to Christian Science, character, and citizenship as evidenced by their active participation in these areas. The annual value ranges from $\frac{1}{4}$ tuition to full tuition. Please check with the Office of Admissions and Financial Aid for more specific details.

Principia College DiscoveryBound National Leadership Council (NLC) Scholarship

This scholarship recognizes the hard work and dedication of students graduating from the NLC program, a multi-year leadership program for high-school-age Christian Scientists across the country that is dedicated to fostering spiritual growth, leadership qualities, and a service perspective on life. This renewable scholarship is valued at \$5,000 annually and may be awarded in addition to other Principia scholarships up to full tuition. Please check with the Office of Admissions and Financial Aid for more detail.

Scholarship Renewal

Each scholarship described above is renewable for four years or eight semesters provided the specific renewal criteria are maintained. Scholars will receive renewal information each year from the Scholarship Committee.

Costs *

Costs of the Principia College program for the year 2013-2014 are as follows:

Fixed Charges (Tuition, Room, Board, and Fees)

Fixed charges include tuition, Traditional Meal Plan**, and cost of residence on campus during each semester (two per year), personnel and counseling services, admission to all on-campus athletic events, admission to The Principia Concert and Lecture Series, subscriptions to annual and weekly student publications and other services. They do not include books, personal expenses, laboratory fees, miscellaneous fees, student activity fees, or the cost of residence on campus between semesters.

Resident Students

	Year	Semester
Tuition	\$25,500	\$12,750
Room	5,000	2,500
Board	<u>5,500</u>	<u>2,750</u>
	\$36,000	\$18,000

Day Students

	Year	Semester
Tuition	\$25,500	\$12,750

*Because of the possibility of substantial increases beyond our control in our operating expenses, the financial arrangements published in this catalog are subject to revision at the beginning of any semester. Notification of any necessary change in rates will be sent to you at least 30 days prior to the beginning of the semester.

**The Traditional Meal Plan is a declining balance meal plan that provides sufficient funds each semester to cover twenty-one meals per week, subject to student food choices. While students may use meal plan dollars in both the Student Dining Room and The Piasa Pub, those who choose to eat more meals in the Pub, larger quantities of food, and/or more expensive specialty food items, may enroll in an upgraded plan. Meal plan enrollment occurs twice a year, by semester. More information on meal plans may be found on the College Dining Services website.

This tuition includes all day student charges except meals taken on campus, occasional overnight residence on campus, student activity fees, books, personal expenses, laboratory fees, and miscellaneous fees.

Payments

Principia College students are expected to pay their bills by the due dates of each PrinBill. All students will be automatically enrolled in a payment plan each semester.

Education at The Principia: Policy number 20

The administration, faculty, staff, and student body are expected to adhere to policy #20 from *Education at The Principia* as stated below:

The Principia shall conduct its activities on the basis that all obligations of whatever nature incurred by or due to The Principia shall be met promptly and fully.

The practices of the business department shall not be controlled by sentiment and shall be based upon the inspiration of the Golden Rule. This policy shall not only govern the business dealings of the institution and its members in contractual or financial matters, but shall be reflected also in the demand that all obligations resting upon members of the administration, faculty, staff, and student body as members of this educational community shall be met squarely and promptly. (pp. 235-236)

PrinBill.com

PrinBill is Principia's online billing and bill payment service. Principia bills are viewable online and payments can be made using secure online access. All PrinBill accounts have a personal, secure login. More information on PrinBill, payment plans, and authorized users will be communicated to enrolled students and families prior to the start of school.

Monthly Billing Statements

Students will receive email communication when the monthly eBill is available online, and they are also able to see current activity throughout the month. Authorized users can also be set up by the students to view their eBill and make online payments. The first payment of the school year is due by August 26. Communication regarding delinquent accounts is with the student. Authorized users may be included in this communication.

PrinBill Payment Methods

Available payment methods include electronic bank withdrawals, credit card payments, or checks. The following credit cards are accepted: MasterCard, American Express, and Discover. Credit card payments incur a convenience fee of 2.75% (\$3.00 minimum per transaction). Students are encouraged to

pay by electronic bank withdrawal. There are no fees for paying by electronic bank withdrawal. Payments must be received by the 26th of the month.

All checks written for payment of student accounts must be on U.S. banks, in U.S. dollars, and made payable to "The Principia." Please send them to:

**The Principia
Attention: Cashier
13201 Clayton Road
St. Louis, MO 63131-1002**

Insufficient Funds and Declined Payments

There will be a service charge of \$20 for each returned or declined payment.

Late Fee

A 1% service charge on delinquent amounts will be billed monthly.

Past Due Accounts

Failure to pay charges when due or according to an approved payment plan classifies the amount as past due. Unless corrected, this could lead to financial suspension of the student. It is important to communicate with Billing Services if there are problems so that solutions can be worked out.

Accounts must be kept current on an ongoing basis. Students will not be allowed to register for the next semester's classes unless the account is current. Students whose accounts are past due at the end of the semester will be placed on financial suspension, prohibiting admission to classes and participation in sports and other activities (including working on campus or living in campus housing) until satisfactory arrangements have been completed with Billing Services.

Grades, Transcripts, Diplomas

Grades and transcripts are furnished on request provided that all financial obligations to Principia have been met. Diplomas are issued to graduates when their accounts are paid in full. Transcript requests must be submitted to the Registrar's Office in writing and should include the following information: full name of the student as it appeared on student records; current name, if different; current address and phone number; dates of attendance at Principia; and full address to which the student wishes the transcript to be sent. **All requests must be signed by the student.** Requests for transcripts will be accepted by FAX (618.374.5105) provided they are properly signed.

Reservation Deposits

New Resident Students

When an applicant has been accepted, a good-faith deposit of \$100 is required to demonstrate the student's intention to enroll. The deposit is credited to the student's account when the student is fully enrolled. No future reservation deposits are required as long as the student stays enrolled at Principia. The reservation deposit is due by May 1. Acceptances offered

after May 1 or for spring semester require a deposit within one week of the acceptance notification.

The deposit is refundable if the Office of Admissions and Financial Aid is notified in writing before June 1 that an accepted student has decided not to enroll. The deposit is forfeited if the student withdraws on or after June 1.

The student should notify the Office of Admissions and Financial Aid as soon as possible if he or she does not intend to pay the reservation deposit, thus canceling the acceptance.

Fees and Personal Expenses

Laboratory and Miscellaneous Fees

These charges, with a few exceptions, are due in full when billed each semester and apply to resident and day students.

Student Fees (billed to all student master accounts on a term basis)

- Student activity fee: \$300 (\$150 per semester)
- Athletics fee: \$90 (\$45 per semester)
- Technology fee: \$90 (\$45 per semester)

Student Fees (optional)

- Parking fee: \$100 (\$50 per semester)
- Health insurance fee: \$199 (\$99.50 per semester) (See Student Health Insurance Requirement, p. 174 and www.principia.edu/insurance.)

Academic Fees (billed to student accounts as incurred)

- Chalk & Wire fee (Freshman/Transfers 1-time only): \$100
- Writer's Help fee (Freshman/Transfers 1-time only): \$30
- Independent study/course contract administrative fee: \$50
- Overload tuition fee: \$850 per semester hour (SH) over 18 SH
- Independent study off campus tuition fee: \$850 per SH
- Internship for academic credit tuition fee: \$850 per SH
- Principia Abroad administrative fee: \$500 per program
- Regular audit: \$100 per course
- Credit by examination: \$100 per course

Laboratory Fees

For lab fees, see the course descriptions in Section 3. Fees cover overhead for class and not all individual student expenses.

Registrar's Fees

- Late registration fee: \$25
- Late schedule change fee: \$25
- Late graduation application fee: \$50
- Transcript fee: \$10

Personal Expenses

Expenses for personal items, general school supplies, services, dues, etc., average between \$20 and \$50 monthly. Students are expected to use cash, check, or credit/ATM card to pay for their school supplies, fees, and other items and services available through the college store and otherwise. Miscellaneous fees of the kind described above are due at time of purchase. These items may not be charged to the student's account. Textbooks are the biggest personal expense incurred by students and generally average \$450 each semester — depending on the courses being taken. Information on course textbooks is available online at www.principiacollege.bkstr.com one month before the start of the semester. Once posted, textbooks may be purchased (in new or used condition) or rented through this website using a credit or ATM card.

Student Health Insurance Requirement

Principia policy requires that all students attending the College have health insurance coverage to insure care costs for injuries sustained in school-related activities. A minimum amount of \$90,000 for athletes is required by NCAA. To ensure that students have the required coverage by the time they arrive on campus, the College automatically enrolls all students in an insurance program and charges the student's account for the cost plus a billing and enrollment fee if insurance information has not been received in Self Service Banner (SSB) by August and December deadlines.

Coverage begins with the student's first scheduled activity and ends with commencement in May, unless there is a school-related activity during the summer months. Principia Abroad trips are covered by other insurance supplied by Principia.

Please note that student athletes are not allowed by NCAA to participate in sports camps or competitions unless they are covered by health insurance.

For details, please go to www.principia.edu/insurance.

Responsibility of Parents or Guardians

Principia will email notification to each student when his/her eBill is available online. If a student has set up authorized users, they will also be sent this notification. It is understood that, unless the student is classified as independent, parents or guardians accept responsibility for the payment of

all charges, fees, etc., due in any semester for which the student is enrolled. Should the student feel he or she qualifies for independent status, a form is available from the Office of Admissions and Financial Aid. This form can be used to verify a student's eligibility for this status.

Principia holds the student primarily responsible for ensuring that bills are paid on time. Students are expected to be aware of the status of their accounts each month, even if the parents are paying the bill. If the account becomes delinquent, the student will be responsible for resolving the situation in demonstration of Policy 20 of the "Purpose and Policies of The Principia."

Rebates in Cases of Withdrawal or Dismissal

In the event it becomes necessary that a student withdraw or be dismissed before the end of a semester for any cause whatsoever, refunds of tuition, room, and board are governed by the policies listed below.

To withdraw from the college, the student must notify the Enrollment Coordinator. The effective date of withdrawal is the day of this notification.

If tuition payments are being made under Principia's installment payment plan, the adjusted balance due for the semester becomes immediately due and payable.

The reservation deposit is normally forfeited in cases of withdrawal or dismissal.

Tuition Rebate

- 100% of tuition will be rebated for withdrawals made by Friday of week two of the semester.
- 50% of tuition will be rebated for withdrawals made between the Saturday at the end of week two and Friday of week three of the semester.
- 25% of tuition will be rebated for withdrawals made between the Saturday at the end of week three and Friday of week four of the semester.
- No tuition will be rebated for withdrawals made after Friday of week four of the semester.
- No tuition will be rebated for administrative withdrawals.

The same rule applies for students taking an off-campus or inter-term independent course, with the dates shown on the course contract constituting the term of that course.

Room Rebate

- 100% of room charge will be rebated for withdrawals made by Friday of week two of the semester.
- 50% of room charge will be rebated for withdrawals made between the Saturday at the end of week two and Friday of week three of the semester.

- 25% of room charge will be rebated for withdrawals made between the Saturday at the end of week three and Friday of week four of the semester.
- No room charge will be rebated for withdrawals made after Friday of week four of the semester.
- No room charge will be rebated for administrative withdrawals.

Board Rebate

- 100% of board charge, less actual dollars expended on the student's meal card, will be rebated for withdrawals made by Friday of week two of the semester.
- 50% of board charge, less actual dollars expended on the student's meal card, will be rebated for withdrawals made between the Saturday at the end of week two and Friday of week three of the semester.
- 25% of board charge, less actual dollars expended on the student's meal card, will be rebated for withdrawals made between the Saturday at the end of week three and Friday of week four of the semester.
- No board charge will be rebated for withdrawals made after Friday of week four of the semester.
- No board charge will be rebated for administrative withdrawals.

Exceptions

To request an exception to any of the rebate policies stated above, please contact:

**Dean of Administration
Principia College
1 Maybeck Place
Elsah, IL 62028
618.374.5152**

Student Employment

The purpose of the Student Employment Program at Principia is to provide students with the opportunity to develop and practice a good work ethic, to learn new skills, and to contribute to the Principia community by providing valued services as part-time student employees. All student employees are required to engage in 150 hours of work in a service department (Facilities or Dining Services) during their first two semesters of employment.

Students are responsible for completing employment applications and providing proper identification in order to secure employment. The Human Resources Office works to find a good match between a student's interests, skills, experience, class schedule, and the needs of departments seeking student workers.

SECTION 5

Academic Rules and Procedures

Graduation Rules

Choice of Catalogs for Degree, Major, and Minor Requirements

If the all-college degree requirements are altered during a student's college career, the student may choose any set of requirements published during his or her particular career, provided that any requirements not already fulfilled can be met through the current program of the college. No special courses will be offered to meet previous catalog requirements. A student must meet all of the all-college degree requirements for the catalog chosen, with the exceptions noted below.

If the requirements of a major or minor are altered after a student has declared the major or minor, the student may choose the requirements listed in the catalog in effect when the major or minor was declared or the requirements of the catalog listing the change. If some courses are no longer taught in support of the old major or minor requirements, the program will allow appropriate substitutions.

A student may choose one catalog for the all-college degree requirements and another for major and/or minor requirements. A student who elects to change catalogs, either for all-college degree requirements or for a major or a minor, must submit the appropriate form to the Registrar's Office.

A student who entered Principia College prior to Fall 2011 who desires to move to the new general education requirements published in the 2011-2012 catalog will be excused from the Integrated Learning Course (ILC) associated with the First Year Experience (FYE) program, if he or she completed an FYE program prior to Fall 2011.

A student who wishes to move to the new general education requirements will be regarded as having already completed the Pre-term Writing Portfolio in the new general education program if he or she completed phase one of the previous all-college writing requirement before the transition to the new requirements. However, to fulfill the purpose of the Writing Fundamentals Portfolio, the student must submit this portfolio within his or her first two terms of enrollment after the new requirements go into effect Fall 2011. It is the student's responsibility to enroll within this time frame in a course that will provide the opportunity to produce the required writing samples and to submit the portfolio by the end of that term. Failure to do so will make the student ineligible to change to the new general education requirements. (See Writing Program Policy, pp. 20-21.)

A student who makes this change must fulfill each Liberal Arts Distribution Requirement (LADR) with at least one course taken after the transition to the new general education requirements. Any remaining requirements may be fulfilled with courses taken before Fall 2011, provided the same course fulfills a LADR under both the old and new distribution requirements.

Graduation Application

Each student is required to file a graduation application in the Registrar's Office prior to graduation. Applications are due as follows:

- May graduation - one year prior to graduation
- September graduation - end of spring semester a full year prior to graduation
- January graduation - end of fall semester a full year prior to graduation

Specific due dates are published on the academic calendar. Late applications will be accepted with a late fee (see Late graduation application fee, p. 174) until the end of the drop/add period the semester prior to graduation.

Approval of Course Attributes

The College Curriculum Committee approves the attributes of courses for distribution requirements at the recommendation of the General Education Implementation Team (GEIT).

Fulfillment of Distribution Requirements by Examination

Where appropriate, any distribution requirement may be satisfied by examination. The department concerned gives an examination comparable to the final given in the course. Arrangements for taking examinations should be made through the department. To earn credit by taking an examination, see Credit by Examination, pages 189-190.

One Degree with Multiple Majors

Students who meet the degree requirements for more than one major within a degree program will have each major acknowledged on the transcript.

B.S. degree candidates who have completed course work for a B.A. major and B.A. candidates who have completed course work for a B.S. major will have that major acknowledged on their transcripts.

Receipt of Two Degrees

It is the policy of Principia College that no individual be awarded both a B.A. and a B.S. degree after earning 120 semester hours, even if requirements for both degrees have been fulfilled. An individual who wishes to earn two degrees must successfully complete 150 semester hours and spend a minimum of five semesters in residence. (See Residency Requirement, p. 12) Students earning two degrees may elect to receive the first degree upon its completion or wait to receive both degrees simultaneously upon completion of the additional requirements.

An individual with a degree from another college may be accepted as a transfer student. To earn a Principia degree, this student will have to meet all of the graduation requirements and earn a minimum of 36 Principia College semester hours. The courses which must be taken at Principia in a major

program (specific courses and/or number of courses) will be determined by the department faculty.

Graduation Honors

Graduation honors are based on a student's college work at Principia. A student whose cumulative grade point average at graduation is 3.50 or higher is granted a degree with scholastic honors. A degree with highest scholastic honors is granted for a cumulative grade point average of 3.75 or higher.

Beginning September 2014, a student whose cumulative grade point average at graduation is 3.650 or higher will be granted a degree with scholastic honors. A degree with highest scholastic honors will be granted for a cumulative grade point average of 3.850 or higher.

Commencement

Principia College holds an annual commencement ceremony in May. Students who have met all graduation requirements are eligible to participate. Students who graduate in September or January are welcome to participate in the commencement ceremony the following May.

Grades and Grading Rules**Grade Reports**

At midterm and at the end of each term students may view their grade reports online through BannerWeb. To access BannerWeb from on campus, click on the link to BannerWeb from prinweb. To access BannerWeb from off campus, go to www.principia.edu/ and find the link to BannerWeb under Current Students and Faculty. Printed grade reports, if released by the student, will be sent to parents or sponsors. Forms authorizing the release of grades are available in the Registrar's Office.

All requests for transcripts must be made in writing, and grades will not be released over the telephone.

Grading System

Grades are on a letter basis from A through F, including pluses and minuses, earning quality points through D minus. Quality points are based on a four-point scale, where one semester hour with a grade of A earns 4.0 quality points. A three semester-hour course with a grade of A earns 12.0 quality points, etc. A student's grade point average is computed by dividing the total quality points earned by the total GPA hours.

Grade Meaning	Quality Points Earned	
	1 semester hour	3 semester hours
<i>Satisfactory</i>		
A Excellent	4.00	12.00
A-	3.67	11.01
B +	3.33	9.99
B Good	3.00	9.00
B-	2.67	8.01
C+	2.33	6.99
C Satisfactory	2.00	6.00
<i>Unsatisfactory</i>		
C-	1.67	5.01
D+	1.33	3.99
D Deficient	1.00	3.00
D-	0.67	2.01
F Failure; no credit	0	0
<i>Withdrawn</i> (based on grades at the time of withdrawal)		
WP Passing; no credit	0	0
WF Failing; no credit	0	0
WX No basis for grade; no credit	0	0
<i>Other grades</i>		
I Incomplete	0	0
S Satisfactory (non-credit only)	0	0
U Unsatisfactory (non-credit only)	0	0
* Course still in progress	0	0

Midterm Grades

Midterm grades are given to all students in all courses. Only the grades A through F (no I's or *'s) are appropriate for midterm grades. S and U are appropriate as midterm grades in non-credit courses only.

Withdrawal Grades

Instructors may give withdrawal grades as final grades in accordance with the college's withdrawal policies. (See Withdrawals, pp. 192-193.)

Star (*) Grades

This grade means the course is still in progress at the end of a semester or interterm. The star grade is given only by pre-arrangement in special courses. These courses will be indicated in the catalog or on the course contract. The College Curriculum Committee approves such courses for the catalog and sets guidelines for acceptance of such contracts.

Incomplete (I) Grades

This grade indicates that the instructor has granted an extension in accordance with the guidelines below to a student who has not finished the work on time. Incompletes from fall and spring semesters and interterms must be resolved by the following midterm. At that time a grade must be given, even if the grade is an F.

If an extension beyond midterm is deemed necessary, the professor must petition the Scholastic Committee giving specific reasons for such an extension; the petition must be in the hands of the registrar a week before the deadline for midterm grades. The extension should at no time go beyond one year after the term in which the I grade is given.

In order to allow evaluation of academic standing before a new semester begins, incomplete (I) grades for students whose academic standing could be affected by the resolution of the incomplete must be resolved by one week before the first day of the following term rather than at the following midterm when incompletes normally resolve.

A student who is suspended during the term and is asked to leave before the end of the term may not receive an incomplete grade. The student will receive withdrawal grades in all of his or her classes. (See Withdrawals, pp. 192-193.)

If a student's suspension goes into effect at the end of a term, the student is allowed to complete the courses taken during the term. If any incomplete grades are recorded, they must resolve within two weeks of the last day of the term when the incomplete was recorded rather than at the following midterm when incompletes normally resolve.

Guidelines for Giving Incompletes

Meeting deadlines is viewed as part of character education at Principia. Students are expected to meet end-of-term deadlines; therefore, incomplete grades (I) are not given simply because a student's work has not been finished. Incomplete grades may be given when:

1. Extenuating circumstances have arisen which have prevented the student from completing work, and which are completely outside the student's control (usually unforeseeable); and
2. It is the opinion of the instructor that it is in the best interest of the student and the school.

Students are expected to have enough flexibility so that a short unexpected interruption in their schedules early in the term can be made up by the end of the term.

Three examples of extenuating circumstances are:

1. Student was called home for the last two weeks of the semester.
2. Student was in Cox Cottage the last week of the semester.
3. Laboratory equipment ordered for a research project was unavoidably detained.

Repeat Grades

Courses for which academic credit may be earned only once may be repeated if the previous grade earned in the course is lower than a C. When such a course is repeated, the highest grade is used to form the student's overall grade point average; all grades remain on the student's record; academic credit is earned only once. Although students are encouraged to repeat courses when the grade earned is lower than a C, the college is not obligated to offer courses specifically for this purpose.

Grade Changes***Policy***

A grade change should be made only to reflect more accurately the student's work done during the semester (or other class term), but not to take into account work done or submitted after the original grade was recorded.

Procedure

Faculty may recommend grade changes in their own classes to the academic dean. The academic dean sends grade changes to the registrar, who implements them.

Students have twelve months after a grade is posted during which they may petition the Scholastic Committee when they feel they have received an incorrect grade. The committee, after consultation with the faculty member involved, may, in turn, recommend a grade change to the academic dean.

If cheating or plagiarism is discovered after a final grade has been submitted, the grade may be changed according to the above procedures.

Phi Alpha Eta

Phi Alpha Eta is the scholastic honor society on campus. Degree-seeking students whose cumulative grade point average (GPA) is 3.800 or higher and who have earned at least 50 total semester hours, of which 20 must be Principia semester hours, are eligible for membership.

Members of Phi Alpha Eta who are currently enrolled in a degree-seeking program at Principia may audit one class each semester without paying the normal audit fee.

The Phi Alpha Eta award is made each year to the graduating senior whose work was completed with the highest Principia grade point average and who has at least 90 Principia semester hours.

Dean's List

To be on the Dean's List, a student must be in good standing and earn a term GPA of 4.000 in 12 or more semester hours, with no grade less than a C in any course, including non-credit courses.

Honor Roll

To be on the Honor Roll a student must be in good standing and must earn a term GPA of 3.800 or better in 12 or more semester hours, with no grade less than a C in any course, including non-credit courses.

Academic Standing

A student's academic standing is set at the end of each grading period (including each regular academic semester, after interterms, and when pending grades resolve) based on the minimum cumulative grade point average (GPA) scale outlined below. Total semester hours earned indicated in the table below include Principia College courses, transfer courses, Advanced Placement, International Baccalaureate, and CLEP.

In order to allow evaluation of academic standing before a new semester begins, incomplete (I) grades for students whose academic standing could be affected by the resolution of the incomplete must be resolved by one week before the first day of the following term rather than at the following midterm when incompletes normally resolve.

Notification of suspension and other academic standing changes is sent to students in writing after final grades are processed.

Good Standing

A student will remain in or return to good standing provided his or her cumulative GPA meets these requirements:

Total Semester Hours Earned	Minimum GPA Required
0 - 15	1.600
>15 - 30	1.700
>30 - 45	1.800
>45 - 59	1.900
>59	2.000

Academic Probation

A student will be placed on academic probation if his or her cumulative GPA is below the minimum required.

At the end of a semester, a student on academic probation whose cumulative GPA remains below the minimum on the GPA requirements scale will be continued on academic probation provided his or her term GPA for the semester just completed meets the minimum GPA requirement. A student may not remain on academic probation for more than two consecutive semesters.

Academic Suspension

A student on academic probation whose cumulative GPA remains below the minimum required and who does not qualify for an additional term of academic probation will be placed on academic suspension for one year.

Due to visa issues for international students and to facilitate regulatory compliance, when an international student receives notification of suspen-

sion, the suspension will go into effect up to 21 days later to allow the SEVIS principal designated school official (PDSO) to make necessary visa arrangements. Students must comply with the Blue Pages' policies regarding campus housing of suspended students. No action will be taken in SEVIS until the suspension goes into effect. The PDSO will notify the dean of academics and the registrar when arrangements have been made.

Upon returning from a one-year academic suspension, a student will return in good standing for one semester. At the end of the returning semester, academic standing will be set according to the normal rules for academic standing.

Any student who has been withdrawn from Principia College for two semesters or more for any reason must re-apply through the Office of Admissions and Financial Aid. A student on academic suspension becomes eligible to re-apply to Principia upon completion of a full year of satisfactory work at another accredited college or a full year of work experience.

A student may appeal an academic suspension in writing to the academic dean. Appeals are rarely granted, but may be considered in cases where there were extreme circumstances outside the student's control that interfered with successful academic work. Appeals must be submitted no later than two weeks before the beginning of the following semester.

Academic Honesty Policy

A Principian is expected to pursue a life of integrity. See The Principia Pledge and the Principia Community Commitment, pages 7-9. Therefore academic honesty is essential to a Principia College education.

Academic Misconduct Policy

Students are expected to refrain from all forms of academic misconduct, including but not limited to lying for academic gain, cheating, plagiarizing, unauthorized sharing of work, and any form of misrepresenting another's work as one's own. Students are also expected to refrain from helping others with any of these or other forms of academic misconduct.

Faculty members are required to report alleged academic misconduct to the Scholastic Committee via the Registrar. The Scholastic Committee will review the incident(s) and then recommend steps for supporting the student in upholding an appropriate standard of integrity in academic work. Course faculty may impose consequences for academic misconduct that include, but are not limited to, failure on the assignment and/or failure in the class. Additionally, egregious or multiple incidents of academic misconduct can lead to academic suspension. When a student is reported for academic misconduct, the student has the right to see the report and respond in writing and/or through a hearing process as outlined in the academic misconduct policy and procedures. Prior to an academic suspension a student has the right to a hearing, and afterwards may appeal to the Dean of Academics (see <http://www.principiacollege.edu/current-students/registrar/policies-and-procedures/academic-misconduct-policy-and-procedures>).

Academic Progress Policy

Any student in good academic standing or on academic probation is considered to be making satisfactory progress. A student who is not making satisfactory progress is not allowed to continue at Principia.

Confidentiality of Student Records

Principia considers a student's record to be confidential, with the exception of the following "directory information": student's name, date of birth, gender, address, telephone number (unless the student chooses not to list it), major fields of study, advisor, participation in officially recognized activities and sports, weight and height of athletic team members, class level, house, campus phone number, courses taken and current registration, status (full or part-time), dates of attendance, degrees received, academic honors and awards, and most recent educational institution attended.

The term "student" includes current, former, and prospective students (those who have applied). Some examples of confidential and private student information are social security numbers, transcripts, grades, and student disciplinary records.

Principia's requirement of protecting the confidentiality of private student information such as social security numbers extends to all Principia departments, Principia agents such as the National Student Clearinghouse, and Principia research consultants who are contractually bound to Principia's confidentiality requirement of strict non-disclosure of private student information. With written notice to the registrar, students may opt out of any Principia disclosure of directory or private information to any third party except for Principia agents or consultants bound by Principia's privacy policy.

Academic and Non-Academic Credit Rules**Principia Credit Units**

Principia's academic credit unit is the semester hour. Each course is assigned a schedule type, which indicates the ratio between contact time and out-of-class preparation. On the average, students should expect to devote three hours per week for 14 weeks, including in-class contact time and homework, for each semester hour of credit. It is the student's responsibility to devote sufficient time to achieve the outcomes of the course.

One Principia PE non-credit course is equal to a minimum of 42 contact hours.

Transfer Credit

Principia College accepts transfer credit and general education attributes from another institution if it meets the following criteria:

- 1) It must come from a regionally accredited college or university.
- 2) It must be comparable in nature, content, and level to the learning experience offered by Principia College.

- 3) It must be appropriate and applicable to the learning experience of the programs offered by Principia College.

For courses to meet criteria 2 and 3, the course must have been completed with a grade of a C- or higher, although credit toward a major may have a higher grade requirement. The Registrar's Office handles transfer credit and General Education Implementation Team (GEIT) authorizes general education credit. Currently enrolled students must get prior approval from the Registrar's Office to transfer in a course they plan to take from another institution.

To begin the process of seeking credit, transfer students must have official transcripts sent directly from their previous institution(s) to the Registrar's Office at Principia College and must provide access to course descriptions, and in some cases a syllabus.

For courses that are clearly comparable to Principia courses the Registrar's Office will assign credit for the matching course number. For courses that are not clearly comparable the chair of the appropriate department will review the information and determine whether or not credit can be given. For courses across departments or units the review will be completed by the unit head (for courses within a single unit) or by the College Curriculum Committee (for courses across more than one unit). When a course is reviewed, whether by a department chair or the unit head, a recommendation may be made as to whether or not the transfer course seems to meet the requirements for a LADR (Liberal Arts Distribution Requirement) designation.

If a transfer course receives credit as a comparable Principia course that has a LADR attribute, the transfer course will also receive the LADR attribute. If the course is received for general credit, a student may apply to GEIT for a LADR attribute. GEIT will review these requests, taking into consideration the recommendation from the department chair or unit head. If either course credit or a LADR attribute is denied, the student will receive a brief written explanation as to which criteria have not been met and how the determination was made.

Transcripts from countries outside the United States must be evaluated by the American Association of Collegiate Registrars and Admissions Officers (AACRAO), an approved evaluation service, at the student's expense. The report from AACRAO must be sent directly to the Registrar's Office at Principia College. If the transcript or course descriptions are not in English, a certified English translation must be submitted. Prior to making arrangements for international evaluations, please contact the Registrar's Office.

Transfer credit is not figured into a student's Principia grade point average. Transfer courses may be used to fulfill major or minor requirements at the discretion of the department chairs concerned; however, some departments may require a grade higher than a C- for such courses.

One semester hour equals 1.5 quarter hours. One quarter hour equals 0.667 semester hours.

Fulfillment of General Education Requirements through Transfer Work

In order to ensure that students address the College-Wide Learning Outcomes and the Liberal Arts Distribution Requirements (LADR) outcomes, they are expected to complete some of their LADR courses at Principia. Transfer courses may be applied to the Liberal Arts Distribution Requirements as follows:

- For the Bachelor of Arts degree: In each LADR area, a transfer course may be used to fulfill one of the two Liberal Arts Distribution Requirements (LADR).
- For the Bachelor of Science degree: Students must take one course from each of the different Liberal Arts Distribution Requirements (LADR) areas at Principia, but may transfer in the other two LADR requirements in any of the three other areas. The 24 semester hours of Math and Natural Science courses outside the major discipline may be met by transfer credit.
- One PE transfer course may be used toward fulfilling the PE distribution requirement, but one PE course must be taken at Principia College.

For use of transfer credit to fulfill the second language proficiency requirement, see Second Language, page 19.

Advanced Placement, CLEP (College Level Examination Program), and International Baccalaureate Examinations

A student who enters with satisfactory scores in Advanced Placement examinations (3 or higher), CLEP (scores are evaluated according to American Council on Education standards), and/or in International Baccalaureate examinations (4 or higher in higher level examinations) in subjects that parallel courses given at Principia may receive college credit with approval of the department chairs concerned. No further examination or fee is required. Transfer credit rules apply to these credits.

Credit By Examination

A student may obtain credit by examination in one of two ways. (1) An instructor who decides that a student has demonstrated proficiency in the subject matter of a course offered at Principia, either by successful completion of advanced work at a higher level or through an evaluation by an instructor, may petition the Scholastic Committee with the approval of the department to grant credit by examination to the student. (2) A student who feels especially well prepared in the subject matter of a course offered at Principia may, with the approval of the instructor and department, petition the Scholastic Committee for permission to receive credit by examination.

After approval of the petition, the instructor will administer the examination and/or evaluation of the student's achievement. If the student demon-

strates achievement at the grade B level (3.000) or above, credit is granted and recorded on the student's scholastic record, but the credit carries no quality points. Upon approval of the petition, the student will be charged a credit-by-examination fee.

Credit by examination may be granted only in courses in which the student would normally be permitted to enroll. Credit by examination is not awarded for courses from which a student withdrew due to suspension.

Credit by examination may also be earned in physical education. Students who have developed considerable expertise in an individual activity may achieve credit by examination for one of these areas through successful completion of a test at a skill level that is above average or higher. The test for credit by examination in physical education may require written as well as practical understanding of the activity. The skill level for aquatic credit by exam is determined by the level of mastery required for the American Red Cross Swimmer level. No fee is charged for credit by examination in physical education.

See also Fulfillment of Distribution Requirements by Examination, page 180.

Independent Study

Independent studies may be pursued on an individual basis through a negotiated course contract under faculty supervision. Independent studies are intended for self-motivated students who are able to pursue a rigorous course of individualized study.

Procedure

In outlining a study format, students and instructors should plan at least 42 hours of work for every semester hour or PE credit. For each component of the study, the time required and the grading criteria should be specified. The date by which work must be completed should be stated if it is other than the end of the term for which the contract is registered.

For on-campus independent courses, instructors should meet with students a minimum of one hour per week throughout the term.

Contracts must be approved by the student's advisor, the instructor, the chair of the department in which it is offered, and the unit head. If the course is to be done off campus or during an interterm, the contract also needs approval from the dean of academics. Students are charged the regular tuition rate for the number of semester hours specified on the contract for off-campus and interterm courses.

Independent study courses may be used to fulfill a distribution requirement with approval of GEIT. Contracts fulfilling a distribution requirement must address the learning outcomes for that requirement.

Official forms for regular semester on-campus contracts are available through the college's internal computer network. Completed forms must be turned in to the Registrar's Office before the end of the drop/add period. However, students need to be alert to earlier departmental and unit dead-

lines. A special form, available from Academic and Career Advising must be used if the independent study is going to be done off campus or during an interterm. For deadlines, contact Academic and Career Advising.

To be eligible for an off-campus independent study course, students must be in good academic standing. Exceptions must be approved by Scholastic Committee. The academic department sponsoring the off-campus independent study course determines the level of writing proficiency required for each specific off-campus independent course.

Registration Rules

Student Responsibility for Registration

Students are responsible for completing their own registration, after meeting with their academic advisor, according to the schedule published in the academic calendar. Detailed information about how and when to register is provided in the course schedule and drop/add instructions each term. Registration is considered valid only when it is recorded in the Banner Student data system. Students are responsible for confirming that their registration is complete and accurate.

Normal Load, Overload, and Underload

Normal load: 12 to 18 semester hours.

Overload: more than 18 semester hours.

Underload: fewer than 12 semester hours.

Normal load

The usual course load is 15 semester hours, but students may take as few as 12 or as many as 18 semester hours for credit without special permission. In addition, students often take a PE or other non-credit activity course.

Overloads and Planned Underloads

A resident student who wants to carry more or less than the normal load must submit a petition to the Scholastic Committee. Students who plan to do so should consult the financial aid office regarding the financial implications including impact on financial aid awards.

Day students may register for an underload without special permission and pay for courses on a semester hour basis. Day students who want to carry more than the normal load must submit a petition to the Scholastic Committee.

Underloads may impact a student-athlete's NCAA eligibility.

Changes in Registration (Drop/Adds)

Registration changes may be processed through the second week of the semester without charge and without withdrawal grades. Specific dates for

the drop/add period are published in the academic calendar.

A student may drop a course during the drop/add period without instructor permission. After the first five days of the semester, adds will be allowed only with instructor permission.

Late Registration Changes

A late registration fee is charged for all changes made after the drop/add deadline. (See Late registration fee, p. 174.) After the deadline, students may, with the instructor's permission:

- add credit courses
- add or drop non-credit courses

In order to drop a credit course after the drop/add period, a student must petition the Scholastic Committee for approval.

Withdrawals

The withdrawal period begins at the end of the drop/add period and ends four weeks before the last day of classes each semester. Specific dates for the withdrawal period are published in the academic calendar. Withdrawal grades are not allowed in courses from which a student has already been excluded with a failing grade.

Students may withdraw from courses under the following conditions:

- During the withdrawal period, a student desiring to withdraw from any credit course while retaining a normal load may do so with the approval of his or her advisor(s) and the instructor of the course.
- After the withdrawal period, a student desiring to withdraw from a credit course must petition the Scholastic Committee. Withdrawals during the last four weeks of classes will be allowed only under exceptional circumstances outside the student's control, such as health conditions or family situations. Poor performance or lack of time management is not considered a legitimate reason for withdrawal during this period.
- A student desiring to withdraw to an underload at any point in the semester must petition the Scholastic Committee.
- A student desiring to withdraw from a non-credit course may do so at any point in the semester after notifying the instructor.
- A student who voluntarily withdraws from school during the withdrawal period will receive withdrawal grades in his or her classes.
- A student who voluntarily withdraws from school during the last four weeks before the last day of classes may petition for withdrawal grades which may be allowed in exceptional circumstances as indicated above.

- A student who is suspended during the term and asked to leave before the end of the term will receive withdrawal grades in his or her classes.

Students who are allowed to withdraw from courses after the drop/add period will receive withdrawal grades rather than having the courses dropped from their records. If a student is allowed to withdraw, it is the instructor's prerogative to assign a WP (withdrew passing), WF (withdrew failing), or WX (withdrew with no basis for a grade).

Students not allowed to withdraw are held responsible for completing all course work. A student who stops attending class risks receiving an F.

Withdrawing during the semester to an underload

A student wishing to withdraw to an underload (less than 12 semester hours) during a term must petition the Scholastic Committee. Factors the committee will consider are:

- Need for the course credit to make adequate progress toward graduation
- Possible loss of a visa (for international students)
- Ineligibility for varsity athletes
- Student Life input about the student living on campus with an underload.

Administrative Changes

At any time, the registrar may process “adds” and “drops” which simply correct clerical errors and do not reflect changes in the student load or schedule.

Audits

To audit a course, an individual must either be enrolled in the college or be a faculty or staff member (or spouse thereof). An audit must be approved by the student's advisor and the instructor of the course involved.

Students attending a class must either audit it or register for credit; there is no informal “sitting in.” Any student desiring to audit a course must complete the proper form from the Registrar's Office.

Visitors may attend a class on an occasional basis without registering to audit. Faculty and teaching staff may also attend colleagues' classes without registering to audit.

Auditing students are not permitted to take part in class discussions, except by invitation of the instructor, nor to make demands upon the instructor either in or out of class. There are no requirements imposed upon auditing students for reading or written work. No attendance records for auditors are kept by instructors, nor are audits recorded on the permanent record in the Registrar's Office. A student may drop an audited course at any time without formal office approval.

A fee is charged for auditing (See Academic Fees, p. 173). The fee for one audit per semester is waived for faculty or staff members, one-year enrichment students, and members of Phi Alpha Eta.

Canceling Undersubscribed Courses

Courses with an enrollment of five or fewer students may be cancelled.

Class Level

A student's official classification as freshman, sophomore, junior, or senior is determined by the number of semester hours earned.

Freshman	under 30 semester hours
Sophomore	30 semester hours
Junior	60 semester hours
Senior	90 semester hours

Course Numbering

Students should experience increasingly challenging courses during their college careers, developing academic skills and building upon knowledge gained. Principia College's course numbering system seeks to:

1. Identify courses by level of difficulty of content and skills;
2. Help place students in courses appropriate to their ability, thus preventing too wide a range of student skills within courses;
3. Identify, using lower numbers, courses which encourage mastery of basic academic skills early in college careers; and
4. Identify, using higher numbers, advanced level courses which encourage students to challenge themselves at increasingly higher levels of difficulty.

Introductory Level

Courses numbered 100-199 are beginning level courses. Their content and academic skills level are most appropriate for freshmen; sophomores may also enroll. Upperclassmen need the consent of the instructor to enroll in these courses, with the exception of a few courses which welcome students from all class levels.

Intermediate Level

Courses numbered 200-299 are intermediate level courses which build on basic academic skills and present the variety of content available in each discipline. They are most appropriate for sophomores and juniors, but freshmen and seniors may enroll.

Advanced Level

Courses numbered 300-399 are advanced level courses which go into more depth in content and assume mastery of basic academic skills. They are most appropriate for upperclassmen. However, students of any class level who have appropriate skills or content prerequisites may enroll; underclassmen need the consent of the instructor.

Courses numbered 400-499 are advanced research, reading, or independent study courses, senior seminars, or capstone internships. Usually they are most appropriate for majors and need the consent of the instructor.

Non-Credit Courses

Courses numbered 099 and below receive no academic credit.

Other Rules

Majors and Minors

Approval or removal of all majors, minors, concentrations, and their requirements rests with the College Curriculum Committee and Faculty Senate, with final approval by the administration.

Full descriptions of Principia's majors and minors begin on page 23.

Arrival on Campus

All students must be on campus for the first day of classes. *New* students must be on campus to attend their first scheduled orientation activity. Students needing to arrive late for classes for legitimate reasons must make arrangements with the professors of classes they will miss *prior* to missing any classes. All students arriving late risk being dropped from classes.

Exclusion from Class

During the term, a student may be excluded with an "F" from a course for reasons including, but not limited to, non-attendance, plagiarism, or cheating. Before excluding the student from class, the instructor will inform the student in writing of the reason for the exclusion and allow the student to respond. A copy of the letter will be sent to the Scholastic Committee. If a student withdraws from school after being excluded from a course, the final grade of "F" will be received for the course and not a withdrawal grade.

Field Trips

Field experiences are an important aspect of the academic program. A field trip is defined as any enriching academic experience better implemented outside the classroom. A conflict field trip is defined as a field trip which would cause any student to miss a previously scheduled, faculty-assigned activity. A work conflict field trip is defined as one which has been announced after the fifth day of class or after a student has made an employment commitment based on announced class/field trip schedules, whichever is later, and which conflicts with a student's employment commitment.

Field Trip Guidelines

1. If a field trip is not a conflict field trip or a work conflict field trip, the instructor may require the student to participate.

2. Attendance cannot be required at conflict field trips, work conflict field trips, or work which conflicts with field trips.* It is assumed that every faculty member has the right to schedule activities for a student during the regular class meeting time.

* Exception: If no qualified substitute is available for a student's job, and/or the job must be done at a specific time, the employer should let the field trip instructor know that the student is needed at that time. The employer may, in this case, require the student to be at work.

Athletic Competitions

The opportunity to participate in intercollegiate athletics is an important aspect of the whole man concept at Principia. For the participating student it is an opportunity which is encouraged and supported by the faculty and administration. Since running an intercollegiate athletic program necessarily requires some missed class time and the athletic trip is not by definition a field trip, the following policies will be recognized:

1. As a general rule, classes missed for athletic contests during the regular season and post-season play (i.e., conference tournament, regional tournament, NCAA play) are excused absences.
2. Students are required to consult with their instructors before they miss a class because of a scheduled contest. Students are responsible for completing all assignments and making up any class work they have missed.
3. The NCAA requires student-athletes to make normal progress toward graduation and to be in good academic standing in order to participate in intercollegiate athletics.
4. Faculty are encouraged to communicate with students and coaches on an ongoing basis concerning any student-athlete who they feel is not meeting his or her academic responsibilities.

End of Semester Assignments and Final Examination Scheduling Policy

End of Semester Assignments

In order to assure that students have adequate time to prepare for final examinations, faculty should carefully consider the demands they place upon students. The week prior to final exams shall be free of major assignments (e.g., tests, papers or projects) unless they have been announced at least two weeks in advance of the due date. It is expected that during this period all assignments and final activities, including any combination of in-class and outside class work and preparation for final exams, will adhere to the normal rule of three hours per semester hour per week. (See Academic and Non-Academic Credit Rules, p. 187.) Required activities must not interfere with students' ability to prepare for final examinations.

Final Examination Scheduling

1. In-class written examinations must be taken during their scheduled final examination periods.
2. Take-home examinations must be distributed to students no later than the last officially scheduled, regular class meeting of the semester and are due no earlier than the scheduled time of the final examination for that course.
3. Notification of final exam meeting must appear on each course syllabus. If attendance is not required during the scheduled final examination time, students should be allowed to submit final course-work in advance, if they so choose.
4. Students who, for legitimate reasons, wish to reschedule their final examination must petition the Scholastic Committee by the deadline specified in the academic calendar. However, if a student has a conflicting examination schedule due to evening or unscheduled classes, the instructor of one class may arrange to give the student the examination at another time without petitioning Scholastic Committee. A student who has three final exams scheduled on the same day may petition the Scholastic Committee to have one of the exams rescheduled. Transportation arrangements for leaving campus at the end of a term must accommodate the student's exam schedule and are not considered reason for rescheduling an exam.
5. Faculty who, for legitimate reasons, wish an exception to this policy must petition the Scholastic Committee for permission.

Scholastic Committee

Exceptions to the scholastic rules and regulations of the college require the approval of the Scholastic Committee. Petitions for exceptions are filed with the Registrar's Office.

Student Ombudsman

For students needing to resolve an issue, a student ombudsman is available. See Student Ombudsman page 8.

SECTION 6

Trustees, Officers, and Administration

Board of Trustees

David J. Anable
Gorham, Maine

William J. Flatley
Rockport, Maine

Hans E. Fredrikson
St. Louis, Missouri

John D. Friborg
Acton, Massachusetts

Janna Lowe Hernholm
Secretary
San Diego, California

Jayne Walker Holcomb
Woodbridge, Virginia

Charles Lindahl
Fullerton, California

Robert J. Macdonald
Menlo Park, California

Meridee K. Olsen
Wilton, Connecticut

Catherine A. Raffles
Vice-Chairman
Lake Forest, Illinois

Julia R. Sanderude
Ridgefield, Connecticut

Robert B. Schwentker
Treasurer
Raleigh, North Carolina

James W. Suber
Irvine, California

Steven K. Sydness
Chairman
Wellesley, Massachusetts

Carol D. Worley
Chestnut Hill, Massachusetts

Administration, The Principia

Jonathan W. Palmer
Chief Executive/College President

Howard E. Berner Jr.
Chief Investment Officer

Richard T. Booth
Chief Technology Officer

D. Douglas Gibbs
Chief Financial Officer

Peter A. Stevens
Chief Administrative Officer

Sara Thorndike
Controller

Marilyn J. Wallace
Head of School, St. Louis Campus

Laurel S. Walters
Marketing and Communication Director

College Administration

Dr. Jonathan W. Palmer
President

Dr. Scott L. Schneberger
Provost

Dr. Joseph M. Ritter
Associate Dean of Academics
(Dean of Academics, Designate)

Dr. Libby E. Scheiern
Assistant Dean of Academics

Dorsie Glen
Dean of Students

Brian McCauley
Dean of Enrollment Management

Lyman E. (Lee) Ellis III
Director of Athletics

Karen Grimmer
Dean of Administration and College Budget Director

Alice Dervin

Registrar

Administration of the Academic Program

Dr. Scott L. Schneberger

Provost

Dr. Joseph M. Ritter

Associate Dean of Academics

(Dean of Academics, Designate)

Dr. Libby E. Scheiern

Assistant Dean of Academics

James H. Hegarty

Creative Arts and Communication

Unit Head

Duncan Charters

Humanities Unit Head

Jeffrey B. Cornelius

Mathematics and Natural

Sciences Unit Head

Brian D. Roberts

Social Sciences Unit Head

Deb B. Wold

Academic Staff Unit Head

SECTION 7

Faculty

Distinguished Endowed Faculty Chairs

Roy W. Johnson Distinguished Professor

Hélène D. Brown

The Cornelius Ayer and Muriel Prindle Wood Professor of Humanities

Duncan Charters

Harry J. and Margaret L. Heimer Professor of Mathematics and Computer Science

Thomas H. Fuller

Kent Smith Professor of Math, Computer, and Natural Sciences

Stephen G. Hinthorne

Charles Stewart Harding Mott Distinguished Professor

Marie G. Jureit-Beamish

William Martin and Mina Merrill Prindle Professor of Fine Arts

John R. Near

Edith and Lewis White Distinguished Professor

Joseph M. Ritter

The year in parentheses, listed after individuals' names, indicates their first year of employment with The Principia. It does not necessarily indicate continuous employment.

Crystal R. Allen (2102)

Assistant Professor of Philosophy

B.A., Principia College;

M.A., University of Missouri;

Ph.D., University of Missouri

James W. Bilsborrow (1983)

Professor of Business

Administration

B.S., Principia College;

S.T.B., Boston University;

M.B.A., Pepperdine University

Julie Blase (2003)

Associate Professor of Political Science

B.A., M.A., Ph.D., University of Texas, Austin

Linda A. Bohaker (1995)

Professor of Business

Administration

B.A., Principia College;

M.A.L.D., Tufts University;

A.M., Washington University

Sally Bown (2012)

Librarian with rank of Associate Professor

B.A., Northwestern Illinois

University;

M.A., University of Kentucky

John W. Broere (2011)

Instructor of Computer Science

B.A., Principia College

Hélène Diaz Brown (1994)

Professor of French

M.A., Université de Bordeaux, France;

M.A., University of Wisconsin, Milwaukee;

Ph.D., University of Wisconsin, Madison

Gregory L. Bruland (2012)

Associate Professor of Biology

B.S., Principia College;

Ph.D., Duke University

Jackie R. Burns (2010)

Professor of Sociology
 B.A., University of Oklahoma;
 M.A., Oklahoma State University;
 Ph.D., Texas A & M University

Michael T. Bushong (1978)

Assistant Professor of Physical Education
 B.A., Principia College;
 M.S., Southern Illinois University,
 Carbondale

Nicole Bushong (2011)

Instructor of Physical Education
 B.A., Principia College

Shannon E. Carney (2010)

Instructor of Physical Education
 B.A., University of California, Los Angeles

Duncan Charters (1974)

Professor of Languages and Cultures
 B.A. (Hons.), M.A., Cambridge University;
 A.M., Ph.D., Indiana University

Jeffrey B. Cornelius (1989)

Professor of Chemistry
 B.S., Principia College;
 M.S., Ph.D., University of Illinois,
 Urbana-Champaign

David D. Coughtry (1985)

Professor of Studio Art
 B.A., Principia College;
 M.A., M.F.A., State University of
 New York, Albany

Thomas L. Davidson (2000)

Assistant Professor of Economics
 B.A., Drake University;
 M.B.A., Harvard Business School

Margaret M. D'Evelyn (2007)

Associate Professor of Art History
 B.A., Principia College;
 M.A., University of California,
 Berkeley;
 Ph.D., Princeton University

Karen L. Eckert (2012)

Professor
 B.S., Principia College;
 Ph.D., University of Georgia

Scott A. Eckert (2010)

Professor of Biology
 B.S., Principia College;
 Ph.D., University of Georgia

Lyman E. Ellis III (1996)

Professor of Physical Education
 B.A., State University College,
 Fredonia, New York;
 Ed.S./M.S., University at Albany,
 New York;
 M.B.A., Rensselaer Polytechnic
 Institute

Carl A. Erikson (2007)

Assistant Professor of Physical Education
 B.A., Principia College;
 M.E.D., Governor College

Alexander Ferguson (2011)

Assistant Professor of Physical Education
 B.A., Principia College;
 M.S., Northern State University

Thomas H. Fuller Jr. (1989)

Professor of Mathematics and Computer Science
 A.B., Amherst College;
 M.S., Old Dominion University;
 D.Sc., Washington University

Nikki J. Gamrath (2011)

Assistant Professor of Education
 B.A., Principia College;
 M.Ed., Antioch University

Michael W. Hamilton (2004)

Assistant Professor of Religion
 B.A., San Francisco State University;
 M.Div., Boston University;
 Th.M., Princeton Theological
 Seminary

Simon P. Hanson (2012)

Associate Professor of Chemistry
 S.B., Massachusetts Institute of
 Technology;
 Sc.D., Massachusetts Institute of
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Hilary R. Harper-Wilcoxon (1997)

Assistant Professor of Dance
 B.A., Columbia University;
 M.F.A., University of Wisconsin

James H. Hegarty (2004)

Associate Professor of Music
 B.A., Principia College;
 M.M., American Conservatory;
 M.M., Northern Illinois University

Lauren S. Hinchman (2011)

Assistant Professor of Education
 B.A., Principia College;
 M.A.T., Webster University;
 M.S., Montana State University

Stephen G. Hinthorne (1994)

Professor of Mathematics
 B.A., University of California, Santa Barbara;
 M.A., University of Massachusetts;
 Ph.D., Washington State University

Catherine A. Hooper (1994)

Assistant Professor of Mathematics
 B.M., Miami University (Ohio);
 M.S., Southern Illinois University, Edwardsville

Barry R. Huff (2008)

Assistant Professor of Religion
 B.A., Principia College;
 M.T.S., Eden Theological Seminary;
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Kenneth R. Johnson (2003)

Professor of Computer Science
 B.A., Principia College;
 M.B.A., Northwestern University

Marie G. Jureit-Beamish (1978)

Professor of Music
 B.A., University of California, Berkeley;
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 M.M., M.M.A., D.M.A., Yale University

Daniel D. Kistler (1995)

Assistant Professor of Studio Art
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Jonathan S. Langton (2009)

Assistant Professor of Physics
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Duncan Martin (2010)

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Christine A. McAllister (1999)

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Patrick N. McCreary (2001)

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William Omari Miller (1996)

Associate Professor of Sociology
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Winifred A. Needham (2013)

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John O'Hagan (2013)

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Vitalis M. Otieno (2003)

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Jonathan W. Palmer (2008)

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School

Andrew T. Parker (2008)

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Wesley B. Powell (2012)

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Casey Reynolds (1986)

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Danne P. Rhaesa (2007)

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Gregory W. Sandford (1998)

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B.A., Principia College;
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Scott L. Schneberger (2008)

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Ph.D., Georgia State University

Serena Seid-Graham (2010)

Assistant Professor of Spanish
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M.A., University of Hawaii

Jess T. Semnacher (2011)

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Heidi J. Snow (2002)

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M.A., Bridgewater State College;
Ph.D., Southern Illinois University,
Carbondale

Mary Ann Sprague (1997)

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M.B.A., University of Missouri

Christine Calkins Steele (2006)

Assistant Professor of Theatre
B.A., University of Iowa, Iowa City;
M.A., Shakespeare Institute,
Stratford-upon-Avon, U.K.

Jeff C. Steele (2010)

*Associate Professor of
Interdisciplinary Studies*
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University;
Ph.D., The Shakespeare Institute,
University of Birmingham

Sally A. Steindorf (2005)

Assistant Professor of Anthropology
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William B. Stock (2010)

Professor of Religion
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M.A.L.D., Ph.D., Tufts University

Janis D. Treworgy (2000)

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*Associate Professor of Mass
Communication*
B.A., University of Santa Barbara

Joan T. Wesman (2011)

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Communication*
B.A., Hamilton College;
M.A.T., Brown University

Paul R. Wesman (2010)

*Assistant Professor of Mass
Communication*
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M.A., Emerson College

Charles E. Wilcoxon (1999)

Instructor of Physical Education
B.A., Principia College

John W. Williams (1983)

*Associate Professor of Political
Science*
B.A., Principia College;
J.D., George Washington University

Christopher B. Young (2005)

Assistant Professor of Philosophy
B.A., Fort Lewis College;
M.A., University of New Mexico

**Emeriti (with date
appointed)****David K. Andrews**

President Emeritus, 1981

George Andrews

*Professor Emeritus of History and
Philosophy, 1958*

Joan R. Andrews

*Professor Emerita of World
Literature and Religion, 1997*

Louise Andrews

*Assistant Professor Emerita of Art,
1958*

Robert Andrews

*Professor Emeritus of Business
Administration, 1981*

Nancy W. Baker

Librarian Emerita, 1960

Samuel N. Baker

Professor Emeritus of Spanish, 1960

Brook B. Ballard, Jr.

Professor Emeritus of History, 1995

James Belote

Professor Emeritus of History, 1983

Frank P. Biggs

*Professor Emeritus of Economics,
2008*

Donald T. Bliss

*Professor Emeritus of Sociology,
1977*

Edward D. Bradley

Professor Emeritus of French, 1985

Paula R. Bradley

Professor Emerita of French, 1994

Colin C. Campbell

Professor Emeritus of English, 2000

Archibald Carey, Jr

*Professor Emeritus of Philosophy,
1988*

George A. Chandler

*Professor Emeritus of Sociology and
Philosophy, 1963*

J. Bryan Collester

*Professor Emeritus of Political
Science, 2002*

J. Colette Collester

*Professor Emerita of Art History,
2002*

David A. Cornell

Professor Emeritus of Physics, 2002

Joyce C. Cundiff

*Professor Emerita of Mathematics,
1993*

E. Olive Davis

Dean of Women Emerita, 1960

Edward A. DeWindt

*Associate Professor Emeritus of
Chemistry, 1997*

Glenn Felch

*Professor Emeritus of Studio Art,
2007*

Judith McCreary Felch

*Professor Emerita of Studio Art,
2007*

Mary Lu Fennell

Professor Emerita of English, 1999

Thomas R. Fennell

Professor Emeritus of History, 2000

Elaine R. Follis

*Professor Emerita of Religious
Studies, 2006*

Clayton D. Ford

*Professor Emeritus of Political
Science, 1970*

Beatrice Gamble

Librarian Emerita, 1958

Laura Lee Smith Gerber

*Professor Emerita of Mathematics,
1993*

Alfred Gertsch

*Professor Emeritus of Modern
Languages, 1997*

David A. Gibbs

*Professor Emeritus of Mathematics,
2009*

James L. Green

Professor Emeritus of Fine Arts, 1976

George B. Happ

Professor Emeritus of Biology, 1960

Gretchen M. Happ

Registrar Emerita, 1963

Albert G. Hinman

*Professor Emeritus of Economics,
1997*

Thomas M. Holzberlein

Professor Emeritus of Physics, 1993

Dorothy Scott Hooper

*Professor Emerita of Mathematics,
1964*

William J. Hooper

Professor Emeritus of Physics, 1964

Charles B. Hosmer, Jr.

Professor Emeritus of History, 1993

Theodore Houpt

*Distinguished Professor Emeritus of
English, 1984*

Garner E. Hubbell

Dean of Men Emeritus, 1960

Winifred Hubbell

Instructor Emerita of Chorus, 1958

Iolani Ingalls

Professor Emerita of Bible, 1977

Anne Elizabeth Jenkins

Professor Emerita of English, 1960

Patricia W. Langton

Registrar Emerita, 2012

Robert C. LeClair

Professor Emeritus of English, 1997

Edwin S. Leonard

Dean of the College Emeritus, 1963

Donald J. Mainwaring

*Professor Emeritus of Drama and
Communication, 1988*

Frederick C. Marshall

*Professor Emeritus of Earth Science,
2000*

Abbie H. Martin

Professor Emerita of German, 2007

G. Curtis Martin

*Professor Emeritus of German
Studies, 2006*

Chester H. Matravvers

*Professor Emeritus of Education,
1960*

Elizabeth F. McIntire

*Professor Emerita of Art History,
1993*

Floyd A. McNeil

Professor Emeritus of History, 1960

Frederic Evan Morgan

President Emeritus, 1959

John R. Near

Professor Emeritus of Music, 2013

James A. Nietmann

*Professor Emeritus of Political
Science, 1983*

Frank Parker

*Professor Emeritus of Fine Arts and
Drama, 1966*

David E. Pfeifer

*Professor Emeritus of Philosophy,
2005*

Forbes S. Robertson

*Professor Emeritus of Earth
Sciences, 1978*

Percival Robertson

Professor Emeritus of Geology, 1960

Robert J. Rockabrand

Professor Emeritus of Music, 1997

Reinhart Ross

Professor Emeritus of Music, 1985

James K. Schmidt

Professor Emeritus of Fine Arts, 1985

Jack K. Snyder

*Professor Emeritus of Economics,
1990*

Lenore A. Suarez

*Professor Emerita of Physical
Education, 2008*

Douglas B. Swett

*Professor Emeritus of Spanish and
World Literature, 1977*

John F. Wanamaker

Professor Emeritus of Biology, 1977

Paul O. Williams

Professor Emeritus of English, 1986

SECTION 8

Staff

The year in parentheses, listed after individuals' names, indicates their first year of employment with The Principia. It does not necessarily indicate continuous employment.

Academic Services

Academic and Career Advising Director

Miriam (Midge) M. Browning (1983)
B.S., Principia College;
B.S., California State University

Academic Technology Director

Christian Borja (1999)
B.A., Principia College;
M.A., Pepperdine University

Library Director

Elizabeth W. Roberts (1998)
B.A., Principia College;
M.L.I.S., University of Texas, Austin

Principia Abroad Director

Linda Bohaker (1996)
B.A., Principia College;
M.A.L.D., Tufts University;
A.M., Washington University

Principia Lifelong Learning Director

Donna Gibbs (1998)

Principia Online Academic

Programs Director
Gary Gentry (1980)
B.A., Principia College;
J.D., University of San Diego

Registrar

Alice Dervin (2004)
B.A., Principia College;
M.A., Goddard College

Center for Sustainability Director

Karen L. Eckert (2012)
B.S., Principia College;
Ph.D., University of Georgia

Teaching and Learning Excellence Center Director

Libby E. Scheiern (1999)
B.A., Principia College;
M.A., Pepperdine University
Ph.D., University of Illinois, Chicago

Administrative Services

Administrative Systems Group Director

Holly Webster (1990)

Campus Security Director

Bryan White (2007)

Dean of Administration and College Budget Director

Karen Grimmer (1990)

Dean of Enrollment Management

Brian McCauley (2008)

Dining Services Director

Lance Thornton (2001)

Director of Compensation/Benefits

Deborah Thompson (2013)

Director of Nursing

Tiffany Green (2004)

Facilities Director

Ed Goewert (2004)

Financial Aid Director

Tamara Gavaletz (2003)

Human Resources Manager

SharonAnn Smith (2011)

Mail and Copy Services Manager

Ward Patterson (1992)

Media Services Director

John Lyon (1991)

Workplace Safety Director

Office of Student Life

Dean of Students

Dorsie Glen (1989)

Director of Freshmen Housing

Joshua Sprague (1996)

Residence Director

Blair Smith (1994)

Counselors:

Heather Barron (2011)

Doug Brown (2012)

Reid Charlston (2008)

Jonathan Daugherty (1995)

Matt Flavin (2012)

Geoff Hinchman (2010)

Louise Kingsbery (2000)

Dan Schneider (2008)

Nicole VanHoose (2010)

Forrest Wilder (2010)

Staff:

Nicole Tisdell (2012)

Judy White (1999)

Business

Budget Office Manager

John Bruce Trevor-Roberts (2011)

College Store

Cheryl Craft (1994)

Chief Advancement Officer

Chief Financial Officer

D. Douglas Gibbs (2002)

Chief Investment Officer

Howard E. Berner Jr. (1996)

Contracts Officer

Bruce Alioto (1992)

Controller

Sara Thorndike (2005)

Purchasing Agent

Susan Curry (2011)

Computing and Information Services

College Technology Director

Robert Peterson (1998)

Telecommunications Manager

Zach Retzlaff (2011)

Advancement

Alumni and Field Relations & Annual Fund Director

Donna Gibbs (1998)

Director of Advancement Services

Cindy Fox (1993)

Development Director

Lawrence E. Harrison Jr. (2000)

Planned Giving Director

Ned McCarty (2011)

General Staff

Academic and Career Advising

James Brandt (2006)

Kristin Halsey (2011)

Linda Hannan (2007)

Academic Technology

Kevin Henry (2013)

Administration and Budget Office

Kim Howland (1999)

Admissions and Financial Aid

Ty Bennett (2012)

Marina Byquist (2009)

Kathryn Clark (2012)

Rebekah Charleston (2013)

Levi Kline (2008)

John Lane (2010)

Cecilia Macklin (2003)

Amber McCartt (1999)

Justin Myers (2011)

Christian Richardson (2013)

Katie Schiele (2007)

Leslie Thompson (2007)

Corey Thornton (2009)

Alumni and Field Relations

Kelly Peticolas (1998)

Catherine Speer (2011)

Archives

Kris Impastato (2010)

Athletics

Heather Fairbanks (2011)

Lora McMullin (1988)

Campus Security

Brandon Fairbanks (2012)

Diane Graham (2011)

Paul Grant (2012)

Mark Mackintosh (2003)

Eric Phillips (2007)

Brad Satterfield (2005)

Dwayne VanHoose (2013)
 Jeff Wingert (1996)
 Matt Ward (2011)

Computing and Information Services

Thomas Cowart (2007)
 Glenn Ford (2002)
 Christian Saucedo (2008)
 Phil Siegling (2004)

Dean of Academics Office

Lisa Dearborn (2006)

Dining Services

Brian Day (2006)
 Carol Davidson (2000)
 Trey McCartt (1999)
 Mary Odhiambo (2006)
 Paul Wagner (2011)
 Catherine Wiegand (2010)

Education

Jessica Charleston (2012)

Facilities

Linda Clifford (2006)
 Robin Fulkerson (1994)
 Paul Lehr (2012)
 Arno List (1994)
 Jeannie Siegling (2004)
 Matt Thompson (1992)
 Mary Pat Ward (2009)

Finance and Accounting

Liz Campbell (2004)
 Cheryl Carbonell (2005)
 Roberta Day (2001)
 Scott Gerber (2004)
 Cindy Graser (2011)
 Scott Greenman (2011)
 Debbie Humphrey (2007)
 Sandy Laurie (2006)
 Milly Mensing (2005)

Human Resources

Kristen Harrison (2012)
 Beth Williams (2011)

Institutional Effectiveness and Planning

Cindy Shedd (1996)

International Student Coordinator

Bente Morse (1989)

Land Stewardship Coordinator

John Lovseth (2010)

Library

Catherine Barlow (2006)
 Sarah "Sally" Bown (2012)
 Edith List (1998)
 Jayne Stanley (2000)
 Deborah Wold (2005)

Mail and Copy Services

Annabelle Bloom (2012)
 Michael Harrison (2012)
 Michael Jensen (2009)

Marketing

Heather Shotwell (2009)

Media Services

Stephen Bailey (2012)
 Larry Charlston (1981)
 Mark Dearborn (2008)
 Eric Lines (2011)
 Darin Pierce (2012)
 Katherine Stanley (2005)
 Stephanie Young (2006)

Online Academic Programs

Richard Dearborn (2008)

Nursing

Shari Charleston (1996)
 Emma Flavin (2012)
 Tamara Wampole (2004)

President's Office

Sue Thoma (2011)

Principia Abroad

Karen Daugherty (2005)
 Stephanie Lovseth (2009)

Principia Guest House

Linda Cunningham (1999)
 Annie Wilder (2010)

Registrar's Office

Helen Coburn (1983)
 Mary Collins (2000)
 Carolyn Frank (2012)
 Whitney Holcomb (2010)
 Erdmute (Natasha) Wood (1979)

Sociology/Anthropology/ Community Service

Robert Pennamon (1997)

Teaching and Learning Excellence Center

Molly Flavin (2013)

Telecommunications

Robin Burns (2007)

Theatre

Leah McFall (2000)

Web Services

Andrew Blass (2006)

Jonathan Hosmer (1997)

Chris Hufford (2009)

Workplace Safety

David Pate (2003)

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