

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 North Central Association of Colleges and Schools.

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## Academic Calendar for 2009-2010

## Fall Quarter 2009

August 16-28 Athletic Writing Seminar
August 16-22 New International Student Orientation
August 22-September 11 Sports Camps*
August 28-30 New Parent Orientation Weekend
August 31-September 11 New Student Orientation/Writing Seminar
September 14 First day of classes
September 14-18 Drop/Add period
September 18 Last day to drop a credit course
September 18 Last day to submit late applications for December 2009 graduation
September 22 Interterm grades due 1:30 p.m.
October 12-16 Midquarter week
October 20 Midquarter and incomplete grades due 1:30 p.m.
October 21 Academic reading day
November 3-9 Registration for winter quarter
November 18 Last day of classes
November 19 Buffer day
November 20-21 Final examination days
November 22 Winter break begins
November 23 Applications for June 2010 and September 2010 graduation due
November $24 \quad$ Final grades due 1:30 p.m.
December 25 Graduation
*Students participating in sports camps should check with their respective coaches for specific dates and times.

## Winter Quarter 2010

| December 30-January 2 | New Student Orientation |
| ---: | :--- |
| January 4 | First day of classes |
| January 4-8 | Drop/Add period |
| January 8 | Last day to drop a credit course |
|  | Last day to submit late applications for March 2010 <br> graduation |
| January 12 | Interterm grades due 1:30 p.m. |
| February 1-5 | Midquarter week |
| February 9 | Midquarter and incomplete grades due 1:30 p.m. |
| February 10 | Academic reading day |
| February 23-March 1 | Registration for spring quarter |
| March 10 | Last day of classes |
| March 11 | Buffer day |
| March 12-13 | Final examination days |
| March 14 | Spring break begins |
| March 15 | Applications for December 2010 graduation due |
| March 16 | Final grades due 1:30 p.m. |
| March 25 | Graduation |

March 24-26 New Student Orientation
March 29 First day of classes
March 29-April 2 Drop/Add period
April 2 Last day to drop a credit course
April 2 Last day to submit late applications for June 2010 graduation
April 6 Interterm grades due 1:30 p.m.
April 26-30 Midquarter week
May 4 Midquarter and incomplete grades due 1:30 p.m.
May 5 Academic Reading Day
May 18-24 Registration for fall quarter
May 24 Last day to submit late applications for September 2010 graduation
June 2 Last day of classes
June 3-4 Final examination days
June 4 Graduating senior grades due 5 p.m.
June 5 Commencement rehearsal
June 5 Baccalaureate
June 6 Commencement
June 7 Applications for March 2011 graduation due
June 8 Final grades for non-graduating students due 1:30 p.m.

## Final Examination Schedule

| 8:00-10:00 a.m. | First Day <br> Classes that begin at 8:00 a.m. on Mondays <br> 10:30 a.m. - 12:30 p.m. |
| ---: | :--- |
| Classes that begin at 9:00 a.m. and classes that <br> begin at 8:00 a.m. on Tuesdays |  |
| 1:30-3:30 p.m. | Classes that begin at 2:00 p.m. on Mondays <br> 7:00-9:00 p.m. |
| Classes that begin at 3:00 p.m. <br> Classes that begin at 4:00 p.m. and evening and <br> unscheduled classes |  |
| 8:00-10:00 a.m. | Second Day <br> Classes that begin at 10:40 a.m. on Mondays <br> 10:30 a.m. - 12:30 p.m. |
| Classes that begin at 11:40 a.m. and classes that <br> begin at 11:00 a.m. on Tuesdays |  |
| 1:30-3:30 p.m. | Classes that begin at 2:00 p.m. on Tuesdays |

## Academic Calendar for 2010-2011

## Fall Quarter 2010

August 15-27 Athletic Writing Seminar
August 19-September 11
August 22-27 New International Student Orientation
August 27-29 New Parent Orientation Weekend
August 30-September 10 New Student Orientation/Writing Seminar
September 13 First day of classes
September 13-17 Drop/Add period
September 17 Last day to drop a credit course
September 17 Last day to submit late applications for December 2010 graduation
September 21 Interterm grades due 1:30 p.m.
October 11-15 Midquarter week
October 19 Midquarter and incomplete grades due 1:30 p.m.
October 20 Academic reading day
November 2-8 Registration for winter quarter
November 17 Last day of classes
November 18 Buffer day
November 19-20 Final examination days
November 21 Winter break begins
November 22 Applications for June 2011 and September 2011 graduation due
November 23 Final grades due 1:30 p.m.
December 25 Graduation
*Students participating in sports camps should check with their respective coaches for specific dates and times.

## Winter Quarter 2011

December 29-31 New Student Orientation
January 3 First day of classes
January 3-7 Drop/Add period
January 7 Last day to drop a credit course
January $7 \quad$ Last day to submit late applications for March 2011 graduation
January 11 Interterm grades due 1:30 p.m.
January 31-February 4 Midquarter week
February 8 Midquarter and incomplete grades due 1:30 p.m.
February 9 Academic reading day
February 22-28 Registration for spring quarter
March 9 Last day of classes
March 10 Buffer day
March 11-12 Final examination days
March 13 Spring break begins
March 14 Applications for December 2011 graduation due
March 15 Final grades due 1:30 p.m.
March 25 Graduation
March 26-27

New Student Orientation
March 28 First day of classes
March 28-April 1 Drop/Add period
April 1 Last day to drop a credit course
April 1 Last day to submit late applications for June 2011 graduation
April 5 Interterm grades due 1:30 p.m.
April 25-29 Midquarter week
May 3 Midquarter and incomplete grades due 1:30 p.m.
May 4 Academic Reading Day
May 17-23 Registration for fall quarter
May 23 Last day to submit late applications for September 2011 graduation
June 1 Last day of classes
June 2-3 Final examination days
June 3 Graduating senior grades due 5 p.m.
June 4 Commencement rehearsal
June 4 Baccalaureate
June 5 Commencement
June 6 Applications for March 2012 graduation due
June $7 \quad$ Final grades for non-graduating students due 1:30 p.m.

## Final Examination Schedule

| 8:00-10:00 a.m. | First Day <br> Classes that begin at 8:00 a.m. on Mondays <br> 10:30 a.m. - 12:30 p.m. |
| ---: | :--- |
| Classes that begin at 9:00 a.m. and classes that <br> begin at 8:00 a.m. on Tuesdays |  |
| 1:30-3:30 p.m. | Classes that begin at 2:00 p.m. on Mondays <br> 7:00-9:00 p.m. |
| Classes that begin at 3:00 p.m. <br> Classes that begin at 4:00 p.m. and evening and <br> unscheduled classes |  |
| 8:00-10:00 a.m. | Second Day <br> Classes that begin at 10:40 a.m. on Mondays <br> 10:30 a.m. - 12:30 p.m. |
| Classes that begin at 11:40 a.m. and classes that <br> begin at 11:00 a.m. on Tuesdays |  |
| 1:30-3:30 p.m. | Classes that begin at 2:00 p.m. on Tuesdays |

## SECTION 1

## General Information

## College Mission

The Purpose of Principia College is to serve the Cause of Christian Science (Education at The Principia, page 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 The Principia School, which includes a 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. As a participant in the HLC AQIP accreditation program, Principia conducts ongoing assessment of its academic programs for the purpose of continual improvement.

## 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 both 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, for education programs, and for special projects.

All student dormitories and six of eight academic buildings have generaluse computer facilities or specially-equipped labs for student use. Most of these 150 computers are available to students 24 hours a day, seven days a week. All of the buildings, including the dormitories, are networked and have internet access. All buildings are also set up for wireless networking. An email account is provided for each student attending Principia and Principia uses this address to do official business with its students.

A telephone system provides communication between staff, faculty, students, and parents. Every dorm room has a telephone with a separate line, including a voice mailbox, for each student.

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 has a language center with video, audio, and computer facilities.

The Science Center was completed in August 1997 and houses programs in biology and natural resources, chemistry, computer science, engineering science, geology, mathematics and physics. 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 growth at Principia College providing access $24 / 7$ to numerous electronic books, periodicals, reference sources, and databases. The library houses 180,000 print volumes and is a wireless technology center with computers, printers, copiers, scanners, presentation suites, and circulating laptops. Open seven days a week, the library offers a variety of private spaces for individual study as well as public spaces for meetings, classes, or group study. The library encourages a variety of study styles; students can read and ride on our Exercycle, get comfortable in one of our study lounges, or spend quiet reflective time in our Christian Science study room. Professional reference librarians make research manageable, efficient, and reliable. They are available six days a week to meet with students in person or students may contact one by phone, email, or instant-messaging.

The Davis-Merrick Center for the Performing Arts is home for the music and theatre departments. The 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 many Steinway grand pianos and Boston grand and upright 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 DramaWing includes a recently upgraded sixty-foot square blackbox theatre, seating up to 150 people. Surrounding the theatre are a costume shop, scene shop, two dressing rooms and a green room.

The MerrickWing of Davis provides a state-of-the-art working laboratory for students of mass communication. The Merrick Wing includes classrooms, production studios, computer laboratories, seminar facilities, and faculty offices. In addition, the Merrick Wing houses the Media Services Department and the student publications: The Pilot (newspaper), and The Sheaf (yearbook), as well as Principia's Internet Audio and a television studio.

The Media Services Center is located in the lower level of the MerrickWing. 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 production facilities, which are used by professors and students for class and individual academic projects. These production facilities include five video edit suites, two multi-media suites used for both audio and video editing projects, a sound recording studio and control room, and a television studio and control room.

Athletic facilities include Coach Crafton Athletic Center, Hay Field House, Hexberg Tennis Center, six outdoor tennis courts, as well as baseball, football, softball, and soccer game fields, plus three practice fields. 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 is located adjacent to the Crafton Center. The Hay Field House provides basketball and volleyball courts, team locker rooms, general fitness center, bouldering wall, and racquetball and squash courts. The Hexberg Tennis Center provides four indoor, airconditioned courts for year-round play.

Howard Center, referred to as "the concourse," is a center for student activities. The college bookstore, the dining room, the Piasa Pub, and student mailboxes are housed on the upper level. Mail and Copy Services, Out of Bounds (a recreation center), 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. And 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 quarter system. We have three ten-week terms per year: fall, winter, and spring quarters.

Course credit is measured in quarter hours. The number of quarter hours assigned to a course is typically the number of hours spent in a class each week. Most classes meet five hours a week, and enrolled students earn five quarter hours of credit. Students spend about two hours studying for each hour spent in class.

To be considered a full-time student, a student must carry a minimum of twelve quarter hours per quarter. A normal academic load is fifteen quarter hours per quarter, which allows a student to complete the required 180 quarter hours in four years. Students are expected to complete their degrees within 12 quarters. In order to remain enrolled beyond 12 quarters, a student must petition for extended study.

College students are expected to be fully conversant with this catalog and are responsible for their own registration. This means that students need to register at the proper time for all courses for which they wish to register. Most registration is completed online, but special registration needs are met in the Registrar's Office. More detailed information on registration is given in the Academic Rules and Procedures section of this catalog (Section 5) and in the quarterly course schedule and drop/add instruction publications. Advisors and the staff of the Registrar's Office welcome any questions students have about these rules and responsibilities. Any changes to registration must be completed by the published drop/add deadlines.

Each incoming student works closely with a new-student advisor who is a member of the faculty or academic staff. These advisors help students select courses each quarter, 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. Students who have not yet selected a major by the end of the first quarter of the sophomore year work with advisors in the Academic and Career Advising office.

The Writing Center is designed to help students develop the writing skills essential to success in college: researching a topic, writing drafts, and revising. Books, handouts, and individual tutoring are available.

The college also offers assistance to students who want to improve their reading and study skills.

The Math Learning Center is designed to help students develop and practice skills and gain knowledge in mathematical topics and quantitative reasoning essential to success in college and everyday life. Books and individual tutoring are available.

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 (pages 190-191) and special majors (page 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 pages 78-79).

## Intercollegiate Athletics

The mission of the Principia College Athletic Department is to offer students a vigorous physical activity program that encourages spiritual growth and character development, creates opportunities to learn and master new skills, and provides a forum for achieving competitive excellence.

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 page 24 for a description of the PE attribute. See pages 134-139 for the list of PE course offerings.)

## Mission Statement Goals

## Preamble

The fulfillment of Principia's mission is possible only as members of the College community endeavor to live as Christian Scientists.

## Goals

I. Provide a diverse, balanced, and co-educational academic program which demands excellence of students across the curriculum and meets the life and career needs of Christian Scientists.
A. Support and develop a comprehensive curriculum and programs within and across academic disciplines.
B. Promote educational experimentation, experiential learning, and innovation.
C. Teach transferable skills and stress analytical and critical thinking.
D. Expand educational experiences which embody Principia's educational philosophy and approach for non-degree seeking adults on and off campus.
E. Develop in students a thirst for life-long learning which "carries with it the obligation to use technical skills for the betterment of humanity" (Education at The Principia, page 231, Policy 10).
II. Emphasize character education in all realms of activity by challenging immorality and amorality and by developing moral reasoning.
III. Stress "equal opportunity and equal ability in the sight of God" (Education at The Principia, page 228, Policy 3). Eliminate racial and gender prejudice, remove cultural and societal barriers, and include United States minorities through the following activities:

1. employment,
2. enrollment,
3. social and athletic programs,
4. academic courses and programs.
IV. Give community members opportunities to share and to explore cultures other than their own.
A. Expect students to leave Principia with an international outlook and with compassion and appreciation for racial, cultural, and ethnic diversity.
B. Encourage faculty and staff individually and personally to develop a broad international perspective that supports students in their development.
C. Expand the international component of our programs in the following:
5. student population,
6. world-wide Principia programs,
7. speakers,
8. courses and programs.
D. Provide avenues to share our riches, expertise, and experiences, with the world (e.g. "Back to School," community outreach programs, off-campus programs).
V. Offer programs that emphasize skills needed to become responsible, caring, community and global citizens.
A. Provide opportunities for student-government officers to develop leadership skills and an appreciation for self-government.
B. Encourage an awareness of environmental, societal, and technological issues.
VI. Offer diverse, balanced, and co-educational social, athletic and physical education programs which meet the life-long needs of Christian Scientists.
A. Provide opportunities for social education which develop positive interpersonal skills.
B. Provide varsity sports, physical education, intramural programs, and recreational activities.
VII. Conduct the business of the institution in a manner consistent with wisdom, responsibility, integrity and good will. The ethics of good business practice as reflected in these activities should be models to be lived both in and out of the classroom.

## Objectives and Standards

## Liberal Arts and Sciences Objectives

As a liberal arts and sciences college for Christian Scientists, Principia expects to graduate men and women who:

1. are guided in their activities by a firm sense of moral, spiritual, and social responsibility;
2. are able to communicate effectively, writing with clarity and force, reading and listening with sensitivity, speaking with poise and directness;
3. are able to read and converse at a basic level in at least one foreign language;
4. have a grasp of basic principles in the major fields of human knowledge-the humanities, the arts, the natural sciences, mathematics, the social sciences;
5. have a reasonably detailed knowledge of the disciplines of their choice;
6. have a measure of historical and cultural perspective, based on an understanding of the relationship between the environment and the course of events, of the past, of the main currents of philosophic and religious thought, of modern science and the physical world, and of humanity and society;
7. have achieved a measure of aesthetic perspective and some ability to respond to works of art-literature, music, painting, sculpture, and architecture, among others;
8. have increasing dominion over the body through meeting the physical and mental challenges involved in competitive team and individual sports;
9. understand how to use the intellectual processes necessary to discover, develop, and utilize information.

## The Principia Pledge

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 fellow-man; one whose outlook on life is bigger than his own personal interest, 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, page 196).

## Code of Conduct

## Honoring the Code

Principia College assumes that its students have made a conscientious choice to align themselves with the unique purpose and moral standards
of this institution. They are accountable, both on and off campus, whether school is in or out of session, for behavior that is in accord with the Code of Conduct. If they do not honor the code, they should seek confidential help or honorably withdraw.

While Principia's moral standards have remained constant throughout its history, its institutional rules and procedures have evolved with changing times and needs. Whether one agrees with all the current rules and policies, or feels that some should be changed, obeying them is an essential responsibility of each community member for the well-being and progress of both the individual and the community.

## Requirements for Remaining Enrolled at Principia

## Social Conduct

Students are responsible for:

- being honest in all situations;
- living completely free from the use of alcohol, tobacco, and other recreational drugs;
- abstaining from pre-marital and extra-marital sexual relations and from homosexual activity;
- demonstrating respect for safety and for the personal and property rights of others. Disrespect includes, but is not limited to, violent acts or language, rape, hazing, harassment, theft, vandalism, indecent exposure, and other illegal activity.

A social violation will be referred to Restorative Justice, Community Board, or the grievance process advisor and could result in social suspension. (See section on "Restorative Justice/Community Board" below.) A student may be considered for suspension for any behavior deemed "loose social conduct" (Policy 22). A pattern of disregard for lesser school rules could also result in social suspension.

## Academic Integrity and Performance

Students are responsible for doing their own academic work and making satisfactory progress. (See the College Catalog pages 186-188 for academic progress policies.) 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 quarter in which they are suspended, but must leave campus by the day students move back into regular dorms. After clearing their financial suspension, students are required to make the scheduled payment on their established payment plan before starting the upcoming quarter 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, workrelated grants, and employee tuition discount).

## Spiritual Reliance

"Members of the faculty, staff, and student body will be expected to rely on Christian Science for healing" (Policy 4). In extraordinary circumstances, temporary use of medicine is compassionately regarded (see Science and Health, page 444:7-10). Under such circumstances, the college will try to find a way to help a student complete as much of the current quarter's academic work as possible, although remaining in the dorm or Cox Cottage may not be an option. Students who rely on medicine beyond one quarter 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.

## Prevention of Graduation

A graduating senior found responsible for a Code of Conduct 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.

## Get Help When There is Immediate Danger

If a community member is aware of circumstances that threaten someone's immediate well-being, he or she should act to prevent harm and, if necessary, get help. Confidentiality is outweighed by the need to get help. Suicidal talk, eating disorders, other health risks, fights, recklessness, drug dealing, hazing, hate acts, child abuse, possession of a lethal weapon, are examples of situations that should be immediately reported to a resident counselor or the dean of students (ext. 5162). For the quickest response of nursing care, call Cox Cottage first (ext. 5000), and then 9-911 if an ambulance is needed. If there is an armed attack, or any other case that needs an immediate armed response from the police, call 9-911 first and then the Gate House (ext. 5111).

## Confidential Counseling

Students who have not honored the Code of Conduct or who have questions about it may seek help from any faculty, staff, or Resident Assistant (RA) with the assurance that what they share will remain confidential. Information learned through confidential self-disclosure cannot be used in a disciplinary hearing without the student's permission, nor can a case be moved forward for discipline as the result of self-disclosure. The goal of this confidentiality is to make certain that while students pursue healing, they can talk to someone about the reasons behind Principia's requirements without fear of disciplinary consequences.

This confidentiality does not apply to situations which present immediate danger (see section above: "Get Help When There is Immediate Danger"); nor does it exempt a student from disciplinary consequences if a violation is independently discovered. Confidential counseling does not provide immunity from being accountable for one's actions. Confidential counseling does not apply to situations when a school official is investigating a possible Code of Conduct violation. Honesty during an investigation is required.

If faculty, staff, or RA working confidentially with a self-disclosing student perceives that the student is not sincerely seeking healing and is continuing to break the code, he or she is not permitted to move the case forward for discipline. He or she may discontinue meeting on the disclosed subject and urge the student to honorably withdraw. Faculty, staff, or RA are welcome to consult a resident counselor or dean of students without revealing the name of the student.

Students are always encouraged to seek the help of a Christian Science practitioner. The practitioner-patient relationship is confidential in accordance with Article VIII, Section 22 of the Manual of The Mother Church by Mary Baker Eddy.

## Responsibilities of Student Organizations and Leaders

Student government, chartered houses, student clubs and organizations must conduct their business in accord with Principia's Purpose and Policies, school rules, and their own mission statements and by-laws. The activities are subject to school supervision through resident counselors, faculty/staff advisors, and college administrators.

Disregard of policies or rules by a student organization could result in one or more of the following: short or long-term cancellation of activities, fines, or work fines. Houses could experience reassignment of one or more house members to other houses, no assignment of new members to the house, loss of charter, or permanent reorganization. Clubs could lose approved status for receiving Student Activity funds or be dissolved.

Acceptance of student leadership positions in any Principia student organization includes accepting responsibility to conduct the business of that activity as true Principians (Education at The Principia, pages 85:34, 177:20, 214:29). A leader who permits activities inconsistent with Principia's Purpose, Policies, or school rules could be fined, removed from office, or suspended.

## Restorative Justice/Community Board

With individual healing as our goal, rather than merely the establishment of an orderly school, we shall eventually find the result to be demonstrated order, honesty, and purity in the entire body of pupils, and we shall, as a school, become 'every whit whole' (Mary Kimball Morgan, Education at The Principia, page 19).

In all its activities, Principia promotes healing and character education. Within this context social discipline proceeds from the premise of each student's innate goodness and perfection, and its goal is to help students develop their spiritual relationship with God and moral relationship with others.

Alleged Code of Conduct violations that are discovered and reported are referred to either Restorative Justice or Community Board (except those associated with sexual harassment charges which are referred to the grievance process advisor). A first offense qualifies for Restorative Justice if the offender admits responsibility and both the person offended and the offender choose it. A case that does not qualify for Restorative Justice will be heard by Community Board.

Restorative Justice's mission is to "support individual and community healing." Since the offender has admitted to the offense, a Restorative Justice circle is not judiciary. Nor is confidentiality guaranteed. The purpose of the circle is to help both the offender and those affected to talk with each other about why the offense happened, what harm was done to individuals and the community, and the reason for the standard. The circle includes the person offended, the offender, one or two trained facilitators, and other community members either affected or able to support the student's growth (e.g. witnesses, roommates, house or team members, advisor, professors, coach, employer, etc.). Together, the individuals in the circle determine a reparation plan that will restore losses, rebuild relationships, and build a community in which this type of offense is less likely to happen. Usually these objectives can be accomplished without suspension. However, if the circle recommends suspension or the offender does not follow through on the reparation plan, the case will proceed to Community Board.

Community Board exists to hear cases of student social discipline brought before it with the goal of supporting and maintaining the Purpose and Policies of The Principia. With healing and reconciliation as its primary objectives the Board endeavors to express wisdom, responsibility, integrity, and
good will in upholding Principia's standards. The Board consists of twentyeight members: sixteen students and twelve faculty/staff, all of whom receive training in the judicial process and standards of evidence. An individual case is heard by a panel of two student members, and two faculty/staff members. The hearings are confidential.

If a situation requires immediate action, the dean of students may temporarily suspend or restrict a student until a circle or a panel can hear the case. The dean of students may hear the case if a circle or a panel cannot be assembled (e.g. during finals or breaks) or if the student is withdrawn.

Principia College is committed to maintaining a fair process in which students are presumed innocent, are informed of the offenses with which they are charged, and have the opportunity to tell their side of the story. The College keeps its procedures simple and free from legalism. It does not allow community members to divulge to a circle or a panel what has been shared with them in confidential counseling, unless permission has been given by the student. Every case is handled individually within a framework of general guidelines and precedents.

Upon investigation of evidence in a given case, a charged student not found responsible may be exonerated and no record of the incident will be retained in his or her file. All substantiated violations, however, will have disciplinary consequences. The Community Board first determines that there is sufficient evidence that a student has violated the code. If so, it then uses the following guidelines to determine what level of consequence best fits the violation(s). Consequences reflect the severity of the violation, the history of previous violations, and the student's degree of honesty during the investigation. Dishonesty in any investigation or hearing may result in an additional quarter of suspension.

## Warning

Students who are accountable for minor violations generally receive a formal letter of disciplinary warning, a copy of which will be placed in their file. They may also be asked to participate in educational sanctions and, if applicable, to pay damages and/or fines.

Immediate suspension for the remainder of the current quarter
Students who are accountable for typical first-time violations, or multiple lesser violations, may be immediately suspended for the remainder of the current quarter. Suspended students may not continue work in their courses as of the date of suspension. Withdrawal grades may be authorized through a petition to Scholastic Committee. They may also be asked to participate in educational sanctions and, if applicable, to pay damages and/or fines. Violations discovered when school is not in session will result in suspension for the following quarter. A student can re-enroll after a quarter's suspension only if he or she is willing and able to abide by Principia's Code of Conduct.

## Immediate suspension for up to one year

Students who are accountable for second violations or severe violations may be immediately suspended for up to one year. Suspended students may not continue work in their courses as of the date of suspension. Withdrawal grades may be authorized through a petition to Scholastic Committee. They may also be asked to participate in educational sanctions and, if applicable, to pay damages and/or fines. They may reapply through the Office of Admissions and Financial Aid for the quarter that begins following the passage of a full calendar year. It is the responsibility of the student to demonstrate, through the normal re-application essays and references, his or her readiness to return to Principia and abide by its Code of Conduct.

## Appeals

Appeals to the Dean of Students may be made if there is indication of new evidence or that the institution did not follow the fair process outlined above.

## International Students

Consequences for international students may be more severe, as according to the United States Department of Homeland Security regulations, suspension of an international student on F-1 or J-1 visa status could result in deportation from the United States. Due to visa issues for international students and to facilitate regulatory compliance, when an international student receives notification of suspension, 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 students and the registrar when arrangements have been made.

## Parental Notification

Principia reserves the right to contact parents as it deems appropriate in disciplinary situations and in health-related challenges.

## SECTION 2

## Academic Programs

## Introduction

Principia offers academic programs leading to the Bachelor of Arts or Bachelor of Science degree. The first part of this section describes requirements that apply to each of these degrees. The remainder of this section describes the requirements of each major and minor program.

## Writing Program

Principia College is committed to helping each student grow as a writer throughout the undergraduate experience. We combine an intensive and an extensive approach to instruction and development, beginning with a two-week pre-fall seminar on writing and thinking for all first-year students. Each subsequent phase of writing development-across the curriculum and throughout a student's undergraduate education-focuses on a different aspect of writing development, culminating in a seniorlevel writing project in the major. Each phase of instruction builds on the previous phases and leads toward the next.

## Phase One: pre-fall seminar

All first-time college students are required to participate in an intensive writing seminar, two weeks before fall quarter begins. During these two weeks, a student will work closely with other students and a faculty member in a small group. The teachers have been selected for their teaching and writing abilities and for their desire to work with first-year students.

Each student will register for WRIT 098, a non-credit course and, at the end, will receive a grade of S (satisfactory) or U (unsatisfactory) for participating. A grade of "unsatisfactory" will raise questions as to the student's readiness to participate fully in the college's curriculum. There will be no additional charges-for tuition or for room and board-during these two weeks. To encourage continuity, a portfolio of the student's pre-fall writing is forwarded to the student's First Year Experience (FYE) teachers for the next phase of writing development.

## Phase Two: integration in the content areas

Building on and extending the work of the writing seminar to contentspecific writing, phase two focuses on providing a foundation and practice in academic writing in the content areas of the FYE programs.

## Phase Three: persuasive writing

Each student takes a writing intensive course (WRP) which focuses on persuasive writing. These courses are offered throughout the curriculum
and also fulfill General Education and/or major requirements. In this stage of writing development, students deepen their abilities to think analytically and to use information and language with precision and deliberation. They practice adapting their general skills of analysis, synthesis, and evaluation to the specific conventions and patterns of writing and presentation associated with the discipline in which the WRP course is offered. A student takes this course after FYE and before the end of the sophomore year.

## Phase Four: writing proficiency portfolio evaluation

Each student submits a portfolio of specified writing during the sophomore year. Each portfolio is evaluated by two faculty members from the student's major department and one faculty member from the Writing Center.

## Phase Five: research writing in the majors

Every student takes an intermediate or advanced course in his or her major field which incorporates research writing. Although students have been introduced to research writing skills prior to this requirement, phase five focuses on deepening a student's scholarship within his or her chosen major. It also helps to prepare the student for the final phase. A student takes this after the proficiency portfolio evaluation and before the senior-level writing project.

## Phase Six: senior-level writing experience in the majors

Every student completes a capstone or an advanced, senior-level writing project within the major. This project is adapted to what seems most appropriate for the major as well as to what helps the student continue to develop as a writer through the senior year or the most advanced academic work.

## First Year Experience

First Year Experience (FYE) introduces students to the richness of the college curriculum within the context of courses especially designed for first-time college students. Each FYE program consists of 10 to 20 quarter hours of courses. These programs offer students a variety of academic disciplines, topics, and teaching methods. Most FYE courses count towards the all-college distribution requirements (see pages 21-24); a few are considered to be electives.

All first-time college students and all transfer students who have completed one semester, one quarter or less, of college academic work are required to participate in FYE. Participation in FYE is open to one-year enrichment students and freshman-level transfer students on a space available basis.

## All-College Degree Requirements

## Student Responsibility for Requirements

Students have direct online access to their own academic records via SelfService Banner (SSB). It is the student's responsibility to check this record for accuracy each quarter 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.

## Major

A student must complete one of the majors corresponding to the degree being pursued. All the majors available at Principia are listed on pages 24-25 and are described on the pages which follow.

## Total Quarter Hours

A student must earn a total of 180 quarter hours (179 is sufficient when transfer work is involved). Transfer work, credit by examination, Advanced Placement and College Level Examination Program credits may be included according to the regulations governing these options found on pages 189-190.

## Grade Point Average

At the time of graduation from Principia College a student must have an overall grade point average of 2.0 (the equivalent of a C average) or better. Only grades earned in credit courses at Principia College are used in computing the grade point average. (See also pages 182-183.)

## Residency

A student must be enrolled, full- or part-time, under direct supervision of Principia faculty or staff, for a total of at least four quarters, earning a minimum of 48 quarter hours. Also, a student must be enrolled for three of the four quarters immediately prior to graduation under direct supervision (including abroads, but not internships) of Principia faculty or staff. Students pursuing two degrees must fulfill three additional quarters in residence, being enrolled for a minimum of seven quarters and earning a minimum of 93 quarter hours at Principia, under direct supervision of Principia faculty or staff. (See page 180 for the purpose of the residency requirement.)

## United States History Requirement

If a student has not completed a one-year course in United States history with a grade of C - or better during high school, then one of the courses taken to fulfill all-college distribution requirements must be a survey of United States history. The courses currently offered which satisfy this requirement are HIST 160 U.S. in the 20th Century, HIST 202 American

Revolution, and HIST 203 U.S. Civil War Era. The requirement may also be satisfied with a score of 3 on the Advanced Placement test in U.S. history.

Completion of an appropriate course in high school does not reduce the need for 10 quarter hours of history courses for B.A. candidates or for 20 quarter hours of history, religion, philosophy or social science courses for B.S. candidates. College credit is not awarded for the high school history course.

## Writing Proficiency

Before a student graduates with either the B.A. or B.S. degree from Principia College, he or she must complete phases three, four, five, and six of the writing program described on pages 17-18.

## Moral Reasoning Seminar

Moral reasoning is an essential element of character education. The seminar meets for a total of approximately 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


## Physical Education

Each student must complete four physical education activity courses to graduate with a B.A. or B.S. degree. These non-credit courses must be completed in addition to the 180 academic quarter hours required for graduation. Four quarters of participation in varsity sports fulfills the four PE course requirement. Special arrangements may be made for those with specific physical needs.

## Graduation Application

Each student is required to file a graduation application in the Registrar's Office prior to graduation. The graduation application is due before the end of the third quarter before the scheduled graduation. For example, a student planning to graduate at the end of spring quarter should file the application by the end of the fall quarter of the senior year. Late graduation applications are accepted (with a late fee) until the end of the first week of a student's final quarter. After that time, the student needs to plan for a later graduation.

## Distribution Requirements

All students are required to take a number of courses from areas throughout the college's curriculum. These distribution requirements are listed in the charts below.

Course attributes are printed on course schedules and in the course descriptions in Section 3.

## Bachelor of Arts Distribution Requirements

| QUARTER |  |  |  |
| :---: | :---: | :---: | :---: |
| SUBJECT AREA H | HOURS | ATTRIBUTE | COMMENTS |
| Foreign Language | 5 | FLAN | 103 or 110 level |
| Literature | 5 | LIT | English or American literature |
|  | 5 | LIT, WLIT | WLIT = other literature courses |
| History | 10 | HIST, UHIS | 5 quarter hours must be U.S. unless taken in high school |
| Arts | 5 | ART | ARTH, ARTS, MUS, THEA |
| Religion \& |  |  |  |
| Philosophy | 10 | BIBL | Or 5 BIBL and 5 RPHL |
| Social Science | 10 | SSCI | BUAD, ECON, EDUC, POLS, SOC |
| Laboratory Science | 10 | BNR, CHEM, CSCI, GEOL, PHYS | Must be from two different disciplines: BNR, CHEM, CSCI, GEOL, PHYS |
| Mathematics, Computer Science, Natural Science | 10 | BNR, CHEM, CSCI, GEOL, MNS, PHYS | In addition to the 10 quarter hours |
|  |  |  | of laboratory science (5 QH must |
|  |  |  | be MATH 110 or MATH 111 unless |
|  |  |  | the Basic Mathematics Placement |
|  |  |  | Examination level is 3) |
| Physical Education |  | PE | 4 PE courses |

## Bachelor of Science Distribution Requirements

| QUARTER |  |  |  |
| :---: | :---: | :---: | :---: |
| SUBJECT AREA H | HOURS | ATTRIBUTE | COMMENTS |
| Foreign Language | 5 | FLAN | 103 or 110 level |
| Literature, Arts | $\begin{gathered} 5 \\ 10 \end{gathered}$ | LIT <br> LIT, WLIT, <br> ART | English or American literature WLIT = other literature courses |
| Bible | 5 | BIBL |  |
| History, Religion, Philosophy, Social Science | 20 | HIST, BIBL, RPHL, SSCI | 5 quarter hours must be U.S. history unless taken in high school |
| Laboratory Science | 10 | BNR, CHEM, CSCI, GEOL, PHYS | Must be from two different disciplines: BNR, CHEM, CSCI, GEOL, PHYS |
| Mathematics, Computer Science, Natural Science | , 40 | BNR, CHEM, CSCI, GEOL, MNS, PHYS | Must be outside the major discipline, which may include the laboratory science requirement (5 QH must be MATH 110 or MATH 111 unless the Basic Mathematics Placement Examination level is 3)* |
| Physical Education |  | PE | 4 PE courses |

## Rationale for Distribution Requirements

## Foreign Language (FLAN attribute)

Foreign language study enables students to perceive their roles as citizens of the world. It allows them to communicate with people who speak other languages and fosters understanding and appreciation of a variety of cultures and values. Through this study students learn how language structures a view of reality. They develop widely applicable skills in listening, reading, observation, self-expression and analysis.

## Literature (LIT, WLIT attributes)

The eloquence, imagination, and drama of literature bring a richer, deeper understanding of human experience. In literature courses students examine how culture and artistic philosophy have shaped a wide array of styles, structures, and genres. Through this study, students become more sensitive to language, its nuances, power, and variety. They practice their writing and analytical skills with strong models of writing as their subject matter.

## History (HIST, UHIS attributes)

History helps us understand the events and ideas that have shaped our world and the way we see ourselves in it. Encompassing every field of human activity as well as every age and society, it teaches us to think beyond the context and values of our own time and place. The student of history learns how to interpret cause-effect relationships in human affairs, distinguish the significant from the trivial, and detect bias. History courses develop research, writing, and critical thinking skills.

## Arts (ART attribute)

Studying the arts develops the ability to share the inspiration and vision which the artist, actor, writer, and musician express. Students explore methods and media of artistic expression, characteristics of style, and the role of the artist, actor, writer, and musician in society. Through this study students will find themselves seeing and hearing with greater discernment, demonstrating measurable dominion, and finding their tastes broadened and deepened.

## Religion and Philosophy (BIBL, RPHL attributes)

Bible courses develop knowledge of the Bible's content and relevance, and the historical and cultural backgrounds of its message. Other courses cultivate an awareness of influential theories and ideas from a variety of religious and philosophical perspectives. The study of religion and philosophy teaches discrimination between responsible, well-documented, well-reasoned, thoroughly-examined ideas on the one hand, and unreflective opinion, acritical assumption, preconceived notion, one-sided analysis, irrational prejudice, or mere dogma, on the other. BIBL attribute courses cover biblical studies, including history, theology and interpretation; RPHL attribute courses deal with non-biblical topics in religious studies, including comparative religions and religious history, and with topics in philosophy, both contemporary and historical.

## Social Sciences (SSCI attribute)

The social sciences examine human behavior, customs, institutions, and values. In studies in the social sciences, students are asked to use various methods for understanding social, educational, political, and economic problems. Opportunities are provided for observing, analyzing case studies, interviewing, and gathering and analyzing both qualitative and quantitative data. Students are encouraged to develop their abilities to raise questions, discuss issues, and conduct collaborative research in the context of some theoretical, analytical, or conceptual framework, and to communicate conclusions clearly and effectively.

## Mathematics, Computer Science, Natural Science (MNS, BNR, CHEM, CSCI, GEOL, PHYS attributes)

The study of mathematics and science cultivates understanding of and care for the environment; it motivates ethical decisions and integrates critical and scientific thinking into every educational experience. Courses in mathematics and science develop many skills, including quantitative reasoning, observation, hypothesis testing, analysis, classification, problem solving, and model building.

## Physical Education (PE attribute)

Physical education helps to develop a sense of dominion over self-imposed limitations; to exercise bodily control in performing acts of grace, power and skill; and to learn that physical activity is not something to be feared, but something which can be a continuing source of enjoyment and fulfillment throughout one's life. Through individual and team activities, students learn to take responsibility for their performance, to appreciate and understand others, and to learn to work with others toward the achievement of a common goal.

## 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 three minors in programs for which there is no major.

| Bachelor of Arts Majors |  |
| :--- | :--- |
| Art | History |
| Business Administration | Mass Communication |
| Chemistry | Mathematics |
| Computer Science | Music |
| Economics | Philosophy |
| Education | Physics |
| English | Political Science |
| Environmental Studies | Religion |
| Foreign Languages | Sociology and Anthropology |
| French | Spanish |
| German Studies | Theatre |
| Global Perspectives |  |
|  |  |
| Bachelor of Science Majors | Engineering Science |
| Biology | Mathematics |
| Chemistry | Physics |
| Computer Science |  |

## Minors in programs with no major

Asian Studies
Geology
Women's Studies

Students interested in majors not listed above, or who are interested in designing their own major, may explore our special major options. (See page 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, Associate Professor
Margaret D'Evelyn, Associate Professor
Heather Fulkerson, Assistant Professor
Daniel D. Kistler, Assistant Professor
Danne Rhaesa, Assistant Professor
Art history and art/studio offer two entirely separate but complementary programs of study.

The study of art history is recommended as an essential part of the liberal arts curriculum, an amenity needed by every educated person whether for professional ends, as an entrée to business negotiations, or as an investment in a life-enhancing means of exploring cultural artifacts. Art history traces the innovations, aspirations, and achievements of individuals and groups, the significance of works of painting, sculpture, architecture, and other visual art in their original contexts; art history's approaches to the interpretation of art through various types of critical theory can be useful to the study of other disciplines. Besides enlarging students' understanding of the precious nature of their cultural heritage world-wide, art history sharpens the student's capacity to discern between valid and invalid imagery in our culture. It offers a career path to graduate work and careers in teaching, curatorial work, museum education programs, publishing, arts management, and a range of other culturally productive activities. Above all, it opens the eyes of every student to the beauty around them in the built environment and its meaning.

The 100 -level art history surveys are foundational. The 200-level courses focus on issues in various historic periods, often incorporating phase three of the all-college writing requirement. Art history courses at the 300 -level delve more deeply into the core questions of the discipline and are open to all with sufficient background in art history or related fields.

The 400-level courses are intended for those considering graduate work in art history.

Courses in art/studio place specific emphasis upon the process of making art, the qualities which support being productive artists in society, and the role of art to enrich the individual. Taken as a whole, studio courses feature learning themes which include character development, experience with varied media, an understanding of foundational concepts of compositional form, development of individual creative skills, service to society and global awareness, and the pursuit of excellence. These themes form the basis of the portfolio review in the studio major's senior year.

The Art and Art History department highly recommends participation in a Principia abroad program that allows students to experience original art firsthand. Internships are available locally, nationally, and internationally, and are strongly encouraged for those interested in graduate work in museum studies of any type.

To receive transfer credit toward studio track requirements, the student must submit a catalog description of the course along with a representative portfolio of work produced in that course. Up to 30 quarter hours of transfer work may be credited towards the requirements for an art major and ten 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.

Most 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.

The art program offers students four choices:
B.A. major in Art (Fine Art track)
B.A. major in Art (Graphics track)

Minor in Art History
Minor in Studio Art
Because of the overlap of the four core courses, students majoring in art may not minor in art history or studio art.

The B.A. major in Art requires a minimum of 65 quarter hours:
Core course requirements ( 20 quarter hours):
—ARTS 102 Visual Fundamentals
—ARTS 150 Drawing I
-One of the following:
ARTH 100 Intro to Western Art to 1400
ARTH 101 Intro Western Art 1400-Present
-One art history course numbered 200 or above

One of the following tracks:

The Fine Art track requires 65 quarter hours (including the core course requirement):
—ARTS $170 \quad$ Graphic Design I
—ARTS $230 \quad$ Color Studies
—ARTS 302 Figure Studies
-One studio painting course
-Two additional painting or drawing courses, second level or above
-One additional art history course
-One of the following:
ARTS 350 Drawing III
ARTS 401 Creative or Research Project (painting/drawing)
ARTS 404 Advanced Series (painting/drawing) with faculty approval
—ARTS $495 \quad$ Portfolio Seminar
—ARTS 496 Capstone Writing Seminar (a grade of "C" or better is required to fulfill phase six of the college's all-college writing requirement)

The Graphics track requires 65 quarter hours (including the core course requirements) plus applied activities:
-One of the following:
MCOM 244 Graphics Production
MCOM 270 Yearbook Production Workshop
—ARTS $170 \quad$ Graphic Design I
—ARTS 230 Color Studies
-One of the following:
ARTS 250 Drawing I
ARTS 302 Figure Studies
ARTS 350 Drawing II
—ARTS $270 \quad$ Graphic Design II
-One studio painting course
-One art history course at the 200 level or above
-One course at the 400 level
—ARTS 495 Portfolio Seminar
—ARTS 496 Capstone Writing Seminar (a grade of "C" or better is required to fulfill phase six of the college's all-college writing requirement)
-Pilot/Sheaf as applied activities. Students are encouraged to participate in these activities as many times as possible.

# A minor in Art History requires six courses (30 quarter hours): <br> -The four core courses <br> -One additional art history course at any level <br> -One art history course at the 200 level or above 

A minor in Studio Art requires seven courses (35 quarter hours):
-The four core courses
—Two painting or drawing courses
—ARTS $170 \quad$ Graphic Design I

## Asian Studies

Faculty from several disciplines support this program.
Asia embraces cultures very different from those found in the United States and Europe. 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, literature, music, economics, history, politics, religion, and philosophy.

A minor in Asian Studies requires five courses (25 quarter hours) from the following list and should be approved in advance by the director of Asian studies. Courses must be from at least three disciplines. The purpose of the minor is to foster some breadth of knowledge about the region or a country in the region.

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

POLS 263
REL 240

Topics in Asian Politics
The Religion of Islam

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.

## Biology and Natural Resources

Michael G. Booth, Assistant Professor
Mary Jane Hoff, Assistant Professor
Christine A. McAllister, Assistant Professor
Michael Rechlin, Professor
The biology and natural resources 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 tremendous natural heritage of Principia's 2600 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.A. degree in environmental studies, which allows students to broadly explore their interest in the environment. There are four tracks - Environment and Society, Natural Resource Management, Natural History, and Geology. 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.

The department also offers a B.S. major in biology with an emphasis on ecology and ecological research. The added emphasis on math and science skills makes this program especially appropriate for students interested in graduate study, work as a field biologist, teaching, or work with an environmental consulting firm. All of our courses urge the development of citizenship, stewardship, and a global perspective through service work, internships, and study abroad. Recent field programs have visited New Zealand, Yellowstone National Park, The Virgin Islands, and the Himalayas.

The B.A. major in Environmental Studies requires a minimum of 13 courses ( 57 quarter hours):

Foundational course requirements:
—BNR or GEOL 050 Work Project
—BNR 111 Introductory Botany
—BNR 191 Introduction to Ecology
—BNR 201 Methods in Research \& Writing
-One of the following:
CHEM 111 Environmental Chemistry
CHEM 115 Introduction to Chemistry
CHEM 131 Fundamentals of Chemistry I
CHEM 201 Environmental Testing
-One approved additional BNR or GEOL course (5 quarter hours)
Focus Area course requirements:
Students must choose one of the following tracks and complete at least five of the courses listed in that area.

Environment and Society track requires:
-Five of the following:
BNR $190 \quad$ Global Environmental Issues
BNR 255 Natural Resources Conservation
BNR 290 Environmental Policy
BNR 291
BNR 362
BNR 391
CHEM/GEOL 230
HIST 285
SOC 235
Sustainable Development
Conservation:
Water Resources Management
Nonrenewable Resources
US Environmental History
Environmental \& Social Change
Geology track requires:
-Four of the following:
GEOL 111 Introductory Geology
GEOL 225 Environmental Geology
GEOL/CHEM 230 Nonrenewable Resources
GEOL 242 Historical Geology
-One of the following
BNR 245 Natural History:
BNR/GEOL 301 Environmental Mapping \& GIS
BNR 391 Water Resources Management
GEOL 180
GEOL 280
Geologic Field Studies
Geologic Field Investigations
Natural Resource Management track requires:
-Five of the following:
BNR 255 Natural Resources Conservation
BNR 264 Sugarbush Management
BNR 295 Stewardship Practicum

BNR/GEOL 301 Environmental Mapping \& GIS
BNR 313 Forest Ecology
BNR 362 Conservation:
BNR 381
BNR 390
BNR 391
Advanced Natural Resources
Forest Resource Management
Water Resources Management
CHEM/GEOL 230 Nonrenewable Resources
Natural History track requires:
-Five of the following:
BNR 112 Introductory Zoology
BNR 230 Ornithology
BNR 245 Natural History:
BNR 312 Grassland Ecology
BNR 313 Forest Ecology
BNR 315 Freshwater Ecology
BNR 380 Advanced Ecology Seminar
One geology course
Capstone course requirements for all tracks:
-BNR or GEOL 400 Capstone Seminar
-BNR or GEOL 401 Senior Capstone Project (must be taken for a minimum of 5 quarter hours)

The B.S. major in Biology requires a minimum of 20 courses (92 quarter hours):

Foundational course requirements:
—BNR $050 \quad$ Work Project
—BNR 111 Introductory Botany
—BNR 112 Introductory Zoology
—BNR 191 Introduction to Ecology
—BNR 201 Methods in Research \& Writing
—BNR 256 Conservation Genetics
Ecology focus (20 quarter hours):
-Two of the following:
BNR 312 Grassland Ecology
BNR 313 Forest Ecology
BNR 315 Freshwater Ecology
-Two BNR electives at the 200 level or above
Math and science enrichment courses:
-CHEM 115 Introduction to Chemistry
-CHEM 260 Organic Survey
—CHEM 274 General Biochemistry
-One math course, to be determined with advisor
-One statistics or quantitative methods course
-Three additional math and natural sciences courses outside BNR Capstone course requirements (at least 7 quarter hours):
—BNR 400
—BNR 401 Senior Capstone Project (must be taken for a minimum of 5 quarter hours)

The minor in Environmental Studies requires 30 quarter hours of coursework within the department. At least 20 quarter hours must be in courses numbered 200 or higher. Potential minors should consult with biology and natural resources faculty.

## Business Administration

James W. Bilsborrow, Professor
Linda A. Bohaker, Associate Professor
Rosalind S. Hibbs, 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. With this package our students will have the understanding and conceptual framework for making outstanding contributions as world citizens.

To demonstrate these principles in action, we encourage students 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 15 quarter hours 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 before the end of their sophomore year. Any student declaring the business administration major after earning 100 quarter 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.

BUAD 430 (Strategic Management) must be taken at Principia College.

The B.A. major in Business Administration requires 11 courses (55 quarter hours):
-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/PHIL 265 Business Ethics
BUAD 310 Investments
BUAD 325 Advertising
BUAD 345 Business Writing
BUAD 350 Business Law
BUAD 401 Business Consulting Practicum
CSCI 215 Intro to Management Info Systems
A minor in Business Administration requires six courses (30 quarter hours):
—ECON 203 Principles of Microeconomics
-ECON 204 Principles of Macroeconomics
—BUAD 251 Financial Accounting
—BUAD 252 Managerial Accounting
—BUAD 320 Marketing
—BUAD 330 Management

A cumulative GPA of 2.0 or above in the eleven major-required courses is necessary to complete the major. Similarly, a cumulative GPA of 2.0 or above in the six courses required for the minor is necessary to complete the minor.

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 (25 quarter 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 (15 quarter 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 preapproved and will be considered only in cases of exceptional academic opportunity.

## Chemistry

Jeffrey B. Cornelius, Professor
B.S. and B.A. degree programs are available in chemistry. The emphasis in both degree programs 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.

For students interested in pursuing a professional career in chemistry or chemistry-related fields, a B.S. degree is more appropriate. The B.A. degree may be helpful to students interested in careers in business, law, education, science journalism, library science, or environmental science.

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

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.

The B.S. major in Chemistry requires 93 quarter hours:
53 quarter hours of chemistry:
-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
-CHEM 311 Phys Chem I: Thermodynamics
-CHEM $312 \quad$ Phys Chem II: Kinetics
-CHEM 313 Phys Chem III: Quantum Chem
—CHEM 321 Applied Spectroscopy
-CHEM 333 Instrumental Analysis
-CHEM 441 Senior Research Project (minimum of three quarter hours)

40 quarter hours outside chemistry (which can be used to meet the mathematics, computer science, and natural science distribution requirements):
—MATH 151 Calculus I
—MATH 152 Calculus II
-MATH 153 Calculus III
—PHYS 201 Phys for Scientists/Engrs I
—PHYS 202 Phys for Scientists/Engrs II
—PHYS 203 Phys for Scientists/Engrs III
-Two electives from math and natural sciences (10 quarter hours)
We recommend an appropriate computer course.

The B.A. major in Chemistry requires 66 quarter hours:
46 quarter hours of chemistry:
-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
-CHEM $311 \quad$ Phys Chem I: Thermodynamics
-Three additional courses at the 200 level or above
-CHEM 440 Senior Project (minimum of one quarter hour) 20 quarter hours outside chemistry:
—MATH 151 Calculus I
—MATH 152 Calculus II
—PHYS 201 Phys for Scientists/Engrs I
—PHYS 202 Phys for Scientists/Engrs II

Additional courses in mathematics, physics, or applied chemistry may also be recommended.

A minor in Chemistry consists of 30 quarter hours:
-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

Thomas H. Fuller Jr., Professor
Kenneth R. Johnson, Associate 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.

The B.A. major in Computer Science requires 11 courses (59 quarter hours):
-CSCI 171 Introduction to Programming
-CSCI 182 Intro to Data Structures
-CSCI 263 Computer Software Architecture
-CSCI 310 Software Engineering
—CSCI 421 Computer Issues Seminar
—ENGR 262 Computer Hardware Architecture
-MATH 261 Discrete Math
-Any four five quarter hour computer science electives numbered above CSCI 215

The B.S. major in Computer Science requires 14 courses (74 quarter hours):

| -CSCI 171 | Introduction to Programming |
| :--- | :--- |
| -CSCI 182 | Intro to Data Structures |
| -CSCI 263 | Computer Software Architecture |
| -CSCI 276 | Object-Oriented Programming |
| -CSCI 310 | Software Engineering |
| -CSCI 330 | Operating Systems |
| -CSCI 380 | Compilers |
| -CSCI 421 | Computer Issues Seminar |
| -ENGR 262 | Computer Hardware Architecture |
| -MATH 151 | Calculus I |
| -MATH 261 | Discrete Math |

-Any three five quarter hour computer science electives numbered above CSCI 215 (CSCI 280 is strongly recommended).

The two math courses may be used in partial fulfillment of distribution requirements for the B.S. degree.

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 declare or 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 2.0 or above for all the courses (required and elective) taken for that program.

## A minor in Management Information Systems consists of six courses (31

 quarter hours):-CSCI 171 Introduction to Programming
-CSCI 225 Database Management Systems
-CSCI 310 Software Engineering
—CSCI 421 Computer Issues Seminar
-Two of the following:
Courses from business administration or economics at the 200 level or above
CSCI 215 Intro to Management Info Systems
For all majors and minors, if CSCI 181 is substituted for CSCI 171, the total quarter hours required will be three less.

## Economics

Thomas L. Davidson, Assistant Professor
William H. Martin, Instructor
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. Through this approach, our students will have the understanding and conceptual framework for making outstanding contributions as world citizens.

Students are encouraged to declare their major before the end of their sophomore year. Any student declaring the economics major after earning 100 quarter hours must petition the department for approval of a graduation plan.

A cumulative GPA of 2.0 or above in the ten major-required courses is necessary to complete the major. Similarly, a cumulative GPA of 2.0 or above is necessary to complete the six-course minor.

ECON 431 (Evolution of Economic Thought) must be taken at Principia College.

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

The B.A. major in Economics requires 10 courses ( 50 quarter hours):
—ECON 203 Principles of Microeconomics
-ECON 204 Principles of Macroeconomics
—BUAD 251 Financial Accounting
—BUAD 261 Business Statistics
-ECON 303 Intermediate Microeconomic Theory
—ECON 304 Intermediate Macroeconomic Theory
-Two of the following:
ECON 231 Comparative Economic Systems
ECON 281 Capitalism
ECON 316 Economic Development
ECON 321 Money and Banking
ECON 331 International Economics
-ECON 431 Evolution of Economic Thought
-One of the following:
CSCI 215 Intro to Management Info Systems
EDUC/POLS/SOC 215 Social Science Research Methods
MATH 151 Calculus I

A minor in Economics requires six courses (30 quarter hours):
—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.

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 ( 25 quarter hours) from Principia economics departmental faculty. For a minor, transfer students must take at least three classroom courses ( 15 quarter 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.

## Education

Brian Walker Johnson, Professor
Betty Jane Rieder, Assistant Professor
Libby E. Scheiern, Associate Professor
The mission of the Principia College education department is to prepare teachers who communicate moral character to build learning communities. Effective teachers have self-knowledge of their own character. Further, effective teachers can differentiate between their own values and the normative conventions, or morals, of the community they are charged to educate. Graduates who understand moral character will effectively com-
municate conventions of curriculum content, professional pedagogy, and schooling. In this way, teacher graduates of Principia's teacher education programs demonstrate moral dimensions of work in schools as their basis for practicing the social science of education.

Teacher candidates who graduate from Principia College with an Illinois elementary or secondary teaching certificate will be able:

- To practice professional conduct and leadership that improves the learning communities in $\mathrm{P}-12$ schools.
- To practice knowledge, skills, and dispositions associated with effective communication as a foundation for learning and teaching moral character and building learning communities in P-12 schools.
- To practice written, quantitative, and technology conventions in P-12 schools.
- To practice an effective science of teaching which includes knowledge, skills, and dispositions of elementary and secondary educators in the areas of communication, learning theory, curriculum content, professional and pedagogical practices, and assessment and evaluation practices.
- To dialog about, debrief, and improve teaching and learning practices in ways that demonstrate an understanding of human diversity - knowledge, skills, and dispositions about cultural, ethnic, gender, ability and style differences - that will help all $\mathrm{P}-12$ students learn.
- To dialog about, debrief, and improve elementary and secondary teaching and learning activities in ways that demonstrate reflective thinking and practice - the ability to think globally and critically about teaching-learning tasks instead of simply "doing" what someone else says to do.

Teacher candidates' progress towards graduation is assessed prior to and throughout their individual teacher certification programs that are each approved by the Illinois State Board of Education. Assessment is based upon performance expectations that range across nine competence areas: communication, learning communities, understanding human diversity, reflective thinking and practice, learning theory, technology, curriculum content knowledge, professional-pedagogical knowledge, and assessment-evaluation. Through guided work in academic courses, field experiences, and clinical practice, teacher candidates develop an ability to integrate all nine of these competence areas into an individual, moral practice of elementary teaching.

Approved teacher certification programs are offered in Elementary/ Middle Education (grades K-9) and in Secondary/Middle Education content areas (grades 6-12), and teacher candidates must complete the academic major in their area of specialization that meets appropriate
secondary teacher certification requirements. Principia College certifies the following subject areas in secondary education: English, Foreign Language: French, Foreign Language: Spanish, and Mathematics. Principia College also certifies teacher candidates for K-12 instruction in Foreign Language: French and Foreign Language: Spanish. Completion of one of these programs makes a teacher candidate eligible for an Illinois initial elementary, K-12, or secondary teaching certificate. All program completers must pass all teacher certification tests required by the State of Illinois.

## Requirements for education majors

## A. General Education Requirements

## Liberal Arts Distribution Requirements

-All Principia College students fulfill distribution requirements for graduation listed on pages 21-24 of this college catalog. Most of the specified general education course work below fulfills some of these liberal arts requirements.
Communication
-EDUC 260 Communication
-Principia College writing requirement
—Passing score in verbal sections of the Illinois Basic Skills Test

Content Knowledge: Basic Skills
Quantitative Reasoning
-MATH $200 \quad$ Foundations of Number*
—MATH 201 Geometry for Teachers*
-Two related science courses utilizing concepts taught in MATH 200 and MATH 201
—Passing score in quantitative section of Illinois Basic Skills Test

* Teacher candidates who have demonstrated the objectives for MATH 200 and MATH 201 through previous college level course work, advanced placement tests, a physical science/mathematics major, or some other appropriate measure of competence are excused from the MATH 200/MATH 201 requirements.

Understanding Human Diversity and Learning Communities
-One five quarter hour college 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
—EDUC 219 School Law taken concurrently with Beginning Block
-One five quarter hour American history course, approved by the education department, that: 1) interprets the experiences of people and cultures who established American social, political, and/or economic institutions; and 2) relates these experiences to contemporary American issues about race, gender, class, ability, or culture
-Four of the following:
SOC 050 Community Service Program or equivalent experiences that broaden understanding of human diversity and are approved by the education department
-Education department community living requirement Internship in a school with students whose culture is different from the teacher candidate's culture Successful community living in education dormitory for one quarter in accord with criteria stated in the Education Dormitory Covenant found in the Education Handbook.

## B. Professional Education: Elementary/Middle School Track

Including study of Learning Theory; Reflective Thinking and Practice; Technology; Professional, Pedagogical Knowledge; Assessment and Evaluation
—EDUC 203 Child \& Adolescent Development
—EDUC 278 Child \& Adolescent Literature

Beginning Block:
-EDUC 220 Elem \& Middle School Methods
—EDUC 221 Elem/Middle School Beg Intern
—EDUC 250 Educational Psychology: Majors
—EDUC 252 Teaching the Exceptional Child

Intermediate Block:
-EDUC $049 \quad$ Health and Schools Examination
—EDUC 320 Reading in Elem \& Middle School
-EDUC 321 Elem School Intermed Intern
—EDUC 330 Math for Elem/Mid School Teachers
-EDUC 345 Science/Soc Science Methods: K-9
—EDUC/PHIL 388 Philosophy of Education
—EDUC 352 Inclusive Learning Environment
-Passing score on the Illinois Assessment of Professional Teaching test

| Student Teaching: |  |
| :---: | :--- |
| —EDUC 051 | Professional Portfolio Prep |
| -EDUC 440 | El/Mid Stu Teach: Instr \& Mgt |
| -EDUC 441 | El/Mid St Tch: Learning Commun |
| -EDUC 442 | El/Mid St Tch: Hum Div \& Lrn Th |

All elementary/middle school teacher candidates at Principia complete a second major that includes at least 15 quarter hours of upper division work. All program completers must earn a passing score on the appropriate Illinois Content Area tests.

## Electives:

The following elective courses for elementary/middle school teacher candidates are designed to support further growth in Principia's nine performance expectations for teacher candidates:

EDUC 120 Signs of the Times
EDUC 183 Adolescence and Society
EDUC/POLS/SOC 215 Social Science Research Methods
EDUC $430 \quad$ Math Methods in Elm/Mid School
THEA 102 Oral Interpretation

## C. Professional Educational Requirements: Secondary/Middle SchoolTrack Including study of Learning Theory; Reflective Thinking and Practice; Technology; Professional, Pedagogical Knowledge; Assessment and Evaluation

Beginning Block:
—EDUC 250 Educational Psychology: Majors
—EDUC 252 Teaching the Exceptional Child
—EDUC 270 Sec \& Middle School Methods
—EDUC 271 Sec/Middle School Beg Intern

Intermediate Block:
-EDUC $049 \quad$ Health and Schools Examination
—EDUC 318 Adv Methods of Teaching
—EDUC 370 Reading in Sec \& Middle School
—EDUC 371 Secondary School Intermed Intern
—EDUC 383 Adolescent Development
—EDUC 352 Inclusive Learning Environment
-EDUC/PHIL 388 Philosophy of Education
-Passing score on Illinois Assessment of Professional Teaching

Student Teaching:
—EDUC 051 Professional Portfolio Prep
—EDUC $490 \quad$ Sec/Mid Stu Teach: Instr \& Mgt
—EDUC 491 Sec/Mid St Tch: Learning Commun
—EDUC 492 Sec/Mi St Tch:Hum Div \& Lrn Th

## Major Area of Specialization

Secondary/Middle School Track teacher candidates must complete the academic major in their area of specialization that meets appropriate secondary teacher certification requirements. Principia College certifies the following subject areas in secondary education: English, Foreign Language: French, Foreign Language: Spanish, and Mathematics. All program completers must earn a passing score on the appropriate Illinois Content Area tests.

## Electives:

The following elective courses for secondary/middle school teacher candidates are designed to support further growth in Principia's nine performance expectations for teacher candidates:

EDUC 120 Signs of the Times
EDUC 183 Adolescence and Society
EDUC/POLS/SOC 215 Social Science Research Methods
EDUC 203 Child \& Adolescent Development
EDUC 278 Child \& Adolescent Literature
EDUC $430 \quad$ Math Methods in Elm/Mid School
THEATR 102 Oral Interpretation

## Assessment and Evaluation of Teacher Candidates

Effective teacher development proceeds from a system of assessment and evaluation throughout each teacher certification program. All teacher certification programs have five benchmarks for assessment and evaluation of teacher candidate progress. Teacher candidates who do not meet benchmark requirements must successfully complete remedial work with education faculty to remain fully admitted to a teacher certification program. Principia's Education Handbook, available in the education department office, describes the following assessment benchmarks and their requirements in detail:

Admission to Beginning Block
Admission to Teacher Certification Program
Admission to Intermediate Block
Admission to Student Teaching
Program Completion

In addition to demonstrating beginning, intermediate, and competent level ability in each of Principia's nine performance expectations for teacher candidates described in the Education Handbook, these benchmarks include the following requirements:

- Beginning block course prerequisites include a grade of "C" or better in EDUC 260 Communication.
- Intermediate block course prerequisites include: a) a grade of "C" or better in each of a teacher candidate's beginning block courses;
b) completion of phase four of Principia's all-college writing requirement.
- Student teaching course prerequisites include: a) a grade of "C" or better in each of a teacher candidate's intermediate block courses; b) a cumulative GPA of 2.8 and an education major GPA of 3.2.
- Program completion prerequisites include: a) a grade of "B" or better in each of a teacher candidate's student teaching courses; b) a cumulative GPA of 2.8 and an education major GPA of 3.2; c) graduation from Principia College.


## Communication Requirement

Verbal, nonverbal, written, and visual communication skills are requisite for full admittance into a teacher certification program. Teacher candidates cannot proceed to intermediate level course work without intermediate level demonstration of the Communications area of Principia's performance expectations for teacher candidates. Details about this requirement and other requirements are found in Principia's Education Handbook. This handbook is available in the education department office.

## Health and Schools Examination Requirement

A basic understanding of school policy about health is needed to support teacher candidates care for P-12 students and their families who have diverse beliefs and practices. This examination requirement (EDUC 049 Health and Schools Examination) should give teacher candidates a solid grounding in basic health care for themselves and their students prior to student teaching. It should also contribute to teacher candidates' understanding of human diversity. Details about this requirement are found in Principia's Education Handbook.

Minors in Education at Principia College do not lead to teacher certification, and the course work included in an education minor does not typically transfer to other institutions that certify teachers in the United States. However, an education minor at Principia College does provide an introduction to the practice of teaching and the study of education. Minors in education are offered in the following two areas:

```
Minor in Teaching
    -One of the following:
            EDUC 183 Adolescence and Society
            EDUC 203 Child & Adolescent Development
            EDUC/PHIL 388 Philosophy of Education
    —EDUC 219* School Law
    -EDUC 220* or Elem & Middle School Methods or
            EDUC 270* Sec & Middle School Methods
    _EDUC 221* or Elm/Middle School Beg Intern or
            EDUC 271* Sec/Middle School Beg Intern
    —EDUC 250* Educational Psychology: Majors
    —EDUC 252* Teaching the Exceptional Child
    -EDUC 260 Communication
    *Taken concurrently
Minor in Educational Studies
    -EDUC 260 Communication
    -Three of the following:
    EDUC 183 Adolescence and Society
    EDUC 203 Child & Adolescent Development
    EDUC 278 Child & Adolescent Literature
    EDUC/PHIL 388 Philosophy of Education
    -One of the following:
    EDUC/POLS/SOC 215 Social Science Research Methods
    PHIL 250 Contemporary Moral Problems
    SOC 160 "Race" and Ethnicity
    SOC 170 Gender Paradigms
    SOC 180 Power, Privilege, and Prestige
    SOC 325 Youth Advocacy and Services
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## 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 B.S. major in Engineering Science requires 105 quarter hours:
—MATH 151 Calculus I
—MATH 152 Calculus II
-MATH $153 \quad$ Calculus III
-MATH 254 Multivariable Calculus
-CHEM 131 Fundamentals of Chemistry I
-CHEM 132 Fundamentals of Chemistry II
—CHEM 133 Fundamentals of Chemistry III
—PHYS 201 Phys for Scientists/Engrs I
—PHYS 202 Phys for Scientists/Engrs II
—PHYS 203 Phys for Scientists/Engrs III
-CSCI 171 Introduction to Programming
-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 35 quarter hours of engineering courses to Principia College as part of the engineering science major.
-Three advanced courses in one of the following areas of concentration:

## Chemistry Concentration

-CHEM 262 Organic Chemistry I
—CHEM 263 Organic Chemistry II
—CHEM 321 Applied Spectroscopy

## Computer Science Concentration

—Three approved CSCI electives

## Math Concentration

—Three approved MATH electives

## Physics Concentration

-One of the following:
PHYS 253 Electronics
PHYS 301 Classical Mechanics
-Two 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

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 cooperating university. Students must also complete the all-college degree requirements. Transfer credit is awarded for the engineering courses only after phase four of the Principia College writing requirement is completed.

## Other Engineering Options

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

## English

Marilyn J. Horth, Associate Professor
Dinah Ryan, Associate Professor
Virginia Slachman, Associate Professor
Heidi J. Snow, Assistant Professor
The objectives of the English program are to enhance students' powers of written and oral communication, to cultivate their critical faculties, and to acquaint them with English and American literature.

The college requirement in literature is satisfied by an elective in English or American literature and a second elective in English, American, dramatic, world, or foreign language literature.

The B.A. major in English with a track in Literary Studies requires eleven courses (55 quarter hours):
-One course in American literature
-One Shakespeare course
-One single author course
-One pre-1800 British literature course
-One post-1800 British literature course
—ENGL 388 Practical Criticism
—ENGL $400 \quad$ Capstone in Literature
(Note: May be taken as a two or three quarter hour course if taken in conjunction with ENGL 401: Capstone in Creative Writing for a combined total of five quarter hours.)
-Four electives from English or World Literature offerings (Note: English/education majors only must take EDUC 350 as one of these electives.)

The B.A. major in English with a track in Creative Writing requires twelve courses ( 60 quarter hours):
-One modern or contemporary literature course
-One pre-19th century literature course
-One single author course
-ENGL $242 \quad$ Writers and Artists at Work
—ENGL 351 Advanced Creative Writing Seminar
—ENGL 388 Practical Criticism
—ENGL 401 Capstone in Creative Writing
(Note: May be taken as a two or three quarter hour course if taken in conjunction with ENGL 400: Capstone in Literature for a combined total of five quarter hours.)
-Two sequential courses chosen from the English department's creative writing courses (Poetry Writing I and II or Fiction Writing I and II).
-Three electives from English or World Literature offerings

English majors in the Creative Writing track are encouraged to complete an internship or a service-learning project related to the field of creative writing.

In addition, English majors in the Creative Writing track are encouraged to have a minor in another academic discipline.

A minor in English with a track in Literary Studies consists of six courses (30 quarter hours):
-One Shakespeare course
-One American literature course
-One British literature course
-Three electives from any literature or writing course offered by the English department

A minor in English with a track in Creative Writing consists of six courses (30 quarter hours):
-One modern or contemporary literature course
-One pre-19th century literature course
-One single author course
-Three courses chosen from the English department's creative writing courses, including one complete sequence (Fiction Writing I and II or Poetry Writing I and II).

English readings courses, advanced seminars, and projects are available through independent study.

## English as a Second Language

An English as a second language program may be offered for international students who need to improve their English language skills.

## Foreign 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 history, literature, and approaches to life different from their own.

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.

Students at all levels may use audio- and videocassettes, CD-ROM and DVD discs, computer programs and Internet access in the Language Center to provide practice in listening and speaking, reading and writing.

The study of literature in the original languages is begun at the intermediate level of foreign 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.

The major in foreign languages is designed for students who want to achieve a working proficiency in two or more languages. 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 sociopolitical and cultural background, is applicable to several career areas, including teaching, translating/interpreting, international business, and government service. Normally, students majoring in foreign languages will have developed some proficiency in one language prior to coming to Principia, and they continue that language in addition to developing one or two others during their major program.

The B.A. major in Foreign Languages consists of 12 courses ( 60 quarter hours) in two or three languages. These courses must be at the 200 level or above.

The two-language track requires:
-Six courses (including one literature or culture course) in one language
-Four courses in a second language
—Two foreign language electives
The three-language track requires:
-Five courses (including one literature or culture course) in one language
-Three courses in a second language
-Two courses in a third language
—Two foreign language electives
Majors in all languages are strongly urged to earn at least five quarter hours in a cultural environment where that language is spoken natively through either a Principia abroad or a solo program.

Majors in foreign languages must also take the following courses, which may be used to satisfy their all-college requirements:
-Two histories related to non-English-speaking areas
-One art history dealing with non-English-speaking cultures
-One political science related to international topics
-One philosophy including non-English-speaking philosophers

Majors in French, German Studies, and Spanish are described separately in this section.

## French

Hélène Diaz Brown, Professor
Diana M. Swift, Associate Professor
A Bachelor of Arts major in French is focused on the French language, with an emphasis on all fundamental language skills: oral fluency and comprehension, the ability to write correct French and to understand various texts written in French. It will also equip the students with knowledge 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 (which, in turn, fulfill all-college requirements) such as history, political science, and art history. The program is designed to be compatible with other majors such as education, business administration, global perspectives, international relations, and political science. Such combinations can lead to a broad range of career choices.

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

The B.A. major in French requires 50 quarter hours at the FREN 204 level and above chosen from the following courses:

$$
\text { —FREN } 250 \quad \text { French Cultural Studies }
$$

- 35 to 40 quarter hours from the following:

FREN 204 Intermediate French I
FREN 205 Intermediate French II
FREN 216 Intermediate Conversation I
FREN 217 Intermediate Conversation II
FREN 225 Intermediate Grammar I
FREN 226 Intermediate Grammar II
FREN 230 Language Workshop Abroad
FREN 240 French Composition
FREN 260 Reading French Through Time
FREN 310 Advanced French
FREN 316 Advanced French Conversation
FREN 325 Advanced French Grammar
FREN 330 Language Workshop Abroad

- 10 to 15 quarter hours from the following:

FREN 300 Love, Reason, and Monarchy
FREN 340 Image \& Power in 19th C France
FREN 350 20th Century: Mind Revolutions
FREN 360 Seminar in French Literature

To complement the French major, one or more of the following courses taught in English are strongly recommended:

| ARTH 235 | 19th Century European Art |
| :--- | :--- |
| ENGL 388 | Practical Criticism |
| FREN/WLIT $179 \quad$ Reading French Society in Film |  |
| HIST 228 | History of France |
| POLS 255 | Contemporary European Politics |

Either FREN 141 Beginning French Pronunciation or FREN 241 French Phonetics is recommended. Also a quarter of study abroad is strongly recommended.

A minor in French requires six courses ( 30 quarter hours) 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 minor. No more than two transfer courses may be applied to the French minor.

## Geology

Janis D. Treworgy, Professor
There are currently two options in geology: a minor in geology and a major in environmental studies (geology track). (See Biology and Natural Resources.)

The minor program in geology provides students with the two fundamental courses in geology as well as the opportunity to gain experience in other areas, including mineral and energy resources and environmental geology. Class activities develop student skills in methodologies ranging from mineral, rock, and fossil identification to analysis of geologic structures. Field activities accompany the geology courses.

A minor in Geology requires five courses (25 quarter hours):
—GEOL 111 Introductory Geology
—GEOL 242 Historical Geology
-Two of the following:
GEOL 180 Geologic Field Studies
GEOL 225 Environmental Geology
GEOL/CHEM 230 Nonrenewable Resources
Any of the choices listed under the next heading when more than one is chosen
-One of the following:
A geology field course
A geology course (such as mineralogy or petrology) which is beyond the introductory level*

An internship program (such as at the Illinois State Geological Survey)

GEOL 280 or a field course at another college or university.
*These courses are not regularly offered at Principia. They would probably have to be taken at another college or university.

## German Studies

The major in German studies is designed to equip students with a diversified understanding of the cultural and socio-political background of the language as preparation for positions in the diplomatic service and in government agencies, international business corporations, and teaching.

The B.A. major in German Studies requires 13 courses (49 quarter hours):
-GER 204 Intermediate German
-GER 205 Intermediate German
-GER 210 German Phonetics
—GER 216 German Conversation
-GER/HIST 220 German Civilization*
-GER 240 Aktuelle Themen
-GER 272 German Literature
-GER 307 Advanced Grammar I
-GER 308 Advanced Grammar II
—GER 350 Project
-HIST 218 German History
-One related art history or music course
-One related political science course
*Must be replaced by European history course if student does not go on an abroad.

Suggested electives include ARTH 235, or additional courses from those listed above.

Transferable electives from other institutions may include courses in German literature, history, or culture.

A minor in German Studies requires six courses (30 quarter hours):
-GER 204 Intermediate German
-GER 205 Intermediate German
—GER 216 German Conversation
-GER 272 German Literature
-Two electives from the following:
GER/HIST 220 German Civilization
GER 316 Advanced Conversation

| GER 350 | Project |
| :--- | :--- |
| HIST 218 | German History |
| POLS 152 | Politics Among Nations |
| POLS 255 | Contemporary European Politics |

No more than two transfer courses may be applied to the German studies minor.

## Global Perspectives

Faculty from several disciplines support this program.
The global perspectives major is designed to prepare students for living in the 21st century - a century of rapidly changing paradigms in an increasingly globalized world. The program is designed to help students overcome a sense of fear about the complexities of the world they live in and to build understanding of these complexities. The global perspectives major integrates topics and fields which develop a worldview for today: civilizations and their histories, religions, comparative economics, global ethics, cultural and language diversity, international politics and ideologies, world geography, current events, and global environmental issues. Throughout the program, students will focus on key issues that mirror the challenges facing our world.

The curriculum of the program consists of required and elective courses, including specified courses in the fields of religion, economics, philosophy, sociology, history, and language. Students will also develop a concentration area of global study, approved by the department faculty, involving a minimum of 25 quarter hours, and selected from a list of catalog offerings approved by the program faculty.

In addition to the course curriculum of this program, students will become involved in a service project or program emphasizing the development of cultural sensitivity and awareness. During the senior year, as the culmination of their concentration area of global study, students will undertake a capstone project addressing an issue of international concern that underscores the importance of global awareness.

The B.A. major in Global Perspectives requires completion of the following courses ( 78 to 81 quarter hours):

Foundational courses/Transition into the major:
-One of the following:
ECON 231 Comparative Economic Systems
ECON 316 Economic Development
ECON 331 International Economics
-GLBL $270 \quad$ World Focus Seminar (must be taken five times)
-HIST $290 \quad$ World History
-One of the following:
HIST 189 Global Religions \& History
PHIL/REL 261 Living Religions of the East
—SOC 150 Intro to Cultural Anthropology

Midsection of the major:
-One of the following
GLBL/PHIL 255 Global Ethics
PHIL 220 Introduction to Ethics
—GLBL 300 Global Issues
-Five quarter hours of foreign language study at or above the 205 level
-Twenty-five quarter hours taken in an area of concentration determined by student and advisor (at least 5 quarter hours must be 300 level or above)

The area of concentration may be fulfilled by an existing minor if all courses comprising the minor have an international or global focus. There may not be any overlap between courses taken to fulfill the general major requirements and courses taken in the area of concentration.

Finishing the major/Transition out of college:
-GLBL 400 Research Methods
—GLBL 401 Research Capstone Seminar
—GLBL 403 Capstone Presentation
—GLBL 431 Worldography

Additional requirement:
-SOC 050 Community Service Program, approved by the advisor

It is also recommended that global perspectives majors pursue an international experience, completing either a full quarter of study abroad or an internationally focused internship.

A minor in Global Perspectives consists of 28 quarter hours including:
-GLBL 270 World Focus Seminar (one quarter hour per seminar, taken three times)
—GLBL 300 Global Issues
—GLBL 431 Worldography
-Three electives from the following ten, with certain limitations:
BNR 190 Global Environmental Issues
HIST 290 World History
SOC 150 Intro to Cultural Anthropology

| One of the following: |  |
| :---: | :---: |
| ECON 231 | Comparative Economic Systems |
| ECON 316 | Economic Development |
| ECON 331 | International Economics |
| One of the following: |  |
| HIST 189 | Global Religions \& History |
| PHIL/REL 261 | Living Religions of the East |
| One of the following: |  |
| GLBL/PHIL 255 | Global Ethics |
| PHIL 220 | Introduction to Ethics |

Substitution of alternative elective courses with a demonstrated global focus may be approved by the global perspectives faculty.

## History

Faith G. Paul, Professor
Gregory W. Sandford, Associate Professor
Elise Wagner, Instructor
J. David Winder, Associate Professor

History helps us understand the events and ideas that have shaped our world and the way we see ourselves in it. Encompassing every field of human activity as well as every age and society, it teaches us to think beyond the context and values of our own time and place. The student of history learns how to interpret cause-effect relationships in human affairs, distinguish the significant from the trivial, and detect bias. History courses develop research, writing, and critical thinking skills.

The B.A. major in History consists of 54 quarter hours:
Three quarter hours in introductory seminar:
-HIST $270 \quad$ History Focus Seminar (one quarter hour per seminar, taken three times)
-Five quarter hours in American history
-Five quarter hours in medieval or modern European history
-Ten quarter hours in Asian, African or Latin American histories
-Twenty quarter hours in history electives
Eleven quarter hours in a senior capstone project:
—HIST $400 \quad$ History Research Methods
-HIST 401 Writing \& Research Project
-HIST 403 Capstone Presentation

Fifteen quarter hours must be taken in courses numbered 300 or above. A single five quarter hour course may fulfill more than one of the major
requirements, (except for the senior capstone project), but the total of 54 quarter hours must be taken.

Independent study courses (e.g., HIST 402 Reading in History) are available to majors by arrangement with individual members of the history faculty.

A minor in History consists of 28 quarter hours including:
Three quarter hours in introductory seminar:
-HIST $270 \quad$ History Focus Seminar (one quarter hour per seminar, taken three times)
-One American history
-One European history
-One non-Western history
—Two history electives

Five quarter hours must be taken in courses numbered 300 or above.

## Mass Communication

George V. Cooke, Associate Professor
David R. McFarland, Associate Professor
Craig F. Savoye, Assistant Professor
Mass communication is a powerful force for change in the world today. Rapid advances in technology have opened global opportunities for communicating with greater numbers of people than ever before. However, technological advances are far ahead of knowledge of how to effectively use 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 the theoretical underpinnings and the practical applications of the mass media. After completing the required core courses, students branch out into elective areas of study. The major culminates in a senior project activity which gives students an opportunity to put into practice the knowledge they have gained through their studies.

The B.A. major in Mass Communication requires six core courses, five additional courses, and a practical experience requirement (55 quarter hours):

Six required core courses:
-MCOM 103 Speech Fundamentals
-MCOM 110 Intro to Mass Communication
-MCOM 222 Newswriting I
-MCOM 260 Media Law and Ethics
-MCOM 320 Mass Media in Society
-MCOM 400 Mass Communication Internship (offered on a contract basis through the Academic and Career Advising office)
-Five practical electives from:
ARTS $170 \quad$ Graphic Design I
ARTS $270 \quad$ Graphic Design II
BUAD 325 Advertising
MCOM 130 Photography Fundamentals
MCOM 225 Screenwriting
MCOM 230 Photojournalism
MCOM 231 Intermediate Photography
MCOM 240 Broadcast Journalism
MCOM 244 Graphics Production
MCOM 245 Public Relations
MCOM 250 Feature/Magazine Writing
MCOM 251 Radio Broadcasting Workshop
MCOM 252 Radio Production
MCOM 255 Video Production I
MCOM 265 Sports Writing
MCOM 270 Yearbook Production Workshop
MCOM 275 Opinion Writing
MCOM 280 Speech Skills for the Media
MCOM 322 Newswriting II
MCOM 354 Radio Management Workshop
MCOM 355 Video Production II
-Practical experience requirement - at least two quarters of public service in:

MCOM 052 Radio On Air
MCOM 053 Radio Station Management
MCOM 060 Newspaper Production
MCOM 070 Yearbook Production
MCOM 083 Television Production
MCOM 353 Radio Broadcast Practicum
MCOM 361 Newspaper Practicum
MCOM 370 Yearbook Editing
MCOM 375 Photography Practicum
MCOM 383 Television Practicum

A minor in Mass Communication requires six courses (30 quarter hours):<br>-MCOM 110 Intro to Mass Communication<br>—MCOM 222 Newswriting I<br>-MCOM $320 \quad$ Mass Media in Society<br>-Three electives numbered 200 or above<br>-At least one quarter of practical experience in MCOM 052, 053, 060,070 , or 083

## Mathematics

Thomas H. Fuller Jr., Professor
Stephen G. Hinthorne, Professor
Catherine A. Hooper, Assistant Professor
Andrew T. Parker, Assistant Professor
Mathematics is the study of pattern and structure with special emphasis on the nature and properties of numbers and geometrical shapes. Specific courses at the lower division level for education majors include the study of the foundations of arithmetic and geometry as well as an introduction to elementary data analysis. A fundamental statistics course introduces social science and biology majors to the techniques of data analysis. A "liberal arts" survey course for non-science majors provides an overview of the history, development, and uses of elementary mathematics. For future secondary mathematics teachers, the department offers a course in the history of mathematics and an upper division course in synthetic geometry. For B.A. majors upper division courses in algebraic structures and real analysis extend the student's knowledge of algebra and calculus developed in single- and multivariable calculus, linear algebra, and discrete mathematics. For B.S. (and B.A.) mathematics majors upper division courses in mathematical statistics, applied advanced analysis, differential equations, and numerical analysis extend the student's knowledge of applied mathematics. For both B.A. and B.S. majors a senior capstone course is required. This course studies a mathematical topic (such as orthogonality or optimization theory) in depth in an effort to synthesize mathematical concepts the students have encountered in their previous mathematics courses and to provide time and opportunity to do significant research on a mathematical topic of interest to the students.

The B.A. major in Mathematics requires 60 quarter hours in the following courses:

| -MATH 151 | Calculus I |
| :--- | :--- |
| -MATH 152 | Calculus II |
| -MATH 153 | Calculus III |
| -MATH 254 | Multivariable Calculus |

-One of the following:
MATH 261 Discrete Math
MATH 364 Mathematical Statistics
—MATH 273 Linear Algebra
—MATH 374 Algebraic Structures
-MATH 382 Foundations of Analysis
-MATH 415 Senior Capstone
-Ten quarter hours approved math electives (up to three quarter hours of MATH 421 Math Seminar may be counted)
-CSCI 171 Introduction to Programming
Substitutions may be made upon approval of the department.

The B.S. major in Mathematics requires 65 quarter hours in the following courses:

| —MATH 151 | Calculus I |
| :--- | :--- |
| —MATH 152 | Calculus II |
| —MATH 153 | Calculus III |
| —MATH 254 | Multivariable Calculus |
| -MATH 273 | Linear Algebra |
| —Four courses from: |  |
| MATH 261 | Discrete Math |
| MATH 355 | Applied Advanced Calculus |
| MATH 360 | Numerical Analysis |
| MATH 364 | Mathematical Statistics |
| MATH 380 | Differential Equations |
| MATH 381 | Complex Variables |
| —MATH 415 | Senior Capstone |
| —Ten quarter hours approved math electives (up to three quarter |  |
| hours of MATH 421 Math Seminar may be counted) |  |
| —CSCI 171 | Introduction to Programming |

B.S. majors must take PHYS 201 Phys for Scientists/Engrs I to satisfy one of their distribution requirements. (Note that B.S. mathematics majors are not required to complete any chemistry courses in order to take PHYS 201.)

Substitutions may be made upon approval of the department.
A grade point average of 2.0 or above for the first five courses is necessary to continue as a math major.

MATH 200 and MATH 201 are recommended for elementary education majors. Secondary education majors are strongly recommended to take MATH 211 and MATH 304 as part of their B.A. major math electives.

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

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. A minor in mathematics requires 30 quarter hours with an average grade of C or above:

| -MATH 151 | Calculus I |
| :--- | :--- |
| -MATH 152 | Calculus II |
| -MATH 153 | Calculus III |
| -MATH 273 | Linear Algebra |
| -Ten quarter hours approved math electives |  |

Mathematics Courses for Non-Science Majors and the Math Learning Center
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). Students who place at Level 1 on the Basic Mathematics Placement Examination will be placed in non-credit math tutorial (MATH 099) designed for each individual by the Math Learning Center to help him/her develop these skills and knowledge sufficiently to be able to do the quantitative reasoning and numerical work required in Math 110 or Math 111. After completion of the tutorial, these students will be required to enroll in their choice of Math 110 or Math 111. Students who place at Level 2 on the Basic Mathematics Placement Examination must enroll in their choice of Math 110 or Math 111 before the end of their first three quarters at the College.

## Music

Laura M. Garritson, Assistant Professor
James Hegarty, Associate Professor
Marie G. Jureit, Professor
John R. Near, Professor
Music department goals provide for and encourage artistic development in music, encourage inner growth, contribute to excellence in church music, develop an appreciation for the rich variety of musical expression and thought that contributes to a greater understanding among peoples through the following learning themes:

- Performance and creative expression
- Thinking and communication
- Personal growth and character development
- Cultural and historical awareness
- Community engagement

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.

The B.A. major in Music requires 60 quarter hours:
-One of the following:
MUS 139 Fundamentals: Beginning
MUS 140 Fundamentals: Advanced
-MUS 141 Diatonic Harmony
—MUS 143 Chromatic Harmony
—MUS 146 Musicianship I
—MUS 147 Musicianship II
—MUS 213 Music of the World
-MUS 243 Counterpoint
—MUS 244 20th C. Techniques
-MUS 246 Musicianship III
—MUS 247 Musicianship IV
—MUS 321 Music History I
-MUS 322 Music History II
-MUS $323 \quad$ Music History III
—MUS $391 \quad$ Form and Analysis
-One 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 Europe
-One of the following:
MUS 401 Senior Project: Composition taken concurrently with MUS 407 Recital Program Notes
MUS 402 Sr Project: Music Hist 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

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, 141, 143, 146, 147, 243, 246.

## 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 ninth week of fall quarter of the sophomore year, he or she will be enrolled in piano lessons beginning in the winter quarter of the sophomore year.
3. The student must continue to take piano lessons through the quarter 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 lessons are available through the department. Degree-seeking students must sign up for MUS 120 (50-minute lessons) or MUS 130 (25minute lessons). However, if registering for studio lessons for credit takes them beyond 18 quarter hours in a particular quarter, they may register for the non-credit numbers MUS 040 and MUS 044 that quarter. Any combination of instruments in any combination of 50- or 25-minute lessons may be taken up to the limit of 12 quarter hours. After that, students will register for the non-credit numbers. 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 quarter 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 quarter in which they are declared music majors, with a minimum of six quarters (three quarters of the requirement must be in a large ensemble).

A minor in Music requires 25 quarter hours:
-Five quarter hours from:
MUS 139 Fundamentals: Beginning
MUS 140 Fundamentals: Advanced
MUS 141/146 Diatonic Harmony/Musicianship I
MUS 143/147 Chromatic Harmony/Musicianship II
-One music history course from:
MUS 100 Intro to the Art of Music
MUS 321 Music History I

MUS $322 \quad$ Music History II
MUS 323 Music History III
-Three music electives
-Three quarters 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 postbaccalaureate 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

Christopher B. Young, Instructor
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.

The B.A. major in Philosophy requires ten courses (46 to 50 quarter hours):
-Two courses in the area of value theory
-Two courses in the history of philosophy
-Four philosophy electives
—PHIL 421 Seminar in Philosophy
—PHIL $440 \quad$ Capstone in Philosophy
Two courses, in addition to PHIL 421 and 440, must be taken at or above the 300 level. One course must be cross-listed with another department.

It is strongly recommended that the one cross-listed course have nonwestern components.

A minor in Philosophy consists of five or more courses, totaling 25 quarter hours. 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.

Physics majors at Principia may earn either a B.A. degree or B.S. degree depending upon whether they desire a general or a more professional preparation in physics. The B.A. major is especially useful to anyone pursuing a career in teaching.

The B.A. major in Physics requires 83 quarter hours:
-CHEM 131 Fundamentals of Chemistry I
-CHEM 132 Fundamentals of Chemistry II
-CHEM 133 Fundamentals of Chemistry III
—MATH 151 Calculus I
—MATH 152 Calculus II
-MATH $153 \quad$ Calculus III
—MATH 254 Multivariable Calculus
—PHYS 201 Phys for Scientists/Engrs I
—PHYS 202 Phys for Scientists/Engrs II
—PHYS 203 Phys for Scientists/Engrs III
—PHYS 283 Advanced Laboratory
-Five additional physics courses numbered 151 or above
—PHYS 308 Senior Project

The B.S. major in Physics requires 95 quarter hours:
-CHEM 131 Fundamentals of Chemistry I
-CHEM 132 Fundamentals of Chemistry II
-CHEM 133 Fundamentals of Chemistry III
—MATH 151 Calculus I
—MATH 152 Calculus II
-MATH $153 \quad$ Calculus III
—MATH 254 Multivariable Calculus
—MATH 355 Applied Advanced Calculus
—PHYS 201 Phys for Scientists/Engrs I
—PHYS 202 Phys for Scientists/Engrs II
—PHYS 203 Phys for Scientists/Engrs III
—PHYS 283 Advanced Laboratory
-One of the following:
PHYS 308 Senior Project
PHYS 401 Research (offered on an independent contract basis)
-Six additional physics courses numbered 251 or above

We further recommend CSCI 171 (Introduction to Programming), MATH 273 (Linear Algebra), and MATH 380 (Differential Equations).

| -MATH 151 | Calculus I |
| :---: | :---: |
| -MATH 152 | Calculus II |
| -PHYS 201 | Phys for Scientists/Engrs I |
| -PHYS 202 | Phys for Scientists/Engrs II |
| —PHYS 203 | Phys for Scientists/Engrs III |
| -PHYS 283 | Advanced Laboratory |
| —PHYS 308 | Senior Project |
| -One additio | hysics course numbered 151 o |

## Political Science

Julie Blase, Assistant Professor
Brian D. Roberts, Associate 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 tracks: Politics and Policy, and International Relations. Non-majors can take either track as a minor. The Politics and

Policy track focuses on core fields of political science-American government and politics, international relations, comparative politics, political philosophy, and methodology. This track is strong preparation for law school. The International Relations track examines the impact of politics, history, economics, and culture on the international system and actors. Building on a strong foundation in political science, it embraces the interdisciplinary nature of international politics and policy.

Theory and practice are emphasized in both tracks. 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 track, must take at least four courses ( 20 quarter 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 10 quarter hours of independent study taken off campus can be applied toward the requirements of the major (or five quarter hours for the minor).

The B.A. major in Political Science. Students choosing to major in political science may elect one of two tracks:

The Politics and Policy track requires 10 courses (50 quarter hours):
—POLS 120 American Government \& Politics
—POLS 152 Politics Among Nations
—POLS/EDUC/SOC 215 Social Science Research Methods
-Seven political science electives (including at least three at the 300 level)

The International Relations track requires 13 courses ( 65 quarter hours):
—POLS 120 American Government \& Politics
—POLS 152 Politics Among Nations
— POLS/EDUC/SOC 215 Social Science Research Methods
—POLS 252 American Foreign Policy
-Six of the following political science courses (including at least three courses at the 300 level):

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)
POLS/PHIL 280 Classics of Political Thought

POLS 300 Revolution: Politics of Violent Change
POLS 352 International Relations Theory
POLS 365 Advanced Issues (if international topic)
(Additional modern international or comparative political science electives may be applied toward this track 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 American Foreign Relations
HIST 382 Modern China
HIST 386 India
(Additional modern history courses may be applied toward this track 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)

The foreign language requirement can be met by testing out at the required level of proficiency. Testing is done by the foreign languages department. Students whose native language is not English are exempt from the foreign language requirement.

MCOM 310, International Mass Communication, or SOC 340, Peace and Conflict, may be substituted for one political science elective. However, three 300-level political science courses must still be completed.

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

The Politics and Policy track requires five courses (25 quarter hours):
—POLS 120 American Government \& Politics
—POLS 152 Politics Among Nations
-Three political science electives (including at least one at the 300 level)

The International Relations track requires six courses (30 quarter hours):
—POLS 120 American Government \& Politics
—POLS 152 Politics Among Nations
-Two political science electives, from the above list (including at least one at the 300 level)
-One history course, from above list
—One economics course (ECON 231, 316, 331)

MCOM 310, International Mass Communication, or SOC 340, Peace and Conflict, may be substituted for one political science elective. However, one 300-level political science course must still be completed.

## Religion

Michael W. Hamilton, Assistant Professor
Barry Huff, Assistant Professor
Helen Mathis, Instructor
A focus on religion cultivates sensitivity to human needs and their satisfaction through spiritual means. A study of biblical literature, ancient languages, and religious and ethical traditions helps the student to investigate and appreciate religiously-based values, the spiritual dimensions of human experience, and the impact these have on individuals and society.

The B.A. major in Religion requires 11 courses ( 53 to 55 quarter hours):
-Two courses in biblical studies (one in Old Testament, one in New Testament)
-Two courses from two of the following areas: philosophy of religion, church history, comparative religions, or theology
-One course in religious ethics
-Five courses as electives
-A senior project (three to five quarter hours)
A minimum of two courses in the major must be at or above the 300 level.

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Minors in Religion require five courses (25 quarter hours):
    Religion (general emphasis)
        -One course in the area of Old Testament
            -One course in the area of New Testament
            -One non-biblical religion or religious ethics course
            -Two electives
Religion (biblical studies emphasis)
    —REL 110 The Old Testament
    —REL 120 The New Testament
    -Three Bible or ancient language electives
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At least one course in each of the religion minors must be at or above the 300 level.

## Sociology and Anthropology

William Omari Miller, Assistant 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 students' experience.

In so doing, we aim 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. We believe that 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 50 quarter hours:
—Race: SOC 160 "Race" and Ethnicity
-Gender: SOC 170 Gender Paradigms
-Social Class: SOC $180 \quad$ Power, Privilege, and Prestige
-Non-Western Culture: One of the following courses:
SOC 150 Intro to Cultural Anthropology
SOC 240 Native American Cultures
SOC 270 Indigenous Cultures
SOC 310 African Cultures
-SOC/EDUC/POLS 215 Social Science Research Methods
—SOC 300 Social Theory
-SOC 395 Internship
—SOC 400 Senior Capstone Seminar

- 10 additional quarter hours of non-contract courses

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

A minor in Sociology and Anthropology requires a minimum of 25 quarter hours including:

20 quarter hours in four core areas, as follows:

| -Race: | SOC 160 | "Race" and Ethnicity |
| :--- | :---: | :---: |
| -Gender: | SOC 170 | Gender Paradigms |
| —Social Class: | SOC 180 | Power, Privilege, and Prestige |
| —Non-Western Culture: One of the following courses: |  |  |
| SOC 150 | Intro to Cultural Anthropology |  |
| SOC 240 | Native American Cultures |  |
| SOC 310 | African Cultures |  |
| —5 additional quarter hours of non-contract work. |  |  |

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

## Spanish

Duncan Charters, Professor
Annabelle Marquez, Instructor
Cecily Quintanilla, Associate 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, in international business, in social and community welfare, and in bilingual and foreign language teaching.

The B.A. major in Spanish. Students choosing to major in Spanish may elect one of two tracks:

The Spanish Language track requires a minimum of 10 courses (50 quarter hours):
-SPAN 204 Grammar and Conversation
-SPAN 205 Intermediate Review
-SPAN 216 Oral Expression \& Conversation
-SPAN 225 Advanced Grammar \& Composition
-SPAN 260 Intro to Hispanic Literature or any approved literature course offered in Spanish
-One of the following:
SPAN 306 Advanced Oral Expression
SPAN 316 Advanced Conversation
—SPAN 325 Advanced Span Language Study or another advanced Spanish language course
-One Spanish literature elective
-Two electives taught in Spanish

A minimum of one major course must be taken in a native environment. We highly recommend a full quarter of study abroad.

The Hispanic Studies track requires a minimum of 10 courses (50 quarter hours):
—SPAN 204 Grammar and Conversation
-SPAN 205 Intermediate Review
—SPAN 216 Oral Expression \& Conversation
-One of the following:
SPAN 225 Advanced Grammar \& Composition
SPAN 325 Advanced Span Language Study
—SPAN 230 Hispanic Culture
-One of the following:
SPAN 260 Intro to Hispanic Literature
SPAN 271 Classical Spanish Literature
SPAN 272 Modern Hispanic Literature
-One of the following:
SPAN 306 Advanced Oral Expression
SPAN 316 Advanced Conversation
SPAN 325 Advanced Span Language Study
SPAN 336 Understand \& Speak Cont Span I
SPAN 346 Understand \& Speak Cont Span II
Any other advanced language course taught in Spanish
-Three of the following:
HIST 222 Latin America
HIST 224 Mexico
HIST 390 Immigration and Acculturation
POLS 254 Latin American Politics
SOC 160 "Race" and Ethnicity
SOC 245 Cultural Studies: Latina/Latino
SPAN 220 Hispanic Civilization
Spanish literature
Spanish-American literature
Project or other approved area studies course (typical fields: Spanish, history, political science, environmental studies)

For both tracks of the Spanish major, at least seven courses (35 quarter hours) must be chosen from those taught in Spanish.

Independent study and seminars are available by arrangement with Spanish faculty.

A minor in Spanish Language requires six courses (30 quarter hours). They normally include the following:
-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

Only courses taught in Spanish can be applied to a minor in Spanish language. No more than two transfer courses can count towards the Spanish minor.

A minor in Hispanic Studies requires six courses (30 quarter hours). They normally include the following:

| -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 English or Spanish |  |
| -One Hispanic area studies elective course, taught in English or |  |
| Spanish |  |

Only one course taught in English may be counted towards fulfilling the minimum requirements for the Hispanic studies minor, although students are encouraged to include as many area studies courses as possible. No more than two transfer courses can count toward the minor.

## Special Major Program

Faculty from several disciplines support this program.
This program combines courses from existing curricular offerings on campus, or courses from other institutions and on-campus courses, to produce a major not currently offered at Principia College. Recent examples of special majors include: family studies, art history, and range science. 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. All special majors must also follow the same distribution 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.

## Theatre and Dance

Patricia A. Brown, Associate Professor
Hilary Harper-Wilcoxen, Assistant Professor
Patrick N. McCreary, Assistant Professor
Christine Calkins Steele, Instructor
The theatre and dance program at Principia is designed to develop wellrounded theatre and dance artists within the context of a dynamic liberal arts education.

The theatre and dance program responds to the needs of majors and non-majors alike. Development of qualities such as poise, authority, grace, and discipline serve the student in whatever field he or she chooses to follow.

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, music, and especially dance.

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 25 quarter hours. The maximum transferable credit for a minor in theatre is two courses or ten quarter hours. Non-credit theatre production courses are not transferable.

The B.A. major in Theatre requires 16 courses ( 70 quarter hours):
Three courses in performance:
—THEA 101 Acting I
—THEA 201 Acting II
—THEA 301 Scene Study
-One course in history:
THEA 272 The History of Theatre
-One of the following courses in literature:
THEA 210 Dramatic Literature
THEA 261 Renaissance and Modern Drama
-One course in voice:
THEA 150 Voice and Speech
-One course in movement:
THEA 230 Theatre Movement
-One course in directing:
THEA 320 Directing
-Two of the following courses in technical theatre:
THEA 104 Theatre Make-up
THEA 140 Stagecraft I
THEA 240 Stagecraft II
THEA 285 Theatre Costuming
THEA 354 Practicum: Mainstage (Crew) (for 5 quarter hours)
-Ten quarter hours in theatre practicum
THEA 350 Practicum: Mainstage (Cast)
THEA $351 \quad$ Practicum: Studio (Cast)

THEA 352 Practicum: Mainstage (Staff)
THEA 353 Practicum: Studio (Staff)
THEA 354 Practicum: Mainstage (Crew)
THEA 355 Practicum: Studio (Crew)
-Two electives, at least one at or above the 300 level:
THEA 102 Oral Interpretation
THEA 260 Theatre Seminar
ENGL/THEA 286 History of English Drama
ENGL/THEA 311 Shakespeare's Tragedies
ENGL/THEA 312 Shakespeare's Histories and Comedies
THEA 401 Acting Seminar
THEA 402 Special Creative or Research Project
THEA 494 Internship
-Two courses in dance
PE/THEA 043 Dance: Ballet I
PE/THEA 044 Dance: Ballet II
PE/THEA 045 Dance: Ballet III
PE/THEA 048 Dance: Jazz I
PE/THEA 080 Dance: Modern I
PE/THEA 081 Dance: Modern II
PE/THEA 082 Dance: Modern III

A minor in Theatre requires 26 to 30 quarter hours:
-One theatre production course:
THEA 350 Practicum: Mainstage (Cast)
THEA 351 Practicum: Studio (Cast)
THEA 352 Practicum: Mainstage (Staff)
THEA 353 Practicum: Studio (Staff)
THEA 354 Practicum: Mainstage (Crew)
THEA 355 Practicum: Studio (Crew)
—THEA 101 Acting I
—THEA 140 Stagecraft I
-One of the following:
THEA 210 Dramatic Literature
THEA 272 The History of Theatre
-Two theatre electives

A minor in Dance requires 25 quarter hours:
—THEA 230 Theatre Movement
-THEA 250 Dance History
-Five quarter hours from:
THEA 370 Dance Practicum (Cast)
THEA 371 Dance Practicum (Staff)
-Ten quarter hours from:
ARTS 230 Color Studies
MCOM 255 Video Production I
MUS 100 Intro to the Art of Music
MUS 101 Symphonic Masterworks
MUS 102 Operatic Masterworks
MUS 139 Fundamentals: Beginning
MUS 140 Fundamentals: Advanced
MUS 203 American Musical Theater
MUS 204 The Jazz Tradition in America
MUS 228 Great Composers \& Their Culture
MUS 321 Music History I
MUS 322 Music History II
MUS 323 Music History III
THEA 101 Acting I
THEA 140 Stagecraft I
THEA 272 The History of Theatre
THEA 494 Internship
-Five dance technique classes from the following non-credit courses:
PE/THEA 044 Dance: Ballet II
PE/THEA 045 Dance: Ballet III
PE/THEA 081 Dance: Modern II
PE/THEA 082 Dance: Modern III

## Women's Studies

Faculty from several disciplines support this program.
Women's studies is by definition an interdisciplinary field. Some of its basic questions are: What have women done throughout history? What roles have women played in the sciences, the arts, politics, religion, and other fields? What obstacles have women and men faced because of their gender? How did these obstacles affect their lives, their words, their study, their status? The goal of women's studies is to explore these questions from a variety of perspectives.

Women's studies is an academically rigorous field that requires thorough critical thinking on a variety of issues. Course material challenges dormant assumptions and promotes expansive thinking. It provides students with a curriculum that places equal emphasis on the sexes, which
in turn fosters equal respect for the sexes. Both male and female faculty teach women's studies courses. Men as well as women are encouraged to deepen their appreciation of humanity by enrolling in women's studies classes.

A minor in Women's Studies consists of three required core courses and two elective courses ( 25 quarter hours). The elective courses may be selected from offerings across the curriculum or may be taken as an independent study or internship. Students should consult with women's studies faculty to verify that an elective course is appropriate for the women's studies minor. The three core courses are listed below:
—WOM/SOC 170 Gender Paradigms
-WOM/SOC 360 Gender Theories
—WOM 410 Senior Seminar: Topics

## 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)

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 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 after considering input from the Writing Center.

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

- Develop a résumé and cover letter. Visit the ACA website under "Careers" for résumé samples and templates.
- Begin to research possible internship locations. Look under "Locating Internships" on the ACA website for online listings.

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

Weeks 1-4:

- Come to ACA office to discuss internship plans and pick up the internship application and packet.
- Finalize an internship location and confirm a field sponsor

Week 5:

- Submit the internship application by Friday.

Week 6:

- Submit internship learning contract.

Week 7:

- First phase signatures due to ACA by Friday.

Week 8:

- Second phase signatures due to ACA by Friday.

For information on tuition charges see Miscellaneous Fees and Personal Expenses, pages 174-175.

## 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 83. Descriptions of major and minor programs begin on page 24 .

## Course Numbering

Course numbers reflect the level of students for which the course is primarily designed and offered. Please see pages 195-196 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 upperclass majors.

## Credit Value

The number immediately beneath the title indicates the amount of credit the course carries.

- Quarter Hours count toward the 180 academic quarter hours required for graduation. (5 quarter hours $=3.3$ semester hours)
- No Credit indicates courses that carry no academic credit.


## Requirement Codes

An attribute code in the parentheses to the far right of the course subject heading and number indicates that the course will fulfill one of the distribution requirements. Please see pages 21-24 for the 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 next term is available online or in print form from the Registrar's Office. A tentative course schedule for the following year is also available.

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

| Subject Headings | Subject Codes |
| :--- | :--- |
| Art - Art History | ARTH |
| Art - Studio Art | ARTS |
| Biology and Natural Resources | BNR |
| Business Administration | BUAD |
| Chemistry | CHEM |
| Computer Science | CSCI |
| Economics | ECON |
| Education | EDUC |
| Engineering Science | ENGR |
| English | ENGL |
| English as a Second Language | ESL |
| Foreign Language | FLAN |
| French | FREN |
| Geology | GEOL |
| German | GER |
| Global Perspectives | GLBL |
| History | HIST |
| Mass Communication | MCOM |
| Mathematics | MATH |
| Music | MUS |
| Philosophy | PHIL |
| Physical Education: Academic Courses | PHED |
| Physical Education: Activity Courses | PE |
| Physical Education:Varsity Sports | PVAR |
| Physics | PHYS |
| Political Science | POLS |
| Religion | REL |
| Russian | RUSS |
| Science | SCI |
| Sociology and Anthropology | SOC |
| Spanish | SPAN |
| Special Studies | SPST |
| Sports Management | SMGT |
| Theatre and Dance | THEA |
| Women's Studies | WOM |
| World Literature | WLIT |
| Writing |  |
|  |  |

## Art - Art History

ARTH 100 Intro to Western Art to 1400 5.0 QH (ART)
This survey begins with Paleolithic art in Europe, and introduces students to art of Mesopotamia, Egypt, ancient Greece and Rome, and medieval Europe. Sometimes known as "caves to cathedrals," the course introduces students to foundational principles for the study of art and art theory, including specialized language.

## ARTH 101 Intro Western Art 1400-Present 5.0 QH (ART)

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

## ARTH 132 Themes in Renaissance Art 5.0 QH (ART)

This course is part of the FYE program Decoding DaVinci. A study of the art and architecture of Northern Europe and Italy from 1300 to 1600, focusing on the changing forms of education available to artists and the impact of this education on artists' lives and works. The course will examine how the introduction of the liberal arts education as the ideal for aspiring Renaissance artists began to raise their social status from craftspeople to creative intellectuals and to be recognized and rewarded by kings and emperors who sought their friendship.

## ARTH 200 Ancient Art

5.0 QH ( ART )

The sculpture, architecture, and pictorial arts of Europe and the Near East from prehistoric times through the Roman Empire.

## ARTH 203 Medieval Art 5.0 QH (ART)

Continues the history of early art, beginning with the Christianizing of Graeco Roman themes and forms in the church communities of Rome and Byzantium. It then turns to HibernoSaxon art, the Ottonian and Carolingian revivals, and finally the flowering of Romanesque and Gothic art, especially the cathedral.

## ARTH 205 Topics in Art History 5.0 QH (ART)

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 (in art as well as other disciplines), or courses organized around the special expertise of visiting faculty. May be taken more than once if the topics differ.

## ARTH 230 Asian Art 5.0 QH (ART)

Chinese and Japanese bronzes, ceramics, paintings, sculpture, and architecture, studied in their social and historical context with special attention to the collection at the St. Louis Museum of Art.

## ARTH 232 Art of the Italian Renaissance 5.0 QH (ART )

A survey of the visual arts during the centuries that, in many ways, mark the boundary between the ancient and modern worlds. Study of the artists and monuments traditionally acknowledged to be among the finest in the history of art, including the works of Michelangelo, Leonardo da Vinci, Raphael, and Donatello. A secondary focus is to question and explore the reasons why the art of this period is so acclaimed.

## ARTH 234 17th - 18th Century Art 5.0 QH (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 5.0 QH (ART)

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

## ARTH 257 American Architecture to 1900 2.0 QH (ART )

Development of American architecture from colonial times to the end of the nineteenth century.

## ARTH 258 Painting \& Sculpture in the US 5.0 QH (ART )

Two- and three-dimensional art in the United States, from colonial times to the present.

## ARTH 282 Islamic Art 5.0 QH (ART )

Traces Islamic art from its beginnings in the Arabic peninsula, its rise in Syria and Palestine, and expansion into Egypt, west into Spain and North Africa, and east into Iraq, Iran and India, conquering and assimilating many ancient cultures.

ARTH 301 20th Century Seminar 5.0 QH (ART ) A study of the theories, movements, and artists from the beginning of the twentieth century to the present decade.

## ARTH 304 Advanced Studies 5.0 QH (ART )

Topics and format will vary to include, for example, Bernard Maybeck, current issues, experience with computer technology.

ARTH 305 20th Century Architecture $\quad$ 5.0 QH (ART)
This course covers major movements of 20th century architecture including Modernism, OrganicFunctionalism, Post-Modernism, the Arts and Crafts, and Contemporarymovements as well as urban planning. Teaches the core skills of visual and historical analysis, with additional focus on oral presentation and research/writing.

## ARTH 403 Internship $5.0-15.0$ QH ( )

An internship in a cultural institution dealing with paintings, decorative arts, and architecture. The student gains experience in the areas of research, interpretation, and administration. May be taken for variable credit from five to fifteen quarter hours.

## Art - Studio Art

## ARTS 102 Visual Fundamentals $\quad 5.0$ QH (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. $\mathbf{F e e}=\mathbf{\$ 3 0 . 0 0}$

ARTS 130 Topics in Studio Art: $\quad \mathbf{1 . 0 - 5 . 0}$ QH (ART)
This course will focus on specific topics, themes, and ideas in studio art. Each individual offering will cover different material that might not be included in the permanent departmental course offerings or will concentrate on new and experimental approaches to issues in art practice. See program faculty for topics. May be taken for variable credit from one to five quarter hours. May be repeated provided the topics differ. Fee=\$30.00

## ARTS 150 Drawing I 5.0 QH (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=\$25.00

## ARTS 170 Graphic Design I 5.0 QH (ART )

Introduction to aspects of graphic design with emphasis on the development of problemsolving 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=\$45.00

## ARTS 210 Oil Painting I 5.0 QH (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 tradition. Prerequisites: ARTS 102 and ARTS 150. Fee=\$40.00

ARTS 220 Watercolor Painting I
5.0 QH
()

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. Prerequisites: ARTS 102 and ARTS 150. Fee=\$30.00

## ARTS 230 Color Studies 5.0 QH ()

Course emphasizes the seeing of color interaction through practice primarily with color papers and some work with pigments. Focus on the expression of light, space, movement, and mood. Includes some history of color theory and introduction to color strategies. Prerequisite: ARTS 102. Fee=\$40.00

## ARTS 250 Drawing II 5.0 QH (ART)

Development of visual skills that deepen the student's ability to find the dynamics of abstraction in the landscape and still-life. Six weeks of on-location drawing in graphite; four weeks of studio rendering techniques in graphite. Emphasis on compositional analysis. Prerequisite: ARTS 150. Fee=\$40.00

## ARTS 270 Graphic Design II

### 5.0 QH ( )

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= $\mathbf{\$ 4 5 . 0 0}$

## ARTS 285 Children's Book Design 5.0 QH ()

An introduction to the liberal arts based thinking skills and technical knowledge required to illustrate an original picture book. Emphasis upon the book as an art form in and of itself, as a vehicle for meaningful communication, and as a valuable professional activity. Prerequisites: ARTS 102, ARTS 150, and ARTS 220. Fee=\$40.00

## ARTS 290 Web Design <br> 5.0 QH ( )

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. Prerequisites: ARTS 170 or MCOM 244.

## ARTS 302 Figure Studies <br> 5.0 QH ( )

The human figure as a vehicle for exploring issues of fine drawing. Includes proportions, anatomy, gesture, content, and some historical background. May be repeated up to a total of fifteen quarter hours with instruction at increasingly advanced levels. Prerequisite: ARTS 102 or ARTS 150. Fee= $\$ \mathbf{8 5 . 0 0}$

ARTS 310 Oil Painting II 5.0 QH () Advanced study in oil painting, centered on the genre of Still Life. Focus will spotlight some of the most significant and ingenious expressions of still life practiced over centuries. The class will survey key technical and conceptual advances of painting with core assignments involving the production of paintings representative of some of the most critical developments. Prerequisite: ARTS 210. Open to all studio art majors. $\mathbf{F e e}=\mathbf{\$ 8 5 . 0 0}$

## ARTS 320 Watercolor Painting II <br> 5.0 QH ()

Focused introduction to the process of developing large studio paintings based upon varied field observations. Advanced watercolor techniques and critique skills. Development of individual style or "point of view." Prerequisite: ARTS 220. Fee=\$30.00

ARTS 330 Studio Seminar 1.0-5.0 QH ()
Group study of selected topics in art. See program faculty for topics and prerequisites. May be taken more than once and for variable credit from one to five quarter hours. Fee=\$25.00

An intense exploration of the relationship of visual language to content in art via mixed drawing media. Production of several different series formats during the first six weeks and a focused preparation of a portfolio quality series the final four weeks. Preparation of an aesthetic statement. Prerequisites: ARTS 150 and either ARTS 250 or one painting course. Fee=\$25.00

## ARTS 401 Creative or Research Project 1.0-15.0 QH ()

Offered by permission of the program faculty through individual course contract proposals. On-campus course work provides an opportunity for in-depth individual research based upon previous studio classes at Principia. May be taken for variable credit from one to fifteen quarter hours. May be repeated up to a total of fifteen quarter hours.

## ARTS 402 On-Location Studies <br> 1.0-15.0 QH ( )

Offered by permission of the program faculty to students enrolled in field-oriented classes such as Studio Art Abroads, internships, or off-campus independents. Course work provides opportunity for in-depth individual research based upon previous studio classes at Principia. Primarily for juniors and seniors. May be offered for variable credit from one to fifteen quarter hours. May be repeated up to a total of fifteen quarter hours.

ARTS 404 Advanced Series
1.0-10.0 QH ( )

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 taken for variable credit from one to ten quarter hours. May be repeated up to a cumulative total of ten quarter hours. For junior and senior students who have completed eight or more art major requirements.

## ARTS 495 Portfolio Seminar 2.0 QH ()

This class requires senior art majors to gather together a variety of portfolio ingredients such as a digital representation of their studio work, résumé materials, post-college options, etc. Students present a portfolio exhibit for the faculty and the community based upon the program's learning themes. Taken concurrently with ARTS 496. Fee=\$15.00

## ARTS 496 Capstone Writing Seminar <br> 3.0 QH ( )

The preparation of three writing components for art majors in studio: An aesthetic statement, a critique-research paper, and a proctored essay. Students are taught the components for completing the statement and the paper and students receive specific feedback throughout the process; the essays include prompts but are otherwise written without faculty assistance. All four writing components presume the application of vocabulary, concepts, writing skills, and experience gained during the student's participation in the art program. Phase five of the all-college writing requirement must be completed and passed before enrollment in this course. Taken concurrently with ARTS 495. Fee=\$15.00

## Biology and Natural Resources

## BNR 050 Work Project <br> 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 5.0 QH (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 191 and BNR 201. Designed primarily for students intending to major in biology or environmental studies.

## BNR 112 Introductory Zoology 5.0 QH (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 <br> 5.0 QH (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 5.0 QH (BNR)

Students will 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 will unpack the theory of natural selection and consider how forces long ago shape present ecological dynamics of these organisms. They will further examine modern day fishing/harvesting practices and consider sustainability as a function of species' evolutionary traits.

## BNR 161 Field \& Natural History 5.0 QH (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.

## BNR 190 Global Environmental Issues $\quad$ 5.0 QH (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 <br> 5.0 QH (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 and BNR 201. Designed primarily for students intending to major in biology or environmental studies. Prerequisite: swim test passed.

## BNR 201 Methods in Research \& Writing 5.0 QH (BNR)

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 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 230 Ornithology $\quad 5.0$ QH (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 232 Wildlife Conservation 5.0 QH (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 245 Natural History: $\quad$ 4.0-6.0 QH (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 Abroads only, with a star $\left(^{*}\right)$ grade until following mid-quarter. May be offered for variable credit from four to six quarter hours. May be taken more than once if the topics differ.

## BNR 255 Natural Resources Conservation 5.0 QH (MNS )

Traces the development of U.S. natural resources and environmental policy. Emphasis is on understanding environmental issues in their current and historical context from an ecological perspective. This perspective naturally brings in international considerations.

## BNR 256 Conservation Genetics 5.0 QH (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 5.0 QH (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 161 or similar course would be helpful but is not required.

BNR 280 Plant Taxonomy 5.0 QH (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 5.0 QH (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 5.0 QH (MNS)
In this course students will study the global issues of sustainability as they relate to population growth, resource use and the ability of the biosphere to assimilate wastes. The course examines sustainable approaches to development in the western world, with a particular emphasis on the United States. It also looks at sustainable development in the developing world as countries strive to raise their standard of living. In this course students will read and discuss case studies of successful sustainable development. They will address issues of globalization and think through the sustainability of our striving for ever higher levels of economic growth.

## BNR 295 Stewardship Practicum 5.0-15.0 QH (BNR)

This course provides an opportunity to put theory into practice in the areas of restoration ecology, forest management, wildlife management, agro-ecology, and sustainable development.The practicum centers on stewardship projects around the 2,500 acre Principia College property which is part school, part farm, and part forest. Depending on the season these may include prairie restoration, wildlife habitat improvements, forestry, maple syrup production, or biodiversity mapping. Regardless of the specific project the goal is always to examine the interface between theory and practice in contemporary land management. Offered on a contract basis. May be taken for variable credit from five to fifteen quarter hours.

## BNR 301 Environmental Mapping \& GIS

### 5.0 QH (MNS )

Introduction to the concepts, techniques, and applications of mapping and monitoring the environment. Students will become familiar with the uses of topographic maps, aerial photography, satellite imagery, Global Positioning Systems (GPS), and Geographic Information Systems (GIS). Students will be able to design and implement an ecosystem mapping project. Prerequisite: at least one geology or 200-level field biology course. Also listed as GEOL 301 .

## BNR 312 Grassland Ecology 5.0 QH (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
5.0 QH (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

5.0 QH (BNR)

Freshwater ecology is 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 a scientific paper on freshwaters. The course has a special emphasis on the identification of freshwater invertebrates. Prerequisites: BNR 111 and BNR 191.

## BNR 340 Adv. Natural History: 4.0-6.0 QH (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 four to six quarter hours. May be taken more than once if the topics differ.

## BNR 355 Plant Physiology 5.0 QH (BNR)

Covers major physiological processes including cellular constituents and their biosynthesis, respiration, photosynthesis, mineral nutrition, transport phenomena, plant growth substances, and plant physiological responses to the environment. Prerequisites: BNR 111 and CHEM 260 or CHEM 262.

## BNR 362 Conservation: 4.0-6.0 QH (MNS)

This course will focus on how natural resources of a given country are managed. Students will study conservation management strategies of representative ecosystems as well as species management. The interface of native culture and resource conservation will also be included. Offered on Principia Abroads only, with a star (*) grade until following midquarter. May be offered for variable credit from four to six quarter hours.

## BNR 380 Advanced Ecology Seminar 2.0-5.0 QH (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. May be offered for variable credit from two to five quarter hours. May be taken more than once if the topics differ.

## BNR 381 Advanced Natural Resources <br> 2.0-5.0 QH (MNS )

Offered when regular or visiting faculty are available to work with students on selected topics in natural resources conservation. May be offered for variable credit from two to five quarter hours. May be taken more than once if the topics differ.

BNR 390 Forest Resource Management 5.0 QH (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 Water Resources Management 5.0 QH (MNS)

Exploration of the long and complex relationships between people and water as a natural resources, with emphasis on learning to critically assess the different approaches to water management that are in practice today. Prerequisite: BNR 315.

## BNR 400 Capstone Seminar 2.0 QH ()

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. Prerequisites: biology or environmental studies major and completion of phase four of the all-college writing requirement.

## BNR 401 Senior Capstone Project <br> 2.0-15.0 QH (MNS )

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

## BNR 402 Internship

## 5.0-15.0 QH (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 five to fifteen quarter hours. Offered on an independent contract basis. May be taken more than once if topics differ.

## BNR 403 Biology Research Experience

5.0-15.0 QH (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 quarter, off campus. May be taken for variable credit from five to fifteen quarter hours. May be repeated for up to a maxim total of 15QH. Prerequisites: biology major; and BNR 111, 191, and 201, and at least one of the following: BNR 312, 313, 315.

## Business Administration

BUAD 110 Discovering Business
5.0 QH ( SSCI )

A course specifically designed for non-majors offering a new approach to the integrated discovery of basic business concepts. Students will 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, will make business principles relevant for the student.

## BUAD 251 Financial Accounting

5.0 QH

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 a computerized practice set. Prerequisite: ECON 203 (with a grade no lower than C).

## BUAD 252 Managerial Accounting

5.0 QH

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
5.0 QH

Students will gain an understanding of how the functions of a business enterprisemanagement, marketing, accounting, finance, and information technology-are interrelated and interdependent. Students will be assigned to a small business team in which they will 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 265 Business Ethics

5.0 QH (RPHL)

This course focuses on major philosophical and ethical questions surrounding modern western business practices. The student will receive a brief introduction to moral philosophy, become familiar with some important literature in the field of business ethics, and begin to understand the place of morality in business. Also listed as PHIL 265.

BUAD 310 Investments
5.0 QH ( SSCI )

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 311 Entrepreneurship 5.0 QH ()
Focuses on development of a business idea, creating a business, and business plans; raising seed and growth capital; legal, marketing, management, and financial problems unique to the small enterprise. Includes visits to start-up companies and interviews of entrepreneurs about their challenges and successes, and the role of the business plan. Term project involves individual development and presentation of a professional business plan. Prerequisite: BUAD 320.

BUAD 320 Marketing 5.0 QH (SSCI)
Provides an overview of how management uses marketing principles to guide decisions pertaining to product development, pricing, distribution and promotional activities in an organization. Includes the study of the nature of consumer and business-to-business markets and the roles of strategic marketing planning, marketing research, pricing, distribution, and advertising in the marketing mix. Case studies are used to test students' application of marketing principles. A major research paper is included which fulfills phase five of the allcollege writing requirement. Prerequisite: BUAD 251 (with a grade no lower than C).

## BUAD 321 Marketing Research 5.0 QH ()

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. Courses includes major market research project. Offered on demand. Prerequisite: BUAD 320.

## BUAD 325 Advertising <br> 5.0 QH ( SSCI )

Interdisciplinary course open to students majoring in business administration, art (graphics) or mass communication. Working together in small teams, ideally from each discipline, students share their different yet essential perspectives. Each team is assigned to a "client" that has a business/communication problem or opportunity. Teams work toward an in-depth, final presentation of their advertising campaign for print and broadcast media, e-commerce, and direct marketing. Students are immersed in an understanding of the socioeconomic attitudes and behaviors of their clients' audiences, and apply qualitative and/ or quantitative research as well as creative and communication principles to "solve" their clients' communication problems. Prerequisites: business administration and economics majors: BUAD 320; mass communication and art majors: either MCOM 244 or ARTS 170 .

## BUAD 330 Management

5.0 Q ( 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 345 Business Writing

Rhetorical approaches and considerations for communicating in the world of work. In addressing commonbusiness problems and needs, students (individually and collaboratively in teams) will write for various audiences and purposes and will become familiar with the most important types of writing used in working situations.

## BUAD 350 Business Law 5.0 QH (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

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 5.0 QH (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 361 Financial Applications 2.0 QH ()

Application of various financial analytical concepts to real organizational problems. Possible topics include profit forecasting and planning, cash management, budgeting, working capital management, leasing, sources of financing, investment decision making, financial leverage, and valuation. Offered on demand. Prerequisite: BUAD 360.

BUAD 362 Intermediate Finance
5.0 QH

In-depth study of theories and cases dealing with investment and financial decisions of the firm: capital budgeting, cost of capital, dividend policy, capital structure management, international financial management, and acquisitions and mergers. Offered on demand. Prerequisite: BUAD 360.

## BUAD 400 Seminar <br> 1.0 QH <br> ()

A seminar in selected topics in business administration or economics. The contents will vary, and the title will be extended to briefly describe the topic. May be taken more than once if the topics differ.

BUAD 401 Business Consulting Practicum 1.0-5.0 QH ()
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 five quarter hours. May be taken more than once, up to a total of 12 quarter hours.

BUAD 404 Business Mgt Study Project 5.0-15.0 QH ()
Offered on a field program or on a contract basis. May be offered for variable credit from five to fifteen quarter hours. Work done independently with a corporation or other organization.

BUAD 430 Strategic Management
5.0 QH
()

Integration of the functional areas ofbusiness managementinformulating 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; empowerment; restructuring; and strategic control. Course includes a capstone research paper. Prerequisites: completion of all other business administration major requirements.

## Chemistry

## CHEM 111 Environmental Chemistry

5.0 QH ( 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 informed global citizens and voters aware of environmental issues. Includes labs.

## CHEM 114 Chemistry of Art Objects/Media

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

5.0 QH ( CHEM )

A one-quarter 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: Algebra II.

## CHEM 131 Fundamentals of Chemistry I 5.0 QH (CHEM )

First of a 15 quarter hour introductory course sequence in chemistry. Develops problemsolving and research skills. Includes atomic structure, stoichiometry, bonding, gases, liquids, and solids. Includes labs. Students should consider taking MATH 151 concurrently. Prerequisite: Algebra II.

## CHEM 132 Fundamentals of Chemistry II

### 5.0 QH ( 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
5.0 QH ( 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 152 concurrently. Prerequisites: CHEM 131 and CHEM 132.

CHEM 201 Environmental Testing
5.0 QH ( 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 230 Nonrenewable Resources
5.0 QH ( 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. Also listed as GEOL 230.

CHEM 260 Organic Survey

### 5.0 QH ( 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 5.0 QH (CHEM )

First of a ten quarter hour 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

5.0 QH (CHEM)

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

## CHEM 274 General Biochemistry

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

CHEM 311 Phys Chem I: Thermodynamics
The study of classical thermodynamics both from a theoretical and an experimental viewpoint. Topics include gas laws, enthalpy, entropy, liquids, solutions, and mixtures. Includes labs. Prerequisites: CHEM 133 and PHYS 203.

## CHEM 312 Phys Chem II: Kinetics

### 5.0 QH ( CHEM )

The study of chemical reaction rates, both from a theoretical and an experimental viewpoint. Topics covered, in addition to chemical kinetics, are statistical mechanics and kinetic molecular theory. Includes labs. Prerequisites: CHEM 133 and PHYS 203.

## CHEM 313 Phys Chem III: Quantum Chem <br> 5.0 QH ( 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 203.

## CHEM 321 Applied Spectroscopy <br> 5.0 QH ( CHEM )

Spectroscopy is 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 <br> 5.0 QH ( 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 440 Senior Project

1.0-5.0 QH (MNS )

Research project required for B.A. chemistry majors. Independent project demonstrating ability to synthesize and apply chemistry knowledge. May be taken for variable credit from one to five quarter hours. May be taken up to three times independently. Prerequisites: chemistry major and phase four of the all-college writing requirement.

## CHEM 441 Senior Research Project

## 1.0-5.0 QH (CHEM )

Research project required for B.S. chemistry majors. Independent experimental research demonstrating ability to synthesize and apply chemistry knowledge. May be taken up to three times independently. May be taken for variable credit from one to five quarter hours. Prerequisites: chemistry major and completion of phase four of the all-college writing requirement.

## Computer Science

## CSCI 170 Intro to Computer Science

5.0 QH (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. (A student may receive credit for only one of the courses CSCI 170 or CSCI 215.)

## CSCI 171 Introduction to Programming 6.0 QH (MNS )

Focus on fundamental concepts of problem solving by writing, documenting and debugging programs, learned through example and considerable practice. (A student may receive credit for only one of the courses CSCI 171 or CSCI 181.)

Students entering the computer science program with considerable programming experience may take this course as a replacement for CSCI 171 as a major or minor 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

6.0 QH (MNS )

In-depth coverage of programming concepts, with emphasis on data structures, including stacks, sorts, queues, linked lists, pointers, and binary trees. The course also introduces object-oriented programming and recursion. Prerequisite: CSCI 171 or CSCI 181.

## CSCI 200 Emerging Technologies Survey 1.0 QH (MNS )

Provides a forum for exploring and discussing the latest hardware and software developments in the field of computer science and related technologies. May be taken more than once. Prerequisite: CSCI 170 or CSCI 215.

## CSCI 201 Programming Strategies <br> 1.0 QH (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 212 MIS Supplement 2.0 QH (MNS )

Fulfills CSCI 215 requirements for those business administration majors, economics majors, and business administration minors who have taken CSCI 170 or CSCI 171.

## CSCI 215 Intro to Mgmt Info Systems

5.0 QH (MNS )

Introduces terminology and concepts of the science of computing, especially to those who have an interest in business information systems. Explores computer arithmetic, programming, architecture, and networks. Uses actual cases from business settings. Considers the business and economic implications of current technologies and possible future technologies such as networks, digital media, and artificial intelligence. Encourages presentation development and delivery. Does not teach computer applications (such as word processing), but explores the science of computing. (A student may receive credit for only one of the courses CSCI 170 or CSCI 215.)

## CSCI 225 Database Management Systems 5.0 QH (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. Generally offered fall of odd calendar years. Prerequisite: CSCI 171 or CSCI 181.

## CSCI 263 Computer Software Architecture 5.0 QH (MNS )

Topics include assembler language programming, system organization, parallelism and serialization, pipelining, memory management, recursion, and microprocessor design. Prerequisites: CSCI 182 and ENGR 262, and phase four of the all-college writing requirement. Must be taken concurrently with scientific/technical writing workshop.

## CSCI 276 Object-Oriented Programming

5.0 QH (MNS )

Students design, code, document, and debug computer programs using classes, objectoriented design, inheritance, polymorphism, and recursion. Demonstrate problem-solving skills using object-oriented concepts. Create program scripts in both Windows and UNIX environments. Generally offered fall of even calendar years. Prerequisite: CSCI 182.

## CSCI 280 Programming Languages

5.0 QH (MNS )

A survey and comparison of programming languages. Short programming exercises in languages selected from LISP, PROLOG, JAVA, and others. Generally offered fall of odd calendar years. Prerequisite: CSCI 182.

## CSCI 310 Software Engineering 5.0 QH (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. Prerequisites: CSCI 171 or CSCI 181 and phase five of the all-college writing requirement.

## CSCI 330 Operating Systems

5.0 QH (MNS )

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

## CSCI 333 Computer Networking 5.0 QH (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.) Generally offered spring of odd calendar years. Prerequisite: CSCI 171 or CSCI 181.

## CSCI 380 Compilers

5.0 QH (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. Generally offered winter of odd and spring of even calendar years. Prerequisites: CSCI 263 and CSCI 276. CSCI 280 is strongly recommended.

## CSCI 381 Artificial Intelligence

5.0 QH (MNS )

An introduction to artificial intelligence with several AI programming projects. Topics include expert systems, natural language recognition, pattern recognition, tree-search methods and artificial neural networks. Generally offered winter of even calendar years. Prerequisite: CSCI 280.

## CSCI 390 Topics in Computer Science $\quad$ 1.0-5.0 QH (MNS )

For advanced students. The topics will vary from year to year and are chosen according to needs and interests of students and instructor. May be offered for variable credit from one to five quarter hours. May be taken more than once if the topics differ.

CSCI 410 Capstone Proposal 1.0 QH (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 5.0 QH (MNS )

A student-designed project with a significant writing component which pulls together the student's major. Choices include independents, internships, or group projects. Prerequisite: CSCI 410.

## CSCI 421 Computer Issues Seminar $\quad$ 5.0 QH ( )

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.

## Economics

## ECON 203 Principles of Microeconomics

5.0 QH (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 5.0 QH (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 281 Capitalism <br> 5.0 QH (SSCI )

This course introduces students to Austrian Economics as a theory of capitalism by tracing its development in contrast to other schools of economic thought (the Historical School, Marxism, Keynesian and Neo-Classical), as well as by applying Austrian principles to analyze current issues such as the business cycle, inflation and deflation, taxation, and environmental policy.

## ECON 303 Intermed Microeconomic Theory 5.0 QH (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 <br> 5.0 QH (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 311 Labor and Human Resources 5.0 QH (SSCI )
Examines the changing role of people in the economic process by studying productivity, wage determination, labor unions, human capital creation, labor market, discrimination, and related topics. Prerequisite: ECON 203.

## ECON 316 Economic Development <br> 5.0 QH ( 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 5.0 QH (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 5.0 QH (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 403 Seminar 5.0 QH ( )
Study and discussion of current economic issues. The issues vary and the title will be extended to briefly describe the issues.

ECON 404 Economics Study Project 5.0 QH ( )
Offered on a field program or on a contract basis for up to fifteen quarter hours. Work done independently with a corporation or other organization.

## ECON 431 Evolution of Economic Thought 5.0 QH (SSCI )

Historical development of economic thought from its origins to the present. Prerequisites: major in economics and completion of phase four of the all-college writing requirement.

## Education

EDUC 040 Developmental Reading
No Credit ()
A review of fundamentals of basic reading and writing competencies along with current conventions for applying these competencies. Contexts for writers and writing that include understanding assignment criteria and time management for literacy tasks will also be considered.

## EDUC 045 Writing Tutorial No Credit ( )

A review of fundamentals of basic writing competencies along with current conventions for applying these competencies. Course will be adapted to the needs of the individual student.

## 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 051 Professional Portfolio Prep

No Credit ()
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 Teacher Candidate Internship. Prerequisite: admission to Student Teaching.

## EDUC 120 Signs of the Times

5.0 QH (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 will critically read current and classic material, write extensively, discuss actively and work collaboratively with other members of the class. Students will 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. This course is designed to encourage a successful transition to the breadth and depth of college learning and living at Principia.

EDUC 140 Writing for College Students $\quad$ 3.0 QH ()
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 150 Writing Workshop 1.0-3.0 QH ()

Course emphasizes the practice and enhancement of college-level writing skills according to the students' individual needs. May be repeated up to a total of ten quarter hours.

## EDUC 151 Fundamentals of Acad Writing 3.0 QH ()

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 writing, revision strategies, and five habits of academic writing (analysis, narration, exploration, experimentation, and metacognition).

## EDUC 152 Revising and Editing

 2.0 QH ( )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.

EDUC 153 Advanced Revising and Editing
3.0 QH
()

Demonstration of the different strategies for editing and revising 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 expected to apply proof reading and application of revision strategies appropriate to at least two academic disciplines.

Introduction of writing strategies that will support the phase four all-college writing requirement competencies. This course will familiarize students with revising and editing strategies, persuasive writing techniques, and portfolio presentation.

Application of historical and cultural linguistic roots of current grammatical conventions to exercise second order thinking, reading, and writing skills.

## EDUC 156 Multilingual Literacy 3.0 QH ()

Analysis of knowledge, skills, and dispositions necessary for academic literacy tasks when English is not a native language. What are conventions non-native speakers need to know for text across disciplines and content? What are the needs and strengths of readers and writers across different languages? How do non-native English speakers use their knowledge, skill, and dispositions for language to engage in second order reading, writing, and thinking across multiple language contexts?

## EDUC 157 Critical Reading and Writing <br> 3.0 QH ()

Critical evaluation of persuasive texts focused on audience and purpose, incorporating critical reading competencies, distinguished between fact and opinion, recognizing generalizations, testing hypotheses, evaluating the adequacy of evidence, and recognizing persuasive language. What are academic conventions readers and writers need to know for critical evaluation of text across disciplines and content? What strategies can academic readers and writers use to apply these conventions in critical ways?

## EDUC 158 Reading and Writing Inquiry 5.0 QH ()

Exploration of pertinent topics through text. This course will encourage students to recognize and evaluate biased language, weigh arguments, ask critical questions, recognize propaganda techniques, and identify faulty logic. After critically reading teacher selected texts (guided practice), the student will explore a self-selected topic through text and write responses, joining the conversation (independent inquiry). What knowledge, skills, dispositions, and strategies do readers and writers need to know for comprehending text across academic disciplines and content? How do these strategies vary among expert readers across and within academic disciplines?

## EDUC 159 Personal Journaling 2.0 QH ()

Application of journaling as a tool for thinking. This course will also include examination of types of journaling associated with five habits of successful writers: analysis, narrative, exploration, experimentation, and metacognition. Creative modes of thinking and writing will be considered and connections to academic writing will be encouraged.

## EDUC 183 Adolescence and Society

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 201 General Psychology 5.0 QH (SSCI)

Introduction to principles of psychology as applied to human behavior in a variety of life settings. Topics include perception, learning, language and thought, personality, emotion, and motivation.

## EDUC 203 Child \& Adolescent Development

5.0 QH ( SSCI)

This course emphasizes the development of children from childhood through the adolescent years including a look at children and adolescents in larger social contexts. Study is grounded in related development theory and contemporary issues, including physical, social, and cognitive development. Special attention given to learning needs of exceptional children and the social and cultural diversity of the public school classroom. Individual research projects include focused child and adolescent study. Applicable Illinois standards for middle school teachers are addressed.

## EDUC 215 Soc Science Research Methods 5.0 QH (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 SOC 215.

## EDUC 219 School Law 2.0 QH ( )

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.

EDUC 220 Elem \& Middle School Methods 4.5 QH ( )
General methods of teaching at the elementary and middle school levels with emphasis on group process communication skills, organizations 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. Emphasis on teaching social studies and science. 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 Elm/Middle School Beg Intern 3.0 QH ( )

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 one hundred and twenty 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 230 Analytical Reading 2.0 QH ( )

Development of skills, approaches, and techniques for efficient college-level reading, applied especially to textbooks and newspapers. Although the emphasis is on the thinking skills that contribute to analytical reading (i.e., questioning, distinguishing levels of importance, challenging assumptions, bias, and conclusions, making critical evaluations), this course also encourages students to practice variable reading speeds and explores such supporting skills as: note taking, concentrating, improving memory, and overcoming boredom with any reading material.

## EDUC 250 Educational Psychology: Majors 4.0 QH (SSCI)

Application of general principles of psychology to educational settings. Theories of teaching and learning and the study of curriculum in a critical, historical, 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 252 Teaching the Exceptional Child
4.5 QH ( 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 255 Educational Psych: Non-Majors

5.0 QH ( SSCI )

Application of general principles of psychology to schools and educationally-related settings. Theories of teaching and learning and the study of curriculum in a critical, historical, social context are included. Consideration of such educational issues as race, class, gender, methodology, research, evaluation, assessment, and classroom management and learning processes are also examined.

## EDUC 260 Communication 5.0 QH (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
4.5 QH

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. Fee=\$200.00

## EDUC 271 Sec/Middle School Beg Intern 3.0 QH ()

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 sophomore intern gains one hundred and twenty 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 5.0 QH ( 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 5.0 QH ()

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 318E Adv Methods of Teaching: Engl <br> 5.0 QH ( )

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: a grade of "C" or better in EDUC 219, EDUC 250, EDUC 252, and either EDUC 220 and EDUC 221 or EDUC 270 and EDUC 271, and completion of phase four of the all-college writing requirement.

## EDUC 318F Methods of Teaching a 2nd Lang 5.0 QH ( )

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. Also listed as FLAN 318F and SPAN 318F. Prerequisites: a grade of "C" or better in EDUC 219, EDUC 250, EDUC 252, and either EDUC 220 and EDUC 221 or EDUC 270 and EDUC 271, and completion of phase four of the all-college writing requirement.

## EDUC 318M Adv Methods of Teaching: Math

6.0 QH

A course for prospective middle or high school history and social studies teachers offering an in-depth look at teaching history including lesson planning, evaluation, classroom materials, and teaching strategies. Extensive reading in professional texts and other related teaching materials. The course looks at how teachers assess and account for content, school climate, student needs, skills, and interests. Attention is also given to the social and cultural diversity of the public classroom today. (Individual projects include focus on adolescent literature.) Taken with Intermediate Block internship. For secondary education majors only. Prerequisites: a grade of "C" or better in EDUC 219, EDUC 250, EDUC 252 , and either EDUC 220 and EDUC 221 or EDUC 270 and EDUC 271, and completion of phase four of the all-college writing requirement.

## EDUC 320 Reading in Elem \& Middle Schl

5.0 QH
()

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 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: a grade of "C" or better in EDUC 219, EDUC 250, EDUC 252, and either EDUC 220 and EDUC 221 or EDUC 270 and EDUC 271, and completion of phase four of the all-college writing requirement.

## EDUC 321 Elem School Intermed Intern 3.0 QH ()

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 the cooperating 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. Prerequisites: a grade of " C " or better in EDUC 219, EDUC 250, EDUC 252, and either EDUC 220 and EDUC 221 or EDUC 270 and EDUC 271, and completion of phase four of the all-college writing requirement.

EDUC 330 Math for Elem/Mid Sch Teachers
5.0 QH

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. Taken as part of Intermediate Block with EDUC 320 and EDUC 321. Prerequisites: a grade of "C" or better in EDUC 219, EDUC 250, EDUC 252, and either EDUC 220 and EDUC 221 or EDUC 270 and EDUC 271, and completion of phase four of the all-college writing requirement.

## EDUC 345 Science/Soc Science Meth: K-9 5.0 QH ( )

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. Prerequisites: a grade of " C " or better in EDUC 219, EDUC 250, EDUC 252, and either EDUC 220 and EDUC 221 or EDUC 270 and EDUC 271, and completion of phase four of the all-college writing requirement.

## EDUC 352 Inclusive Learning Environment

3.0 QH

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 will be 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 grades no lower than C.

## EDUC 370 Reading in Sec \& Middle School 5.0 QH ()

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: a grade of "C" or better in EDUC 219, EDUC 250, EDUC 252, and either EDUC 220 and EDUC 221 or EDUC 270 and EDUC 271, and completion of phase four of the all-college writing requirement.

## EDUC 371 Secondary Sch Intermed Intern 3.0 QH ()

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 the cooperating 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: a grade of "C" or better in EDUC 219, EDUC 250, EDUC 252, and either EDUC 220 and EDUC 221 or EDUC 270 and EDUC 271, and completion of phase four of the all-college writing requirement.

## EDUC 383 Adolescent Development <br> 5.0 QH ( 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. Taken as part of Intermediate Block. Prerequisites: a grade of " C " or better in EDUC 219, EDUC 250, EDUC 252 , and either EDUC 220 and EDUC 221 or EDUC 270 and EDUC 271 , and completion of phase four of the all-college writing requirement.

## EDUC 388 Philosophy of Education

5.0 QH (RPHL)

Study of classic and contemporary philosophies of education. A beginning, personal philosophy of education is produced. Also listed as PHIL 388.

## EDUC 430 Math Methods in Elm/Mid School 2.0 QH ()

This course focuses primarily on mathematics methodology, modeling, and integration with whole school curriculum. Methods of teaching mathematics in elementary and middle school are presented in the context of understanding mathematical thinking. Prerequisite: a grade of " C " or better in EDUC 318E, or EDUC 318F, or EDUC 318M, and either EDUC 320 and EDUC 321 or EDUC 370 and EDUC 371, and EDUC 330, EDUC 345, and EDUC 383.

This course of study emerges from 10 to 13 weeks of teaching in an elementary or middle school. Emphasizes planning, implementing, reflecting, and assessing teaching and teaching products. Teaching products will 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: a grade of "C" or better in EDUC 320, EDUC 321, EDUC 330, and EDUC 345.

## EDUC 441 El/Mid St Tch: Learning Commun 4.0 QH ()

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 will be evident and develop within the learning community: listening, receiving and giving feedback, collaboration, problem solving, planning, risk taking, and building trust. Prerequisites: a grade of "C" or better in EDUC 320, EDUC 321, EDUC 330, and EDUC 345.

## EDUC 442 El/Mid St Tch:Hum Div \& Lrn Th

4.0 QH
()

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 will be justified by educational theory and will be culturally sensitive to all members of the learning community. Instructional strategies and assessments will be adapted to the needs of students with individualized education plans. All instruction will occur in the context of a 10 to 13 week student teaching period. Prerequisites: a grade of "C" or better in EDUC 320, EDUC 321, EDUC 330, and EDUC 345.

## EDUC 490 Sec/Mid Stu Teach: Instr \& Mgt

7.0 QH

The course of study emerges from 10 to 13 weeks of teaching in a secondary or middle school. Emphasizes planning, implementing, reflecting, and assessing teaching and teaching products. Teaching products will 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: a grade of "C" or better in EDUC 318E, or EDUC 318F, or EDUC 318M, and EDUC 370 and EDUC 383, and admission to Student Teaching.

## EDUC 491 Sec/Mid St Tch:Learning Commun 4.0 QH ()

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 will be evident and developing within the learning community: listening, receiving and giving feedback, collaboration, problem solving, planning, risk taking, and building trust. Prerequisites: a grade of "C" or better in EDUC 318E, or EDUC 318F, or EDUC 318M, and EDUC 370 and EDUC 383, and admission to Student Teaching.

## EDUC 492 Sec/Mi St Tch:Hum Div \& Lrn Th 4.0 QH ()

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 will be justified by educational theory and will be culturally sensitive to all members of the learning community. Instructional strategies and assessments will be adapted to the needs of students with individualized education plans. All instruction will occur in the context of a 10 to 13 week student teaching period. Prerequisites: a grade of " C " or better in EDUC 318E, or EDUC 318F, or EDUC 318M, and EDUC 370 and EDUC 383, and admission to Student Teaching.

## Engineering Science

ENGR 032 Eng Proj: Solar Car-Non Credit No Credit ()
Non-credit version of ENGR 132.
ENGR 060 Engineering Seminar Non-Credit
No Credit
Non-credit version of ENGR 160.
ENGR 132 Engineering Project: Solar Car 1.0 QH ()
Project design, planning, management, and construction. Experience with proposal writing, shop techniques, teamwork, and group dynamics. May be taken more than once.

## ENGR 180 Project Management

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 262 Computer Hardware Architecture

7.0 QH ( CSCI )

Digital electronic logic explored in theory and laboratory from simple switching to electronic architecture of digital computers. Topics include electronic valving and switching, logicgate design, Boolean algebraic proofs of gate equivalence, counters, registers, arithmetic, operations, memory addressing and information transfer, microprogramming, interfacing and control. Prerequisite: CSCI 171 or MATH 261.

## ENGR 279 Engineering Project Proposal 1.0 QH ( )

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 repeated up to a maximum total of three quarter hours provided the projects differ. Prerequisite: ENGR 180.

ENGR 280 Engineering Projects
1.0-5.0 QH (MNS )

A hands-on course that allows students to learn vital lessons through active participation in a student-centered, multidisciplinary, team project. The course will emphasize problem solving, effective communication, leadership/followership, ethics, and citizenship. May be offered for variable credit from one to five quarter hours. May be repeated up to a total of 15QH. Prerequisites: ENGR 132 or ENGR 180 or ENGR 279 or ENGR 332.

## ENGR 332 Eng Proj: Advanced Solar Car

### 5.0 QH (PHYS )

Course topics include technical project management, computer aided design, construction, data gathering and analysis, telemetry and wireless communications, energy management strategies, meteorological research, stress analysis, materials analysis, empirical and dynamic testing, technical writing, and route profile analysis. Students will work on an appropriate subset of these topics. May be taken more than once. Cannot be taken concurrently with ENGR 132. Prerequisites: ENGR 032 or ENGR 132 and demonstrated commitment to the solar car project.

## English

ENGL 174 Native American Literature
5.0 QH ( LIT )

Course will center largely upon poetry, novels, and other texts written by contemporary Native American writers from the late 1960's to the present, including N. Scott Momaday, Leslie Marmon Silko, Louise Erdrich, and others, as well as some traditional Native American texts in translation.

## ENGL 178 Renaissance Themes 5.0 QH ( LIT )

Part of the FYE Program entitled "Renaissance Thinking," this course, together with its companion in art history, explores the major themes of Renaissance thought. This literature component includes readings from both Italian and English Renaissance writers.

## ENGL 180 FYE: Environmental Themes 5.0 QH ( LIT )

Part of the FYE program Environmental Imagination. Readings focus on the theme of nature in essays, poetry, biography, and short stories. The wide variety of roles which nature has played in literature (e.g., as healer, as escape, as terror, as inspiration) will be examined. This course will use journal writing and essay writing as vehicles for exploring and integrating ideas gained by responding to nature as an artist, as a scientist, and as a reader and writer.

ENGL 182 FYE: The Creative Essay 5.0 QH ( LIT )
Part of the FYE Beneath the Surface program, this class will explore classic as well as contemporary pieces by essayists from The New Yorker and other magazines and literary journals. Students will write essays with the goal of publishing them online and in print.

## ANGL 202 Understanding Poetry 5.0 QH ( LIT )

Selections from four to five major poets designed to equip students with a variety of reading strategies.

ENG 204 Understanding Short Fiction 5.0 QU ( LIT )
Selections from several major short story writers from a variety of historical periods and racial and ethnic backgrounds designed to equip students with a variety of reading strategies.

ENGL 230 Literary Themes \& Forms
5.0 QH ( LIT )

Centers upon a literary theme or form at the intermediate level. The contents vary and the title will be extended to briefly describe the topic of form. Topics recently taught include: Modernist Women, Fairytales and Modern Myth. May be taken more than once if the topics differ.

## ENG 232 The Gothic Novel

### 5.0 QH ( 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.

## ENG 233 Film \& Literature

5.0 QH ( LIT )

The study of not only the translation of literature into film but also of film as text. The course will serve to acquaint students with basic literary and film theory and terminology as tools for the analysis of both literature and film and to explore the interplay between these two types of text. Prerequisite: at least one college literature course.

## ENCL 240 Poetry Writing I <br> 5.0 QU <br> ()

An introduction to the art and craft of poetry writing. Students will study formal poetics and will apply that study to their own creative writing. A substantial portion of the course will be devoted to writers' workshop in which students read and critique each other's poetry. Students will 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.

## ENCL 241 Fiction Writing I

5.0 QU
()

An introduction to the art and craft of fiction writing. Students will study the elements of short fiction and will apply that study to their own creative writing. A substantial portion of the course will be devoted to writer's workshop in which students read and critique each other's short stories. Students will 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.

ENG 242 Writers and Artists at Work 5.0 OH ( LIT)
This class explores the links between creative practice and critical theory in contemporary literature and visual art.

ENG 253 Topics in Women's Literature 5.0 QU ( LIT ) Focuses on literature by and/or about women from various ethnic and literary traditions. Approaches may be theoretical or historical. May be taken more than once if the topics differ. Also listed as WOM 253.

ENG 256 American Literature to 1860 5.0 QH ( LIT )
Survey of major American Puritan, Transcendental, and reactionary writers.

ENGL 258 American Literature Since $1940 \quad$ 5.0 QH ( 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 American 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 281 Medieval \& Renaissance Lit 5.0 QH <br> ( LIT )

Survey of major intellectual themes reflected in English literature before 1601.
ENGL 282 17th \& 18th Cent British Lit $\quad$ 5.0 QH ( LIT )
Survey of major intellectual themes reflected in English literature between 1601 and 1798.
ENGL 283 Romantic Literature 5.0 QH ( LIT )
Examines the major poets of the Romantic Period: William Blake, Wordsworth, Coleridge, Shelley, and Keats.

ENGL 284 Victorian Literature 5.0 QH ( LIT )
Examines texts of the period, focusing on questions of nationalism, colonialism, gender roles, and emerging psychological and evolutionary theories, by considering how authors such as Bronte, Eliot, Dickens and Wilde reinforced and resisted the dominant ideologies of their day.

ENGL 285 Modern British Literature 5.0 QH ( LIT )
Fiction, poetry, and drama of the 20th century, with emphasis on Yeats, Eliot, Conrad, Woolf, and Beckett.

ENGL 286 History of English Drama $\quad$ 5.0 QH ( LIT )
English drama from the medieval period to 20th century including morality and mystery plays, Renaissance and Shakespeare, Restoration and 18th century, and 20th century. Dramatists may include Shakespeare, Marlowe, Congreve, Dryden, Gay, Sheridan, Goldsmith, Wilde, Shaw, Synge, Pinter, Stoppard. Also listed as THEA 286.

## ENGL 310 Chaucer 5.0 QH ( LIT )

Poetry of Chaucer, with emphasis on The Canterbury Tales and their medieval background. Special attention to the oral reading of late Middle English texts.

## ENGL 311 Shakespeare's Tragedies 5.0 QH ( LIT )

Analysis of major tragedies, with emphasis on theories of tragedy and their representation in text and performance. Prerequisite: completion of phase four of the all-college writing requirement. Also listed as THEA 311.

ENGL 312 Shakespeare's Hists \& Comedies 5.0 QH ( LIT )
Analysis of histories and comedies with emphasis on theories of comedy and their representation in text and performance. Prerequisite: phase four of the all-college writing requirement. Also listed as THEA 312.

ENGL 313 Milton 5.0 QH ( LIT )
Study of Milton's poetry, prose, drama. Offered every other year.
ENGL 314 18th Century Literature $\quad 5.0$ QH ( LIT )
Study of the writings of the major British authors between 1660 and 1800, including Swift, Pope, Addison and Steele, Boswell, Dr. Samuel Johnson, and Robert Burns. Offered every other year.

ENGL 320 History of the English Novel 5.0 QH ( LIT )
Novels selected from early and late periods trace development of this form. Offered upon sufficient demand.

## ENGL 340 Poetry Writing II 5.0 QH ()

An intermediate-level poetry-writing seminar for students who already have some experience with writing poetry and who are acquainted with some of the formal elements and techniques of poetry writing, such as the use of rhythm, line, diction, trope, and given forms. Beginning to cultivate distinct voices as writers, students will produce a number of original poems, which will be peer reviewed within the writer's workshop structure of the course and then thoroughly revised. The course will also include reading contemporary poetry, a more advanced study of poetics and the creative process, as well as some research about poets and their working methods so that students may begin to see how their work fits into these processes and literary traditions. Students will be given a basic introduction to the publishing process. Prerequisites: ENGL 240 and completion of phase four of the all-college writing requirement.

ENGL 341 Fiction Writing II
5.0 QH ( )

An intermediate-levelfiction-writingseminar for students who already have some experience with writing short fiction and who are acquainted with the techniques of structure, dialogue, scene, and other elements of fiction writing. Students in the course will begin to cultivate distinct voices as writers, including the development of an artist's statement. They will produce several works of fiction, which will be peer reviewed within the writer's workshop structure of the course and then thoroughly revised (perhaps more than once). The course will also include reading contemporary fiction, writing about the creative process and the structure of fiction, as well as some research about authors and their working methods so that students may begin to see how their work fits into these processes and literary traditions. Students will be given a basic introduction to the publishing process. Prerequisites: ENGL 241 and completion of phase four of the all-college writing requirement.

ENGL 350 Advanced Writing Seminar $\quad$ 3.0-5.0 QH ()
List
Listed basically as EDUC 350.

## ENGL 351 Adv Creative Writing Seminar

5.0 QH ( )

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 340) or (ENGL 241 and ENGL 341).

## ENGL 358 Seminar

Problems in English and American literature and language. The contents vary and the title will be extended to briefly describe the topic. May be taken more than once if the topics differ. May also be listed as WOM 358 if topic is appropriate.

## ENGL 388 Practical Criticism <br> 5.0 QH <br> ()

The application of various critical theories to literary texts. Prerequisite: completion of phase four of the all-college writing requirement.

ENGL 400 Capstone in Literature 5.0 QH ()
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 5.0 QH ()
This course is the culmination of the track in creative writing in the English major. Students will 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 340 or ENGL 241 and ENGL 341) and ENGL 351.

## English as a Second Language

ESL 202 ESL Independent Study
1.0-5.0 QH ( )

Contract course. May be taken for variable credit from one to five quarter hours for work in the English language.

## Foreign Language

FLAN 100 Elementary Language Study 1.0-5.0 QH ()
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, Hindi. Offered either on campus or Principia Abroads. May be repeated in any combination of languages up to a maximum total of ten quarter hours, with no more than a total of five quarter hours in any single language. May not count toward any language major.

FLAN 318F Methods of Teaching a 2nd Lang
5.0 QH
()

Listed basically as EDUC 318F. Taught in English.

## French

FREN 101 Elementary French 5.0 QH ( )
Students learn from videos and cassettes how to listen and speak, read and write French sentences. Students describe themselves, their families, and their present and future activities.

## FREN 102 Elementary French 5.0 QH ( )

Students continue their study of elementary French in this video-based course. They understand and speak, read and write sentences and simple paragraphs using present, future and past tenses. Prerequisite: FREN 101 or placement.

FREN 103 Elementary French
5.0 QH ( FLAN )

Speaking French in the classroom enables students to function in everyday situations in Francophone cultures. Videos, cassettes, and exercises help students to convey their ideas about past, present, and future events. Students strengthen their ability to read and write more cohesive paragraphs. Prerequisite: FREN 102 or placement.

## FREN 110 Elementary Review <br> 5.0 QH ( FLAN )

Intensive review of first year French with emphasis on normal conversational French. Fulfills all-college language requirement for students entering Principia with insufficient preparation for exemption from further language study.

## FREN 130 Language Workshop Abroad

5.0 QH ( FLAN )

Elementary language study with native speakers at a French institute. Offered only on Principia Abroad.

FREN 141 Beginning French Pronunciation 1.0 QH ()
A practice of fundamental aspects of French speech. Enables the beginning and intermediate students to learn correct basic pronunciation.

FREN 179 Reading French Society in Film 5.0 QH ( WLIT )
This course will look at different aspects of French society through both literature and film. These texts will 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. Also listed as WLIT 179.

## FREN 204 Intermediate French I <br> 5.0 QH <br> ()

Develops speaking, reading, and writing skills. Culture and history used as basis for reading and speaking. Prerequisite: FREN 103 or placement.

FREN 205 Intermediate French II 5.0 QH ()
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 QH
()

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 repeated up to three times. Will count toward the French major only once.

FREN 216 Intermediate Conversation I
3.0 QH ()

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 217 Intermediate Conversation II 3.0 QH ()

Discussions on issues of French/Francophone culture through conversation and reading, with an emphasis on oral self-expression. May be taken before or after FREN 216. Prerequisite: FREN 204 or placement.

FREN 220 Contemporary French Society 5.0 QH (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 will receive credit towards a French major. May be offered on campus as well as on Principia Abroads. Also listed as SOC 220.

## FREN 225 Intermediate Grammar I <br> 2.0 QH <br> ()

Exercises 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. Emphasis will be on verb tenses and pronouns. Prerequisite: FREN 103 or FREN 110.

FREN 226 Intermediate Grammar II
2.0 QH
()

Exercises in grammar and style. Strengthens students' foundations in written French, at the intermediate level. Increased practice will be on the subjunctive, passive voice, articles, indefinite nouns and prepositions. May be taken before or after FREN 225. Prerequisites: FREN 103, FREN 110 or placement.

## FREN 230 Language Workshop Abroad 5.0-10.0 QH ()

Intermediate language study with native speakers at a French institute. Offered only on Principia Abroads.

## FREN 240 French Composition 5.0 QH ()

Develops style and grammatical correctness; intensive work on creative writing with some reading. Prerequisite: FREN 205 or FREN 216.

## FREN 241 French Phonetics 2.0 QH ()

Introduction to French phonetic theory and practice of pronunciation of modern French. Prerequisites: FREN 240 and FREN 250 or FREN 260.

FREN 250 French Cultural Studies 5.0 QH ()
Develops reading skills and understanding of Francophone literature. Prepares students for further study of French literature. Prerequisite: FREN 205.

## FREN 260 Reading French Through Time 5.0 QH ( 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.

FREN 280 French Cinema in French
1.0-5.0 QH
()

A study of the main periods of development of the French film industry from its inception to the present. Taught in English. Offered to French majors who qualify and complete special assignments in French. May be offered for variable credit from one to five quarter hours.

FREN 300 Love, Reason, and Monarchy 5.0 QH (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 205, FREN 240, and FREN 250 or FREN 260.

## FREN 310 Advanced French 5.0 QH ( )

Intensive analytical grammar and reading. Develops writing skills. Prerequisites: three French courses above FREN 205 or placement.

FREN 316 Advanced French Conversation $\quad$ 3.0 QH ( )
Reading, conversation, and writing on topics of French/Francophone culture and history.
FREN 320 Advanced Reading in French $\quad 1.0$ QH ( )
Allows students to develop their reading skills and to broaden their knowledge of French literature. May be repeated up to three times, with the consent of the instructor. Will count only once toward the French major.

## FREN 325 Advanced French Grammar 2.0 QH ( )

Course develops writing skills at the advanced level, focusing on grammar through exercises. Prerequisite: two French courses at the 200 level.

FREN 330 Language Workshop Abroad 5.0 QH ( )
Advanced language study with native speakers at a French institute. Offered only on Principia Abroads.

## FREN 340 Image \& Power in 19th C France 5.0 QH ( 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 240 and one of the following: FREN 250, FREN 260, or FREN 300.

## FREN 350 20th Century: Mind Revolutions 5.0 QH (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 240 and one of the following: FREN 250, FREN 260, or FREN 300.

FREN 360 Seminar in French Literature $\quad 3.0$ QH ( )
Seminar in a particular topic of French literature. Offered upon sufficient demand. Prerequisite: one of the following: FREN 240, FREN 260 or FREN 300.

FREN 370 Project
1.0-5.0 QH ( )

Allows for independent study on literature topics or writing. May be taken for variable credit from one to five quarter hours. Prerequisite: six courses above FREN 205.

## Geology

## GEOL 050 Work Project

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

5.0 QH (GEOL)

The internal and external processes that form and shape the Earth as we see it today and interpreting 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: 2.0-10.0 QH (GEOL)
Covers geologic topics specific to a country or region. Topics will include the Earth's physical features and mineral and water resources and how they influence human activities in a region. Other topics may include modern sedimentary environments, tectonic history, special fossil/rock discoveries. Offered on Principia Abroads or field programs only. May be offered for variable credit from two to ten quarter hours. May be taken more than once if the topics differ, up to a maximum of 15 quarter hours.

## GEOL 180 Geologic Field Studies

1.0-5.0 QH ( 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. May be taken more than once if topics or depth of research differ. May be offered for variable credit from one to five quarter hours. May be repeated up to a total of ten quarter hours.

## GEOL 225 Environmental Geology <br> 5.0 QH (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 5.0 QH (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. Also listed as CHEM 230.

## GEOL 242 Historical Geology <br> 5.0 QH (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 271 Classic Localities in Geology 5.0 QH (MNS )
Field investigations of classical localities in geology.
GEOL 280 Geologic Field Investigations
1.0-5.0 QH ( GEOL)

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. May be taken more than once if topics or depth of research differ. May be offered for variable credit from one to five quarter hours. May be repeated up to a total of ten quarter hours. Prerequisites: GEOL 111, GEOL 180 or GEOL 242.

## GEOL 301 Environmental Mapping \& GIS

Introduction to the concepts, techniques, and applications of mapping and monitoring the environment. Students will become familiar with the uses of topographic maps, aerial photography, satellite imagery, Global Positioning Systems (GPS), and Geographic Information Systems (GIS). Students will be able to design and implement an ecosystem mapping project. Prerequisite: at least one geology or 200-level field biology course. Also listed as BNR 301.

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 will include a project design and methodology, an annotated bibliography, and a research proposal. Prerequisites: environmental studies major and completion of phase four of the all-college writing requirement.

## GEOL 401 Senior Capstone Project 1.0-15.0 QH (MNS )

Project selected in accordance with student's qualifications, interests, and needs. May be taken for variable credit from one to fifteen quarter hours. May be taken more than once with GEOL program chair's approval. Prerequisite: four GEOL courses; five or more BNR courses numbered above 150 .

## German

GER 101 Elementary German 5.0 QH ()
Understanding, speaking, reading, and writing of simple German. Emphasis on gaining command of German sentence structure, speaking idiomatic German, absorbing elements of German culture.

GER 102 Elementary German 5.0 QH ()
Second quarter of the first year course sequence. See description for GER 101. Prerequisite: GER 101 or placement.

GER 103 Elementary German 5.0 QH ( FLAN )
Third quarter of the first year course sequence. See description for GER 101. Prerequisite: GER 102 or placement.

GER 204 Intermediate German 5.0 QH ( )
Grammar review with emphasis on conversation, composition, and culture, based on study of short literary works. Prerequisite: GER 103 or placement.

GER 205 Intermediate German 5.0 QH ()
Second quarter of intermediate sequence. See description for GER 204. Prerequisite: GER 204 or placement.

## GER 210 German Phonetics 1.0 QH ()

In-depth study and practice of the specific sounds of German. Enables students to speak German accurately.

## GER 216 German Conversation 5.0 QH ( )

Develops fluency in speaking German correctly. Emphasis on accurate idiomatic use of the language in a variety of situations which occur in daily life. Prerequisite: GER 205.

## GER 220 German Civilization 5.0 QH ( )

Study of German literature, art, music, architecture, history, from Karl Der Grosse to Goethe. Also listed as HIST 220. Offered only on Principia Abroads. Taught in English.

## GER 230 Martin Luther 2.0 QH ()

An exploration of the life and works of Martin Luther, based on readings from the Bible, from his shorter writings, and from the major biography of Luther, Here I Stand, by Roland Bainton. Also listed as REL 232. Prerequisite: GER 103.

GER 240 Aktuelle Themen 1.0 QH () Discussion course based on current events in Germany, meeting one hour per week. Prerequisite: GER 216.

GER 255 20th Cent German Lit in Transl 5.0 QH ( WLIT)
Explores the range and depth of German literature in this century by focusing on the diversity of forms but similarity of themes presented by prominent authors. Taught in English.

## GER 272 German Literature 5.0 QH (WLIT )

A study of the key genres in German literature: short story, novella, drama, poetry and novel. Works will be selected from different literary periods. Prerequisites: GER 216 or placement and completion of phase four of the all-college writing requirement.

GER 307 Advanced Grammar I 1.0 QH ( )
First half of a two-part advanced grammar sequence. In-depth study of German subjunctive and passive voice. Prerequisite: GER 205

## GER 308 Advanced Grammar II 1.0 QH ( )

Second half of a two-part advanced grammar sequence. In-depth study of relative clauses, extended adjective modifiers, infinitive phrases and modals. Prerequisite: GER 205.

## GER 316 Advanced Conversation 5.0 QH ( )

Develops fluency in speaking German correctly. Emphasis on accurate idiomatic use of the language in a variety of situations-in daily life, business, and other more specialized occasions. Offered only on Principia Abroads.

## GER 350 Project 5.0 QH ( )

Offered to students of marked ability as a project in reading, composition, and critical analysis. Prerequisite: completion of phase four of the all-college writing requirement.

## Global Perspectives

GLBL 110 American Culture \& Language
5.0 Q $\quad$ ( )

Course designed specifically for international students to enhance competencies for success in the American college community. Focusing on American culture as portrayed in text and film, the course will develop academic capabilities, computer literacy, language proficiency, and research methodology.

GLBL 210 Ethnology 3.0 QH ()
Course provides a theoretical and ethnological study of sociology and culture anthropology. This study will involve the identification and explanation of cross-cultural regularities and differences through analysis, comparison, generalization, ethnography and hypothesis formation concerning issues found in other cultures and customs. Also listed as SOC 210.

## GLBL 255 Global Ethics

### 5.0 QH ( 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 will be considered. Intercultural moral conflicts will be examined from a wide array of religious, cultural and moral vantage points. More sensitivity, understanding, and assessment of needs will be stressed. Also listed as PHIL 255.

GLBL 270 World Focus Seminar
1.0 QH

Develops 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. Determines what areas the student needs to study in depth to address these problems and provides assistance in selecting courses which deal with these issues. Meets once a week for 60 to 90 minutes. May be taken more than once up to a total of five quarter hours.

GLBL 300 Global Issues $\quad 5.0$ QH ( )
Research and study into selected global issues and the interconnectedness of those issues as seen in current world events. A variety of perspectives (e.g., historical, environmental, cultural) will be used to better understand the context of selected issues. Course research paper will satisfy phase five of the all college writing requirement.

## GLBL 375 Globalization \& Culture 5.0 QH (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. Also listed as SOC 375.

## GLBL 400 Research Methods

Research preparation for the capstone project in global perspectives. Students will work extensively with research methodologies, library resources, resource management, and Internet resources. Work will culminate in a capstone proposal and annotated bibliography. May be offered for variable credit from two to five quarter hours. Prerequisite: global perspectives major.

## GLBL 401 Research Capstone Seminar 5.0 QH ()

Individual research and writing on a topic concerning the world as developed in GLBL 400. Course work will culminate in a research paper written under the supervision of faculty advisor(s) and evaluated by the global perspectives department faculty. Prerequisite: GLBL 400.

## GLBL 403 Capstone Presentation

1.0 QH ( )

Develops skills and techniques for making public presentations of global perspectives capstone papers, including use of multi-media aids. Culminates in a public presentation of the student's capstone. Prerequisite: GLBL 401.

## GLBL 431 Worldography 5.0 QH ()

A seminar involving critical reading and discussion of eight outstanding books on different world-encompassing issues. Seminar conducted by selected faculty. Prerequisites: global perspectives major and phase four of the all-college writing requirement.

## History

## HIST 111 Historical Perspectives 5.0 QH ( 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.

## HIST 160 U.S. in the 20th Century 5.0 QH (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 5.0 QH ( 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. Also listed as REL 189.

## HIST 195 People of Courage 5.0 QH (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 will study the people and their times, the conditions and environment within which they worked.

## HIST 202 American Revolution

5.0 QH (UHIS)

Deals with 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.

## HIST 203 US Civil War Era 5.0 QH (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.

## HIST 216 Ancient Greece and Rome 5.0 QH ( HIST )

A study of the classical Greek and Roman civilization from the age of Homer to the fall of Rome. Emphasis on Athenian democratic institutions and cultural achievements, and on Roman political, economic, and judicial developments.

## HIST 218 German History 5.0 QH ( HIST )

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 219 Germany Since $1945 \quad$ 5.0 QH ( HIST )
A study of the political, economic, and social development of Germany (East and West) from 1945 to the present. Topics include denazification and democratization, causes and consequences of the postwar division of Germany, détente and Willi Brandt's Ostpolitik, the decline and collapse of East Germany, and the challenges of reunification. Offered on Principia Abroads.

## HIST 220 Civilization 5.0 QH ( )

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 is extended to indicate the civilization studied. This course may be taught on field study tours, and it may carry the HIST attribute to fulfill a graduation requirement in history on approval of the History faculty. Also listed as GER 220 and SPAN 220. May be taken more than once if the culture studied is different.

HIST 222 Latin America 5.0 QH ( 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 5.0 QH (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 228 History of France $\quad 5.0$ QH (HIST )

Survey of France's central role in the shaping of European civilization from pre-Roman times to the present day. Course will trace 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 235 African American Cultural Hist
5.0 QH ( HIST )

A historical and cultural exploration of the African American experience from African antiquity to the present. Also listed as SOC 250.

## HIST 240 The History of Islam 5.0 QH (HIST )

This course will explore the roots of the Muslim religion in the Middle East and its rich cultural legacy. It will also examine 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. Taken concurrently with REL 240.

## HIST 250 History of Science 5.0 QH (HIST )

A survey of significant scientists and scientific discoveries, and their development and interrelatedness over time. Students will gain an appreciation of the impact of science on social, cultural, religious, and political aspects of human life. Also listed as PHYS 250.

## HIST 252 Britain 5.0 QH (HIST )

Survey of British history from the time of Roman occupation to the 21st century. 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.

HIST 255 The Middle Ages
5.0 QH ( 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 5.0 QH (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 nationstates, 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 5.0 QH (HIST )

Focuses on the dramatic political, economic, and social transformations of 19th century Europe with special emphasis on France, Germany, and Britain. Comes to grips with the multiplex 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

### 5.0 QH ( HIST )

Examines major developments in Europe since World War I with special emphasis on Germany and the Soviet Union. Investigates the continuing development of new thought patterns, especially those that result from reactions to World Wars I and II. Covers the period from 1914 to 2000.

## HIST 270 History Focus Seminar $\quad 1.0$ QH ( )

Develops an awareness of major problems/issues in the world today, including a geographical understanding of those problems/issues and a historical understanding of the way in which they are interconnected. Will also focus on choosing a topic for a senior history project and basic research skills. May be repeated up to a total of five quarter hours.

## HIST 275 South African History 5.0 QH ( HIST )

A survey course exploring both indigenous peoples and the clash of the white and black races of South Africa, as well as the attitudes that make up three centuries of modern history with major emphasis on the last half century.

## HIST 280 Native American History 5.0 QH ( HIST )

An historic overview of several groups of Native Americans, including an analysis of the political, social, and cultural aspects of their societies, and how those changed and were changed with the European colonization of North America. Develops an understanding and appreciation of the history of Native Americans and their contributions to our society.

## HIST $281 \quad$ China

5.0 QH ( HIST )

Past political, social, and cultural characteristics which help to explain the nature of presentday problems in China.

## HIST 283 Japan 5.0 QH (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 285 US Environmental History 5.0 QH ( HIST )

This course covers the development of environmental history in the United States from pre-European times to the present. This study consists of an examination of the evolution of environmental thought, movements, and groups in their social, political, and economic contexts, as well as key individuals and events that helped shape them.

## HIST 288 The Age of FDR

5.0 QH ( HIST )

This class will focus 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 5.0 QH ( 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 will examine four of them. Class will also examine how the role of character played out in their lives and if they can serve as role models today.

## HIST 290 World History 5.0 QH ( HIST)

This course will explore the concept of civilization and study the patterns and trends found in the emergence, development and fall of civilizations throughout the world.

## HIST 297 Historical Thinking \& Research 5.0 QH (HIST )

In this course 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 will be 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 to global perspectives and history majors.

## HIST 301 Social Issues and the Courts 5.0 QH (HIST )

This course will look 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 will be 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 5.0 QH ( 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. Prerequisite: completion of phase four of the all-college writing requirement.

## HIST 303 Seminar: Civil War \& Reconstr 5.0 QH ( 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. Prerequisite: completion of phase four of the all-college writing requirement.

HIST 305 Seminar: 20th Century America 5.0 QH ( 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. Prerequisite: completion of phase four of the all-college writing requirement.

## HIST 310 The Cold War 5.0 QH ( HIST)

Examination of the causes, development, and eventually resolution of the U.S. - Soviet confrontation from the breakdown of the World War II alliance to the disintegration of the Soviet Union. Topics covered include the division of Germany and Europe, the Korean conflict, the nuclear arms race, superpower competition for the Third World, détente, and the reasons for the Soviet Union's ultimate collapse. Prerequisite: completion of phase four of the all-college writing requirement.

## HIST 313 Africa 5.0 QH ( 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. Prerequisite: completion of phase four of the all-college writing requirement.

## HIST 333 Russia 5.0 QH (HIST)

A survey analyzing the origins of Russian nationality, rise of the Muscovite Tsarist state, Imperial development from Peter the Great to the Revolution of 1917, the Soviet System and its fall. Prerequisite: completion of phase four of the all-college writing requirement.

## HIST 335 Middle East

5.0 QH ( HIST )

Past political, social, and cultural circumstances which explain the nature of present problems. Prerequisite: completion of phase four of the all-college writing requirement.

## HIST 354 20th C Amer Foreign Relations <br> 5.0 QH ( HIST )

This course will concentrate on the emergence of the United States as a great power at the end of the 19th century and the wider roles in the world undertaken by the United States as the 20th century proceeded. Students will examine major junctures in American foreign relations in the 20th century, such as World War I and World War II and the development of post-war arrangements arising from of these two conflicts. Students will look at the history of America's economic involvement with the rest of the world, as well as more traditional political and security issues. Students will examine how the choices America made were shaped by different American foreign policy traditions, by the leading figures of the day, and by the changing international context. Prerequisite: completion of phase four of the allcollege writing requirement.

## HIST 355 American Westward Movement <br> 5.0 QH ( HIST )

Study of the hold that "the West" has on Americans. Focus on the traditional view of the region balanced against the "new" western history. Inter-disciplinary approach using art, architecture, movies, poetry and music in an effort to understand the region. Prerequisite: completion of phase four of the all-college writing requirement.

## HIST 363 Conflict in Amer: The 1960's 5.0 QH (HIST)

Analysis of the history of the United States during the 1960's, with emphasis on events reflecting social, cultural, and political conflict and protest. Analyzes pre-1960's trends and post-1960's effects. Will cover social movements, political protest and radicalism, Vietnam, civil rights, rock music, and the counterculture. Prerequisite: completion of phase four of the all-college writing requirement.

## HIST 382 Modern China 5.0 QH (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. Prerequisite: completion of phase four of the all-college writing requirement.

HIST 386 India 5.0 QH (HIST )
Past political, social, religious, and cultural characteristics which help to explain the nature of present-day problems. Prerequisite: completion of phase four of the all-college writing requirement.

## HIST 390 Immigration and Acculturation 5.0 QH ( HIST )

Using a historical lens, students will be introduced to major periods of immigration in America, and the issues of immigration at each point in time. They will explore the role of positive and negative national perceptions of immigration populations, labor market segmentation, local network support groups, race, ethnicity, gender, and identity politics in the experience of first and second generation immigrants. They will examine and use data sets to see how social scientists gather, interpret, and report data on immigration and acculturation. They will focus on the development of immigration policy at the local, state, and national level.

## HIST 400 History Research Methods 5.0 QH ( HIST )

Advanced research methods in history for senior history majors as preparation for the history capstone course. Includes topic selection, research techniques including use of Internet resources, bibliographic development, and library skills.

## HIST 401 Writing \& Research Project 5.0 QH (HIST)

Individual research on a selected historic topic for purpose of writing a professional paper under faculty supervision. Especially for history majors or students planning graduate work in history or related disciplines.

## HIST 402 Reading in History

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.

Develops skills and techniques for making public presentations of history capstone projects, including use of multi-media aids. Culminates in a public presentation of the student's history capstone.

HIST 431 Historiography 5.0 QH ( HIST)
Critical readings of a selection of historical works focused on a common theme. Seminar conducted by the history staff. Prerequisite: 3.0 GPA.

## Mass Communication

## MCOM 052 Radio on Air

No Credit
Participation in broadcast activities of the college's radio station, Principia Internet Radio. Prerequisite: MCOM 151.

MCOM 053 Radio Station Management No Credit ( ) Participation in the operations of the college's radio station, Principia Internet Radio. Prerequisite: MCOM 052.

MCOM 060 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, artists, business, and production staff.

## MCOM 070 Yearbook Production <br> No Credit <br> ()

Participation in the production of the college yearbook. Involves reporting, writing, graphics, layout, photography, advertising, and editing.

## MCOM 081 Video Production <br> No Credit

Participation in selected video production activities at the college. Supervised by faculty advisor.

## MCOM 083 Television Production

No Credit ( )
Participation in television production activities at the college under the supervision of the faculty advisor.

## MCOM 102 Public Speaking Workshop 1.0-3.0 QH ()

Workshop designed to help students speak with clarity and poise in a variety of situations. The course teaches how to prepare speeches including research, organization and delivery. Offered for variable credit from one to three quarter hours.

MCOM 103 Speech Fundamentals
5.0 QH ()

Provides opportunities for students to develop skills in a variety of oral communications settings including speeches of introduction, informative speeches, persuasive speeches, and group discussion. Includes research and organization for speeches, audience analysis, listening, body control, and freedom in public appearances.

## MCOM 110 Intro to Mass Communication 5.0 QH ( )

Close analytical look at one of most significant influences on the human mind. Study of the organization and behavior of the mass media, their roles and purposes. Concentration on print and electronic communications, including newspapers, magazines, print advertising, radio, TV, cable, film and the information superhighway.

Focuses on the theoretical and practical elements of radio broadcasting. Topics include Principia policies, basic announcing, programming and station management. Technical instruction will be given, using the audio console and the Internet broadcasting equipment in our radio station. This course is the prerequisite for student participation in broadcasting activities of Principia Internet Radio.

## MCOM 222 Newswriting I 5.0 QH ( )

A beginning course for those aspiring to work in the media or in a media-related field such as public relations. Students will have intensive training in interviewing, the analysis of news and newswriting. Students will regularly write and edit stories worthy of submission for publication.

MCOM 225 Screenwriting 5.0 QH ( ) Introduction to the principles of writing for the screen, including full-length features and short films. Emphasis on character development, plotting, and screen play structure. Analysis of both feature films and hardcopy scripts. Deliverables will include a treatment, the first act of a script for a full-length film, and a completed (shooting) script for a five to seven minute feature.

MCOM 230 Photojournalism $\quad 5.0$ QH ( )
This course is an applied study of how photojournalists tell stories with pictures and learn to capture the peak moment. Working in digital photography, students will refine their sense of content, aesthetics, news judgment, and ethics. Prerequisite:MCOM 130. Fee=\$150.00

## MCOM 231 Intermediate Photography <br> 5.0 QH <br> ()

This course will examine the different ways of visual thinking between black and white and color photography as applied to both photojournalism and fine art. Through a critical study of the current and past masters of photography, students will work toward defining their own vision and photographic portfolio. Prerequisite: MCOM 130. Fee=\$175.00

MCOM 240 Broadcast Journalism
5.0 QH
( )
This course is designed to 1) show how writing for the print media can be adapted to the broadcast media, 2) introduce the distinct demands, forms, and techniques of writing for broadcasting, and 3) apply these techniques so that students can effectively deliver written presentations on air within specific time restraints expected of radio/TV announcers.

## MCOM 244 Graphics Production 5.0 QH ( )

An introduction to graphic design with an emphasis in computer usage especially a page layout program. Develops basic skills in working with photographs, illustrations, and words to create advertisements, brochures and other printed materials. Explores the fundamentals of design. Critical class for students considering a professional career in graphic design.

MCOM 245 Public Relations
5.0 QH
()

This introductory class will instruct 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 will both be examined. Case studies that highlight effective public relations strategies will be considered. A special section on crisis communications is included.

MCOM 250 Feature/Magazine Writing
5.0 QH ( )

Instructs students in a wide variety of feature writing situations ranging from the types commonly associated with newspapers to those in use in modern magazine formats. Prerequisite: MCOM 222.

## MCOM 251 Radio Broadcasting Workshop

Students will be daily producing and performing live radio shows with interviews, news, sports, and music that will be broadcast over Principia Internet Radio. In class, students will learn how to deal with the issues of programming a radio station as well as critiquing the performance of their radio shows. Prerequisite: MCOM 151.

## MCOM 255 Video Production I 5.0 QH ( )

A basic introduction to the theory and practical techniques of contemporary video production. Emphasis is placed on acquiring the fundamental skills necessary for producing, camera operation, composition, lighting, audio recording and video editing. Students will gain valuable hands-on experience working in the digital nonlinear video editing suites. Fee=\$25.00

## MCOM $\mathbf{2 6 0}$ Media Law and Ethics

5.0 QH
()

Study of the legal and ethical aspects of mass media, including the constitutional issues of free press and privacy, as well as the regulation of broadcasting and advertising. Taught as a lab course, using numerous case studies. Prerequisite: MCOM 110.

MCOM 265 Sports Writing
5.0 QH
()

Students will have an opportunity to apply basic newswriting and interviewing skills in the sports environment. They will write game summaries, game previews, and sports features. Prerequisite: MCOM 222.

## MCOM 270 Yearbook Production Workshop 5.0 QH ()

Develops in-depth skills through experience working as a member of The Sheaf, the college yearbook. Students will receive instruction on the process and production of a yearbook from concept to finished product. Each class member will gain valuable hands-on experience in areas of graphic design, photography, and writing for a yearbook. Additional experience will be gained through critical evaluations of weekly work. Prerequisites: ARTS 170, MCOM 222, MCOM 230, or MCOM 244.

## MCOM 275 Opinion Writing

### 5.0 QH ( )

Course open to students who have mastered the basics of writing to explore opportunities to reflect thoughtfully on significant issues of the day. Students will be instructed on the various approaches to write editorials, op-ed columns and movie reviews.

## MCOM 280 Speech Skills for the Media

5.0 QH

Provides students with a variety of speech skills which would be useful to them in media professions. Among the skills included are interviewing on and off camera, extemporaneous speaking, oral reading, group discussion and impromptu speaking.

MCOM 290 Communication Seminar 1.0-5.0 QH () Group study of selected topics in mass communication. See program faculty for topics. May be offered for variable credit from one to five quarter hours. May be repeated up to a total of ten quarter hours provided the topics differ.

## MCOM 310 Internat'I Mass Communication 5.0 QH ()

An introduction to the world's mass media systems, with emphasis on the complexities of cross-border communication. The course links the impact of technology, culture, politics, economics, and geography on the development and implementation of mass media in today's "global village." Prerequisite: MCOM 110.

MCOM $\mathbf{3 2 0}$ Mass Media in Society
5.0 QH ( )

Discusses the relationship between the media and society throughout history and the influence of one on the other. Explores various theoretical approaches to understanding and explaining the communication process and how it affects society. Prerequisite: MCOM 110 and completion of phase four of the all-college writing requirement.

MCOM 322 Newswriting II 5.0 Q

The advanced study of print journalism, including practice of various styles (editorials, investigative stories) and genre of journalism; study of journalism organization and management; practice of reportorial skills. Prerequisite: MCOM 222.

This course will explore the tactics and strategies of radio operations with an opportunity to develop and refine skills and expertise as a member of the management team of Principia's Internet Radio. Prerequisite: MCOM 251.

MCOM 355 Video Production II 5.0 QH ( ) An exploration of advanced video production practices. Examines the key roles of the producer, director, and director of photography in a single-camera video production. Besides refining the student's technique regarding camera and lighting, emphasis will be placed on the aesthetics of video communication. Further practical experience will be gained working with the digital nonlinear video editing equipment. Prerequisite: MCOM 255. Fee=\$25.00

MCOM 361 Newspaper Practicum
1.0-3.0 QH ( )

Practicum for writers/reporters, editors, and staff of The Pilot, the college newspaper. May be offered for variable credit from one to three quarter hours. May be taken up to a total of six quarter hours. Prerequisite: MCOM 222.

MCOM 370 Yearbook Editing ( )
Practicum for the editor(s) of The Sheaf, the college yearbook. May be offered for variable credit from one to two quarter hours. May be taken up to a total of six quarter hours. A team approach is encouraged. Prerequisite: member of The Sheaf editing staff.

## MCOM 375 Photography Practicum 1.0 QH ( )

Practicum for staff photographers of The Sheaf, the college yearbook. Students will 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 six quarter hours.

MCOM 381 Video Practicum
1.0-3.0 QH ( )

Develops skills through experience working on special video assignments under the supervision of mass communication faculty. May be offered for variable credit from one to three quarter hours. May be repeated up to a total of six quarter hours. Prerequisite: MCOM 255.

## MCOM 383 Television Practicum 1.0-3.0 QH ( )

Develops television skills through experience working on special broadcasting projects under supervision of mass communication faculty. Experience will be 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 one to three quarter hours. May be repeated up to a total of six quarter hours. Prerequisite: MCOM 083.

## 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 Basic Mathematics Placement Examination.

## MATH 110 Mathematical Applications 5.0 QH (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 Basic Mathematics Placement Examination.

## MATH 111 A Survey of Mathematics

5.0 QH (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 Basic Mathematics Placement Examination.

## MATH 140 Trigonometry 2.0 QH (MNS )

Circular functions, their graphs, inverse functions, and identities; trig equations, law of sines, law of cosines. Prerequisite: MATH 110, MATH 111, or Level 3 on the Basic Mathematics Placement Examination.

## MATH 141 College Algebra $\quad 3.0$ QH (MNS )

Topics from algebra and analytical geometry often included in fourth year high school math. Topics include graphs and functions, exponential and logarithmic functions, conics, and math induction. Prerequisite: MATH 110, MATH 111, or Level 3 on the Basic Mathematics Placement Examination.

## MATH 143 Precalculus 5.0 QH (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 3 on the Basic Mathematics Placement Examination.

## MATH 151 Calculus I

5.0 QH (MNS )

First quarter of single-variable calculus. Includes a review of the elementary functions, the limit, continuity, the derivatives, rates of change, tangent lines, antiderivatives, the definite integral and the Fundamental investigate concepts. Prerequisite: MATH 110, MATH 111, or Level 3 on the Basic Mathematics Placement Examination.

## MATH 152 Calculus II 5.0 QH (MNS )

Second quarter of single-variable calculus. Includes a review of derivative formulas, optimization problems using the derivative, antiderivatives and elementary differential equations, techniques of integration, numerical integration, improper integrals and applications of the definite integral. Computers are used regularly to investigate concepts. Prerequisite: MATH 151.

## MATH 153 Calculus III

5.0 QH (MNS )

Third quarter of a single-variable calculus. Includes applications of the definite integral, probability distributions, Taylor polynomials and series, general infinite series, Fourier series, convergence of series, methods for solving first and second order ordinary differential equations including approximation methods, and mathematical modeling. Computers are used regularly to investigate concepts. Prerequisite: MATH 152.

## MATH 164 Introduction to Statistics

5.0 QH (MNS )

Descriptive statistics including measures of central tendency, measures of dispersion, correlation and regression; basic concepts of probability; inferential statistics including estimation andhypothesistesting.Applicationsinbiological and social sciences. Prerequisite: MATH 110, MATH 111, or Level 3 on the Basic Mathematics Placement Examination.

MATH 200 Foundations of Number
5.0 QH (MNS )

A study of the language and structure of our number system; an in-depth look at arithmetic algorithms; introduction to problem-solving techniques; elementary data analysis. Prerequisite: MATH 110, MATH 111, or Level 3 on the Basic Mathematics Placement Examination.

## MATH 201 Geometry for Teachers $\quad$ 5.0 QH (MNS )

A study of the language and facts of plane and solid geometry; measurement facts and applications; basic construction, transformations, and similarity; tessellations, regular polyhedra and fractals; introduction to coordinate geometry. Prerequisite: MATH 110, MATH 111, or Level 3 on the Basic Mathematics Placement Examination.

MATH 211 History of Mathematics
A concise history of mathematics. Includes topics from: mathematics in early civilization; Greek mathematics; the first Alexandrian school; mathematics in medieval times; mathematics and the Renaissance; the calculus controversy; the discovery of non-Euclidean geometry; the rise of analysis; Godel's Incompleteness Theorem and the loss of certainty. Prerequisite: MATH 151.

MATH 254 Multivariable Calculus
5.0 QH (MNS )

Vector algebra and vector calculus. Partial differentiation. Directional derivatives. Multiple integrals. Line and surface integrals. Applications. Prerequisite: MATH 153.

MATH 261 Discrete MATH
5.0 QH (MNS)

Nature of proof, sets, graph theory, logic, Boolean algebra, functions and relations. Prerequisite: MATH 143.

MATH 273 Linear Algebra $\quad$ 5.0 QH (MNS )
Vector spaces, vector and matrix operations, determinants, linear transformations, systems of linear equations, change of basis, eigenvalues. Recommended: MATH 152.

MATH 304 Synthetic Geometry
3.0 QH (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. Prerequisites: MATH 152 and MATH 273.

## MATH 355 Applied Advanced Calculus 5.0 QH (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 254.

## MATH 360 Numerical Analysis

### 5.0 QH (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 254 and MATH 273.

## MATH 364 Mathematical Statistics $\quad$ 5.0 QH (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 254.

## MATH 374 Algebraic Structures $\quad$ 5.0 QH (MNS )

Group theory, Boolean algebra, rings, integral domains and fields. Offered every other year. Prerequisite: MATH 273.

## MATH 380 Differential Equations 5.0 QH (MNS)

Linear differential equations, Laplace transform methods, series solutions, numerical solutions, introduction to partial differential equation, applications. Offered every other year. Prerequisite: MATH 153.

## MATH 381 Complex Variables $\quad$ 5.0 QH (MNS )

Analytical functions, Cauchy's theorem, Taylor and Laurent series, residues, contour integration, integral transforms, conformal mapping. Prerequisite: MATH 254.

## MATH 382 Foundations of Analysis $\quad 5.0$ QH (MNS )

Formal development of the concepts of real analysis. Includes limits and continuity, sequence and series, uniform convergence, Riemann integral. Prerequisite: MATH 153.

## MATH 415 Senior Capstone

5.0 QH (MNS )

Synthesizes and extends material from courses in the major using topics such as integration, linearity, optimization, periodicity, and expansions. Includes a writing assignment that fulfills phase six of the all college writing requirement.

MATH 421 Math Seminar
1.0-5.0 QH (MNS)

A seminar in selected topics in mathematics. May be offered for variable credit from one to five quarter hours. The contents will vary, and the title will be extended to briefly describe the topic. May be taken more than once if the topics differ.

## Music

MUS 040 Applied Lessons (50 Minutes) No Credit ()
Applied instrumental or vocal instruction. Nine 50-minute lessons per quarter, with two hours of practice daily. For applied music lessons for credit, refer to MUS 120. Fee=\$440.00

## MUS 044 Applied Lessons ( 25 Minutes) No Credit ( )

As above. Nine 25-minute lessons or equivalent per quarter, with one hour practice daily. For applied music lessons for credit, refer to MUS 130. Fee=\$231.00

## 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 quarters 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 the Saturday evening prior to graduation day. Offered only in quarters 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 <br> 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 <br> No Credit

Small chamber ensemble, vocal or instrumental. May be repeated as often as desired.

## 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. May be taken only after ten quarter hours have been earned in MUS 206. Will receive a star (*) grade until the quarter in which the recital is given. Prerequisite: demonstrated proficiency on instrument or voice.

## MUS 100 Intro to the Art of Music 5.0 QH (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 5.0 QH (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 5.0 QH (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 QH

Students will learn how to use common software programs to assemble original arrangements from existing loops and samples. This course will teach the fundamentals of mixing and mastering which will enable students to transfer their work to CD. Designed primarily for the non-major.

## MUS 112 Music Recording Techniques 1.0 QH ( )

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. Designed primarily for the non-major. Prerequisite: MUS 110 or concurrent enrollment in MUS 110.

MUS 120 Applied Lessons (50 Minutes) 1.0 QH ( )
Applied instrumental or vocal lessons. Nine 50-minute lessons per quarter, with two hours of practice daily. $\mathbf{F e}=\mathbf{\$ 4 4 0 . 0 0}$

MUS 130 Applied Lessons (25 Minutes) 0.5 QH ( )
Applied instrumental or vocal lessons. Nine 25-minute lessons per quarter, with one hour of practice daily. $\mathbf{F e e}=\mathbf{\$ 2 3 1 . 0 0}$

MUS 139 Fundamentals: Beginning $\quad$ 5.0 QH ( ) 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 5.0 QH ( )
Study of notation, rhythm, meter, intervals, scales, and triads. Melodic and rhythmic dictation and sight-singing. Prerequisite: music background.

MUS 141 Diatonic Harmony 3.0 QH ( )
A study of diatonic materials. Part-writing, tonal function, voice leading, harmonization of melody lines. Taken concurrently with MUS 146. Prerequisite: MUS 139 or MUS 140 (with a grade no lower than C).

## MUS 143 Chromatic Harmony 3.0 QH ( )

Analysis and exercises in chromatic harmony, concentrating on the 19th century. Topics include secondary dominants, mode mixture, chromatic modulation, diminished seventh chords, augmented sixth chords. Taken concurrently with MUS 147. Prerequisite: MUS 141 (with a grade no lower than C).

MUS 146 Musicianship I 2.0 QH ( )
Sight-singing, melodic dictation, rhythmic studies, diatonic chord recognition, keyboard harmony. Taken concurrently with MUS 141. Prerequisite: MUS 139 or MUS 140 (with a grade no lower than C).

## MUS 147 Musicianship II 2.0 QH ( )

Continuation of MUS 146. Taken concurrently with MUS 143. Prerequisite: MUS 146 (with a grade no lower than C).

## MUS 165 Jazz Ensemble 1.0 QH ( )

Reading and rehearsing music from various big band and combo styles. Special attention is given to style awareness, ensemble and improvisation techniques. May be taken more than once up to a total of 6 quarter hours. Open to the entire community.

MUS 180 Instrumental Techniques $\quad 5.0$ QH ( )
Techniques, characteristics and usage of instruments of brass, woodwind, string families. Acquisition of playing ability on three instruments (one from each family).

MUS 182 Choral Conducting 2.0 QH ( )
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 5.0 QH (ART )

A comprehensive study of a notable composer or topic of music history. The course will serve to acquaint students with a significant body of music and its importance in music history. Will include historical context, analysis, and listening. Title will be extended to briefly describe the major topic, e.g., Johannes Brahms, Women in Music, Charles-Marie Widor, Native American Music, Legendary Pianists. May be repeated up to 15 quarter hours provided topics differ.

MUS 201 Beethoven: The Great Master 5.0 QH (ART ) A survey of the life and music of Ludwig van Beethoven (1770-1827) including his symphonies, string quartets, piano music, chamber music, and Missa Solemnis. No music background is required.

MUS 203 American Musical Theater 5.0 QH (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 5.0 QH (ART )

Explores the connection between jazz music and its culture and social context. The heritage of the lives and music of jazz artists will be 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 $\quad$ 5.0 QH (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 QH ( )

Thirty-minute recital on instrument or voice, demonstrating performance ability and understanding of various musical styles. Subject to music faculty approval. May be repeated up to a maximum total of ten quarter hours. Will receive a star (*) grade until the quarter in which the recital is given. Prerequisite: demonstrated proficiency on instrument or voice.

## MUS 207 Popular Music in America 5.0 QH (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 will be discussed in the context of the artists, recordings, and political events surrounding them. No musical background is required.

## MUS 209 Songs through Time 5.0 QH (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

### 5.0 QH ( 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 will be studied.

## MUS 220 Electronic and Computer Music <br> 1.0-5.0 QH ( )

An introduction to the equipment and processes of the electronic music studio. Emphasis is placed on individual projects involving musical applications of digital equipment. May be offered for variable credit from one to five quarter hours. May be repeated up to a total of five quarter hours. Prerequisites: MUS 141 and MUS 146.

MUS 225 Music Composition $\quad 1.0-2.0$ QH ()
Seminar on the art and craft of music composition with a focus on critical analysis of existing works and peer and instructor review of the student's compositions. Each quarter the course will focus on one of the following topics: vocal, instrumental, multimedia, or collaborative composition. May be repeated up to a maximum of five quarter hours.

MUS 227 Field Studies in Europe $\quad$ 5.0 QH (ART )
Field study of materials covered in music courses such as MUS 100, MUS 101, and MUS 102. Offered only on Principia Abroad.

MUS 228 Great Composers \&Their Culture
5.0 QH
( )
This course includes a study of the great composers and their individual cultures that will be experienced on the Music Abroad. A specialized survey of music, history, art, and culture directly related to countries visited and composers studied.

MUS 243 Counterpoint 3.0 QH ( )
A study of 18th-century counterpoint. Topics include melodic construction, species counterpoint, contrapuntal devices, and a final counterpoint project. Taken concurrently with MUS 246. Prerequisite: MUS 143 (with a grade no lower than C).

## MUS 244 20th C. Techniques 3.0 QH ( )

Study of 20th-century styles, including atonality, dodecaphony, set theory, and minimalism. Taken concurrently with MUS 247. Prerequisite: MUS 243 (with a grade no lower than C).

## MUS 246 Musicianship III 2.0 QH ( )

Concentrates on practical musicianship, including harmonic and two-part dictation, sightsinging, rhythmic exercises of increasing complexity, and keyboard skills. Prerequisite: MUS 147 (with a grade no lower than C).

MUS 247 Musicianship IV 2.0 QH ( ) A continuation of MUS 246 employing literature from chant to 20 th century as the vehicle for teaching musicianship. Also includes harmonic dictation, involving chromaticism and secondary dominants; two-part melodic dictation; intricate rhythms and keyboard skills. Prerequisite: MUS 246 (with a grade no lower than C).

## MUS 250 College Choir 1.0 QH ()

Preparation and performance of choral literature focusing on concepts of style, ensemble, and vocal production. May be taken up to six times. Open to the entire community.

MUS 251 Chorus for Musical $\mathbf{1 . 0 - 2 . 0 ~ Q H ~ ( ) ~}$
Preparation and performance of chorus parts for the musical production. By audition only. Offered only in quarters when there is a musical production.

## MUS 252 Principia Music Tour 1.0-2.0 QH ( )

Preparation of music literature for performance on tour focusing on style, ensemble, presentation, and tour logistics. Star $\left({ }^{*}\right)$ grade will be assigned until completion of the tour. May be offered for variable credit from one to two quarter hours. May be repeated up to a total of six quarter hours. Offered by invitation only.

MUS 261 Orchestra
1.0-2.0 QH ( )

Preparation and performance of instrumental literature focusing on style, expressive interpretation, and ensemble. May be offered for variable credit from one to two quarter hours. May be taken up to six times for a maximum of seven quarter hours. Open to the entire community.

## MUS 271 Chamber Music for Credit 1.0-2.0 QH ( )

Small chamber ensemble, vocal or instrumental. May be offered for variable credit from one to two quarter hours. May be taken up to six times for a maximum of seven quarter hours.

## MUS 281 Instrumental Conducting $\quad 2.0$ QH ( )

Introduction to the basics of conducting instrumental music. Includes all essential beat patterns, expressive gestures, score-reading, learning of instrumental transpositions, score reduction at the keyboard. Prerequisite: completion of piano proficiency requirement.

MUS 303 Junior Recital
1.0-5.0 QH ( )

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 quarter hours. May be repeated up to a maximum of five quarter hours, but may only be taken during the junior year. Will receive a star ( ${ }^{*}$ ) grade until the quarter in which the project is completed. Prerequisite: demonstrated proficiency on instrument or voice.

## MUS 320 Computer Music Seminar

1.0-5.0 QH
()

Continued study in computer music and music composition. Each quarter will focus on different specific topics. The course will consist of research and discussion of the topics being considered and practical application of the material through the composition of original works and presentation of performances. Prerequisite: MUS 220.

## MUS 321 Music History I

5.0 QH (ART)

A study of musical styles and forms of the Medieval, Renaissance, and Baroque periods with considerable emphasis on listening to the music from these periods.

MUS 322 Music History II 5.0 QH (ART )
A study of musical styles and forms of the Classic and early Romantic periods, with considerable emphasis on listening to music from these periods.

## MUS 323 Music History III 5.0 QH (ART )

A study of musical styles and forms of the middle Romantic period through the present, with considerable emphasis on listening to the music from these periods.

## MUS 391 Form and Analysis <br> 5.0 QH ( 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 143 and MUS 147.

## MUS 401 Senior Project: Composition 4.0 QH ( )

An original composition prepared for performance, demonstrating competency in compositional devices and understanding of formal and idiomatic considerations. Will receive a star (*) grade until the quarter in which the composition is performed. May be taken up to three times. Prerequisites: completion of phase four of the all-college writing requirement and piano proficiency. Must be taken concurrently with MUS 407.

MUS 402 SR Project:Music Hist Research 5.0 QH ()
Fifty-page research paper on a special topic in music history. Will receive a star (*) grade until the quarter in which the project is completed. May be taken up to three times. Prerequisites: completion of phase four of the all-college writing requirement and piano proficiency.

## MUS 403 SR Project: Adv Performance <br> 4.0 QH ( )

Sixty-minute recital of instrumental or vocal music demonstrating performance ability and understanding of various musical styles. Will receive a star (*) grade until the quarter in which the recital is given. May be taken up to three times. Prerequisites: completion of phase four of the all-college writing requirement and piano proficiency. Must be taken concurrently with MUS 407.

## MUS 404 Senior Project: Analysis

5.0 QH
()

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 quarter in which the project is completed. May be taken up to three times. Prerequisites: completion of phase four of the all-college writing requirement and piano proficiency.

## MUS 405 SR Proj: Performance/Research 5.0 QH ( )

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 up to three times. Will receive a star (*) grade until the quarter in which the recital is given. Prerequisites: completion of phase four of the all-college writing requirement and piano proficiency.

MUS 406 SR Proj: Music Recital 1.0-4.0 QH ()
Thirty-minute (minimum) recital of instrumental or vocal music demonstrating performance ability and understanding of various musical styles. May be repeated up to a maximum total of eight quarter hours. Will receive a star (*) grade until the quarter in which the recital is given. Open only to double majors in music and education. Prerequisite: demonstrated proficiency on instrument or voice, completion of phase four of all-college writing requirement and piano proficiency. Must be taken concurrently with MUS 407.

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 $\left({ }^{*}\right)$ grade until the quarter in which the project is completed. May be taken up to three times. 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 5.0 QH ( )
A skill development endeavor emphasizing analytical skills, the reasoning process, the identification of arguments, and the manner in which good arguments are constructed. Informal logic and common fallacies will be examined.

## PHIL 150 Introduction to Philosophy 5.0 QH (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 220 Introduction to Ethics 5.0 QH (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 5.0 QH (RPHL)

A seminar for lower division students on a topic of current philosophic interest. May be repeated up to a total of ten quarter hours of credit, if topics differ.

## PHIL 222 Feminist Philosophy 5.0 QH (RPHL)

This course explores the connections between traditional western philosophy and recent feminist discourse. Students will 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 in an alternatives to philosophical thinking and evaluate the validity of these new insights. Also listed as WOM 222.

## PHIL 225 American Philosophy

5.0 QH (RPHL)

A brief survey of the philosophies within colonial and revolutionary times followed by an in-depth look at the philosophies of the nineteenth century with emphasis on Transcendentalism and Pragmatism. The developments within the early twentieth century will be reviewed.

PHIL 230 Philosophic Classics 5.0 QH (RPHL)
An introduction to philosophy through the study of classic texts in philosophy.
PHIL 235 Philosophy and Race 5.0 QH (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
5.0 QH (RPHL)

A rapid survey of philosophy from earliest to most recent times to provide context and a time-line for other studies.

## PHIL 250 Contemporary Moral Problems 5.0 QH (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 5.0 QH (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. Also listed as REL 252.

## PHIL 255 Global Ethics 5.0 QH (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 will be considered. Intercultural moral conflicts will be examined from a wide array of religious, cultural and moral vantage points. More sensitivity, understanding, and assessment of needs will be stressed. Also listed as GLBL 255.

PHIL 261 Living Religions of the East 5.0 QH (RPHL)
Introduction to religions of the non-western world, including Islam, Buddhism, Hinduism and Tao. Also listed as REL 261.

## PHIL 265 Business Ethics 5.0 QH (RPHL)

This course focuses on major philosophical and ethical questions surrounding modern western business practices. The student will receive a brief introduction to moral philosophy, become familiar with important literature in field of business ethics, and begin to understand the place of morality in business. Also listed as BUAD 265.

PHIL 275 Aesthetics 5.0 QH (RPHL)
Philosophical inquiry into the nature of art, the aesthetic experience, and aesthetic appreciation. Offered every other year.

## PHIL 280 Classics of Political Thought 5.0 QH (RPHL)

Listed basically as POLS 280.

## PHIL 285 Religious Epistemology 5.0 QH (RPHL)

Focuses on the manner in which religious truth claims are justified. Are religious beliefs justifiable? Do beliefs have reasons? Is faith legitimate? Revelation, miracles, faith, belief, and religious experience will be discussed.

PHIL 290 Ethical Theory 5.0 QH (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: five quarter hours in philosophy or permission of the instructor. Offered every other year.

## PHIL 311 Ancient \& Medieval Philosophy <br> 5.0 Q ( RPHL)

Philosophical ideas of the ancient and medieval worlds with emphasis on Plato, Aristotle, Augustine and Aquinas.

PHIL 312 17th \& 18th C Philosophy $\quad$ 5.0 QH (RPHL)
Philosophical ideas of the 17th and 18th centuries. Emphasized: rationalist and empiricist movements.

PHIL 313 19th \& 20th C Philosophy 5.0 QH (RPHL)
Philosophical ideas of the 19th and 20th centuries. Emphasized: idealist, existential, pragmatic, and analytical movements.

PHIL 321 Epistemology 5.0 QH (RPHL)
Exploration of classical and contemporary theories of knowledge and truth inclusive of theories of mind.

PHIL 388 Philosophy of Education 5.0 QH (RPHL)
Listed basically as EDUC 388.

An advanced seminar for upper division students on a topic of current philosophical interest. May be taken for variable credit from one to five quarter hours. May be repeated up to a total of ten quarter hours provided the topics differ. Prerequisite: completion of phase four of the all-college writing requirement.

## PHIL 421 Seminar in Philosophy 1.0-5.0 QH ()

A seminar in a selected problem or topic in philosophy. Course content will vary from year to year. Research and writing techniques will be developed, sufficient to complete phase five of the all college writing requirement. May be offered for variable credit from one to five quarter hours. May be repeated up to a total of ten quarter hours providing topics differ. Prerequisite: completion of phase four of the all-college writing requirement.

PHIL 440 Capstone in Philosophy 5.0 QH ( ) 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 QH ()
Following the Red Cross program, this course is designed to develop skills necessary to recognize a person in a distressed or drowning situation and to effectively rescue that person; to understand professional lifeguard/employer/ patron relationships; to prepare students mentally and physically to understand and meet accepted lifeguarding and aquatic safety standards. Prerequisite: 15 years of age and successful completion of a swimming skills test. Taken concurrently with PE 061. Fee=\$55.00

PHED 301 Water Safety Instructor 2.0 QH ()
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=\$66.00

PHED 302 Lifeguard Training Instructor 1.0 QH ()
Trains students to teach lifeguards the basic instructional methodology and fundamentals; teach lesson planning and motivational skills; and teach lifeguarding and aquatic safety management. Prerequisite: current lifeguard training certification. $\mathbf{F e e}=\mathbf{\$ 2 5 . 0 0}$

## Physical Education: Activity Courses

PE 015 Foil Fencing No Credit (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 (PE )
An introduction to the basic skills and strategies of ultimate frisbee. Covers rules, scoring and vocabulary.

PE 020 Golf No Credit (PE)
An introduction to basic golfing skills, vocabulary, rules, scoring, and etiquette. Fee=\$30.00
PE 022 Tennis
No Credit (PE )
Students will 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 (PE )

Continuation of instruction in the sport of basic foil fencing. Additional instruction will be given in technique and bouting.

## PE 026 Baseball Theory and Practice No Credit (PE )

Students will learn the history, philosophy, and technique of America's favorite pastime. Students will 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 will also be included. Students will learn the language of the game: statistics, scoring and nomenclature.

## PE 027 Aerobics <br> No Credit (PE )

Choreographed exercise using aerobic movements.

## PE 029 Biking No Credit (PE)

Designed to develop the skills and knowledge necessary to fully enjoy bicycling.
PE 030 Squash: Beginning No Credit (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 (PE )
An introduction to the basic skills and strategies of racquetball as well as vocabulary, rules, scoring, equipment, and etiquette.

## PE 033 Racquetball: Intermediate No Credit (PE )

Continuation of PE 031 at the intermediate level.
PE 034 Fitness Through Weightlifting No Credit (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 $035 \quad$ Circuit Training
No Credit (PE )
Students will engage in a variety of activities in order to develop aerobic strength. Students will utilize the weight room in conjunction with medicine balls and isometric exercises.

## PE 036 Triathlon No Credit (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 (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 039 Volleyball: Beginning No Credit (PE )

An introduction to the fundamental skills and techniques of power volleyball. Including present status, vocabulary, rules, scoring, and strategy.

## PE 040 Volleyball: Intermediate <br> No Credit (PE )

Continuation of PE 039 at the intermediate level.

## PE 041 Dance Team No Credit (PE )

Practiced and perfected dance routines are performed duringhalftime throughout basketball season. Routines are choreographed by a certified dance instructor and by team captains.

PE 043 Dance: Ballet I No Credit (PE )
Listed basically as THEA 043.
PE 044 Dance: Ballet II
No Credit
( PE )
Listed basically as THEA 044.
PE 045 Dance: Ballet III
No Credit
( PE )
Listed basically as THEA 045.

PE 048 Dance: Jazz I No Credit (PE )
Listed basically as THEA 048.

## PE 050 Basketball No Credit (PE)

Focus is on the basic skills and strategies of basketball, including rules, scoring, etiquette, and vocabulary.

## PE 051 Soccer No Credit (PE)

An introduction to the fundamental techniques and strategies, etiquette, vocabulary, and rules of soccer.

PE 052 Softball No Credit (PE )
Emphasizes the basic skills and strategies necessary to enjoy and understand the game of softball. Covers rules, scoring, and vocabulary.

PE 056 Power Walking No Credit (PE )
Power walking 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 (PE )
Fitness class designed for qualified students. Course for students who want to develop their fitness through lap swimming. Students will swim a minimum of 1500 yards per week. Prerequisite: swimming ability intermediate or above.

PE 058 Water Aerobics No Credit (PE )
A fitness class designed for hydro-aerobic movement activities in the water.
PE 061 Emergency Water Safety
No Credit (PE )
An aquatics course which will introduce people to increased enjoyment of water-related activities 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 (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 (PE )
Designed to meet the individual skill needs of non- and beginning swimmers. Students will be required to participate in 30 hours of supervised swimming instruction.

PE 066 Swimming: Intermediate
No Credit (PE )
Designed to meet the individual skill needs of students. Develops proficiency of intermediate swimming technique.

PE 069 Water Polo No Credit (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 070 Synchronized Swimming

No Credit
( PE )
This course is for those swimmers who are already proficient in the standard water techniques and who are ready to modify strokes and stunts and to improvise in the water.

PE 071 Lifeguard Refresher No Credit (PE)
Course designed to review the skills necessary in being a Red Cross Certified Lifeguard. Prerequisite: current American Red Cross Lifeguard Training Certification and successful completion of swimming skills

## PE 072 Boating No Credit (PE)

Introduction to develop the skills and knowledge necessary to fully enjoy different boating activities. Contents vary and the title will be extended briefly to describe the activity. May be taken more than once if the activities differ. When the class culminates in an off-campus trip at the end of the quarter, a star ${ }^{(*)}$ grade will be given and will resolve after the trip. Prerequisite: completion of swim test. Fee varies.

## PE 073 Rugby No Credit (PE )

This course will expose students to the basic skills, strategies, and fundamentals of competitive rugby. Students will have the opportunity to compete against collegiate and club level teams sanctioned by USA Rugby and its affiliated unions.

PE 074 Lacrosse
No Credit (PE )
This course will expose students to the basic skills, strategies, and fundamentals of competitive lacrosse. Students will have the opportunity to compete against collegiate teams in the Central PlainsWomen's Lacrosse League of the Women's Division Intercollegiate Associates of US Lacrosse.

## PE 080 Dance: Modern I No Credit (PE )

Listed basically as THEA 080 .
PE 081 Dance: Modern II No Credit (PE)
Listed basically as THEA 081.
PE 082 Dance: Modern III No Credit (PE )
Listed basically as THEA 082.
PE 083 Dance as Movement
No Credit (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 movement.

## PE 085 Hiking/Backpacking No Credit (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 (PE )

An introduction to running outside over various terrains and under various conditions.

## PE 096 Winter Sports No Credit (PE )

Develops an appreciation for winter activities. Includes conditioning and technical instruction. At the end of the quarter a star (*) grade will be recorded and will be resolved after off-campus practical experience.

## Physical Education: Varsity Sports

## PVAR 083 Varsity Cross Country <br> No Credit (PE )

Designed to provide a student athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Focuses on building stamina and developing speed through a variety of training activities, including long runs, sustained effort runs, long intervals, running-form drills, short interval speed sessions, and supplementary exercises to strengthen the athlete. Daily practices and ten NCAA D-III competitions during the fall quarter will allow runners to reach their full potential. Along with increased running ability, close attention is paid to recognizing the value of team commitment, discipline, light-heartedness, honest self-examination, and courage.

## PVAR 084 Varsity Football

No Credit (PE )
Players will be trained in individual position technique, play concepts, strategy, strength and conditioning, team building, leadership, and hard work. Daily practices and a ten-game NCAAD-III season during the fall quarter will allow players to reach their full potential. Along with the increased game skills related to football, players will be provided the opportunity to demonstrate character growth, teamwork, leadership, and other life skills.

## PVAR 085 Varsity Volleyball

No Credi
( PE )
Players will be challenged daily through intense training and a high level of competition. Team members will dedicate themselves to being students of Christian Science and strive to soar above all suggestions of limitations. Practices will include teaching and repetition on technical skills, plyometrics and strength and conditioning, and the largest part of training will revolve around a competitive cauldron environment, demanding an improved competitive maturity on a daily basis. Daily practices and a 30 -game NCAA D-III season during the fall quarter will allow players to reach their full potential. Along with the increased game skills related to volleyball, players will be provided the opportunities to put down limitations based on gender, to grow in grace, and to treasure and demonstrate their completeness.

## PVAR 086 Varsity Track and Field Indoor No Credit (PE )

Designed to provide a student athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition, specifically any track or field event contested at the National Championships. Focuses on fitness and skill development in the track and/or field event group(s) that the student elects to compete in. Daily practices and up to ten NCAA D-III competitions during the winter quarter will allow runners to reach their full potential. Along with increased running ability, close attention is paid to recognizing the value of team commitment, discipline, light-heartedness, honest selfexamination, and courage.

## PVAR 087 Varsity Soccer No Credit (PE )

Players work daily to demonstrate dominion, unselfishness, sportsmanship, unity, and excellence of execution. Players will be trained in the proper physical fundamentals of the game as well as strategy, strength, and conditioning. Daily practices and a 20 -game NCAA D-III season will afford players necessary time to demonstrate leadership, character growth, and their full potential as athletes and soccer players.

PVAR 089 Varsity Basketball No Credit (PE)
Players work daily to demonstrate dominion, unselfishness, sportsmanship, unity, and excellence of execution. Players will be trained in the proper physical fundamentals of the game as well as strategy, strength, and conditioning. Daily practices and a 25 -game NCAA D-III season will afford players necessary time to demonstrate leadership, character growth, and their full potential as athletes and basketball players.

## PVAR 090 Varsity Swimming No Credit (PE)

Swimmers develop individual, spiritual, academic, and team growth. Training is grounded in solid technique, aerobic fitness, and spiritual understanding, with practices designed to bring each swimmer to his or her peak in fitness and speed. Training includes a variety of in-water techniques and equipment as well as dry land work in a variety of settings. Daily practices and 16 NCAA D-III competitions during the fall and winter quarters will allow swimmers to reach their full potential. Along with increased swimming abilities, there is an emphasis on developing a quality supportive team atmosphere through a variety of team building activities and informal interactions.

## PVAR 091 Varsity Diving No Credit (PE)

Divers develop individual, spiritual, academic, and team growth. Training focuses on the fundamentals of board work, dives, and spiritual understanding with practices designed to allow each diver to develop the skills necessary to refine his/her repertoire and to develop new, more challenging dives. Daily practices and 16 NCAA D-III competitions during fall and winter quarters will allow divers to reach their full potential. Along with increased diving abilities, there is an emphasis on developing a quality supportive team atmosphere through a variety of team building activities and informal interactions.

## PVAR 092 Junior Varsity Tennis No Credit (PE )

Players will utilize practices to overcome limitations, compete honestly and fairly, and to respect their teammates, opponents, and themselves. Practices will include training on technical skills, game strategy, and strength and conditioning. Intra squad competition and the possibility of several intercollegiate competition dates will provide players the opportunity to demonstrate character growth, teamwork, leadership, and other life skills.

## PVAR 093 Varsity Tennis <br> No Credit (PE )

Players will work daily to overcome limitations, compete honestly and fairly, and to respect their teammates, opponents, and themselves. Practices will include training on technical skills, game strategy, and strength and conditioning. Daily practices and 20 NCAA D-III competition dates will afford players the opportunity to demonstrate character growth, teamwork, leadership, and other life skills.

## PVAR 094 Varsity Track \& Field Outdoor No Credit (PE )

Designed to provide a student athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition, specifically any track or field event contested at the National Championships. Focuses on fitness and skill development in the track and/or field event group(s) that the student elects to compete in. Daily practices and up to ten NCAA D-III competitions during the spring quarter will allow runners to reach their full potential. Along with increased running ability, close attention is paid to recognizing the value of team commitment, discipline, light-heartedness, honest selfexamination, and courage.

## PVAR 095 Varsity Baseball

Players will be trained in the proper fundamentals and mechanics in pitching, hitting, fielding, base-running, throwing, and other technical skills relevant to the game of baseball. Daily practices and a 40-game NCAA D-III season during the winter and spring quarters will afford players necessary time to hone their skills and reach their full potential. Along with increased game skills related to baseball, players will be provided the opportunity to demonstrate positive character growth, teamwork, leadership, and other life skills.

## Physics

PHYS 120 Introduction to Physics 5.0 QH (PHYS )
Topics from physics with weekly laboratory, selected for variety and current interest. Intended as a lab course elective in general physics or for preparation of students for further study of physics. Title will be extended to briefly describe the major topic, e.g., "Survey," "Sports Mechanics," and "Biology." Math at the level of high school algebra and geometry may be expected. May be taken more than once if the topics differ.

## PHYS 151 Descriptive Astronomy

5.0 QH (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 5.0 QH (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. One two-hour lab per week.

## PHYS 174 Computational Physics

Introduction to physical systems with use of computer modeling, numerical techniques, computer simulations, and related reasoning. Subjects may include planetary orbits, diffusion, Monte Carlo simulations of probabilistic motion, vibrating systems, astrophysics, and chaotic systems. Of special interest to computer science students and education majors.

## PHYS 177 Energy 5.0 QH (MNS )

Principles of energy, energy use, efficiency, and conservation. Applications to societal problems in the home, business, and transportation. Renewable and non-renewable resources, including nuclear, solar, wind, geothermal energy. Mathematics at level of high school algebra may be expected.

## PHYS 201 Phys for Scientists/Engrs I

5.0 QH (PHYS )

Introductory physics with calculus. Covers the grand themes of physics, including mechanics, conservation laws, electricity, magnetism, waves, light, sound, relativity and early quantum theory. Laboratories weekly. Emphasis on mechanics. Continues as PHYS 202 and PHYS 203. CHEM 133 and MATH 152 recommended.

PHYS 202 Phys for Scientists/Engrs II 5.0 QH (PHYS )
Second term of introductory physics with calculus and laboratory. Emphasis on relativity, electricity and magnetism. Prerequisites: PHYS 201 and MATH 152.

## PHYS 203 Phys for Scientists/Engrs III 5.0 QH (PHYS )

Concluding term of introductory physics with calculus and laboratory. Emphasis on thermodynamics and atomic/nuclear theory. Prerequisite: PHYS 202.

## PHYS 231 Superstrings \& Stranger Things <br> 5.0 QH ( MNS )

Explores current research areas in physics as seen in the popular press. Typically five books, covering a wide range of topics are studied. Prerequisite: MATH 143 or equivalent.

## PHYS 250 History of Science <br> 5.0 QH (MNS )

A survey of significant scientists and scientific discoveries, and their development and interrelatedness over time. Students will gain an appreciation of the impact of science on social, cultural, religious, and political aspects of human life. Also listed as HIST 250.

## PHYS 251 Astronomical Topics

3.0 QH (MNS)

Topics will be selected from themes introduced in the descriptive astronomy course, e.g., Newtonian orbit calculations, multiple star motions, Planck's radiation law and photons, atomic radiation theory, redshifts and cosmology, and Einstein's theory of relativity. Develops thinking, analysis, problem solving, trigonometry, and mathematical skills. Computer programming, trigonometry, and calculus are helpful, but not required. Prerequisite: PHYS 151.

## PHYS 253 Electronics 5.0 QH (PHYS )

Introduction to basic electronics theory and practice; circuit elements, Kirchhoff's Laws, equivalent circuits, semiconductor devices, power supplies, filters, and electronic logic. Weekly laboratory. Prerequisite: PHYS 202. Offered in alternate years.

## PHYS 281 Reading in Physics

5.0 QH (MNS )

Study of any area of science related to physics. Texts selected by student in consultation with faculty. Weekly papers and discussions based upon texts. Course may include, but not limited to, science fiction, speculation, interface of science with other areas of thought, theory, current literature, philosophy, or history of science. Offered on a contract basis only.

## PHYS 283 Advanced Laboratory

5.0 QH (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 5.0 QH (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 254; MATH 380 strongly recommended. Offered in alternate years.

## PHYS 303 Electricity \& Magnetism I 5.0 QH (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 254; MATH 355 and MATH 380 strongly recommended. Offered in even years.

## PHYS 304 Electricity \& Magnetism II

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 5.0 QH (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 153.

## PHYS 306 Quantum Mechanics II 5.0 QH (MNS )

Continuation of PHYS 305. Prerequisite: PHYS 305.

## PHYS 308 Senior Project

## 1.0-10.0 QH ( )

Research project required for B.A. physics majors, who must take it for at least three quarter hours. Independent project demonstrating ability to synthesize and apply physics knowledge. Required for physics minors, who must take it for at least one quarter hour. May be repeated up to a total of ten quarter hours.

## PHYS 325 Solid State Physics 5.0 QH (MNS)

Description of crystal structures and their impact upon vibrations, waves, and electronics in solids. Specific heats, electron band theory, and statistical treatment of electrons. Prerequisite: PHYS 203.

## PHYS 326 Statistical Mechanics 5.0 QH ()

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.

## PHYS 361 Physics Research Seminar

1.0 QH ( )

Review, annotation, and presentation of literature in peer- reviewed journals on subject(s) of interest to students preparing for PHYS 308 or PHYS 401 projects. The result of this course will be an annotated bibliography suitable as a basis for a PHYS 308 or PHYS 401 project.

## PHYS 362 Technical and Proposal Writing 1.0 QH ()

This course is an upper division seminar on technical writing. Both the mechanics and content of research and proposal writing will be covered in preparation for PHYS 308 and PHYS 401 projects. Prerequisites: PHYS 361 and completion of phase four of the all-college writing requirement.

## PHYS 401 Research 1.0-10.0 QH ()

Experimental or theoretical research under faculty supervision. Offered on an independent contract basis. May receive a star (*) grade, with final grade being assigned upon completion of the project. May be taken for variable credit from one to ten quarter hours. May be repeated up to a total of ten quarter hours.

## 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 quarter 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 115 Parliamentary Procedure
1.0 QH

The principles and practice of parliamentary procedure, including the use of power and the responsibilities of leaders to facilitate progress and safeguard the rights of both the individual and the group.

## POLS 120 American Government \& Politics $\quad$ 5.0 QH (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 152 Politics Among Nations $\quad$ 5.0 QH (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 $\quad$ 5.0 QH (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 SOC 215.

## POLS 220 American Parties \& Elections <br> 5.0 QH ( 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.

POLS 225 State \& Local Government
5.0 QH ( 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 5.0 QH (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

5.0 QH (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 5.0 QH (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. Also listed as WOM 240.

## POLS 252 American Foreign Policy 5.0 QH (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 <br> 5.0 QH ( 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.

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 <br> 5.0 QH ( 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

### 5.0 QH ( 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 VietnamWar to the politics of Japan. May be taken more than once if the topics differ.

## POLS 264 Russia and the FSU 5.0 QH (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

5.0 QH ( 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. May be taken more than once if the topics differ.

## POLS 280 Classics of Political Thought 5.0 QH (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 $\quad$ 5.0 QH (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 Tse-Tung's Chinese Revolution, Che Guevara in Latin America, and Eastern Europe in the post-cold war era. Prerequisite: completion of phase four of the allcollege writing requirement.

POLS 325 The Legal Process $\quad$ 5.0 QH (SSCI)
How the nature oflaw, including itshistory, development, and efficientadministration, 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. Prerequisite: completion of phase four of the all-college writing requirement.

## POLS 330 American Constitutional Law 5.0 QH (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. Prerequisite: completion of phase four of the all-college writing requirement.

## POLS 340 Public Policy Analysis <br> 5.0 QH (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, POLS 215, and completion of phase four of the all-college writing requirement.

POLS 348 U.S. and Global Security 5.0 QH (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.

Advanced study of the means and methods of theory construction in the field of international relations. Prerequisite: POLS 152 and completion of phase four of the all-college writing requirement. Open to political science majors.

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. Prerequisite: completion of phase four of the all-college writing requirement.

## POLS 365 Advanced Issues <br> 5.0 QH ( 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. May be taken more than once if the topics differ. Prerequisite: completion of phase four of the all-college writing requirement.

POLS 400 Project Course/Independent
1.0-5.0 QH ()

Independent research or readings in student-selected, faculty approved topics in political science. Research may include applications of theory as well as original research. Allows for exploration of topics not considered in regular courses, or advanced work in areas of initial preparation. Designed for majors or minors seeking to deepen their knowledge of a specific field of political science. Supervised by faculty mentor. Excellent preparation for graduate or professional school. May be taken for variable credit from one to five quarter hours.

## Religion

REL 110 The Old Testament 5.0 QH (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.

## REL 120 The New Testament 5.0 QH (BIBL)

An introductory overview of the thought-world, times, texts and teachings of the New Testament, its enduring relevance and impact. Focus for this exploration is a consideration of the New Testament's diverse but unified answers to the questions of messiahship (Who was Jesus?), discipleship (What does it take, what does it mean, to be his followers?), and salvation (What is the outcome of following Jesus?).

REL 189 Global Religions \& History 5.0 QH (RPHL)
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. Also listed as HIST 189.

REL 200 Ethics: Women in the Bible 5.0 QH (BIBL)
This course allows students to become involved with moral reasoning in a specialized area of interest, specifically, relationships between women and men, and between women and God. A look at female experience in Scripture within the confines of a patriarchal society with focus on contemporary feminist criticism, and identifying and discussing various moral dilemmas in male/female relationships portrayed in both Old and New Testaments. Also listed as WOM 200.

REL 215 The Hebrew Prophets 5.0 QH (BIBL)
Prophecy as a quest for leadership and as insight into social and moral conditions in Israel before, during, and after the exile.

REL 218 The Wisdom of Israel 5.0 QH (BIBL)
Close reading of Proverbs, Ecclesiastes, Job, selected Psalms, Sirach, Wisdom of Solomon, with reference to wisdom traditions of the ancient Near East. This course will compare and contrast biblical and contemporary approaches to social, political and religious questions.

## REL 224 The Four Gospels 5.0 QH (BIBL)

An examination of the origins and development of the Gospels as historical, literary and theological products of the early Church, and of their contemporary interpretations. Detailed study of Mark, Matthew, Luke-Acts and John.

## REL 225 The Bible and Christian Ethics 5.0 QH (BIBL)

An introductory overview of the nature, content and goals of biblical ethics. Basic modes of moral thinking are explored in light of the biblical material and the Christian perspectives it has produced, and this provides a framework consideration of contemporary ethical issues.

## REL 227 Paul The Apostle

5.0 QH (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.

## REL 230 Faith and Film <br> 5.0 QH (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: fulfillment of all-college Bible requirement (five quarter hours of course work with the BIBL attribute).

## REL 231 Christianity 5.0 QH (RPHL)

An exploration of the Christian Church as the encounter of a radical religious vision of reality with the traditions of diverse human cultures and events. The course considers how Christianity has shaped society, and how society has shaped Christianity, over the past 2,000 years. Also listed as HIST 212.

REL 232 Martin Luther $\quad 2.0$ QH ()
An exploration of the life and works of Martin Luther, based on readings from the Bible, from his shorter writings, and from the major biography of Luther, Here I Stand, by Roland Bainton. Also listed as GER 230.

## REL 240 The Religion of Islam 5.0 QH (RPHL)

The study of Islam as a religion, focusing on the Quran, the prophet Muhammad, ritual, commentary, dissent, and important religious themes and developments during three periods: Middle ( $650-850$ CE); Mature ( $850-1500$ CE); and Modern (1600-present). Taken concurrently with HIST 240.

REL 250 Character Education 1.0 QH () How are qualities of virtue recognized and developed? An overview of approaches to character education, including the thought of Mary Kimball Morgan, founder of The Principia. Close consideration of traditional virtues such as honesty, courage, humility, and unselfishness.

## REL 252 Philosophy of Religion

5.0 QH (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. Also listed as PHIL 252.

REL 260 Religion in America 5.0 QH (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 5.0 QH (RPHL) Introduction to religions of the non-western world, including Islam, Buddhism, Hinduism and Tao. Also listed as PHIL 261.

REL 290 Elementary Hebrew 1.0-5.0 QH () Introduction to biblical Hebrew, with daily practice in reading and translation. May be offered for variable credit from one to five quarter hours. May be repeated up to a total of five quarter hours. Offered on demand.

## REL 291 Hebrew Readings

REL 292 Elementary Greek
5.0 QH

Introduction to Koine Greek of New Testament, with daily practice in reading and translation.

REL 293 Greek Readings 2.0-5.0 QH ()
Continued study of Koine Greek, with selected readings from gospels and epistles. May be offered for variable credit from two to five quarter hours. Prerequisite: REL 292.

REL 300 Biblical Exegesis 5.0 QH (BIBL)
An analysis of the methods scholars and others have used to interpret biblical literature, from antiquity to the present.

REL 301 Health \& Healing in the Bible 5.0 QH (BIBL)
An in-depth look at notions of health and the place of healing in the history, theology and salvific message of the Bible and of the Christian Church. Alternative approaches to wellbeing in the biblical period (medicine, magic) are explored in relation to biblical and contemporary understandings of healing.

## REL 304 Topics in Biblical Studies 1.0-5.0 QH (BIBL)

A seminar on a topic in biblical studies at the advanced level. The content varies and the title will be extended to briefly describe the topic. May be offered for variable credit from one to five quarter hours. May be repeated up to a total of ten quarter hours provided the topics differ. Prerequisite: completion of at least one course that carries the BIBL attribute.

## REL 310 Topics in Religious Studies <br> 1.0-5.0 QH (RPHL)

A seminar on a topic in religious studies at the advanced level. The contents vary and the title will be extended to briefly describe the 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 five quarter hours. May be repeated up to a total of ten quarter hours provided the topics differ. Prerequisite: at least one REL course.

REL 321 Intertestamental Period 5.0 QH (BIBL)
History, literature, culture of Israel from 500 B.C. until 50 A.D. Special attention given to apocryphal literature and canonization process. Prerequisite: REL 110.

## REL 324 Bible Parables <br> 5.0 QH ( BIBL)

An exploration and analysis of the form and function of parables in the Bible. The course compares parable and allegory in biblical tradition and interpretation, and focuses on the how and why of Jesus' use of parables. Specific parables from the Gospels will be examined and discussed.

REL 332 The Life of Mary Baker Eddy
5.0 QH (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. Prerequisites: completion of one course with BIBL, RPHL, or HIST attribute.

REL 360 Holocaust Studies and Ethics
5.0 QH (RPHL)

A study of a religious crisis of conscience for the world. A consideration of the historical, social, theological, and moral implications of intense hatred, focusing specifically on antiSemitism during World War II.

REL 401 Project 2.0-5.0 QH ( )
A selected topic, area, or problem providing opportunity for survey, investigation, research, creative activity, or approved travel-study. May be taken for variable credit from two to five quarter hours. Offered on an independent contract basis.

## REL 411 Readings 2.0-5.0 QH ()

Individual readings directed by a member of the department. May be taken for variable credit from two to five quarter hours. May be repeated up to a total of fifteen quarter hours. Offered on an independent contract basis.

## Russian

## RUSS 101 Elementary Russian $\quad$ 5.0 QH ( )

An introduction to the Russian language with emphasis on understanding spoken and written Russian in the context of Russian life and culture. Attention is also given to conversation and writing skills. Considerable use is made of the language laboratory and other audio-visual aids.

| RUSS 102 | Elementary Russian | 5.0 QH | ( ) |
| :---: | :---: | :---: | :---: |
| Second quarter of the first year course sequence. See description for RUSS 101 |  |  |  |
| RUSS 103 | Elementary Russian | 5.0 QH | ( FLAN ) |
| Third quarter of the first year course sequence. See description for RUSS 101 |  |  |  |

## Science

SCI $250 \quad$ Women in Science
1.0 QH ()

Explores the relationship between gender and science. Students will examine the lives and careers of women in science, as well as scientific literature produced by women. Students will also explore women's ways of learning and doing science.

## SCI 360 Current Science Literature 1.0 QH ()

Introduction to the current scientific literature in field(s) of students' choice. Initial readings will be selected by faculty. Students will present findings orally. Readings will be selected from peer-reviewed scientific journals, e.g. Physical Review, Journal of Geophysical Research, etc. May be repeated up to a total of five quarter hours.

## Sociology and Anthropology

SOC 050 Community Service Program No Credit ()
In nearby communities, 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.

## SOC 100 Intro to Global Sociology 5.0 QH (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, postcolonialism and global ecology.

SOC 150 Intro to Cultural Anthropology 5.0 QH (SSCI )
Comparative analysis of behavior and values in various cultures around the world, including exploration of forces that shape cultures. Looks at the impact of western society on traditional cultures.

## SOC 160 "Race" and Ethnicity 5.0 QH (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.

## SOC 170 Gender Paradigms

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.

SOC 180 Power, Privilege, and Prestige
5.0 QH ( 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.

## SOC 200 Criminology <br> 5.0 QH (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."

SOC 210 Ethnology 3.0 QH ( )
Course provides a theoretical and ethnological aspect of sociology and cultural anthropology, which involves the identification and explanation of cross-cultural regularities and differences through analysis, comparison, generalization, ethnography and hypothesis formation of other cultures and customs. Also listed as GLBL 210.

## SOC 215 Soc Science Research Methods 5.0 QH (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.

## SOC 220 Contemporary French Society 5.0 QH (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 Abroads. Also listed as FREN 220.

## SOC 235 Environmental \& Social Change 5.0 QH (SSCI )

The interface between social and environmental problems- plus strategies to resolve such problems. Impact of industrialization on humanity and ecosystems in traditional agricultural and more industrialized cultures. Feasibility of ecologically-sustainable agriculture. Comparative analysis of contemporary global and USA environmental organizations and grassroots environmental movements - their beliefs, goals, tactics, and memberships.

## SOC 240 Native American Cultures <br> 5.0 QH ( SSCI )

Develops an appreciation for Native North American cultures from an anthropological and historical perspective. Surveys Native American spirituality, substance, politics, kinship, and practices prior to European contact. Analyzes both resistance and assimilation to hegemonic European power. Explores contemporary political issues.

## SOC 245 Studies in Culture

2.0-5.0 QH ( SSCI )

Analysis of selected cultures. The contents will vary, and the title will be extended to briefly describe the topic. May be taken more than once if topics differ.

## SOC 250 African American Cultural Hist 5.0 QH (SSCI)

A historical and cultural exploration of the African American experience from African antiquity to the present. Also listed as HIST 235.

## SOC 251 Anthropology of India

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. Offered only on Principia Abroads.

## SOC 270 Indigenous Cultures

5.0 QH (SSCI)

Explores the spirituality, subsistence, politics, kinship, and practices of indigenous peoples around the world prior to contact with dominant societies. Uses colonialism, human rights, and globalization as lenses through which to examine present day issues facing indigenous peoples.

## SOC 300 Social Theory 5.0 QH (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. Prerequisite: completion of phase four of the all-college writing requirement.

## SOC 310 African Cultures <br> 5.0 QH (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.

## SOC 323 Refugees: Culture and Conflict

5.0 QH ( SSCI )

This course looks at refugee groups around the world along with governmental and nongovernmental 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 will be encouraged to enroll in the SOC 50 community service at the International Institute.

SOC 325 Youth Advocacy and Services $\quad$ 5.0 QH (SSCI )
Covers a wide range of children's issues in the USA, including child abuse and neglect, adoption and foster care, day care, special needs children, and children and their environment. Private and government efforts to respond to these issues are explored and evaluated with special emphasis on understanding the child welfare system.

## SOC $330 \quad$ Social Field Work Methods $\quad 5.0$ QH ( )

Designed for students considering human service, social work, or alternative education as a profession. Begins with an overview of the social work profession and various social service systems. The second half of the course is devoted to skill development in interviewing, counseling, observing, and case work.

SOC $335 \quad$ Gender \& Masculinity $\quad 5.0 \mathrm{QH}$ 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: SOC/WOM 170. Also listed as WOM 335.

SOC 340 Peace and Conflict $\quad 5.0$ QH (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.

## SOC 345 Advanced Studies in Culture $\quad \mathbf{2 . 0 - 5 . 0}$ QH (SSCI )

Advanced analysis of cultures. The contents will vary, and the title will be extended to briefly describe the topic. May be taken more than once if topics differ.

Attempts to answer the question 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: SOC/WOM 170. Offered every other year. Also listed as WOM 360.

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.

## SOC 375 Globalization and Culture $\quad$ 5.0 QH (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. Also listed as GLBL 375.

## SOC 385 Ethnographic Research 5.0 QH (SSCI)

Ethnographic research is 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. Offered only on Principia Abroads.

## SOC 390 Independent Study 1.0-15.0 QH ( )

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 fifteen quarter hours. May be taken more than once if topics differ.

SOC 395 Internship
5.0-15.0 QH ( 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 quarter if the total quarter hours in that internship does not exceed 15 quarter hours. If an internship is extended beyond one quarter, the extension may be as few as two quarter hours. Offered on an independent contract basis.

## SOC 400 Senior Capstone Seminar 5.0 QH (SSCI )

Research projects which include the application of theory and library research to contemporary social issues.

## Spanish

## SPAN 101 Introduction to Spanish 5.0 QH ()

An introduction to Spanish and the skills required for learning a second language. For students without a strong language background, and with no previous study of Spanish.

## SPAN 102 Elementary Spanish 5.0 QH ()

An elementary course for students with some previous study of Spanish or other strong language background. Course sequence is completed with SPAN 103. Prerequisite: SPAN 101 or placement.

SPAN 103 Elementary Spanish 5.0 QH ( FLAN)
Continuation of SPAN 102. Fulfills the all-college language requirement in Spanish. Prerequisite: SPAN 102 or placement.

SPAN 110 Elementary Review
5.0 QH ( FLAN )

Review of first year Spanish, with emphasis on basic grammatical structure and on development of ability to speak Spanish. Fulfills all-college requirement for students entering Principia with insufficient preparation for exemption from further language study.

## SPAN 136 Language Wkshp Abroad: Elem 5.0 QH ( FLAN )

Elementary language study with native speakers at an academic institution in a Spanishspeaking country, in combination with on-campus study in the case of shorter stays abroad. Offered only on Principia Abroads. Prerequisite: SPAN 102, placement into SPAN 110, or equivalent.

SPAN 204 Grammar and Conversation 5.0 QH ()
Conversation, vocabulary and idiom building, grammar review. Prerequisite: SPAN 103, SPAN 110, or placement.

SPAN 205 Intermediate Review 5.0 QH ()
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 216 Oral Expression \& Conversation 5.0 QH ( )

Emphasis on a variety of activities developing oral expression, as well as listening comprehension. Prerequisite: SPAN 205 or placement.

## SPAN 220 Hispanic Civilization <br> 5.0 QH <br> ()

Listed basically as HIST 220.

## SPAN 225 Advanced Grammar \& Composition <br> 5.0 Q ( )

Translation and free composition, based on an intensive study of grammar, verbs, and idioms. Prerequisites: SPAN 204 and SPAN 216.

## SPAN 230 Hispanic Culture 5.0 QH ()

Backgrounds of Spanish and Spanish-American culture. Special focus on contemporary Spanish-speaking cultures, including Hispanic culture in the United States. Given in Spanish, with readings in Spanish and English. Prerequisite: SPAN 216.

SPAN 236 Lang Wkshp Abroad:Intermediate 5.0-10.0 QH () Intermediate language study with native speakers at an academic institution in a Spanishspeaking country, in combination with on-campus study in the case of shorter stays abroad. Offered for variable credit from five to ten quarter hours. Offered only on Principia Abroads. Prerequisite: SPAN 103, SPAN 110, or placement.

## SPAN 241 Phonetics \& Diction 1.0-5.0 QH ()

Theory and practice of pronunciation of the Spanish of modern Spain and Spanish-America. Tape and computer programs used for drill, recording, self-criticism. May be offered for variable credit from one to five quarter hours.

SPAN 260 Intro to Hispanic Literature 5.0 QH ( 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: three years of high school Spanish; SPAN 204; SPAN 216 when possible.

## SPAN 271 Classical Spanish Literature 5.0 QH ( WLIT )

Selected masterpieces of Spanish literature before 1700. Prerequisite: SPAN 260 or other experience reading literature in Spanish.

## SPAN 272 Modern Hispanic Literature 5.0 QH ( 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 306 Advanced Oral Expression 5.0 QH ( )

Advanced expression in Spanish through use of drama, video, simulated situations. Work with contemporary materials to learn to express and defend opinions on current topics in the Hispanic world and human experience. Prerequisite: SPAN 216.

Listed basically as EDUC 318F. Taught in English. Spanish credit will be given to students completing a project and a major paper in Spanish.

SPAN 325 Advanced Span Language Study
5.0 QH
()

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 336 Understand \& Speak Cont Span I 5.0 QH ( ) Continuing development of advanced conversational skills, with extensive training in aural comprehension of the language as used in different parts of Spanish-speaking world. Prerequisite: SPAN 316. Offered only on Principia Abroad.

## SPAN 346 Understnd \& Speak Cont Span II 5.0 QH ( )

Continuing development of advanced conversational skills with emphasis on understanding Spanish spoken by native speakers on any topic in normal, daily experience. Training in speaking Spanish with native fluency, intonation, and grammatical accuracy, and in using colloquial vocabulary. Prerequisite: SPAN 336. Offered only on Principia Abroad.

## SPAN 355 Spanish Film

5.0 QH ( )

The course will combine 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 will present either a brief acting project or a contemporary film from Spain or Latin America. Prerequisites: oral communication skills at least at the fifth year AP high school level or SPAN 216, along with some background in reading Spanish literature.

SPAN 360 Spanish Literature Seminar $\quad 1.0-5.0$ QH ( WLIT )
Seminar in a special topic of the literature of Spain or Spanish America. Examples: Cervantes' Don Quijote, contemporary Latin American short story. May be offered for variable credit from one to five quarter hours. May be taken more than once if topics differ. May be repeated up to a total of 15 quarter hours. Prerequisite: two previous literature courses taught in Spanish. Offered upon sufficient demand.

## 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 quarter in preparation for the annual conference.

SPST 280 Orientation Seminar: $\quad 1.0-2.0$ QH ( )
The orientation seminar is an opportunity for students to prepare academically, culturally, and logistically for upcoming abroads and field programs. Weekly 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. May be taken more than once if associated with a different abroad or field program. May be offered for variable credit from one to two quarter hours. There will be a significant additional academic component when the course is offered for two quarter hours. Prerequisite: acceptance on the associated abroad or field program.

## SPST 281 Reentry Seminar: 1.0 QH ( )

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 will interpret and articulate their growth and experiences. Technical and organizational skills needed to create a successful presentation will also be developed. Offered only in association with study abroads or field programs. Prerequisite: successful completion of the associated abroad or field program.

## SPST 284 Field Studies: 5.0 QH ( )

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. May be taken more than once if associated with a different location. Prerequisite: acceptance on the associated field program.

## SPST 285 Country Studies: <br> 5.0 QH <br> ()

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. May be taken more than once if associated with a different location. Prerequisite: acceptance on the associated abroad.

## SPST 290 Experimental Writing 1.0-2.0 QH ( )

This course is designed to help students explore the nature, theory, and practice of experimental writing. It will also help students expand the use of their voice(s) in written work. The primary application of experimental writing in this course is non-fiction academic prose. May be offered for variable credit from one to two quarter hours.

SPST 375 Internship: 5.0-15.0 QH ()
This course will provide an opportunity to gain practical experience in one's chosen field of study. The internship is designed for two purposes. It is offered on an independent contract basis for students who wish to design and complete an internship for their special major. Students wishing to incorporate an internship into their special major must work in collaboration with the special studies program chair, the internship coordinator, and their faculty advisor. The internship may also be utilized 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. May include a service-learning component. Not offered on an independent contract basis; however, students' work will include metacognitive journals, a portfolio of work, interviews with professionals, paper writing, and field sponsor supervision. May be taken for variable credit from five to fifteen quarter hours. May be taken more than once if the internships differ, up to a maximum of 25 quarter hours.

SPST 405 Capstone Project: $\quad 2.0-15.0$ QH () Capstone projects are selected in accordance with student qualifications, interests, and needs. Projects must be approved by the student's special major advisory committee. May be taken for variable credit from two to fifteen quarter hours. May be repeated, up to a total of fifteen quarter hours, with advisory committee approval. The contents will vary, and the title will be extended to briefly describe the topic. Open only to approved special majors nearing the completion of their program.

## Sports Management

## SMGT 180 Intro to SMGT: Facility <br> 5.0 QH

Course will give students hands-on opportunities to study the management of programs and their facilities including their mission, design, and organization in the educational, recreational and professional setting.

A comprehensive study of the theory and the methodology of exercise systems and how they affect athletic performance.

SMGT 260 Sport in Society
5.0 QH ( )

An introduction to the study of sport as a social phenomenon and as an important component of contemporary society. Students will have an opportunity to critically analyze a broad range of topics, including the history of sport and its development in western culture, gender equity, race and ethnicity, deviance and aggression, the business of sport, sport in the media, sport and religion, and sport in the 21st century.

## SMGT 288 Theory of Coaching 5.0 QH ( )

Study of the theory and philosophy of coaching. Further, students will learn the art of communication, leadership and team building, identify the pros and cons of competition, and uncover sport's spiritual dimension.

SMGT 360 Leadership 5.0 QH ( ) 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 Research Topics in SMGT
1.0-5.0 QH ( )

A research course in selected topics in sports management. May be taken for variable credit from one to five quarter hours. May be taken more than once if topics differ. May be repeated up to a total of five quarter hours. Offered on an independent contract basis only.

SMGT 450 Internship $5.0-15.0$ QH ( )
Field experience in sport management. Application of interpersonal and organizational skills, plus knowledge gleaned from courses. Includes field sponsor supervision, periodic self-assessment, final paper/project and regular faculty contact. May be taken more than once if the focus is different. May be offered for variable credit from five to fifteen quarter hours. An internship may extend beyond one quarter if the total quarter hours do not exceed fifteen quarter hours. Offered on an independent contract basis.

## Theatre and Dance

THEA 043 Dance: Ballet I
No Credit (PE )
Introduction to the basic principles and vocabulary of ballet. Flexibility, strength and control will be emphasized. Also listed as PE 043.

THEA 044 Dance: Ballet II No Credit (PE )
Provides the intermediate dancer with ongoing training in ballet technique. Emphasis is on center work and adagio. Also listed as PE 044.

THEA 045 Dance: Ballet III
No Credit (PE )
Provides the more advanced dancer with an upper level technique class emphasizing pointe work and petit allegro. Also listed as PE 045.

THEA 048 Dance: Jazz I No Credit (PE )
Introduction to the basic principles and vocabulary of jazz technique and rhythm. Also listed as PE 048.

THEA 050 Practicum: Mainstage (Cast) No Credit ()
Participation in a mainstage theatrical or dance practicum as a member of the cast.

Participation in a mainstage theatrical or dance practicum as a member of the creative design staff or management team.

THEA 053 Practicum: Studio (Staff) No Credit ( )
Participation in a studio theatrical practicum as a member of the creative or management staff.

## THEA 054 Practicum: Mainstage (Crew) No Credit ()

Participation in a mainstage theatrical or dance practicum as a technician.
THEA 055 Practicum: Studio (Crew) No Credit ()
Participation in a studio theatrical practicum as a member of the crew.

## THEA 080 Dance: Modern I No Credit (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. Also listed as PE 080.

## THEA 081 Dance: Modern II No Credit (PE )

Builds on the basic modern dance techniques and allows greater exploration of improvisation and movement sequences. Also listed as PE 081.

## THEA 082 Dance: Modern III No Credit (PE )

Continuation of THEA 081. Further development of modern technique and improvisation and floor work. Exploration of different styles of modern dance, e.g. Limon, Graham and others. Also listed as PE 082.

THEA 083 Dance as Movement No Credit (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.

## THEA 101 Acting I 5.0 QH ( )

Basic acting technique and improvisation methods. Includes voice work and stage movement.

## THEA 102 Oral Interpretation <br> 5.0 QH (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 104 Theatre Make-Up 5.0 QH ( )

The fundamental principles of the art and technique of straight and character makeup is studied and applied in this course. Emphasis is placed on researching and creating character studies in their historical and cultural context. Through demonstration, practical application, and experimentation the student will develop a personal approach to theatrical make-up design. Fee=\$75.00

## THEA 140 Stagecraft I 5.0 QH ()

An introduction to the technical areas of the theatre. This course may be divided into the study of the concepts of scene design, construction techniques, scene painting, basic lighting and, which also may include an introduction to vetorworks, computer design/ lighting. $\mathrm{Fee}=\mathbf{\$ 5 0 . 0 0}$

THEA 150 Voice and Speech
5.0 QH
( )
This course introduces the Linklater voice technique and is designed to "free the natural voice" of the student actor or public speaker. Through breathing, relaxation, alignment, and physical awareness exercises, students will increase their ability to be expressive and honest in their vocal communication. Texts used include poetry and dramatic literature.

## THEA 201 Acting II

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

5.0 QH ( WLIT )

A survey of dramatic literature from the beginnings to modern theatre. Representative plays will be read with emphasis on theatre as live performance. Discussions will explore the social context of the plays and performance. Prerequisites: THEA 101 and THEA 201.

## THEA 230 Theatre Movement 5.0 QH ()

Centers on movement forms inspired by the demands of the stage. The content varies, and the title will be extended to briefly describe the topic. Topics covered can include: Alexander Technique, LMA/Bartenieff, Suzuki/Viewpoints. May be taken more than once if the topics differ.

## THEA 240 Stagecraft II 5.0 QH ()

Continuing studies of design, construction, and lighting for stage from Stagecraft I. Students will also be introduced to the industry standard computer design program Vectorworks including basic projects in 3-D modeling. Prerequisite: THEA 140. Fee=\$50.00

## THEA 250 Dance History <br> 5.0 QH <br> ()

An introduction to dance history, specificallyWestern dance history. Periods covered include, but are not limited to, the Baroque era and Louis XIV, the Romantic era, the Classical/Imperial era and the Modern and Post Modern eras. Particular emphasis will be placed on ballet in western dance, but modern luminaries such as Isadora Duncan, Ruth St. Denis, Martha Graham, Doris Humphrey, Merce Cunningham and Paul Taylor will also be included. Video will be used in order to understand the differences between various periods of dance. There will also be an emphasis on placing various ballets and dances within their historical context and exploring how they connect to one another and to their culture and society.

## THEA 260 Theatre Seminar 1.0-5.0 QH ()

Group study of selected topics in theatre. See program faculty for topics and prerequisites. The title will be extended to briefly describe the topic. May be taken more than once if the topics differ.

## THEA 261 Renaissance and Modern Drama 5.0 QH ( LIT )

Study of about ten plays seen in performance, chiefly by the Royal Shakespeare Company in Stratford and London. The course involves the study of several of these plays as literature and in performance, with guest lectures and discussions with actors. Offered only on the England and Scotland Abroad.

## THEA 272 The History of Theatre

### 5.0 QH (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 will be studied. Prerequisite: completion of phase four of the all-college writing requirement.

THEA 285 Theatre Costuming
5.0 QH

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. Fee=\$60.00

## THEA 286 History of English Drama 5.0 QH ( LIT )

English drama from the medieval period to 20th century, including morality and mystery plays, Renaissance and Shakespeare, Restoration and 18th century, and 20th century. Dramatists may include Shakespeare, Marlowe, Congreve, Gay, Sheridan, Behn, Goldsmith, Wilde, Shaw, Pinter, Churchill and Stoppard. Also listed as ENGL 286.

THEA 301 Scene Study 5.0 QH ( )
This course in acting extends the performer's acting technique developed in Acting I and Acting II into the performance of scenes. These scenes will be worked on toward performance level, and students will participate in a final presentation at the end of the term. May be repeated for a total of fifteen quarter hours. Prerequisites: THEA 101 and THEA 201.

## THEA 312 Shakespeare's Hists \& Comedies <br> 5.0 QH ( LIT )

Listed basically as ENGL 312.

## THEA 320 Directing

5.0 QH
()

A history of theatre directing leading to a study of the fundamentals of play directing, especially focusing on the director's work with the actor, the playwright's text and design elements. Prerequisites: THEA 101, THEA 201, THEA 210, and THEA 301.

THEA 350 Practicum: Mainstage (Cast) $1.0-5.0$ QH ()
Practical application of classroom courses in performance areas of both dance and theatre. Students study and analyze text or choreography and the rehearsal process in preparation for performance. May be offered for variable credit from one to five quarter hours. May be taken more than once, but any combination of THEA 350, THEA 351, THEA 352, THEA 353, THEA 354, THEA 355, THEA 370, and THEA 371 may not exceed 15 quarter hours, ten of which may apply to the theatre major or minor.

THEA 351 Practicum: Studio (Cast) 1.0-5.0 QH ()
Practical application of classroom courses in a performance setting. Students participate as cast members. May be offered for variable credit from one to five quarter hours. May be taken more than once, but any combination of THEA 350, THEA 351, THEA 352, THEA 353, THEA 354, THEA 355, THEA 370, and THEA 371 may not exceed 15 quarter hours, ten of which may apply to the theatre major or minor.

THEA 352 Practicum: Mainstage (Staff) 1.0-5.0 QH ()
Practical application of classroom work in the management area including stage management, assistant direction, choreography, business management, publicity, etc. May be offered for variable credit from one to five quarter hours. May be taken more than once, but any combination of THEA 350 , THEA 351 , THEA 352, THEA 353, THEA 354, THEA 355 , THEA 370, and THEA 371 may not exceed 15 quarter hours, ten of which may apply to the theatre major or minor.

THEA 353 Practicum: Studio (Staff) 1.0-5.0 QH ()
Practical application of classroom courses in a performance setting. Students participate as staff: A.D., P.S.M., producers, designers, choreographers, etc. May be offered for variable credit from one to five quarter hours. May be taken more than once, but any combination of THEA 350, THEA 351, THEA 352, THEA 353, THEA 354, THEA 355, THEA 370, and THEA 371 may not exceed 15 quarter hours, ten of which may apply to the theatre major or minor.

## THEA 354 Practicum: Mainstage (Crew)

1.0-5.0 QH

Practical application of classroom work in technical areas including set and lighting design, construction and additional crew work. May be offered for variable credit from one to five quarter hours. May be taken more than once, but any combination of THEA 350, THEA 351, THEA 352, THEA 353, THEA 354, THEA 355, THEA 370, and THEA 371 may not exceed 15 quarter hours, ten of which may apply to the theatre major or minor.

## THEA 355 Practicum: Studio (Crew) 1.0-5.0 QH ()

Practical application of classroom courses in a performance setting. Students participate as crew members and technicians. May be offered for variable credit from one to five quarter hours. May be taken more than once, but any combination of THEA 350, THEA 351, THEA 352, THEA 353, THEA 354, THEA 355, THEA 370, and THEA 371 may not exceed 15 quarter hours, ten of which may apply to the theatre major or minor.

## THEA 370 Dance Practicum: (Cast) <br> 1.0-5.0 QH ( )

Practical application 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 five quarter hours. May be taken more than once, but any combination of THEA 350, THEA 351, THEA 352, THEA 353, THEA 354, THEA 355, THEA 370, and THEA 371 may not exceed 15 quarter hours, ten of which may apply to the theatre major or minor.

A production course designed to give students hands-on experience in assisting the director and in the business management of a production. Students will work closely with the director and in certain cases the technical director to learn what is involved in their area of putting on a dance production. Professionalism, self-discipline, strong communication skills and team work will all be stressed. May be offered for variable credit from one to five quarter hours. May be taken more than once, but any combination of THEA 350, THEA 351, THEA 352, THEA 353, THEA 354, THEA 355, THEA 370, and THEA 371 may not exceed 15 quarter hours, ten of which may apply to the theatre major or minor.

## THEA 401 Acting Seminar 5.0 QH ()

Advanced course in acting focused on specific performance problems and solutions. Areas to be covered will be scene study, style, audition techniques, improvisation, voice and movement. Subject matter will change each time the course is offered based on the needs of the students. Prerequisites: THEA 101, THEA 201 and THEA 301.

THEA 402 Spec Creative or Research Proj 5.0 QH ()
Advanced creative or research project in performance or scholarship. May be repeated for a maximum of fifteen quarter hours, five of which may apply toward the major or minor. Prerequisite: theatre major or minor.

THEA 494 Internship
5.0-15.0 QH ( )

Practical experience in one of the various areas of theatre (management, performance, technical theatre, or research and history). May be taken for variable credit from five to fifteen quarter hours.

## Women's Studies

WOM 170 Gender Paradigms 5.0 QH (SSCI)
Examines underlying assumptions about male and female roles throughout history, then focuses on contemporary issues. Addresses the questions of why status difference 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 SOC 170.
wom 200 Ethics: Women in the Bible
5.0 QH (BIBL)

This course allows students to become involved with moral reasoning in a specialized area of interest, specifically, relationships between women and men, and between women and God. A look at female experience in Scripture within the confines of a patriarchal society with focus on identifying and discussing various moral dilemmas in male/female relationships portrayed in both Old and New Testaments. Also listed as REL 200.

## WOM 220 Women in Sports 5.0 QH ()

This course offers a historical look at the development of sport in America. Further, it explores the role gender, race, and class play in determining access to participation. Some of the earliest female athletic stars, their feats and the media's portrayal of them are identified as well as the various organizations who tried to promote, regulate or suppress competition for women. Finally, the boom in women's sport participation brought about by the civil rights movement, the women's movement and Title IX are chronicled and the specific benefits sports offer to young women are explored. Also listed as SMGT 220.

WOM 222 Feminist Philosophy 5.0 QH (RPHL)
Listed basically as PHIL 222.
WOM 240 Women in Politics
5.0 QH (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. Also listed as POLS 240.

## WOM 335 Gender \& Masculinity 5.0 QH ()

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 period? Readings include representative selections of the diverse literature on men and theories of masculinity. Prerequisite: SOC/WOM 170. Also listed as SOC 335.

## WOM 360 Gender Theories $\quad$ 5.0 QH ( 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: SOC/WOM 170. Also listed as SOC 360.

WOM 365 Global Perspectives of Women
5.0 QH
( )
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 SOC 365.

WOM 410 Senior Seminar: Topics 5.0 QH ( )
The topics seminar serves to culminate the minor in women's studies. A topic is selected and treated in depth with readings and discussion. Students bring with them to the course depth and variety from two electives in women's studies. Prerequisites: WOM 170, WOM 360, and two electives in women's studies.

## World Literature

WLIT 131 Stories Around the Globe

### 5.0 QH ( WLIT )

Students will gain insight into different cultures as well as their own through careful reading and discussion of stories from different countries. The relationship between literature and culture will be explored in class discussions and writing.

WLIT 179 Reading French Society in Film 5.0 QH (WLIT )
This course will look at different aspects of French society through both literature and film. These texts will 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. Also listed as FREN 179.

WLIT 231 Themes and Forms $\quad$ 5.0 QH (WLIT )
Centers on a literary theme or form at the intermediate level. The contents vary and the title will be extended to briefly describe the topic or form.

## WLIT 421 Masterpieces of World Lit

## 2.0-5.0 QH (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 two to five quarter hours. Prerequisites: one English course and 3.0 GPA.

## Writing

## WRIT 098 Writing Seminar

No Credit ( WRS1)
The power of language to extend, shape, inspire, and clarify what we think and how we communicate is at the heart of the pre-fall writing seminar. During this intensive two-week workshop, students will explore a wide range of reading and writing experiences: creative, analytical, reflective, and experimental. Not only will students strengthen their skills in reading, writing, and thinking, but they also will 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 100 Phase One Strategies

2.0 QH (WRS1)

This course is designed for first-time college students entering college at the beginning of winter rather than fall quarter. This two-credit hour course offered during the term is designed to introduce students to many of the generative strategies taught in the two-week intensive pre-fall seminar (see course description for WRIT 098 above).

## SECTION 4

## Admissions and Finances

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 Sunday School or church.

## 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 there is an expectation that all applicants to Principia College must be active students of Christian Science. It is also expected 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. (i.e. March 1 for fall quarter enrollment).

## 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 US history)
- 2 or 3 years of the same foreign language
- 2 years of academic electives (from any of the five academic categories above)

See pages 192-193 for the Basic Mathematics Policy. All incoming first-time college students and transfer students are required to take a Basic Mathematics Placement Examination to determine current knowledge of basic mathematics and quantitative reasoning and numerical ability. This exam will be administered during new student orientation each quarter.

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 degree has been conferred; 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 optionalWriting 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<br>College Board SAT Program<br>PO Box 6200<br>Princeton, NJ 08541-6200

Phone: 609-771-7600
website: www.collegeboard.com
(Principia's College Board code is 1630.)

For the ACT:

## ACT Registration Department PO Box 414 <br> 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 Nigeria, Kenya and Ghana are 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. US citizens who attend secondary school outside of the US 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: 609-771-7500
Telephone: 609-771-7100
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(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 ACT examination, including the writing section.

## Foreign Language Achievement Test

There are two ways to fulfill Principia's foreign language requirement: to take foreign language courses at Principia or to demonstrate proficiency in a language beyond the basic level (usually third year of a high school foreign language).

Students wishing to demonstrate proficiency in a previously studied foreign language may "test out" of the foreign language requirement. This may be done in high school by taking the SAT College Board Subject Test in the language studied and by demonstrating a level consistent with the requirements of a one-year college course.

The SAT Subject Test in a foreign language is used only for demonstrating proficiency and for guidance in placement and does not affect the admissions decision. In addition to the SAT test, students also have the opportunity to be placed in language courses (or out of the requirement) with a language interview after they arrive on campus.

Students who have taken a foreign language but who have not reached this level of proficiency may elect, after placement testing, to continue in a language previously studied (French, German, or Spanish) to the 103 or 110 level. Students may also elect to begin a new language at Principia and complete the 101-102-103 one-year sequence in that language.

This policy also applies to transfer students who have not successfully completed a full year of a foreign language in college or high school.

## 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.applyweb.com/apply/prin/ 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 Whole Man scholarship requires submission of an essay and résumé which are evaluated by the Scholarship Committee based on published criteria. The priority deadline for the Whole Man scholarship is January 15. Submissions will also be considered after the March 1 regular admissions
deadline, and then as funds are available. (See pages 170-171 for more information on scholarships.)

Reference forms are also available as PDF files at www.applyweb.com/ apply/prin/. 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 Quarter | January 15: Priority consideration for the Whole <br> Man scholarship will be given to those who apply <br> by January 15. Submissions will also be considered <br> after the March 1 deadline, and then only as funds <br> are available. |
| :--- | :--- |
| March 1 for those applying for admission, scholar- |  |
| ship and financial aid. The online application will |  |
| be available September 1, at which time the rolling |  |
| admissions process will begin. |  |

For the most current information about the scholarship program, please visit www.prin.edu/college/admissions/.

## 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.prin.edu/college.

Winter or spring quarter 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 merit scholarship program, contact your admissions counselor or write to:

Office of Admissions and Financial Aid Principia College Elsah, IL 62028-9799<br>Admissions phone: 800-277-4648, ext. 2802<br>Admissions phone: 618-374-5181<br>email: collegeadmissions@prin.edu<br>FAX: 618-374-4000<br>website: www.prin.edu/college/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.

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, page 174). 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 pages 19 and 180 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.

Students currently enrolled in college and who are applying for winter quarter must submit midterm grades and comments from their professors by November 15 since a final transcript is not available from most colleges until late December.

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 may apply for fall quarter admission only and 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 February 1. 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:

Principia College<br>International Admissions Counselor<br>Principia College<br>1 Maybeck Place<br>Elsah, IL 62028-9703<br>USA<br>Telephone: +1-618-374-5179<br>e-mail: intladmissions@prin.edu<br>FAX:+1-618-374-4000<br>web site: www.prin.edu/college/admissions/int

## 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 an Office of Student Life suspension, 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 \$7 million in merit scholarships and need-based aid to approximately $89 \%$ of the enrolled students.

## Application Process

The average financial aid package including merit scholarships for incoming freshman last year was $\$ 21,455$. 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 twelve quarters. 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 mail or fax them to:

Principia College<br>Office of Admissions and Financial Aid<br>1 Maybeck Place<br>Elsah, IL 62028-9720<br>FAX: 618-374-5906

The Office of Admissions and Financial Aid would be happy to answer your questions at any time. You may reach us at 618-374-5187 or 800-277-4648 ext. 2813. Our email address is "finaid@principia.edu."

## 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

Every student must complete this application and return it directly to the Office of Admissions and Financial Aid. You can find this application online at www.prin.edu/college/admissions/finaid/.

## 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 accepted and upon receipt of all three documents mentioned above, the financial aid committee will notify students in writing about aid awarded.

## 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.

Tuition Reduction Work Plan (TRWP) - This program offers a matching grant for students' on campus employment in qualified positions. Please ask the Office of Admissions and Financial Aid for more information.

## Outside Resources

Students are encouraged to actively pursue outside sources of college funding from their community, employers, and civic organizations. A comprehensive list of resources may be requested by the Principia College Office of Admissions and Financial Aid.

## Conditions Governing Financial Aid Awards

Recipients of financial aid awards are required to maintain satisfactory academic progress (see page 188) 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.

Principia realizes that traveling to campus by car is often more economical than other means of transportation. However, financial aid recipients who have a car on campus must demonstrate wisdom and economy in their use of it. Any abuse of this privilege may result in closely monitored use of the car or in cancellation of the financial aid award.

## 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 | 1350 | 30 |
| Chairman's | $3 / 4$ tuition | 3.8 | 1300 | 29 |
| President's | $1 / 2$ tuition | 3.7 | 1250 | 28 |
| Dean's | $1 / 4$ tuition | 3.6 | 1200 | 27 |

All of these scholarships are available to first-time freshmen; the Dean's scholarship is available to transfer students as well.

## 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.

## Whole Man Scholarship

The Whole Man Scholarship is evidence of Principia's commitment to whole man character education. Prospective students who have already demonstrated outstanding service and leadership and are prepared to continue that demonstration at Principia College are encouraged to apply for this renewable scholarship. Scholarship recipients are awarded based on the quality and extent of their service and leadership. The annual value ranges from 1/4 tuition to full tuition. Please check with the Office of Admissions and Financial Aid for more specific details.

## DiscoveryBound National Leadership Council Scholarship

The Principia College DiscoveryBound National Leadership Council Scholarship recognizes the hard work and dedication of students graduating from the DiscoveryBound National Leadership Council (NLC) program. This multi-year leadership program is designed for Christian Science high school teens across the country and 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. 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 12 quarters 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 2009-2010 are as follows:

## Fixed Charges (Tuition, Room, Board, and Fees)

Fixed charges include tuition, standard meal allowance, and cost of residence on campus during each ten-week academic quarter (three per year), personnel and counseling services, participation in athletics, admission to all on-campus athletic events, admission to The Principia Concert and

[^0]Lecture Series, subscriptions to annual and weekly student publications and other services. They do not include books, personal expenses, laboratory and miscellaneous fees, or the cost of residence on campus between quarters.

## Resident Students

| Year | Quarter |  |
| :--- | ---: | ---: |
| Tuition ..................................................... $\$ 22,650$ | $\$ 7,550$ |  |
| Room and Board ............................................8,730 | $\underline{8,910}$ |  |
|  | $\$ 31,380$ | $\$ 10,460$ |
| Day Students |  |  |
|  |  |  |
| Tuition ....................................................... $\$ 22,650$ | Year | Quarter |
| \$7,550 |  |  |

This fee covers 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.

## Student Activity Fees

The student activity fee for resident and day students is $\$ 100$ per quarter or $\$ 300$ per year.

## Payments

Principia College students are responsible for their own financial arrangements with Billing Services, including completion of their online payment plan from a link in Self-Service Banner. They are expected to pay their bills by the due dates of each PrinBill.

All students must complete the following before attending class or sports camp:

- Choose a payment plan online or pay in full by first due date
- Submit a payment method (bank withdrawal, credit card payment, payment by check)
If the payment plan is not created by the start of an academic term, the student's registration will be dropped and the student will not be able to attend classes.


## 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. (From Purpose and Policies of The Principia)

## Monthly Billing Statements

Students will receive email communication when the monthly statement (PrinBill) 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 PrinBill and make online payments. The first payment of the school year is due by August 26. Communication regarding delinquent accounts is with the student.

## 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.

## 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). There are no fees for paying by electronic bank withdrawal. Payments must be received by the 26th of the month.

All checks written in payment of student accounts should be on U.S. banks, in U.S. dollars, and made payable to "The Principia."

Mailing Address:
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 plan classifies the amount as past due. Unless corrected, this could lead to financial suspension of the student. It is most 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 quarter's classes unless the account is current. Students whose accounts are past due at the end of the quarter 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 winter or spring quarter 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.

## Miscellaneous Fees and Personal Expenses

## Laboratory and Miscellaneous Fees

These charges, with a few exceptions, are due in full when billed each quarter.

## Per Quarter

- Student activity fee: $\$ 100$
- Athletics fee: \$15
- Technology fee: $\$ 15$


## Per Year

- Parking: \$100 (\$35 per quarter)
- Health Insurance Fee: \$400 (See Student Health Insurance Requirement, page 176.)


## Academic Fees

- Independent Study/Course Contract administrative fee: $\$ 300$ for any optional course
- Overload tuition fee: $\$ 505$ per quarter hour over 18 quarter hours
- Independent study off campus tuition fee: $\$ 505$ per quarter hour
- Internship for academic credit tuition fee: $\$ 505$ per quarter hour
- Principia Abroad administrative fee: $\$ 500$ per program
- Regular Audit: $\$ 100$ per course
- Credit by examination: $\$ 15$ per quarter hour


## 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: $\$ 5$


## Personal Expenses

Expenses for personal items, services, dues, books, etc., vary from perhaps $\$ 125$ to $\$ 150$ monthly. Generally, the biggest expense is books at the beginning of each quarter.

## How to Pay Miscellaneous Fees and Expenses

Students are expected to pay cash (or check or credit card) for their books, school supplies, fees, and other items and services available through the college bookstore 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.

## Student Health Insurance Requirement

Principia policy requires that all students attending the College have health insurance coverage in the amount of $\$ 90,000$ or more to insure care costs for injuries sustained in school-related activities. To ensure that students have the required coverage by the time they arrive on campus, the College automatically enrolls all students in the Principia Student Care (PSC) insurance program (PISC for international students), if verification of insurance has not been received by August 10. The charge for this insurance is $\$ 400.00$ and covers students in school activities during the period from the beginning of the athletic writing seminar in August through commencement in June. Each Principia student will be billed and enrolled in the College's plan unless he or she completes and submits the online Student Insurance Verification Form by August 10. (See www.principia.edu/insurance for the form and an explanatory letter.) The deadline for receiving the Student Insurance Verification Form for students entering the College winter quarter is December 20, and spring quarter, March 22. The fee will be prorated for winter and spring entrants. Refunds for late submissions of the Student InsuranceVerification Form are processed only at the beginning of the following quarter.

Please note that student athletes are not allowed by NCAA to participate in sports camps or competitions unless students are covered by health insurance.

## Responsibility of Parents or Guardians

Principia will email notification to each student when their monthly statement is available online. If a student has set up authorized users, they, too, will be sent this notification. It is understood that, unless the student is classified as independent, parents or guardians accept the responsibility for the payment of all charges, fees, etc., due in any quarter 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

## Tuition

In the event it becomes necessary that a student be withdrawn or dismissed before the close of a quarter for any cause whatsoever, refund of tuition is governed by the following policy:

- If the student withdraws before the first day of classes, there is no charge for tuition for the quarter or the term.
- If a student withdraws after the start of a quarter, a rebate of tuition will be made for that part of the quarter which remains following the student's departure.
- If a student withdraws from one or more classes after the first week, but remains enrolled, and this results in an underload; there will be no rebate of tuition.

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.

To withdraw from the college, the student must notify the Academic/ Transition 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 quarter becomes immediately due and payable.

## Room and Board

A rebate of room and board charges will be made for that part of the quarter which remains following the student's departure.

The reservation deposit is normally forfeited in cases of withdrawal or dismissal.

## Exceptions

Should you wish to ask for an exception to any of the rebate policies stated above, please contact:

Controller<br>The Principia<br>13201 Clayton Road<br>St. Louis, MO 63131-1099<br>314-275-3100

## 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 new student employees are required to engage in 150 hours of work in a service department (Dining Services or Facilities) within their first three quarters of employment.

All student employment is handled and approved through Human Resources for Hourly and Student Employment. Two-thirds of the students on campus are employed and are permitted to work up to fifteen hours per
week on campus. Students who qualify for the Tuition ReductionWork Plan (TRWP) through the Office of Admissions and Financial Aid are granted priority interviewing for available jobs. Jobs cannot be guaranteed for students not on TRWP. Job placements are made in a wide variety of departments such as, the Library, Bookstore, and Mail and Copy Services, in addition to service work in Dining Services and Facilities. There are some restrictions for fall quarter freshmen.

Students may qualify for the Tuition ReductionWork Plan (TRWP).TRWP is a self-help plan designed to help students whose need is greater than the aid available to them. Eligibility is determined by the Financial Aid Committee during its review of the student's financial aid application.

## 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.

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.

## Approval of Course Attributes

After consulting with the program faculty involved, the Curriculum Committee approves the attributes of courses for distribution requirements.

## 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 pages 189-190, Credit by Examination.

## 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 180 quarter hours, even if requirements for both degrees have been fulfilled. An individual who wishes to earn two degrees must successfully complete 225 quarter hours and spend a minimum
of seven quarters in residence. 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 48 Principia College quarter 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.

## Purpose of the Residency Requirement

We require a student to be enrolled for at least four quarters 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 three of the four quarters 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 Code of Conduct.

## Writing Program Policy (see pages 17-18)

1. First-time college students who enter Principia winter quarter must enroll in a designated writing course during their first quarter of enrollment.
2. Transfer students who have successfully completed (with a final grade of B or higher) a writing course at another college may be exempted from phases one and two, but must complete phases three through six. Transfer students who have not done so and enter in the fall quarter must enroll in the pre-fall Writing Seminar. Transfer students who have not done so and enter in the winter or spring
quarters need to enroll in a designated writing course during their first quarter of enrollment.
3. Students must complete phases four, five, and six for each major. When a student has multiple majors and the major faculty determine it is appropriate, the requirements for these phases can be coordinated and consolidated to avoid duplication.
4. Students who have not completed phase four by 89 quarter hours and have a documented need for additional, sustained writing instruction will be required to take a writing workshop each quarter until they complete phase four. Needs are typically documented through teacher evaluations and recommendations. These students will be registered automatically for the required workshop.
5. Students who do not complete phase four by the time they achieve 89 total (Principia and other) quarter hours will be given a phase four deadline alert which will remain in effect until phase four is completed or until they achieve 134 total (Principia and other) quarter hours. Students will receive written notification of this phase four deadline alert from the Writing Center at the end of each quarter.
6. Students who do not complete phase four by the time they achieve 134 total (Principia and other) quarter hours will be given a presuspension writing alert and must pass their phase four portfolios before achieving 149 total quarter hours to avoid writing suspension. Students will receive written notification of this pre-suspension writing alert from the Registrar along with a contract of conditions from the Writing Center.
7. Students who do not complete phase four by the time they achieve 149 total (Principia and other) quarter hours will be suspended and will be unable to register until phase four is completed. (See Writing Suspension, page 187.) In order to have time to complete phases five and six of the writing program in sequence before graduation, students are not allowed to enroll in their final two quarters without completing phase four. Students will be notified of writing suspension by the Registrar. The Writing Center will continue to work with students to develop a plan for completing this requirement during their suspensions.

## Graduation Honors

A student whose cumulative grade point average at graduation is 3.5 or better 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 better. Graduation honors are based on a student's college work at Principia.

## Commencement

Principia College holds an annual commencement ceremony in June. Students who have met all graduation requirements are eligible to participate. Students who graduate in September, December, or March are welcome to participate in the commencement ceremony the following June.

## Grades and Grading Rules

## Grade Reports

At midquarter and at the end of each quarter students may view their grade reports online through Self-Service Banner (SSB). To access SSB from on campus, click on the link to Self-Service Banner from prinweb. To access Self-Service Banner from off-campus, go to www.prin.edu/ssb. 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.

## Faculty Grade Deadlines

## For fall, winter and spring quarters:

Midquarter grades are due by 1:30 p.m. on the second working day after midquarter week so that advisors and students may have the grades during advising for next-quarter registration.

Final grades are due by 1:30 p.m. on the second working day after the last day of final exams. Academic standings are set on the third working day. Online access to grades is available at that time.

Notification of suspension and other academic standing changes is sent to students in writing after final grades are processed.

## Grades for June Graduating Seniors:

Final grades for June graduating seniors are due by 5 p.m. on the last day of finals.

## For Interterms:

Academic work for interterms (between regular quarters) must be completed before the next quarter begins. Final grades are due by 1:30 p.m. on the second day of the second week of the next quarter.

## 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 fourpoint scale, where one quarter hour with a grade of A earns 4.0 quality points. A five-quarter hour course with a grade of A earns 20.0 quality points, etc. A student's grade point average is computed by dividing the total quality points earned by the total quarter hours attempted.

Grade Meaning
Quality Points Earned 1 quarter hour 5 quarter hours

## Satisfactory

| A | Excellent | 4.00 | 20.00 |
| :--- | :--- | :--- | :--- |
| $\mathrm{~A}-$ |  | 3.67 | 18.34 |
| $\mathrm{~B}+$ |  | 3.33 | 16.67 |
| B | Good | 3.00 | 15.00 |
| $\mathrm{~B}-$ |  | 2.67 | 13.34 |
| $\mathrm{C}+$ |  | 2.33 | 11.67 |
| C | Satisfactory | 2.00 | 10.00 |

Unsatisfactory

| $\mathrm{C}-$ | 1.67 | 8.34 |  |
| :--- | :--- | :--- | :--- |
| $\mathrm{D}+$ | 1.33 | 6.67 |  |
| D | Deficient | 1.00 | 5.00 |
| $\mathrm{D}-$ |  | 0.67 | 3.34 |
| F | Failure; no credit | 0 | 0 |

## Withdrawn

(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 |

## Other grades

| I | Incomplete | 0 | 0 |
| :--- | :--- | :--- | :--- |
| S | Satisfactory (non-credit only) | 0 | 0 |
| U | Unsatisfactory (non-credit only) | 0 | 0 |
| $*$ | Course still in progress | 0 | 0 |

## Midquarter Grades

Midquarter grades are given to all students in all courses. Only the grades A through F (no I's or *'s) are appropriate for midquarter grades. S or U are appropriate as midquarter grades in non-credit courses only.

## Withdrawal Grades

Instructors may give withdrawal grades as final grades in courses that do not earn academic credit. Withdrawal grades are not to be given in academic credit courses unless requested by the Scholastic Committee through the registrar. (Also see Withdrawals, pages 193-194.)

## Star (*) Grades

This grade means the course is still in progress at the end of a quarter 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 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, winter and spring quarters and interterms must be resolved by the following mid-term. At that time a grade must be given, even if the grade is an F. An I must be resolved by an appropriate final grade.

If an extension beyond mid-term 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 midquarter grades. The extension should at no time go beyond one year after the quarter in which the I grade is given.

In order to allow evaluation of academic standing before a new quarter begins, incomplete (I) grades for students whose cumulative GPA is below 2.0 must be resolved within two weeks of the last day of the quarter in which the incomplete was recorded rather than at the following midquarter 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 may petition Scholastic Committee for withdrawal grades. (See pages 193-194.)

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 quarter when the incomplete was recorded rather than at the following midquarter 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-quarter 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 quarter can be made up by the end of the quarter.

Three examples of extenuating circumstances are:

1. student was called home for the last two weeks of the quarter;
2. student was in Cox Cottage the last week of the quarter;
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 quarter (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. Third-quarter sophomores, juniors and seniors whose cumulative grade point average is 3.700 or higher 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 quarter 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 135 Principia quarter hours.

## Dean's List

To be on the Dean's List, a student must be in good standing and earn a quarterly GPA of 4.0 in 12 or more quarter hours, or a quarterly GPA of 3.875 or better in 19 or more quarter 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 quarterly GPA of 3.5 or better in 12 or more quarter 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 quarter, after interterms, and when pending grades resolve) based on the minimum cumulative grade point average (GPA) scale outlined below. Total quarter 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 quarter begins, incomplete grades (I) for students whose cumulative GPA is below 2.0 must be resolved within two weeks of the last day of the quarter in which the incomplete was recorded rather than at the following midquarter when incompletes normally resolve.

## Good Standing

A student will remain in or return to good standing provided his or her cumulative GPA meets these requirements and the student is not on writing suspension:

| Total Quarter Hours Earned | Minimum GPA Required |
| :---: | :---: |
| $0-15$ | 1.500 |
| $>15-30$ | 1.600 |
| $>30-45$ | 1.700 |
| $>45-60$ | 1.800 |
| $>60-75$ | 1.900 |
| $>75-88$ | 1.950 |
| $>88$ | 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 quarter, 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 quarter just completed meets the minimum GPA requirement. A student
may not remain on academic probation for more than two consecutive quarters.

## 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 suspension, 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 quarter. At the end of the returning quarter, academic standing will be set according to the normal rules for academic standing.
Any student who has been withdrawn from Principia College for three quarters 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 one week before the beginning of the following quarter.

## Writing Suspension

Students who do not complete phase four of the all-college writing requirement by the time they achieve 149 total quarter hours will be placed on writing suspension and will be unable to register for further study until phase four is completed (See Writing Program Policy, pages 180-181.)

Students on writing suspension are not subject to the expectation of enrollment at another college, outlined for students on academic suspension, but must complete their phase four portfolio to be eligible to return. The Writing Center will continue to work with students on writing suspension to develop a plan for completing this requirement during their suspension. Any student who has been withdrawn from Principia College for three quarters or more while completing the writing requirement must re-apply through the Office of Admissions and Financial Aid.

## Academic Honesty Policy

A Principian is expected to pursue a life of integrity (see The Principia Pledge and Code of Conduct, pages 9-11.) Therefore academic honesty is essential to a Principia College education. Students are expected to refrain from cheating, plagiarizing, unauthorized sharing of work, any form of misrepresenting another's work as one's own, and helping others with any of these forms of dishonesty. Consequences for academic misconduct may include failure on the assignment and/or failure in the course.

Faculty are required to report incidents in violation of the academic honesty policy to the Scholastic Committee via the registrar. Further consequences may include suspension.

## Academic Progress Policy

Any student on good standing or 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, 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 quarter hour. On the average, one quarter hour equals one in-class contact hour plus two homework hours
per week for ten weeks, or 30 hours total. One quarter hour equals .667 semester hours.

One Principia PE non-credit course is equal to a minimum of 30 contact hours.

## Transfer Credit

Courses taken at other regionally 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. Transfer students must have official transcripts sent directly from their previous institution(s) to the Registrar's Office at Principia and must provide access to course descriptions. Transcripts from countries outside the United States must be evaluated by an approved evaluation service at the student's expense. If the transcript or course descriptions are not in English, a certified English translation must be submitted.

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. In all other cases, transfer courses receive elective credit only.

## 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.

## 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 demonstrates achievement at the grade B level (3.00) 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 179.

## 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 30 hours of work for every quarter 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 quarter hours specified on the contract for off-campus and interterm courses.

Independent study courses do not normally fulfill a distribution requirement, but with support of faculty in the appropriate department, a student may be granted an exception to this rule. Contracts fulfilling a distribution requirement must be representative of catalog-listed courses that satisfy that requirement.

Official forms for regular quarter 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 Drop/AddWeek. However, students need to be alert to earlier departmental and unit deadlines. 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 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 after considering input from the Writing Center.

## Registration Rules

## When to Register

## For fall, winter, and spring quarters:

Students who are on campus may register for the next quarter's classes during the eighth week of the current quarter. Others register on the first day of classes with the following exceptions: students who are on Principiasponsored off-campus programs may submit advance registration plans to the Registrar's Office; and students who are enrolled in off-campus internships or taking courses at another college or university for special majors may work with the Academic and Transition Advisor, who will help them register during the eighth week of the current quarter. New students have a special registration before classes begin their first quarter. Students who are required to register for writing workshops for the following quarter will be automatically registered for those courses during the sixth week of the current quarter so that they will be able to include that information in their advising plan for eighth week registration. (See Writing Program Policy, pages 180-181.)

## For Interterms:

Students may register for the next interterm's courses on the first day of the tenth week of the preceding quarter.

## Normal Load, Overload, and Underload

Normal load: 12 to 18 quarter hours.
Overload: more than 18 quarter hours.
Underload: fewer than 12 quarter hours.

## Normal load

The usual workload is 15 quarter hours comprised of three courses carrying five quarter hours each. But students may take as few as 12 or as many as 18 quarter hours without special permission. In addition, students often take a PE or other non-credit activity course.

Day students may register for an underload without special permission and pay for courses on a quarter hour basis.

## Overload

A student who wants to carry more than 18 quarter hours, must submit a petition to the Scholastic Committee. Petitions will be routinely approved if the student has a 2.0 G.P.A. or better and is in good standing. The maximum load is 20 quarter hours.

## Planned Underload

A resident student who wants to carry less than 12 quarter hours must submit a petition to the Scholastic Committee. Petitions for a minimum of ten quarter hours will be routinely approved for one quarter during the senior year for students in good standing, provided the underload will not impact the expected graduation date.

The Scholastic Committee may also recommend approval of underload petitions from resident students in good standing who do not meet the conditions above when exceptional circumstances warrant this special permission.

Students who plan to underload should consult the financial aid office regarding the financial implications including impact on financial aid awards.

## Basic Mathematics Policy

All incoming first-time college students and transfer students will take the Basic Mathematics Placement Examination to determine their current knowledge of and skills with mathematics and quantitative reasoning. Briefly, this means confidence and competence with elementary arithmetic, simple mental arithmetic, manipulating and using simple formulas, reading and interpreting data presented in tabular or graphic form, converting units of measure, and understanding the concept and use of ratios and proportions. This exam will be administered during new student orientation each quarter. Exempt from this examination are students who have passed a college-level calculus course from another accredited college, received a 3,4 , or 5 on either the AB or BC Advanced Placement (AP) Calculus Test, or received a 5, 6, or 7 on either the Standard Level or Higher Level Mathematics International Baccalaureate (IB) Test.

Students who score at Level 1 will be enrolled in a two-hours-per-week, non-credit tutorial course (MATH 099) to strengthen their quantitative reasoning skills. After completing the tutorial, these students will be enrolled in their choice of MATH 110 or MATH 111, which must be completed before the end of their first three quarters at Principia College. Students who fail the course must re-take the same course until they pass.

Students who score at Level 2 must enroll in their choice of MATH 110 (Applied Mathematics) or MATH 111 (Survey of Mathematics) in one of their first three quarters at the College. Students who fail the course must re-take the same course until they pass.

Students who score at Level 3 may enroll in any mathematics course of their choice for which they have the necessary prerequisites. These students are
considered by Principia College as adequately prepared in quantitative reasoning skills and knowledge to engage the entire curriculum of the College.

## Changes in Registration (Drop/Adds)

Changes in registration are made following consultation with an advisor. Since a student's registration is considered a contract, a change is valid or complete only if properly handled and recorded in the Banner Student data system. Information is published each quarter about when registration may be done online or in person through the Registrar's Office.

## Drop/Adds

Changes may be processed on drop/add days without charge and without withdrawal grade. After the first two days of the quarter, changes will only be allowed if the instructors whose classes are being added or dropped agree to give signatures. Some instructors will not give permission after the first few days of the quarter. The normal drop/add periods are:

- the first five days of each quarter,
- the first two calendar days of classes that begin meeting after the first week of the quarter,
- the first two days of each interterm.


## Late Registration Changes

A late registration fee is charged for all changes made after the drop/add deadline. (See page 175, Late registration fee.) 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 days, a student must petition the Scholastic Committee for approval.

## Withdrawals

Students desiring to withdraw from credit courses must petition the Scholastic Committee. (If the petition is to withdraw to an underload, please also see "Withdrawing during the quarter to an underload" below.) Students desiring to withdraw from non-credit courses do not need to petition Scholastic Committee if they receive permission from their instructor.

After the drop/add period, students are rarely allowed to withdraw from credit courses even if they stop attending a class. "Poor performance" and "personal choice" are not sufficient reasons for withdrawal grades. Withdrawals may be allowed for academically sound reasons.

Students not allowed to withdraw are held responsible for completing all course work. A student who stops attending class risks receiving an F. However, during the first seven weeks of the quarter, if a student stops attending all classes because he or she has voluntarily withdrawn from school,
withdrawal grades may be issued. If a student is suspended during the term and is asked to leave before the end of that term, no partial credit is awarded for the courses in progress. The student may not receive an incomplete grade for any course taken during the term but may petition Scholastic Committee for withdrawal grades only. If the student returns to the college after the suspension and wishes to earn any credit for a course taken during the quarter in which the suspension occurred, the student must repeat the entire course either through a regular course offering or by independent course contract if the faculty agrees. With department agreement, a student desiring to complete only the unfinished portions of a course that was in progress at the time of suspension may do so by independent course contract but may not receive credit for the portions of the course completed before the suspension. For example, a student suspended during the eighth week of the quarter may not receive more than $20 \%$ of the course credit unless repeating the entire course. The college is not obligated to offer courses specifically for this purpose.

Students who are allowed to withdraw from courses after drop/adds 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).

## Withdrawing during the quarter to an underload

A withdrawal from an academic course which leaves a student with an underload will not be permitted unless:

1. a Scholastic Committee petition and supplement for withdrawal, properly signed by the student's advisor and the instructor of the course from which the student wishes to withdraw, is delivered to the registrar; and
2. there is little or no evidence that the student's unsatisfactory performance is a result of a conscious choice, lack of effort, or lack of proper motivation; and
3. there is evidence that the student has worked consistently to master the course material and fulfill course demands (attendance, completion of written work, etc.); and
4. there is evidence that the student might earn a deficient grade in another course; and
5. the student makes a commitment to use the additional time gained from a withdrawal for academic skill-building or doing better in other courses; and
6. the Scholastic Committee determines that withdrawal will best serve the needs of the student.

## 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, page 175). The fee for one audit per quarter 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 quarter hours earned.

| Freshman | under 44 quarter hours |
| :--- | :--- |
| Sophomore | 44 quarter hours |
| Junior | 89 quarter hours |
| Senior | 134 quarter 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

A major must include no fewer than 40 quarter hours approved by the department concerned and may require as many as 60 quarter hours in the major discipline. Bachelor of Science majors require a minimum of 90 quarter hours in mathematics, computer science, and the natural sciences. No more than 100 quarter hours total may be required to complete a major program. (For example: a physics major might require 60 quarter hours of physics plus 30 quarter hours of math plus 10 quarter hours of chemistry.)

A minor is a concentration of 25 to 30 quarter hours, offered at the discretion of each program that offers a major. Minors in other programs must be approved by the Curriculum Committee.

Full descriptions of Principia's majors and minors begin on page 25.

## Arrival on Campus

New students must be on campus to attend the first scheduled orientation activity. All students must be on campus for the first day of classes. Students who need to arrive late for legitimate reasons must petition the Scholastic Committee for permission. All students who arrive late risk being dropped from their 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.

## 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 Practices and Games

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, three classes missed for athletic contests during the regular season are excused absences. Additional missed classes due to post-season play are excused absences as well (i.e. conference tournament, regional tournament, NCAA play).
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. Athletic practices are regularly scheduled from 4:15-6:15 p.m. If an academic or school-sponsored activity is scheduled, varsity athletes are not expected to attend.
4. 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.
5. No games or scrimmages will be scheduled during finals week. No practices will be held on Buffer Day.
6. Faculty are encouraged to communicate on an ongoing basis concerning any student-athlete whom they feel is not meeting his or her academic responsibilities.

## End of Quarter Assignments and Final Examination Scheduling Policy

## End of Quarter 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, beginning Thursday of week nine, 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 quarter hour per week. (See "Academic and Non-Academic Credit Rules," pages 188-191.) 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 quarter 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 coursework in advance, if they so choose.
4. Students who, for legitimate reasons, wish to reschedule their final examination must petition the Scholastic Committee. 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.
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, regulations, and procedures of the college require the approval of the Scholastic Committee. Petitions for exceptions are filed with the Registrar's Office.

## SECTION 6

## Trustees, Officers, and Administration

## Board of Trustees

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Steve K. Sydness
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Robert B. Schwentker
Secretary
Howard E. Berner Jr.
Chief Investment Officer
D. Douglas Gibbs

Chief Financial Officer
Lawrence E. Harrison
Assistant Secretary
P. Clay Jackson

Assistant Secretary
J. Bruce Preston

Assistant Secretary
Philip R. Riley
Assistant Secretary
Peter A. Stevens
Assistant Secretary

## Administration, The Principia

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Chief Executive/College President
Howard E. Berner Jr. Chief Investment Officer
Richard T. Booth Chief Technology Officer
Stephen A. Fulkerson
Director of Facilities
D. Douglas Gibbs

Chief Financial Officer
Gretchen Newby
Marketing Director
J. Bruce Preston

Chief Advancement Officer
Philip R. Riley
Principia Counsel
Peter A. Stevens
Executive Officer
Sara Thorndike
Controller
Marilyn J. Wallace
Head of School, St. Louis Campus

## College Administration

Dr. Jonathan W. Palmer
President
Dr. Scott L. Schneberger
Dean of Academics
Dr. Joseph M. Ritter
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
Director of Administration and Budget
Patricia W. Langton
Registrar

## Administration of the Academic Program

Scott L. Schneberger
Dean of Academics
Joseph M. Ritter
Assistant Dean of Academics
David R. McFarland
Creative Arts and Communication Unit Head
GregoryW. Sandford
Humanities Unit Head
Michael G. Booth
Mathematics and Natural Sciences Unit Head
Rosalind S. Hibbs
Social Sciences Unit Head
Suzanne K. Goewert
Academic Staff Unit Head

## SECTION 7

## Faculty

## Distinguished Endowed Faculty Chairs

## 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

William Martin and Mina Merrill Prindle Professor of Fine Arts John R. Near

Roy W. Johnson Distinguished Professor
Michael Rechlin

The year in parentheses, listed after individuals' names, indicates their first year of employment with The Principia. It does not necessarily indicate continuous employment.

James W. Bilsborrow (1983)
Professor of Business
Administration
B.S., Principia College;
S.T.B., Boston University;
M.B.A., Pepperdine University

Julie Blase (2002)
Assistant Professor of Political Science
B.A., University of Texas, Austin;
B.A., University of Texas, Austin;

Ph.D., University of Texas, Austin
Linda A. Bohaker (1996)
Associate Professor of Business
Administration
B.A., Principia College;
M.A.L.D., Tufts University;
A.M., Washington University

Michael G. Booth (2007)
Assistant Professor of Biology
B.S., Principia College;
M.S., M.Phil, Ph.D., Yale University

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
Patricia A. Brown (2001)
Associate Professor of Theatre
B.A., Principia College;
M.F.A., Roosevelt University

Duncan Charters (1974)
Professor of Foreign Languages B.A. (Hons.), M.A., Cambridge University;
A.M., Ph.D., Indiana University

George V. Cooke (1996)
Associate Professor of Mass
Communication
B.A.A., Ryerson Polytechnic

University;
M.A., Webster University;
M.F.A., Southern Illinois University, Carbondale

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[^0]:    * The costs listed are for the 2009-2010 academic year. 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 quarter. Notification of any necessary change in rates will be sent to you at least 30 days prior to the opening of the quarter.

