



PRINCIPIA COLLEGE
CATALOG

2017 - 2018

Principia College

**CATALOG
2017 — 2018**

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Cover: Principia College campus may be in the Midwest of the United States but Principia students are provided the opportunity of a campus that encompasses the world and to study with exceptional faculty on both abroad and field programs. The photographs on the front cover are a sampling of the places Principia students have studied around the world.

Top left: savoring a vista in Peru

Top right: learning to write in Chinese

Bottom left: riding camels in China

Bottom right: “timeless” view of Paris

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Academic Calendar for 2017-2018

Fall Semester 2017

Tuesday-Friday, August 8-11	New Faculty Orientation
Sunday, August 13	New international students arrive
Monday, August 14	Faculty return to College
Monday, August 14	New and returning student athletes arrive ¹
Monday, August 14	President's College Staff Chapel Meeting
Monday, August 14	Registration resumes for Fall 2017 classes
Monday-Friday, August 14-18	New International Student Orientation
Tuesday-Wednesday, August 15-16	Academic Deans' Workshop
Friday, August 18	New students arrive
Friday-Sunday, August 18-20	New Parent Orientation
Friday-Friday, August 18-25	New Student Orientation
Friday, August 25	Continuing students return
Monday, August 28	First day of classes
Friday, September 1	Summer interterm grades due by 9:00 a.m.
Friday, September 8	Convocation
Friday, September 8	Drop/Add period ends
Friday, September 8	Last day to submit late applications for January 2018 graduation
Friday, September 29	September graduation
Saturday-Tuesday, Sept 30-Oct 3	Fall break (no classes) (week 6)
Wednesday, October 4	College classes resume
Friday-Sunday, October 13-15	Homecoming
Monday, October 16	Midterm and incomplete grades due by 9:00 a.m.
Friday, October 27	Advising for Spring 2018 registration begins
Monday, November 6	Registration for Spring 2018 opens according to priority days
Friday, November 10	Last day to withdraw-Fall 2017 credit class
Friday, November 10	Internship contracts for Spring 2018 due to ACA by 5:00 p.m.
Friday, November 10	Type B unique independent course contract for winter interterm and Spring 2018 due to the Registrar's Office by 5:00 p.m.
Friday, November 10	Last day to petition to reschedule a final exam
Tuesday, November 21	Deadline for Spring 2018 extended study petitions
Wednesday-Sunday, November 22-26	Thanksgiving break (no classes)
Friday, December 8	Last day of classes
Monday-Wednesday, December 11-13	Final examination days
Wednesday, December 13	Graduation applications for January 2019 due
Monday, December 18	Final grades due by 9:00 a.m.

Friday, December 22

Registration for Spring 2018 closes at 5:00 p.m. (reopens January 8, 9:00 a.m.)

¹ Students participating in sports camps should check with their respective coaches for specific dates and times.

Spring Semester 2018

Monday, January 8	Registration resumes for Spring 2018 classes at 9:00 a.m.
Tuesday-Wednesday, January 9-10	New Faculty Orientation
Tuesday, January 9	New international students arrive
Wednesday-Saturday, January 10-13	New International Student Orientation
Monday, January 15	Faculty return to College
Tuesday, January 16	New students arrive
Tuesday-Wednesday, January 16-17	Academic Deans' Workshop
Tuesday-Friday, January 16-19	New Student Orientation
Friday, January 19	Joint Staff Meeting (Location TBD)
Saturday, January 20	Continuing students return
Monday, January 22	First day of classes
Friday, January 26	Winter interterm grades due by 9:00 a.m.
Wednesday, January 31	January graduation
Friday, February 2	Winter Convocation
Friday, February 2	Drop/Add period ends
Friday, February 2	Last day to submit late applications for May 2018 graduation
Friday, February 2	Last day to declare a major/minor for May 2018 graduation
Friday, February 2	Last day to receive transcripts from other institutions for students planning to graduate May 2018
Monday, March 12	Midterm and incomplete grades due by 9:00 a.m.
Monday, March 12	Last day to submit late applications for September 2018 graduation
Saturday-Sunday, March 17-25	Spring break (no classes) (week 9)
Monday, March 26	College classes resume
Friday, March 30	Advising for Fall 2018 registration begins
Friday, April 6	Last day to withdraw-Spring 2018 credit course
Friday, April 6	Internship contracts for summer interterm and Fall 2018 due ACA by 5:00 p.m.
Friday, April 6	Type B unique independent course contracts for summer interterm and Fall 2018 due to the Registrar's Office by 5:00 p.m.
Friday, April 6	Last day to petition to reschedule a final exam

Monday, April 9	Registration for Fall 2018 opens according to priority days
Thursday-Sunday, April 12-15	Parents' weekend
Friday, April 20	Deadline for Fall 2018 extended study petitions
Friday, May 4	Last day of classes
Monday-Wednesday, May 7-9	Final examination days
Wednesday, May 9	All work for any student expecting to graduate this term must be completed by 5:00 p.m.
Wednesday, May 9	Applications for May 2019 and September 2019 graduation due
Thursday, May 10	Graduating senior grades due by noon
Friday, May 11	Student Awards Ceremony
Friday, May 11	Commencement rehearsal
Friday, May 11	Baccalaureate
Saturday, May 12	Commencement
Monday, May 14	Non-graduating student grades due by 9:00 a.m.
Monday-Tuesday, May 14-15	Academic Deans' Workshop
Tuesday, May 15	President's College Workshop
Friday, May 18	Registration for Fall 2018 closes at 5:00 p.m. (reopens August 13, 9:00 a.m.)
Monday, May 21 - Friday, July 13	Summer online program dates
Friday, May 25	Summer online program drop/add deadline by 5:00 p.m. CDT
Friday, June 22	Summer online program withdrawal deadline by 5:00 p.m. CDT

Academic Calendar for 2018-2019

Fall Semester 2018

Tuesday-Friday, August 7-10	New Faculty Orientation
Sunday, August 12	New international students arrive
Monday, August 13	Faculty return to College
Monday, August 13	New and returning student athletes arrive ¹
Monday, August 13	President's College Staff Chapel Meeting
Monday, August 13	Registration resumes for Fall 2018 classes
Monday-Friday, August 13-17	New International Student Orientation
Tuesday-Wednesday, August 14-15	Academic Deans' Workshop
Friday, August 17	New students arrive
Friday-Sunday, August 17-19	New Parent Orientation
Friday-Friday, August 17-24	New Student Orientation
Friday, August 24	Continuing students return
Monday, August 27	First day of classes
Friday, August 31	Summer interterm grades due by 9:00 a.m.
Friday, September 7	Convocation
Friday, September 7	Drop/Add period ends
Friday, September 7	Last day to submit late applications for January 2019 graduation
Friday, September 28	September graduation
Saturday-Tuesday, Sept 29 - Oct 2	Fall break (no classes) (week 6)
Wednesday, October 3	College classes resume
Monday, October 15	Midterm and incomplete grades due by 9:00 a.m.
Thursday-Sunday, October 18-21	Homecoming
Friday, October 26	Advising for Spring 2019 registration begins
Monday, November 5	Registration for Spring 2019 opens according to priority days
Friday, November 9	Last day to withdraw-Fall 2018 credit class
Friday, November 9	Internship contracts for Spring 2019 due to ACA by 5:00 p.m.
Friday, November 9	Type B unique independent course contract for winter interterm and Spring 2019 due to the Registrar's Office by 5:00 p.m.
Friday, November 9	Last day to petition to reschedule a final exam
Friday, November 9	Deadline for Spring 2019 extended study petitions
Wednesday-Sunday, November 21-25	Thanksgiving break (no classes)
Friday, December 7	Last day of classes
Monday-Wednesday, December 10-12	Final examination days
Wednesday, December 12	Graduation applications for January 2020 due
Monday, December 17	Final grades due by 9:00 a.m.

Friday, December 21 Registration for Spring 2019 closes at 5:00 p.m. (reopens January 14, 9:00 a.m.)

¹ Students participating in sports camps should check with their respective coaches for specific dates and times.

Spring Semester 2019

Monday, January 14	Registration resumes for Spring 2019 classes at 9:00am
Tuesday, January 15	New international students arrive
Tuesday-Wednesday, January 15-16	New Faculty Orientation
Wednesday-Saturday, January 16-19	New International Student Orientation
Monday, January 21	Faculty return to College
Tuesday, January 22	New students arrive
Tues-Weds, January 22-23	Academic Deans' Workshop
Tuesday-Friday, January 22-25	New Student Orientation
Friday, January 25	Joint Staff Meeting (Location TBD)
Saturday, January 26	Continuing students return
Monday, January 28	First day of classes
Thursday, January 31	January graduation
Friday, February 1	Winter interterm grades due by 9:00 a.m.
Friday, February 8	Winter Convocation
Friday, February 8	Drop/Add period ends
Friday, February 8	Last day to submit late applications for May 2019 graduation
Friday, February 8	Last day to declare a major/minor for May 2019 graduation
Friday, February 8	Last day to receive transcripts from other institutions for students planning to graduate May 2019
Monday, March 18	Midterm and incomplete grades due by 9:00 a.m.
Monday, March 18	Last day to submit late applications for September 2019 graduation
Saturday-Sunday, March 23-31	Spring break (no classes) (week 9)
Monday, April 1	College classes resume
Friday, April 5	Advising for Fall 2019 registration begins
Thursday-Sunday, April 11-14	Parents' Weekend
Friday, April 12	Last day to withdraw-Spring 2019 credit class
Friday, April 12	Internship contracts for summer interterm and Fall 2019 due to ACA by 5:00 p.m.
Friday, April 12	Type B unique independent course contract for summer interterm and Fall 2019 due to the Registrar's Office by 5:00 p.m.
Friday, April 12	Last day to petition to reschedule a final exam

Monday, April 15	Registration for Fall 2019 opens according to priority days
Friday, April 26	Deadline for Fall 2019 extended study petitions
Friday, May 10	Last day of classes
Monday-Wednesday, May 13-15	Final examination days
Wednesday, May 15	All work for any student expecting to graduate this term must be completed by 5:00 p.m.
Wednesday, May 15	Applications for May 2020 and September 2020 graduation due
Thursday, May 16	Graduating senior grades due by noon
Friday, May 17	Student Awards Ceremony
Friday, May 17	Commencement rehearsal
Friday, May 17	Baccalaureate
Saturday, May 18	Commencement
Monday, May 20	Non-graduating student grades due by 9:00 a.m.
Monday-Tuesday, May 20-21	Academic Deans' Workshop
Tuesday, May 21	President's College Workshop
Friday, May 24	Registration for Fall 2019 closes at 5:00 p.m. (reopens August 19, 9:00 a.m.)
Monday, May 27-Friday, July 19	Summer online program dates
Friday, May 31	Summer online program drop/add deadline by 5:00 p.m. CDT
Friday, June 28	Summer online program withdrawal deadline by 5:00 p.m. CDT

Some dates on the 2018-2019 academic calendar are projections and are subject to adjustment.

Daily Schedule

Monday (M)		Tuesday (T)		Wednesday (W)		Thursday (R)		Friday (F)	
(M1) 8:00-8:50		(T1) 8:00-9:15		(M1) 8:00-8:50		(T1) 8:00-9:15		(M1) 8:00-8:50	
(M2) 9:00-9:50		(T2) 9:25-10:40		(M2) 9:00-9:50		(T2) 9:25-10:40		(M2) 9:00-9:50	
(M3) 10:00-10:50		Quiet Time: 10:50-11:10		(M3) 10:00-10:50		Quiet Time: 10:50-11:10		(M3) 10:00-10:50	
Quiet Time: 11:00-11:20		Open Time 11:20-11:55		CSO 11:00-11:50		Open Time 11:20-11:55		CS 11:00-11:50	
Open Time: 11:30-11:45				Open Time 12:00-12:45				Faculty Senate 12:00-12:50	
(M4) 11:55-12:45		(T3) 12:05-1:20		(MW) 12:55-2:10		(T3) 12:05-1:20		Open Time 1:00-2:10	
(MW) 12:55-2:10		(T4) 1:30-2:45		(M5) 2:20-3:10		(T4) 1:30-2:45		(M5) 2:20-3:10	
(M5) 2:20-3:10		(T5) 2:55-4:10		(M6) 3:20-4:10		(T5) 2:55-4:10		(M6) 3:20-4:10	
(M6) 3:20-4:10									
(M7) 4:20-6:30	(A7) 4:20-6:30 Athletics/ Music/ Theatre	(T7) 4:20-6:30	(A7) 4:20-6:30 Athletics/ Music/ Theatre	(M7) 4:20-6:30	(A7) 4:20-6:30 Athletics/ Music/ Theatre	(T7) 4:20-6:30	(A7) 4:20-6:30 Athletics/ Music/ Theatre	(A7) 4:20-6:30 Athletics/Music/ Theatre	
(M8) 7:30-10:20 pm		<p>Combination class times for appropriate schedule types: C1 = M1 + M2 = MWF 8:00 – 9:50 C2 = T1 + T2 = TR 8:00 – 10:40 C3 = T4 + T5 = TR 1:30 – 4:10 C4 = M5 + M6 = MWF 2:20 – 4:10 C7 = M6 + M7 = MW 3:20 – 6:30 C8 = T5 + T7 = TR 2:55 – 6:30</p> <p>Five semester hour courses only! C5 = M1 + T1 = MWF 8:00 – 8:50 and TR 8:00 – 9:15 C6 = M3 + T2 = MWF 10:00 – 10:50 and TR 9:25 – 10:40 C9 = M5 + T4 = MWF 2:20 – 3:10 and TR 1:30 – 2:45</p>							

Final Examination Schedule

Fall 2017 - Spring 2018

Time Slot	Meeting Days	Meeting Time	Exam Day	Exam Time
M1	Mon, Wed, Fri	8:00-8:50 a.m.	Wednesday	8:00-10:00 a.m.
M2	Mon, Wed, Fri	9:00-9:50 a.m.	Wednesday	10:30 a.m. -12:30 p.m.
M3	Mon, Wed, Fri	10:00-10:50 a.m.	Monday	8:00-10:00 a.m.
M4	Mon	11:55 a.m.-12:45 p.m.	Tuesday	6:00-8:00 p.m.
MW	Mon, Wed	12:55-2:10 p.m.	Monday	10:30-12:30 p.m.
M5	Mon, Wed, Fri	2:20-3:10 p.m.	Tuesday	8:00-10:00 a.m.
M6	Mon, Wed, Fri	3:20-4:10 p.m.	Tuesday	10:30 a.m.-12:30 p.m.
M7	Mon, Wed	4:20-6:30 p.m.	Monday	6:00-8:00 p.m.
M8	Mon	7:30-10:20 p.m.	Monday	3:30-5:30 p.m.
T1	Tues, Thur	8:00-9:15 a.m.	Wednesday	1:00-3:00 p.m.
T2	Tues, Thur	9:25-10:40 a.m.	Wednesday	3:30-5:30 p.m.
T3	Tues, Thur	12:05-1:20 p.m.	Monday	1:00-3:00 p.m.
T4	Tues, Thur	1:30-2:45 p.m.	Tuesday	1:00-3:00 p.m.
T5	Tues, Thur	2:55-4:10 p.m.	Tuesday	3:30-5:30 p.m.
T7	Tues, Thur	4:20-6:30 p.m.	Tuesday	6:00-8:00 p.m.
A7	Any day	4:20-6:30 p.m.	Monday	6:00-8:00 p.m.

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

General Information

Catalog 2017-2018

Principia College
One Maybeck Place
Elsah, Illinois 62028
Phone 618.374.2131
FAX 618.374.5122

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. Principia does not discriminate on the basis of gender, race, age, disability, color, military or veteran status, national origin or ethnicity 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.

Accreditation

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

www.ncahlc.org

800.621.7440

College Mission and Vision

Mission

“The Principia shall seek to serve the Cause of Christian Science through appropriate channels open to it as an educational institution.” (Policy 1 (p. 244))

Vision

Principia is a Christian Science community of practice where all members are students, teachers, and healers. Through transformative opportunities, a challenging curriculum, and character education based on the teachings of Christian Science, we examine, test, and strengthen our faith while developing the skills and

understanding requisite for excellence. As global, outward-looking, inspired learners, we serve and better the world.

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 in Elsah, Illinois, graduated its first class.

From those early days, Principia has grown to two modern campuses enrolling about 900 young Christian Scientists from states coast to coast and many other countries around the world.

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 and Policies (p. 244) can be found in this catalog. They can also be found in *Education at The Principia* by Mary Kimball Morgan, and *As the Sowing* by Edwin S. Leonard Jr., along with more information on Principia's history.

Institutional Affiliation

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

About Academics

Principia College offers academic programs leading to a Bachelor of Arts (p. 34) or a Bachelor of Science (p. 35) degree. Each of these degrees has its own requirements, described in the academic programs section of this catalog.

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

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

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

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

Each incoming student works closely with a new-student advisor in the Academic and Career Advising (ACA) department. These professionally trained advisors help students select courses, explore possible majors, start to connect skills and interests to potential career ideas, and develop an educational plan which includes extra curricular activities. An emphasis is placed on integrating academic and career components, intentionally planning courses and other college experiences with post graduation pursuits, and developing students' abilities to communicate in a professional manner. Students may declare a major at any time after their first term begins, although it is recommended they declare during their second term. Once a major has been declared, the student will be advised by a faculty member in that academic program.

Faculty in the Center for Teaching and Learning (CTL) support students of all academic levels by offering one-on-one sessions, workshops (including regular WISE write-in workshops and various learning communities), and training in study and time management skills. The Center also offers programming for scholastic enrichment, as well as for-credit courses in writing, academic literacy/reading, and quantitative reasoning for all students. CTL trains and hires writing/research tutors to guide their peers through the paper-writing process. CTL sponsors a student academic peer mentor program. Students who are conditionally admitted for academic reasons, those on academic probation, and students with a cumulative grade point average of less than 2.0 are required to attend CTL sessions and improve their learning skills.

Majors, minors, and courses available at Principia College are described in the Departmental Programs (p. 36) pages of this catalog. Students desiring to go beyond regular curricular offerings should consult the sections in this catalog on independent study (p. 232) and individualized majors (p. 83).

Principia also offers three types of off-campus programs: Principia Abroads, field programs, and academic internships. See Off-Campus Programs (p. 120).

About Athletics

Intercollegiate Athletics

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

Principia offers nine intercollegiate programs for women and eight for men. There are women's teams in volleyball, soccer, cross-country, swimming and diving, tennis, indoor track and field, outdoor track and field, softball, and beach volleyball. Women also compete in club lacrosse. Men compete in soccer, cross-country, basketball, swimming and diving, baseball, tennis, and indoor and outdoor track and field. Men also compete in rugby. Principia is a member of the National Collegiate Athletic Association (NCAA) Division III, the St. Louis Intercollegiate Athletic Conference (SLIAC), and USA Rugby. For information about any of the above-mentioned sports including schedules and rosters visit www.principiaathletics.com.

Physical Education

Principia provides students with a broad-based curriculum of lifetime physical education courses which support the graduation requirement. (See Liberal Arts Distribution Requirements (p. 25) for a description of the GEPE attribute. See Physical Education: Activity Courses for a list of PE courses.)

Intramural Sports

Student Life offers an active program of intramural athletics. Sports played in intramurals include soccer, beach volleyball, and basketball. Students participating enjoy friendly competition generally organized by house.

College-Wide Student Learning Outcomes

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

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

1. Demonstrate a depth and breadth of knowledge.
2. Demonstrate critical and generative thinking.
3. Demonstrate the ability to communicate effectively.
4. Be intentional learners.

5. Be effective members of communities.
6. Act on the basis of Principle.

Principia College Student Ombudsman

The Principia College Student Ombudsman is available to listen to and assist students who have tried unsuccessfully to resolve an issue regarding their experience at Principia through other channels. The ombudsman works with students to help them resolve their issues whether they are with a peer, a faculty member, an advisor, or a Residential/Community Educator (RCE).

The ombudsman treats each situation with confidentiality and neutrality, helping the student understand and clearly state the issue, encouraging a metaphysical approach, as well as informally assisting the student.

The four key principles under which the College Student Ombudsman operates are confidentiality, neutrality, informality, and independence.

Confidentiality is maintained at all times unless there is imminent danger to the student (or others), or the student gives permission to share information. The College Student Ombudsman strives to remain neutral and does not advocate for one side or the other. The ombudsman operates informally; therefore no records are kept about individual cases other than to report trending data anonymously to administration. If the resolution leads to a formal process, the student pursues that action independently with the appropriate party.

The College Student Ombudsman may be contacted by emailing StudentOmbud.College@principia.edu.

Career Planning Services

During the first year, each student has the opportunity to work closely with an Academic and Career Advisor. These professionally trained advisors help students explore possible majors, start to connect skills and interests to potential career ideas, and develop an educational and career plan which also includes extra curricular activities. The ACA Office services include: tools for self-assessment and major/career exploration; academic/career planning; assistance with internships and Research Experiences for Undergraduates; résumé/cover letter writing; online portfolios; interview preparation; social media; and career/graduate school exploration and preparation.

Career Courses offered by ACA also support this preparation and include: CAR 101 You. Your Major. Your Career, CAR 201 Navigating Internships, CAR 091 Career Conference, and CAR 301 Investigating Career Options.

Principia Standards

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

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

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

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

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

The Spirit of the Golden Rule & the Matthew Code

Principia embraces the spirit of the Golden Rule (Matthew 7:12; see also *Science and Health* 497:26) and the Matthew code (Matthew 18:15-17). These are valuable tools for resolving conflict in any Christian community; they direct us to love our neighbor (each other) enough to take our concerns to one another and treat others as we would like to be treated. If you would like support in thinking through how to honor these foundational Christian teachings, please ask for support from a coach, professor, dean, or anyone in Student Life.

The Principia Student Community Commitment

A Requirement for Remaining Enrolled at Principia

Students sign the Principia Student Community Commitment found here (<http://admissions.principiacollege.edu/communitycommitment>). The key points are:

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

Academic Integrity and Progress

A Principian is expected to pursue a life of integrity. See the Principia Student Community Commitment (p. 17). Therefore academic honesty is essential to a Principia College education.

Students are responsible for doing their own academic work and making satisfactory progress. Instances of cheating or plagiarism are referred to the Scholastic Committee. Poor academic performance or a breach of academic integrity could result in academic suspension. For more information see Academic Standing (p. 229). Students on academic suspension are not allowed to remain in campus 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. Financial suspension means that a student may not stay or work on campus or return to campus for classes. Falsification of information on applications for financial aid or scholarships may result in social discipline and/or the loss of Principia-provided aid (scholarships, loans, need-based grants, work-related grants, or an employee tuition discount).

Spiritual Defense & Reliance

Spiritual Defense

Principia needs and expects every student to join faculty and staff in contributing to the spiritual strength and well-being of our community. Opportunities and proven ways of doing this include:

- Study of our Pastor and the Bible Lesson
- Prayer-based focus during the three Quiet Time periods each week:
 - Mondays 11:00 - 11:20 a.m.
 - Tuesdays/Thursdays 10:50 - 11:10 a.m.
- Support for church; for example, attending church, Sunday School, CSO
- Participation in weekly EMC offerings (Exploring Metaphysical Concepts)
- Finding inspiration, comfort, and joy in Hymn Sings
- Use of Christian Science Study Rooms in each house and around campus (with study materials including JSH-online in many)

Spiritual Reliance

Of Principia's 23 foundational Policies, which all students, faculty and staff have committed to, Policy 4 (p. 244) provides that "Members of the faculty, staff and student body will be expected to rely on Christian Science for healing."

For more information, please refer to the Student Right to Know (<http://admissions.principiacollege.edu/srtk>) webpage.

Prevention of Graduation related to non-academic standards/policy violations

A graduating senior found responsible for the following 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 disciplinary conditions have been met:

- A violation of Principia social standards
- A violation of Principia's policies related to and including, but not limited to harassment, sexual harassment, sexual assault, hazing, bullying and discrimination.

Parental Notification

Principia reserves the right to contact parents as it deems appropriate in disciplinary situations and in health-related challenges. When a case is forwarded to Formal Discipline, the charged student(s) will be required to inform their parents of the possible impending disciplinary consequences.

About Campus Resources

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

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

Computer Facilities for General Use

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

School of Nations

The School of Nations building is noted for its unique classroom atmospheres. Eight rooms have been designed to capture the architectural flavor of different countries. England, France, Japan, and Spain rooms are located on the main floor and Arabia, Germany, India, and Russia rooms are located on the second floor. The nationality rooms are a gift of Mrs. Hazle Buck Ewing, founder and sponsor of The School of Nations at The Principia. They express her love and deep interest in promoting a better understanding of the major cultures of the world.

The School of Nations building also houses the 21st Century Classroom with the latest in classroom technology.

School of Government

The School of Government building is located in the heart of the academic part of campus. It houses administrative and faculty offices, Admissions and Financial Aid, The Center for Teaching and Learning (CTL), and seven classrooms. The terrace level is where you will find the Academic and Career Advising Office, the Registrar's Office, and the Terrace Conference Room. The flagpole is a common meeting place which sits just outside the east side of the building. A covered breezeway, where each year we welcome new students to the campus in the fall and seniors take their

final walk to graduation in the spring, connects the School of Government to the entrance of Cox Auditorium.

Science Center

The Science Center was completed in August 1997 and houses programs in biology and natural resources, chemistry, computer science, earth science, engineering science, mathematics, physics, and sustainability. The facility contains modern labs in each program, a tropical aviary, a greenhouse, computer facilities, a Principia ice-age Mammoth display, 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.

Marshall Brooks Library

The Marshall Brooks Library supports and enhances the mission of Principia College by creating an atmosphere conducive to learning and reflection. The library promotes information literacy, the preservation of culture, and the creation of knowledge by providing access to quality collections, instruction, services and spaces. Open seven days a week during the term, the library offers an extensive book collection, over 1,500 DVDs and over 7,500 streaming video titles, private study carrels, reservable rooms for group meetings, presentation suites, and a host of computers, laptops, printers, and a high-speed scanner. The library participates in the I-Share system with 85 other Illinois libraries which provides our students access to over 38 million items via our daily weekday courier service. The library also offers access to over 59,000 electronic journals and over 300,000 e-books through its website, library.principiacollege.edu.

The resources go beyond those of a traditional library to include the Principia Archives and the Special Collections of artifacts, fine art, rare books, and manuscripts in support of scholarly research. Library faculty partner with classroom faculty to provide tailored library instruction sessions across the curriculum. During the day, the library is staffed by professional researchers who are available in person, online, or by phone to assist with research. In the evening, the library is staffed with peer tutors who can assist with writing and research.

Davis-Merrick Center for the Performing Arts

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

The Davis Music Wing contains listening rooms, a state-of-the-art audio/visual-equipped classroom, an electronic music studio, ten practice rooms, an ensemble rehearsal room, teaching studios, and Davis Music Hall, serving performance, rehearsal, and classroom needs and equipped with a large-screen audio/visual system. Principia College is designated an “all-Steinway school” because of its numerous Steinway pianos throughout the Music Department and in Wanamaker Hall. A Steinway concert grand piano is located in Cox Auditorium. A concert practice carillon is housed in Davis, and carillon lessons are available free of charge.

In addition to the Davis-Merrick facilities, the Jean L. Rainwater Carillon, with 39 Eijsbouts bells, and the 34-rank Martin Ott tracker pipe organ are housed in the College Chapel. The world-class 56-rank Casavant tracker pipe organ was installed in Cox Auditorium in 2006.

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

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

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

Athletic Facilities

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

Howard Center

Howard Center, referred to as “the concourse,” is a center for student activities. The Dining Room, Piasa Pub, Student Activity Center, Perry Lounge, College Store, Information Booth, and student mailboxes are housed on the upper level. Mail & Copy Services, Campus Security, Housekeeping, Workplace Safety, and the Jam Factory (a small live performance venue) are located on the lower level.

All-College Degree Requirements

Introduction

Principia offers academic programs leading to the Bachelor of Arts or Bachelor of Science degree. This section describes degree requirements, the programs through which these requirements are met, and the intended student learning outcomes associated with specific programs. See Summary of Degree Requirements - Bachelor of Arts (p. 34) or Summary of Degree Requirements - Bachelor of Science (p. 35) for a summary of degree requirements described here in full.

Student Responsibility

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

Academic Course Requirements

- Major - In order to ensure depth of study, a student must complete one of the majors corresponding to the degree being pursued. All the majors available at Principia are listed on the Departmental Programs (p. 36) page and are described on the individual program pages.
- General Education Requirements (p. 25)

Total Semester Hours

A student must earn a total of 120 semester hours. Transfer work, credit by examination, Advanced Placement, College Level Examination Program (CLEP), and International Baccalaureate Examination credits may be included according to the regulations governing these options found on the Academic and Non-Academic Credit Rules (p. 232) page.

Grade Point Average

At the time of graduation from Principia College a student must have an overall grade point average of 2.000 (the equivalent of a C average) or higher. Only grades earned in credit courses at Principia College are used in computing the grade point average. See also Grades and Grading (p. 225).

Residency

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

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

Purpose of the Residency Requirement

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

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

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

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

Dilemmas & Decisions (D&D) Seminar

Values-based decision making is an essential element of the development of character, which according to Principia's founder, is the "most important work that Principia has to do" (*Education at the Principia*, p. 77). The D&D seminar meets for a total of 30 hours essentially evenly distributed over the student's time at Principia. During the seminar, students will:

1. Articulate basic concepts of values, dilemmas, and decisions
2. Apply various tools to ethical dilemmas and assess comparative value systems
3. Demonstrate an understanding of the importance of morality and ethics to Christianity and Christian Science

General Education Program

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

- Distribution requirements
- Proficiency requirements
- Skill development requirements

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

The general education program is designed to meet the academic components of the College-Wide Student Learning Outcomes (p. 15).

Liberal Arts Distribution Requirements (LADR)

The distribution requirements at Principia College are designed to provide breadth across a variety of disciplines in designated academic areas of the liberal arts. In addition, students fulfill a non-credit distribution requirement in physical education. The outcomes for these courses are listed below. Each LADR course (with a GEA, GEH, etc. attribute) must address all the outcomes listed below for that area requirement. At least one LADR in each category must be taken at Principia College after Fall 2011.

Arts [GEA course attribute]

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

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

Humanities [GEH course attribute]

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

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

Math and Natural Sciences [GESL, GESN course attributes]

The study of natural sciences and mathematics helps to develop scientific literacy, defined by the National Academy of Sciences as "...the knowledge and understanding of scientific concepts and processes required for personal decision making, participation in civic and cultural affairs, and economic productivity."¹ It also cultivates understanding of and care for the environment; it motivates ethical decisions, and integrates critical and scientific thinking into every educational experience.

Students completing a natural sciences general education lab (GESL) requirement will be able to:

1. Demonstrate scientific literacy¹
2. Demonstrate competence in the scientific method

Students completing a natural sciences general education non-lab (GESN) requirement will be able to:

1. Demonstrate scientific literacy¹

¹ As defined by: National Academy of Sciences (1996). National Science Education Standards (Report). National Academy Press. Wash. D.C. 262p. <http://www.nap.edu/catalog/4962.html>.

Social Sciences [GESS course attribute]

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

1. Generate questions and hypotheses about causes of human behavior.
2. Evaluate forces, needs, and/or beliefs influencing human behavior.
3. Describe social science methods used to study human behavior.
4. Recognize patterns within a set of observations/data about human behavior.
5. Articulate theories of human behavior.

Bible [GEB course attribute]

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

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

Mathematics [GEM course attribute]

The ability to reason quantitatively in a "data-informed" society is essential. Students completing the general education requirements for both a Bachelor of Arts and a Bachelor of Science degree will be able to:

1. Apply proportional reasoning to solve problems.
2. Draw inferences from data and spatial information.
3. Reason confidently, accurately, and effectively with numbers and formulas.

In lieu of taking a GEM course at Principia, students may satisfy the GEM requirement in one of the following ways:

- A score of 3 or greater on AB or BC Calculus Advanced Placement Examination.
- A score of 4 or greater on International Baccalaureate (IB) Examination in Mathematics (higher level).
- Transfer credit from an accredited institution in a mathematics course that meets or exceeds the GEM outcomes.

Physical Education [GEPE course attribute]

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

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

Bachelor of Arts (B.A.) Liberal Arts Distribution Requirements (LADR)

- 8 courses selected from these academic areas as follows:

2 Arts [GEA attribute] ¹

2 Humanities [GEH attribute] ¹

2 Natural Sciences, 1 of which must be a lab course [GESL attribute for labs; GESN attribute for non-labs] ¹

2 Social Sciences [GESS attribute] ¹

¹ Each of these two courses must be from a different discipline.

- 1 Bible [GEB attribute]
- 1 Mathematics [GEM attribute]

Each credit course must be 3 semester hours or more

- 2 PE [GEPE attribute]

GEPE courses are non-credit and require a minimum of 42 contact hours

Any non-credit courses to be completed are in addition to the 120 academic hours required for graduation

Bachelor of Science (B.S.) Liberal Arts Distribution Requirements (LADR)

- 5 courses selected from these academic areas as follows:

Each of these five courses must be from a different discipline:

1 Arts [GEA attribute]

1 Humanities [GEH attribute]

1 Social Sciences [GESS attribute]

2 courses from any of these areas [GEA, GEH, GESS attributes]

- 1 Bible [GEB attribute]
- 1 Mathematics [GEM attribute] (May be fulfilled within major requirements)
- Additional 24 semester hours of Math and Natural Sciences courses outside the major discipline (must include one lab course outside the major)¹

¹ B.S. Majors may not count MATH 110 Mathematical Applications or MATH 111 A Survey of Mathematics as part of the 24 SH outside their discipline. B.S. majors should ask their advisor(s) for the complete list of courses that count toward these 24 SH.

Each credit course must be 3 semester hours or more

- 2 PE [GEPE]

GEPE courses are non-credit and require a minimum of 42 contact hours

Any non-credit courses to be completed are in addition to the 120 academic hours required for graduation

Skill Development and Proficiency Requirements

Skill Development Requirements

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

First Year Experience (FYE) Program

All first-time college students and non-exempt transfer students (see below) must enroll in a First Year Experience Program. An FYE program consists of either a "1+1" FYE program that consists of one LADR course (p. 25) and one Integrated Learning Course (ILC) or three courses: two thematically-linked LADR content courses from different disciplines and one Integrated Learning Course (ILC) that embeds skill development within the content of the two LADR courses. The ILC course is listed as GEN 101 (p. 160). The FYE program is designed to enable students to enter the academic conversation, focusing on the goals and outcomes below.

Overarching Goals of FYE

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

Outcomes for FYE/ILC

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

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

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

Proficiency Requirements

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

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

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

- Second Language
- Writing

Second Language

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

Outcomes for Second Language

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

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

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

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

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

Writing

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

1. Students will demonstrate their understanding that writing is a tool for thinking by:

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

Writing Proficiency Requirement

All students will fulfill the writing proficiency requirement by submitting the following:

- Baseline Writing Sample
- Writing Fundamentals Portfolio
- Writing Major Portfolio

Writing Program Policy

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

that the student has demonstrated a satisfactory level of competence in writing required by the student's discipline.

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

Summary of Degree Requirements: Bachelor of Arts

Completion of one B.A. major

120 semester hours

2.000 minimum cumulative GPA

Residency

Dilemmas and Decisions

General Education Requirements

B.A. Liberal Arts Distribution Requirements (LADR)

- 8 courses selected from these academic areas as follows:

2 Arts [GEA attribute] ¹

2 Humanities [GEH attribute] ¹

2 Natural Sciences, 1 of which must be a lab course [GESL attribute for labs; GESN attribute for non-labs] ¹

2 Social Sciences [GESS attribute] ¹

¹ Each of these two courses must be from a different discipline.

- 1 Bible [GEB attribute]
- 1 Mathematics [GEM attribute]

Each credit course must be 3 semester hours or more

- 2 PE [GEPE attribute]

GEPE courses are non-credit and require a minimum of 42 contact hours

Any non-credit courses to be completed are in addition to the 120 academic hours required for graduation

Skill Development Requirement

- First Year Experience Program (FYE) (p. 30)

Proficiency Requirements

- Second Language (p. 30)
- Writing (p. 30)

Summary of Degree Requirements: Bachelor of Science

Completion of one B.S. major

120 semester hours

2.000 minimum cumulative GPA

Residency

Dilemmas and Decisions

General Education Requirements

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

- 5 courses selected from these academic areas as follows:

Each of these five courses must be from a different discipline:

1 Arts [GEA attribute]

1 Humanities [GEH attribute]

1 Social Sciences [GESS attribute]

2 courses from any of these areas [GEA, GEH, GESS attributes]

- 1 Bible [GEB attribute]
- 1 Mathematics [GEM attribute] (May be fulfilled within major requirements)
- Additional 24 semester hours of Math and Natural Sciences courses outside the major discipline (must include one lab course outside the major)¹

¹ B.S. Majors may not count MATH 110 Mathematical Applications or MATH 111 A Survey of Mathematics as part of the 24 SH outside their discipline. B.S. majors should ask their advisor(s) for the complete list of courses that count toward these 24 SH.

Each credit course must be 3 semester hours or more

- 2 PE [GEPE]

GEPE courses are non-credit and require a minimum of 42 contact hours

Any non-credit courses to be completed are in addition to the 120 academic hours required for graduation.

Skill Development Requirement

- First Year Experience Program (FYE) (p. 30)

Proficiency Requirements

- Second Language (p. 30)
- Writing (p. 30)

Majors and Minors (Academic Programs)

Art: Art History

Margaret M. D'Evelyn, Professor

Andrew M. Martin, Associate Professor

Art History fills a niche in the Principia College curriculum as neither “studio art” nor strictly “history” in a conventional sense, but as an exploration of the thoughts, works, and lives of talented individuals from the distant past to the ever-changing present. Art History at Principia College includes architecture, sculpture, painting, photography, and decorative arts from around the world with particular emphasis on European and American art from its earliest beginnings to the present day. Non-Western art is increasingly available in our courses, too. Students learn art theory and architectural theory of various types from their foundational courses onward.

The campus of Principia College began as a work of art. From this basis of fine architecture “at home” and with the rich resources of the art museums nearby in Saint Louis, Principia College students experience works of art and architecture first-hand as a normal part of daily life. Student gallery talks at the Saint Louis Art Museum, as a regular part of the curriculum at every level, enable students to speak with authority about works of art they have selected, researched, and found meaningful to share.

Because Principia is internationally-oriented, Art History has a vital role to play in every student’s academic program. Many successful professionals around the world think first of a nation’s art treasures as they investigate their potential commonalities. Knowing how to penetrate to the meaning and messages of art is therefore an important talent to be cultivated. The visual arts, thoughtfully considered, form ready-made cultural bridges.

Paradoxically, many of the world’s great works of art and architecture were created to meet a deep desire of humanity for access to the unseen. Whether in the form of a cave painting, a mosque, or a work of abstract expressionism, art allows us to envision and share the aspirations of humanity. In every instance, works of art, carefully studied, allow us to view the world more expansively and compassionately.

The study of Art History prepares students for a variety of professions, including architecture and architectural preservation, museum and gallery work, the conservation/preservation of art, as well as for graduate study in the history of art and/or architecture; teaching, law, business, and economics.

Students interested in majoring in art history should see Individualized Majors (p. 83). Students minoring in art history may also major in studio art. The three art history courses required for the major in studio art may count toward both the studio art major and the art history minor. Only three additional courses would be required for a studio art major to fulfill the art history minor.

Minor in Art History

A minor in Art History requires six courses:

Code	Title	Semester Hours
One introductory course from the following:		3.0
ARTH 100	Intro to Western Art to 1400	
ARTH 101	Intro:Western Art 1400-Present	
One non-western art history course from the following:		3.0
ARTH 110	Survey Asia/Africa/Americas	
ARTH 230	Asian Art	
Three 200-level art history courses		9.0
One 300-level art history course		3.0
Total Semester Hours		18.0

Among the required 200- and 300-level art history courses, at least one must be from before 1600 and at least one from after 1600.

Art: Studio Art

David D. Coughtry, Professor

Daniel D. Kistler, Associate Professor

Duncan Martin, Professor

Danne P. Rhaesa, Assistant Professor

Paul B. Ryan, Professor

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

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

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

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

graduation, its value cannot be overstated; students are encouraged to pursue an internship, especially during the summers, to supplement the studio program.

Courses in art history trace the innovations, aspirations, and achievements of individual artists and groups of artists. They explore the significance of particular works of painting, sculpture, architecture, and other visual arts, enlarging students' awareness of their cultural heritage, and sharpening their capacity to "read" images clearly. The rich variety of the visual arts of the western and non-western traditions offers relevant connections to all facets of 21st-century society. Majors and minors in studio art benefit from the contextualization of their own work, as well as of compelling works from the past. General Education students, too, learn how to place works of art in their cultural context and to communicate a growing understanding that will make them true "citizens of the world," awake to the issues and ideas which artists perceive beyond appearances.

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

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

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

Students majoring in art may minor in art history. The three art history courses required for the major in art will count toward both the art major and the art history minor. Only three additional courses would be required for art majors to fulfill the art history minor.

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

Departmental Learning Outcomes

1. *Assimilation: Develop a disciplined artistic practice*
 - a. Engage in a discipline-specific creative process.
 - b. Demonstrate intellectual agility through imaginative problem-solving.
 - c. Demonstrate informed use of visual media.
 - d. Create work that demonstrates awareness of historical and contemporary cultural context.
 - e. Show evidence of mastery and individuality.
2. *Expression: Organize visual elements to construct meaning*
 - a. Construct complex systems of form.
 - b. Apply compositional theory (e.g. space, volume, color).
 - c. Solve visual problems.
 - d. Articulate the connection between form and content.
3. *Interpretation: The Critique of visual work*

- a. Effectively interpret and evaluate various source materials.
- b. Assess visual compositions and articulate the relationship of subject, form, and content.
- c. Develop an informed individual point of view.
- d. Be able to defend claims with evidence.
- e. Address collective meanings of art by questioning the history, language, and contemporary trends.

B.A. Major in Studio Art

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

Code	Title	Semester Hours
One introductory course from the following:		3.0
ARTS 102	Visual Fundamentals	
ARTS 103	Three Dimensional Design	
Seven required core courses:		
ARTS 150	Drawing I	3.0
ARTS 170	Graphic Design I	3.0
ARTS 230	Color Studies	3.0
ARTS 302	Figure Studies	3.0
ARTS 401	Creative Research Project	3.0-6.0
ARTS 495	Portfolio Seminar	1.0-3.0
ARTS 496	Capstone Writing Seminar	2.0
Four electives from the following:		12.0-21.0
ARTS 175	Print Design	
ARTS 203	Sculpture I	
ARTS 210	Oil Painting I	
ARTS 220	Watercolor Painting I	
ARTS 250	Drawing II	
ARTS 270	Graphic Design II	
ARTS 280	Printmaking	
ARTS 285	Illustration	
ARTS 290	Web Design	
ARTS 295	Sustainable Design	
ARTS 299	Experimental New Media Seminar	
ARTS 301	Portraiture	
ARTS 304	Figure Modeling	
ARTS 310	Oil Painting II	
ARTS 320	Watercolor Painting II	
ARTS 330	Studio Seminar	
ARTS 350	Drawing III	
ARTS 360	Figurative Painting	
ARTS 370	Advanced Design Practices	
ARTS 402	On-Location Studies	
ARTS 404	Advanced Series	

Three art history courses:	9.0
One 100-level art history course	
One 200-level art history course	
One 300-level art history course	
<hr/> Total Semester Hours	42.0-56.0

Minor in Studio Art

A minor in Studio Art requires eight courses:

Code	Title	Semester Hours
One introductory course from the following:		3.0
ARTS 102	Visual Fundamentals	
ARTS 103	Three Dimensional Design	
Required courses:		
ARTS 150	Drawing I	3.0
ARTS 230	Color Studies	3.0
Three electives from the following:		9.0-15.0
ARTS 170	Graphic Design I	
ARTS 175	Print Design	
ARTS 203	Sculpture I	
ARTS 210	Oil Painting I	
ARTS 220	Watercolor Painting I	
ARTS 250	Drawing II	
ARTS 270	Graphic Design II	
ARTS 280	Printmaking	
ARTS 285	Illustration	
ARTS 290	Web Design	
ARTS 295	Sustainable Design	
ARTS 299	Experimental New Media Seminar	
ARTS 301	Portraiture	
ARTS 302	Figure Studies	
ARTS 304	Figure Modeling	
ARTS 310	Oil Painting II	
ARTS 320	Watercolor Painting II	
ARTS 330	Studio Seminar	
ARTS 350	Drawing III	
ARTS 360	Figurative Painting	
ARTS 370	Advanced Design Practices	
ARTS 402	On-Location Studies	
ARTS 404	Advanced Series	
One 100-level art history course		3.0
One 200-level art history course		3.0
<hr/> Total Semester Hours		24.0-30.0

Asian Studies

John Williams, Professor

Faculty from other disciplines also support this program.

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

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

Courses offered on Principia abroads to Asia, as well as one-time offerings and independent projects, may also apply toward the minor if approved by the director of Asian Studies. The director may consult with the faculty teaching courses in support of the minor to determine the appropriateness of coursework.

Minor in Asian Studies

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

Code	Title	Semester Hours
Select a minimum of 18 semester hours:		18.0
ARTH 230	Asian Art	
ARTH 282	Islamic Art	
ECON 231	Comparative Economic Systems	
ECON 316	Economic Development	
HIST 240	The History of Islam	
HIST 281	China	
HIST 283	Japan	
HIST 335	Middle East	
HIST 382	Modern China	
HIST 386	India	
LANG 100	Elementary Language Study	
POLS 261	Politics of China	
POLS 263	Topics in Asian Politics	
REL 130	World Religions	
SOAN 251	Anthropology of India	
Total Semester Hours		18.0

Biology and Natural Resources

Gregory L. Bruland, Professor

Scott A. Eckert, Professor

John T. Lovseth, Assistant Professor

Christine A. McAllister, Professor

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

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

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

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

Departmental Learning Outcomes

The study of Biological and Environmental Sciences cultivates understanding of and care for the environment; it motivates ethical decisions, and integrates critical and scientific thinking into every educational experience. Students majoring in Biology or Environmental Studies will be able to:

1. *Demonstrate foundational knowledge in the Biological and Environmental Sciences through*

- Demonstration of a thorough knowledge of Earth's biological life.
- The ability to interpret patterns in the landscape and understand the fundamental geological, biological, and ecological processes that drive those patterns.

- The ability to explain fundamental biological processes and their effects on organismal community and ecosystem function.
 - Understanding the role of natural selection in the evolution of populations over time.
 - Develop a thorough understanding of ecology including the scales of ecological organization and major ecological processes.
 - Recognize and explain the ways in which humans are impacting the environment.
2. *Practice scientific skills such as sampling, measuring, estimating, calculating, and analysis of data.*
- Students will be able to know and use the scientific method.
3. *Demonstrate the ability to communicate science and scientific findings to society through*
- Improving the written communication skills through specific instruction in and practice with a variety of writing and speaking styles used in the scientific community.
 - Improving the oral communication skills through specific instruction in and practice with a variety of writing and speaking styles used in the scientific community.

B.S. Major in Biology

The B.S. major in Biology requires 14 courses:

Code	Title	Semester Hours
Bio-block courses taken concurrently:		
BNR 111	Introductory Botany	4.0
BNR 112	Introductory Zoology	4.0
BNR 191	Introduction to Ecology	4.0
BNR 201	Methods in Research & Writing	4.0
Additional required courses:		
BNR 215	Biometry	3.0
BNR 256	Conservation Genetics	4.0
Two of the following advanced ecology courses:		8.0
BNR 312	Grassland Ecology	
BNR 313	Forest Ecology	
BNR 315	Freshwater Ecology	
BNR 317	Wetland Ecology	
Or another advanced ecology course approved by the dept.		
Two BNR electives at the 200 or 300 level		6.0-8.0
CHEM 115	Introduction to Chemistry	4.0
CHEM 260	Organic Survey	4.0
One mathematics elective at or above the level of MATH 143		3.0-5.0

BNR 050	BNR Service Learning	0.0
Total Semester Hours		48.0-52.0

Business Administration

Portia Benson, Assistant Professor

Lucia De Paz Nicol, Assistant Professor

Karl G. Hellman, Associate Professor

Dale E. Matheny, Associate Professor

Colleen P. Vucinovich, 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 business organizations, markets, products, systems, resources, and governmental policies. Students graduating from this program should be able to demonstrate a solid understanding of core business principles, formulate and recommend solutions to complex business problems, communicate effectively both orally and in writing, and collaborate within and learn how to build effective teams.

To demonstrate these principles in action, students are required to participate in a career-based, off-campus, 3rd party, internship experience at a business firm, government agency, or established NGO. Many positions will qualify, but the student must apply for the internship and get approval for it through the ACA Office and his or her major advisor the semester before the work experience is to take place. The internship may be the BUAD 090 Business Internship course or a for-credit internship (on an Internship Learning Contract), but neither internship will count toward the hours required to fulfill the major.

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

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

Business administration majors are encouraged to complete ECON 203 Principles of Microeconomics, BUAD 215 Intro to Mgmt Info Systems, BUAD 251 Financial Accounting, BUAD 252 Managerial Accounting and BUAD 261 Business Analytics by the end of their sophomore year.

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

A cumulative GPA of 2.000 or above in the 15 for-credit major-required courses is necessary to complete the major. Similarly, a cumulative GPA of 2.000 or above in the six courses required for the minor is necessary to complete the minor.

BUAD 430 Strategic Management must be taken at Principia College.

The application of transfer course credit to the major or minor is considered on an individual basis.

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

Departmental Learning Outcomes

1. *Students will demonstrate a solid understanding of core business principles in the primary areas of accounting/finance, marketing, and management, as well as the interconnectedness of these disciplines in the running of an organization.*
 - In the area of accounting, students will analyze the key accounting statements and evaluate accounting information to assess the financial health of an organization.
 - In the area of finance, students will explain the capital structure of a business and evaluate a financial strategy that creates and enhances shareholder value.
 - In the area of marketing, students will define the fundamental principles of marketing and explain how to evaluate a marketing plan to support a recommendation.
 - In the area of management, students will identify and describe the leading theories in management and their application to the key management functions of an organization -- planning, organizing, leading and controlling.
2. *Students will formulate solutions to complex business problems*

Demonstrating critical thinking characterized by:

- the ability to define business problems with the evidence available
- discern fact from opinion
- determine underlying causes
- formulate and evaluate potential solutions

Demonstrating problem solving evidenced by:

- an ability to make qualitative and quantitative judgments
- identify solutions for unstructured problems that do not have obvious solutions
- make decisions in the midst of uncertainty
- demonstrate courage to think creatively
- argue persuasively the solutions reached

3. *Students will demonstrate effective oral and written communication skills through*

Written work that is:

- clear, organized, succinct
- depth of analysis and synthesis
- accurate in mechanics and documentation

Effective oral communication displaying:

- participation skills including contributions that demonstrate a grasp of the material
- discussion skills including articulation of one's point of view, listening to other views, synthesizing ideas and contributing to the purpose of the discussion
- presentation skills characterized by the clear and persuasive organization and delivery of content

4. *Students will demonstrate collaborative team-building skills*

- recognizing different styles of thinking and the strengths of team members
- working together as a team to define goals and roles by maximizing individual input to achieve team goals.
- giving and receiving feedback
- identifying areas of conflict and implementing problem solving strategies

B.A. Major in Business Administration

The B.A. major in Business Administration requires 15 for-credit courses and a Business Internship for a total of 45 semester hours:

Code	Title	Semester Hours
BUAD 090	Business Internship	0.0
ECON 203	Principles of Microeconomics	3.0
ECON 204	Principles of Macroeconomics	3.0
BUAD 215	Intro to Mgmt Info Systems	3.0
BUAD 251	Financial Accounting	3.0
BUAD 252	Managerial Accounting	3.0
BUAD 261	Business Analytics	3.0
BUAD 320	Marketing	3.0
BUAD 330	Management	3.0
BUAD 336	Organizational Effectiveness	3.0
BUAD 340	Operations & Supply Chain Mgmt	3.0
BUAD 360	Managerial Finance	3.0
BUAD 430	Strategic Management	3.0
BUAD 440	New Venture Creation	3.0
Two of the following: (only one may be ECON)		6.0
BUAD 270	Business Sustainability	
BUAD 310	Investments	

BUAD 321	Marketing Research
BUAD 326	Multi-Channel Marketing
BUAD 335	International Business
BUAD 350	Business Law
BUAD 401	Business Consulting Practicum (minimum of 3 SH)
ECON 321	Money and Banking
ECON 303	Intermed Microeconomic Theory
ECON 331	International Economics
PHIL 265	Business Ethics

Total Semester Hours	45.0
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Minor in Business Administration

A minor in Business Administration requires six courses:

Code	Title	Semester Hours
ECON 203	Principles of Microeconomics	3.0
ECON 204	Principles of Macroeconomics	3.0
BUAD 251	Financial Accounting	3.0
BUAD 252	Managerial Accounting	3.0
BUAD 320	Marketing	3.0
BUAD 330	Management	3.0

Total Semester Hours	18.0
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Chemistry

Jeffrey B. Cornelius, Professor

Brian K. Kamusinga, Instructor

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

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

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

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

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

Departmental Learning Outcomes

1. *Synthesize foundational knowledge of chemistry.*

A foundational knowledge of chemistry includes basic knowledge in all of the following fields:

- Inorganic Chemistry
- Organic Chemistry
- Organic Laboratory Techniques
- Physical Chemistry
- Analytical Chemistry
- Environmental Chemistry

2. *Apply scientific reasoning to increasingly complex problems.*

Different types of problems will require different skill sets, including proficiency in the following areas:

- Quantitative Skills
- Analytical Skills
- Literature Research
- Laboratory Research

3. *Perform as an effective member of the scientific community.*

Working within the scientific community requires a wide variety of communication and interpersonal skills in addition to knowledge of equipment and safety. Of particular importance are the following abilities:

- Listening to instruction and constructive criticism
- Reading scientific literature and texts
- Writing clear laboratory reports and research papers
- Presenting research clearly and concisely
- Demonstrating integrity
- Working effectively as a member of a group
- Working safely and knowledgeably with chemistry lab equipment

B.S. Major in Chemistry

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

Code	Title	Semester Hours
CHEM 131	Fundamentals of Chemistry I	4.0
CHEM 132	Fundamentals of Chemistry II	4.0
CHEM 133	Fundamentals of Chemistry III	4.0
CHEM 262	Organic Chemistry I	4.0
CHEM 263	Organic Chemistry II	4.0
CHEM 311	Phys Chem I: Thermodynamics	4.0
CHEM 313	Phys Chem II: Quantum Chem	4.0

CHEM 321	Applied Spectroscopy	4.0
CHEM 333	Instrumental Analysis	4.0
CHEM 441	Senior Research Project (minimum of three semester hours)	3.0
MATH 181	Calculus I	5.0
MATH 182	Calculus II	5.0
PHYS 201	Phys for Scientists/Engrs I	4.0
PHYS 202	Phys for Scientists/Engrs II	4.0
One of the following:		4.0
CHEM 274	General Biochemistry	
CHEM 301	Adv Environmental Chemistry	
Total Semester Hours		61.0

Minor in Chemistry

A minor in Chemistry requires six courses:

Code	Title	Semester Hours
CHEM 131	Fundamentals of Chemistry I	4.0
CHEM 132	Fundamentals of Chemistry II	4.0
CHEM 133	Fundamentals of Chemistry III	4.0
One of the following:		4.0
CHEM 260	Organic Survey	
CHEM 262	Organic Chemistry I	
Two chemistry electives numbered 250 or above		8.0
Total Semester Hours		24.0

Computer Science

John W. Broere, Instructor

Thomas H. Fuller Jr, Professor

Clinton A. Staley, 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 courses stress the principles that underlie computing as well as practical experience in creating software and problem solving.

Students develop programming skills from beginning to advanced levels and also learn about the fundamental design and architectural considerations of computer systems. In the process, students have plenty of opportunities to demonstrate the discipline and persistence needed to bring a program to completion—all the while gaining confidence in their ability to think systematically and to recognize everyone's natural ability to do so.

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

cumulative average of 2.000 or higher for the courses (required and elective, within the department or outside it, such as math and engineering) taken for that program.

For all majors and minors, if CSCI 181 Accelerated Intro Programming is substituted for CSCI 171 Introduction to Programming, the total semester hours required will be two fewer.

The Computer Science Department also offers a minor in Management Information Systems (p. 84). A student may not earn both a major in computer science and a minor in management information systems.

Departmental Learning Outcomes

1. *Design*: Our students will develop computer programs and systems characterized by good design: elegance, simplicity, clear structure, flexibility, efficiency, usability, maintainability, ease of use, and durability.
2. *Problem Solving*: Our students will accurately assess problems and think about them creatively, conceptually, critically, insightfully, analytically, and metaphysically. This will lead them to create, apply, and integrate appropriate and efficient algorithms and mathematical models.
3. *Application of Technical Knowledge*: Our students will understand a sufficiently comprehensive, foundational body of knowledge such that missing pieces can be derived, acquired, or revealed, and applied properly. This body of knowledge consists primarily of computer science topics such as programming, computer hardware and software organization, operating systems, database management, and networking, but also includes elements of information systems and software engineering.
4. *Effective Communication*: Our students will convey and receive information and ideas accurately, consistently, and efficiently in oral, visual, and written form, formally and informally across a diversity of audiences and organizational levels. Good communication necessitates honesty and effective listening.
5. *Teamwork and Collaboration*: Our students will work within diverse groups of people toward common goals by expressing effective communication, resourcefulness, confidence, and humility, while respecting and valuing the contributions of others. Our students will comprehend the qualities of both a true leader and a true follower, and develop the moral courage to lead with authority, thereby bringing out the best in others.
6. *Ability to Learn*: Our students will develop the desire and ability to continuously learn and improve their knowledge, attitudes, and methods in both individual and group settings. They will display accurate self-assessment, wise self-correction, and a growing mastery of their field.
7. *Ethics*: Our students will recognize ethical issues, identify needed actions, and demonstrate the moral courage to implement them. Our students will understand and follow generally accepted codes of conduct such as the *ACM Code of Ethics and Professional Conduct* and the *ACM/IEEE Software Engineering Code of Ethics and Professional Practice*.
8. *Professionalism*: Students will hold themselves responsible for depth of knowledge and excellence of action. Those who best demonstrate professionalism do so by keeping a high quality of thought, meeting obligations,

being accountable, giving attention to detail, being dependable and consistent, maintaining a balanced perspective, and respecting others.

B.S. Major in Computer Science

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

Code	Title	Semester Hours
CSCI 171	Introduction to Programming	4.0
CSCI 182	Intro to Data Structures	4.0
CSCI 220	Programming Languages	4.0
CSCI 240	Object-Oriented Programming	4.0
CSCI 263	Computer Software Architecture	3.0
CSCI 310	Software Engineering	3.0
CSCI 320	Database Management Systems	4.0
CSCI 330	Operating Systems	3.0
CSCI 333	Computer Networking	3.0
CSCI 380	Compilers	4.0
CSCI 421	Computer Issues Seminar	3.0
ENGR 262	Computer Hardware Architecture	5.0
MATH 181	Calculus I	5.0
MATH 261	Discrete Math	3.0
Total Semester Hours		52.0

B.A. Major in Computer Science

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

Code	Title	Semester Hours
CSCI 171	Introduction to Programming	4.0
CSCI 182	Intro to Data Structures	4.0
CSCI 220	Programming Languages	4.0
CSCI 240	Object-Oriented Programming	4.0
CSCI 263	Computer Software Architecture	3.0
CSCI 310	Software Engineering	3.0
CSCI 320	Database Management Systems	4.0
CSCI 333	Computer Networking	3.0
CSCI 421	Computer Issues Seminar	3.0
ENGR 262	Computer Hardware Architecture	5.0
MATH 261	Discrete Math	3.0
Total Semester Hours		40.0

Dance

Erin J. Lane, Instructor

Dance plays an important role within the Department of Theatre and Dance. Our focus in the department is on the following outcomes: Train Deeply, Think Critically,

Grow Spiritually and Share Freely. We feel that dance is a unique vehicle with which to do all of those things. From Composition classes where students explore their own creativity through choreography to high-end workshops with leading professionals in the field, we offer a wide range of opportunities for dance students to train and share their love for this universal art form. We always remember that our “vital purpose” (*Education at The Principia* p. 107) is to help students in their pursuit of spiritual progress and that dance can be a powerful way to do just that.

Visit our webpage for more information and find us on Facebook.

Minor in Dance

A minor in Dance requires 11 courses:

Code	Title	Semester Hours
DANC 250	Dance History	3.0
DANC 370	Dance Practicum Cast (4 SH requires course to be taken more than once)	4.0
One of the following:		3.0
THEA 230	Theatre Movement	
DANC 330	Dance Composition	
Two of the following:		6.0-8.0
DANC 200	Topics in Dance History	
DANC 371	Dance Practicum Staff	
ARTS 230	Color Studies	
MCOM 292	Video Production	
MUS 100	Intro to the Art of Music	
MUS 101	Symphonic Masterworks	
MUS 102	Operatic Masterworks	
MUS 139	Intro to Music Fundamentals	
MUS 203	American Musical Theater	
MUS 204	The Jazz Tradition in America	
MUS 228	Great Composers & Their Culture	
MUS 321	Music History I	
THEA 101	Acting I	
THEA 220	Intro to Technical Theatre	
Five dance technique classes from the following:		0.0
DANC 043	Dance: Ballet I	
DANC 044	Dance: Ballet II	
DANC 045	Dance: Ballet III	
DANC 048	Dance: Jazz I	
DANC 080	Dance: Modern I	
DANC 081	Dance: Modern II	
DANC 082	Dance: Modern III	
DANC 083	Dance as Movement	
Total Semester Hours		16.0-18.0

Dual Language

Faculty from several disciplines support this program.

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

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

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

Majors in French (p. 69) and Spanish (p. 109) are described separately.

B.A. Major in Dual Language

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

Code	Title	Semester Hours
Six courses (including one literature or culture course) in one language other than English		18.0
Four courses in a second non-English language		12.0
Two electives in either or both of the target languages		6.0
Three culturally-related courses:		9.0
Two histories related to non-English-speaking areas		
One art history/political science/sociology related to international topics		
Total Semester Hours		45.0

Earth Science

Marie C. Farson, Assistant Professor

Through a minor in Earth Science students learn about the history of the earth, rock formations, oceanography from submersibles to dolphins and the origin and fate of the universe. The minor program in earth science provides students with an introductory course, three 200 level fundamental courses in earth science, and experience with GIS Mapping software as well as the opportunity to explore an upper level topic. Class activities develop student skills in methodologies ranging from mineral and rock identification to analysis of geologic structures, stratigraphic

relations, geophysical processes and the instrumentation used in field research. Field activities accompany the earth science courses.

Minor in Earth Science

A minor in Earth Science requires six courses:

ERTH 111	Introductory Geology	4.0
ERTH 301	Environmental Mapping & GIS	4.0
Three of the following:		10.0-11.0
ERTH 205	Introduction to Oceanography	
ERTH 225	Environmental Geology	
ERTH 230	Nonrenewable Resources	
ERTH 242	Historical Geology	
PHYS 151	Descriptive Astronomy	
PHYS 231	Introduction to Cosmology	
CHEM 201	Environmental Testing	
One of the following:		3.0-6.0
CHEM 301	Adv Environmental Chemistry	
ERTH 401	Senior Thesis	
ERTH 410	Senior Readings	
PHYS 351	Astrophysics	
A course approved by the Earth Science Department		
Total Semester Hours		21.0-25.0

Economics

Thomas L. Davidson, Assistant Professor

Karl G. Hellman, Associate Professor

Nicholas H. Johnson, 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. Upon completion of this major, the student will be able to determine the appropriate response to a broad range of economic issues at the household, firm, national, and international levels. The student will also be able to appreciate and appraise alternative perspectives on key economic issues.

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

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

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

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

The application of transfer course credit to the major or minor is considered on an individual basis.

1. For transfer students who have not yet attended Principia College:
For a major, transfer students must take at least five classroom courses (15 semester hours) from Principia economics departmental faculty. For a minor, transfer students must take at least three classroom courses (9 semester hours) from Principia economics departmental faculty.
2. For students who are currently enrolled or were once enrolled at Principia College:
Students are expected to complete remaining major/minor courses at Principia. Exceptions must be pre-approved according to Principia's transfer policy.

Departmental Learning Outcomes

1. *Illustrate and explain principle economic theories.*
2. *Correctly apply principle economic theories in a broad range of circumstances.*
3. *Appraise alternative perspectives on key economic issues.*
4. *Create effective written and oral communications.*

B.A. Major in Economics

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

Code	Title	Semester Hours
ECON 203	Principles of Microeconomics	3.0
ECON 204	Principles of Macroeconomics	3.0
BUAD 251	Financial Accounting	4.0
BUAD 261	Business Analytics	3.0
ECON 303	Intermed Microeconomic Theory	3.0
ECON 304	Intermed Macroeconomic Theory	3.0
ECON 431	Evolution of Economic Thought	3.0
Two of the following:		6.0
ECON 231	Comparative Economic Systems	
ECON 271	Environmental Economics	
ECON 316	Economic Development	
ECON 321	Money and Banking	
ECON 331	International Economics	
One of the following:		3.0
EDST 260	Communication	
MCOM 140	Public Speaking	
THEA 102	Oral Interpretation	
One of the following:		3.0-5.0
BUAD 215	Intro to Mgmt Info Systems	
POLS/SOAN 215	Soc Science Research Methods	

MATH 181 Calculus I

 Total Semester Hours 34.0-36.0

Minor in Economics

A minor in Economics requires six courses:

Code	Title	Semester Hours
ECON 203	Principles of Microeconomics	3.0
ECON 204	Principles of Macroeconomics	3.0
BUAD 251	Financial Accounting	3.0
Three electives chosen from BUAD 261 and economics courses at or above the 200 level.		9.0
Total Semester Hours		18.0

Educational Studies

Galen E. Benson, Assistant Professor

Lyman E. Ellis III, Professor

Lauren S. Hinchman, Associate Professor

Winifred A. Needham, Assistant Professor

The B.A. in Educational Studies prepares students to contribute to a variety of educational contexts. This major does not lead to teacher licensure. Graduates will have in-depth knowledge of educational theory, group management, building learning communities, and experience putting theory into practice through lesson and curriculum design. Students will develop strong skills in communication, critical thinking, experiential learning, inquiry-based teaching and learning, leadership, and the use of technology. The Educational Studies department offers a B.A. in Educational Studies with a choice of two different concentrations.

Students pursuing a B.A. in Educational Studies with a concentration in Educational Theory and Practice will visit a wide variety of schools which will contribute to their knowledge of the American educational system. Students will consider the role of teachers, learners, parents, community members, and leaders in educational reform. This topic will be explored in terms of both past and present efforts to design an educational system which supports learning for all students. Graduates are encouraged to use the Educational Studies major to expand the potential use of the content gained in a second major. The skills gained during the course of this major will be valuable to students who want to pursue consulting, training, facilitating, group management, teaching at all levels, involvement in higher education, and other leadership roles.

The B.A. in Educational Studies with a concentration in Outdoor & Experiential Education takes advantage of Principia College's 2,600 acre campus, which sits on top of limestone bluffs that tower over the Mississippi River. We use the beautiful and untamed portions of campus to give our students experiences that emphasize leadership, outdoor program design, environmental ethics, outdoor education, adventure education, experiential teaching and learning theories and methods, program planning and delivery, team building, lesson plan design, hard and soft skill development, and communication skills.

Graduates will not only be confident in their ability to design, lead, and evaluate outdoor pursuits, but will also understand the subtleties involved with designing experiential and hands-on learning opportunities for multiple other venues, including in a traditional classroom setting. This program reflects Principia's commitment to experiential education and interdisciplinary learning. Graduates may go on to have careers as outdoor guides, challenge course facilitators, interpretive center guides or directors, outfitters, park rangers, camp directors, environmental program designers, or eco-tourism guides. Graduates will be recognized for their strengths in the areas of leadership, group facilitation, communication, interpersonal skills, and moral character.

Departmental Learning Outcomes

1. *Communication – graduates will use verbal, nonverbal, written, and visual skills to effectively communicate*
 - a. Active listening
 - b. Giving and receiving feedback
 - c. Effective communication in group settings
 - d. Use of grammar and punctuation conventions
 - e. Introduction and purpose
 - f. Sequence and focus
2. *Reflective Thinking, Observing, and Responding – Graduates will be able to observe, document, and analyze personal and group processes through reflection*
 - a. Documentation/reporting
 - b. Questioning
 - c. Analysis and response
3. *Pedagogical Knowledge – Graduates will be able to articulate their own personal pedagogical beliefs about teaching and learning*
 - a. Understanding of diverse learners and needs
 - b. Knowledge and application of differentiation and inclusion
 - c. Demonstrate the skills needed to develop safe and positive learning communities
4. *Authentic Leadership – Graduates will develop their own authentic leadership styles*
 - a. Recognize the role of character and dispositions in effective leadership
 - b. Develop and know one's own authentic leadership style

B.A. Major in Educational Studies with a Concentration in Theory and Practice

A major in Educational Studies with a concentration in Theory and Practice requires 12 courses:

Code	Title	Semester Hours
EDST 260	Communication	3.0
Educational Studies Block:		16.0
EDST 222	Field Experiences in Education	
EDST 223	Classroom Methods & Management	
EDST 251	Educational Theory	
EDST 253	Dynamic Learning Communities	
EDST 254	Child & Adolescent Development	
EDST 325	Literacy Across the Curriculum	
Four of the following (one course must be 300 level):		11.0-13.0
EDST 120	Signs of the Times	
EDST 130	Outdoor Education	
EDST 170	Environmental Education	
EDST 184	Children and Society	
EDST 210	21st Century Learning	
EDST 218	Education in America	
EDST 235	Outdoor Leadership	
EDST 240	Contemporary Topics	
EDST 242	Outdoor Ed Topics	
EDST 275	Pedagogy of Place	
EDST 278	Child & Adolescent Literature	
EDST 285	Foundations in Experiential Ed	
EDST 287	Character Education	
EDST 295	Wilderness Literacy	
EDST 310	Global Education	
EDST 312	Teacher as Leader	
EDST 383	Adolescent Development	
EDST 388	Philosophy of Education	
3 SH course approved by the Educational Studies 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.		
EDST 420	Capstone: Educational Studies	2.0-3.0
Total Semester Hours		32.0-35.0

B.A. Major in Educational Studies with a Concentration in Outdoor and Experiential Theory and Practice

A major in Educational Studies with a concentration in Outdoor and Experiential Theory and Practice requires 12 courses:

Code	Title	Semester Hours
EDST 130	Outdoor Education	3.0
EDST 260	Communication	3.0
EDST 285	Foundations in Experiential Ed	3.0
EDST 300	Exper. Educ Practicum/Intern	3.0

One of the following educational studies courses:	3.0
EDST 275 Pedagogy of Place	
EDST 287 Character Education	
EDST 295 Wilderness Literacy	
One of the following leadership focused courses:	2.0-4.0
EDST 210 21st Century Learning	
EDST 235 Outdoor Leadership	
EDST 312 Teacher as Leader	
SMGT 360 Leadership	
Two of the following natural science and/or earth science courses:	6.0-8.0
BNR 111 Introductory Botany ¹	
BNR 161 Field & Natural History	
BNR 191 Introduction to Ecology ¹	
BNR 220 Marine Biology	
BNR 255 Natural Resources Management	
BNR 236/237 Sea Turtle Biology	
BNR 264 Sugarbush Management	
ERTH 111 Introductory Geology	
ERTH 242 Historical Geology	
PHYS 151 Descriptive Astronomy	
One of the following courses with an emphasis on diversity:	3.0
SOAN 160 "Race" and Ethnicity	
SOAN 170 Gender Paradigms	
or an advisor-approved course with an emphasis on diversity	
One of the following interdisciplinary courses related to the environment:	3.0-4.0
CHEM 111 Environmental Chemistry	
EDST 170 Environmental Education	
ERTH 225 Environmental Geology	
SUS 151 Introduction to Sustainability	
REL 222 The Bible and the Environment	
SOAN 235 Environmental & Social Change	
Two additional electives from the Educational Studies course offerings listed below. Education courses found in any part of the Experiential and Outdoor Theory and Practice track outlined above will qualify as long as they are not already being counted towards the above requirements:	6.0
EDST 120 Signs of the Times	
EDST 183 Adolescence and Society	
EDST 184 Children and Society	
EDST 218 Education in America	
EDST 240 Contemporary Topics	
EDST 242 Outdoor Ed Topics	
EDST 388 Philosophy of Education	
<hr/> Total Semester Hours	<hr/> 35.0-40.0

¹ BNR 111 Introductory Botany and BNR 191 Introduction to Ecology are offered as part of the bio-block. These courses are only available to those students who choose to take all of the courses in the bio-block.

Minor in Educational Studies Theory and Practice

A minor in Educational Studies Theory and Practice requires five courses:

Code	Title	Semester Hours
EDST 260	Communication	3.0
EDST 287	Character Education	3.0
Three other courses from Educational Studies course offerings totaling nine semester hours or more. WRIT 350 is an acceptable substitution for one of these electives.		9.0
Total Semester Hours		15.0

Minor in Educational Studies Outdoor and Experiential Theory and Practice

A minor in Educational Studies Outdoor and Experiential Theory and Practice requires five courses:

Code	Title	Semester Hours
EDST 130	Outdoor Education	3.0
EDST 285	Foundations in Experiential Ed	3.0
Three of the following:		9.0-10.0
EDST 170	Environmental Education	
EDST 235	Outdoor Leadership	
EDST 260	Communication	
EDST 275	Pedagogy of Place	
EDST 287	Character Education	
EDST 295	Wilderness Literacy	
EDST 300	Exper. Educ Practicum/Intern	
EDST 312	Teacher as Leader	
Total Semester Hours		15.0-16.0

Engineering Science

Jeffrey B. Cornelius, Professor

Chris A. O'Riordan-Adjah, Associate Professor

Faculty from other disciplines also support this program.

Principia College offers a Bachelor of Science major in engineering science in the following ways:

¹**Option I** – Completion of a five (5) year program with Principia College and the University of North Dakota.

²**Option II** – Completion of a three (3) year program at Principia and transfer to either Southern Illinois University Edwardsville (SIUE) or Missouri University of Science and Technology (MST).

³**Option III** – Completion of a three (3) year program at Principia and transfer to the University of Minnesota (UMN)

⁴**Option IV** - Completion of a three (3) year program at Principia and transferring to any university of the student's choice – this could include University of North Dakota.

Successful completion of Option I awards the student a B.S. in Engineering Science from Principia College and an accredited (Accreditation Board for Engineering and Technology – ABET) B.S. degree in one of the five (5) listed engineering disciplines below (Chemical, Civil, Electrical, Mechanical and Petroleum) from the University of North Dakota. This program with the University of North Dakota allows a student to remain on the Principia College campus all five years.

The B.S. in engineering science may also be awarded to students who opt for Options II – IV (students usually attend Principia for three years and then transfer for their last two years) and 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 transfer credit is approved by the Registrar. Also, a student will need a waiver of residency petition approved by Principia College.

The dual degree program is adapted to satisfy the curricular needs of both Principia and the cooperating universities. This program prepares students to confront the technical challenges facing society today. Principia provides the scientific principles and ethical basis; the cooperating university completes the education of the professional engineer.

All engineering students must achieve a grade of "C" or better in ALL required science (physics, mathematics, chemistry, and computer science) and engineering courses. For students participating in the University of North Dakota Dual Degree Program, all courses transferring to UND must have a grade of "C" or better.

For UND as well as SIUE, MST, UMN, or another university, 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 before or during their junior year. Each university has its own timelines.

The various types of engineering programs offered as part of the dual degree with University of North Dakota (Option I) are described below.

Mechanical Engineering

The Mechanical Engineering major prepares students at all levels to effectively apply modern engineering principles to the evolving needs of industry and society through focused efforts in manufacturing, materials science, mechanical design, thermal sciences, and aerospace applications. This major supports an accessible, collaborative, multidisciplinary research and learning environment that stimulates

students and faculty members to reach their highest potential through hands-on education, leadership opportunities, and life-long learning.

Civil Engineering

The Civil Engineering major is concerned primarily with fundamental civil engineering design and analysis in such areas as structures, geotechnical engineering, sanitary engineering, water resources, and transportation engineering. The required curriculum includes the fundamentals for each of these areas and provides an opportunity for additional learning experiences with technical electives and a major design experience.

Electrical Engineering

The Electrical Engineering major focuses primarily on areas like Applied Electromagnetics, Power and Energy Systems, Signal and Image Processing, Wireless Communications, and Unmanned Systems. The required curriculum includes the fundamentals for each of these areas and provides an opportunity for additional learning experiences with technical electives and a major design experience.

Chemical Engineering

The Chemical Engineering major prepares students to work in the chemical industry to convert basic raw materials into a variety of products, and deals with the design and operation of plants and equipment. These core principles build on the fundamentals of physical sciences and mathematics. A chemical engineer applies and uses principles of chemical engineering in any of its practical applications which include design, manufacture and operation of plants and machinery in industrial chemical (machines used to extract or convert industrial chemicals — example, crude oil) and related processes. This major in recent development has expanded to focus on new technologies such as fuel cells, hydrogen power and nanotechnology.

Petroleum Engineering

A fairly new program but on the rise, Petroleum Engineering majors are provided the knowledge to research and also develop the latest technologies for discovery, exploration, drilling and production of the oil and gas fields to produce future energy. Due to recent discoveries and development of the unconventional resources, this program is strategically important to our developing world in terms of educating practical and hands-on engineers who can work in the field to meet the necessary requirements and demands.

Other Engineering Options

Students who wish to obtain an engineering degree only from a second university (not a dual degree) should work with their engineering advisor and an advisor at the school from which they intend to graduate to match courses from our freshman and sophomore years to the requirements of the engineering school. After two years at Principia, these students would then apply to transfer their credits to that engineering school and obtain their engineering degree there. The decision to transfer Principia courses to the other school resides with the transfer institution. In

addition, students may opt to complete a four-year B.S. major at the College (e.g., chemistry, computer science, mathematics, or physics) and then transfer to the university for two more years to complete an engineering degree.

¹ There is an associated fee for summer laboratories for students who declare and decide to pursue this option (Option I). This associated fee will depend on when a student declares the major and also will be discussed and approved by the director of the program.

² Principia College has a memorandum of understanding and an articulation agreement with these institutions.

³ Principia College has an articulation agreement with this institution.

⁴ Students need to discuss their intentions for this option with the preferred institution in mind by the end of their second year with the advisor and director of the engineering program.

B.S. Major in Engineering Science

The B.S. major in Engineering Science requires 24 courses:

Code	Title	Semester Hours
CHEM 131	Fundamentals of Chemistry I	4.0
CHEM 132	Fundamentals of Chemistry II	4.0
CSCI 171	Introduction to Programming	4.0
ENGR 101	Graphical Communications ¹	3.0
ENGR 160	Intro Engineering Profession	2.0
ENGR 201	Engineering Mechanics:Statics	3.0
ENGR 202	Engineering Mechanics:Dynamics ²	3.0
ENGR 203	Mechanics of Materials ²	3.0
ENGR 340	Prof Integrity in Engineering	3.0
GEN 101	FYE: Integrated Learning	3.0
MATH 181	Calculus I	5.0
MATH 182	Calculus II	5.0
MATH 283	Multivariable Calculus	4.0
MATH 380	Differential Equations	3.0
PHYS 201	Phys for Scientists/Engrs I	4.0
PHYS 202	Phys for Scientists/Engrs II	4.0
PHYS 203	Phys for Scientists/Engrs III	4.0
WRIT 151	Fundamentals of Acad Writing	3.0
Successful transfer of at least 6 courses of Principia-advisor-approved engineering courses in one of the specialities listed in the narrative description of engineering science ³		18.0
Total Semester Hours		82.0

¹ Required for ONLY Civil & Mechanical majors (for all other majors see director of engineering program for equivalent courses in major to fulfill the 18 course requirement).

² Required for ONLY Civil, Electrical & Mechanical majors (for all other majors see director of engineering program for equivalent courses to fulfill the 18 course requirement).

³ These transfer courses will include at least four (4) 300 and above level courses.

English

Karen Haire, Associate Professor

Dinah J. Ryan, Professor

Heidi J. Snow, Professor

Jeff C. Steele, Associate Professor

Sara J. Wienecke, Assistant Professor

The English department offers diverse courses, programs, and activities to encourage students to cultivate scholarly, creative, and analytical voices while developing a sense of professionalism in all their work. Students in the major become active participants in a community involved in intellectual and artistic practice. The English department builds this community through a wide range of challenging and engaging classes and regular on- and off-campus special events such as student readings, visits from authors, trips to St. Louis for book talks and readings, and abroad programs. Students may earn a major or minor in English with concentrations in Literary Studies or Creative Writing.

The English major requirements are designed to introduce students to a range of literature, research methods, theories, and writing practices. In planning their major, students may choose from a range of courses from modules including regional/chronological, voices of difference, and genre. At least four of the required courses taken for either concentration of the English major must be at the 300 or 400 level. Students in the Literary Studies concentration must take a creative writing course as one course in the genre requirement in the major; students in the Creative Writing concentration may not count creative writing courses for the genre requirement in the major. To complete a major or minor offered by the English department, a student must earn a GPA of 2.0 or higher for all the courses (required and elective) taken for that program.

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

It is recommended that English majors who are considering a career in secondary education take a Shakespeare course and a U.S. literature course as part of their major requirements.

If you have questions about the English major, you can email the Department Chair (Sara.McDaniel@principia.edu).

Departmental Learning Outcomes

Objective: In keeping with Principia's mission to serve the Cause of Christian Science, the English Department is committed to uplifting and healing humanity through the inventive practice of empathetic, critical, transformative reading and writing with independence of thought.

Reading: As a content area English involves reading unfiltered texts—texts produced within a culture as opposed to textbooks summarizing a given area of study.

Writing: Implicit in reading experimental and imaginative texts is an invitation to write with precision and vigor.

As a result English majors will be able to:

1. **Apply** literary knowledge through close readings of texts.
2. **Comprehend** scholarly debates about texts.
3. **Identify** the effect of culture on style in historical and/or contemporary settings.
4. **Integrate** appropriate research materials.
5. **Practice** the formal elements of prose and poetry.

B.A. Major in English with a Concentration in Literary Studies

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

Code	Title	Semester Hours
ENGL 150	Introduction to the Major	1.0
	Two courses focused on a chronological or regional presentation of literature (from two different time periods or regions)	6.0
	Two courses focused on a genre study of literature (one must be a creative writing course)	6.0
	Two courses focused on voices of difference (colonial, post-colonial, women's literature, Native American, polyvocal, etc.)	6.0
	One single author course	3.0
ENGL 388	Literature and Critical Theory	3.0
ENGL 399	Capstone Proposal	2.0-3.0
ENGL 400	Capstone in Literature	3.0
	Three electives from English department or World Literature offerings	9.0
Total Semester Hours		39.0-40.0

B.A. Major in English with a Concentration in Creative Writing

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

Code	Title	Semester Hours
ENGL 150	Introduction to the Major	1.0
	One course focused on either a chronological or regional presentation of literature	3.0
	One course focused on a genre study of literature (may not be a creative writing course)	3.0
	One course focused on voices of difference (colonial, post-colonial, women's literature, Native American, polyvocal, etc.)	3.0
	One single author course	3.0
	One of the following:	3.0
ENGL 242	Theory as Creative Practice	
ENGL 243	Theory as Practice on Location	
ENGL 351	Adv Creative Writing Seminar	3.0
ENGL 388	Literature and Critical Theory	3.0

ENGL 399	Capstone Proposal	2.0-3.0
ENGL 401	Capstone in Creative Writing	3.0
One complete two-course sequence from the following:		6.0
ENGL 240 & ENGL 290	Poetry Writing I and Poetry Writing II	
ENGL 241 & ENGL 291	Fiction Writing I and Fiction Writing II	
Two additional courses chosen from the English department or World Literature offerings		6.0
Total Semester Hours		39.0-40.0

Minor in English in Literary Studies

A minor in English in Literary Studies requires six courses:

Code	Title	Semester Hours
One course focused on a regional or chronological presentation of literature		3.0
One course focused on a genre study of literature		3.0
One course focused on voices of difference (colonial, post-colonial, women's literature, Native American, polyvocal, etc.)		3.0
One single author course		3.0
Two electives from English department or World Literature offerings		6.0
Total Semester Hours		18.0

Minor in English in Creative Writing

A minor in English in Creative Writing requires six courses:

Code	Title	Semester Hours
One of the following:		3.0
ENGL 242	Theory as Creative Practice	
ENGL 243	Theory as Practice on Location	
One course focused on voices of difference (colonial, post-colonial, women's literature, Native American, polyvocal, etc.)		3.0
One single author course		3.0
One complete two-course sequence from the following:		6.0
ENGL 240 & ENGL 290	Poetry Writing I and Poetry Writing II	
ENGL 241 & ENGL 291	Fiction Writing I and Fiction Writing II	
One additional course chosen from the English Department's creative writing courses		3.0
Total Semester Hours		18.0

Environmental Studies

Gregory L. Bruland, Professor

Scott A. Eckert, Professor

John T. Lovseth, Assistant Professor

Christine A. McAllister, Professor

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

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

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

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

Departmental Learning Outcomes

The study of Biological and Environmental Sciences cultivates understanding of and care for the environment; it motivates ethical decisions, and integrates critical and scientific thinking into every educational experience. Students majoring in Biology or Environmental Studies will be able to:

1. *Demonstrate foundational knowledge in the Biological and Environmental Sciences through*

- Demonstration of a thorough knowledge of Earth's biological life.
- The ability to interpret patterns in the landscape and understand the fundamental geological, biological, and ecological processes that drive those patterns.

- The ability to explain fundamental biological processes and their effects on organismal community and ecosystem function.
- Understanding the role of natural selection in the evolution of populations over time.
- Develop a thorough understanding of ecology including the scales of ecological organization and major ecological processes.
- Recognize and explain the ways in which humans are impacting the environment.

2. *Practice scientific skills such as sampling, measuring, estimating, calculating, and analysis of data.*

- Students will be able to know and use the scientific method.

3. *Demonstrate the ability to communicate science and scientific findings to society through*

- Improving the written communication skills through specific instruction in and practice with a variety of writing and speaking styles used in the scientific community.
- Improving the oral communication skills through specific instruction in and practice with a variety of writing and speaking styles used in the scientific community.

B.A. Major in Environmental Studies

The **B.A. major in Environmental Studies** requires 14 courses:

Code	Title	Semester Hours
Bio-block courses taken concurrently:		
BNR 111	Introductory Botany	4.0
BNR 112	Introductory Zoology	4.0
BNR 191	Introduction to Ecology	4.0
BNR 201	Methods in Research & Writing	4.0
Additional required courses:		
BNR 050	BNR Service Learning	0.0
BNR 215	Biometry	3.0
Three BNR or EARTH electives at the 200 or 300 level		9.0-12.0
One advisor-approved advanced ecology course		3.0-4.0
Two advisor-approved SOAN courses or EDST 170 and one other EDST course		6.0-8.0
One of the following:		4.0
CHEM 111	Environmental Chemistry	
CHEM 115	Introduction to Chemistry	
CHEM 131	Fundamentals of Chemistry I	
One of the following:		3.0
ECON 203	Principles of Microeconomics	

ECON 271	Environmental Economics
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Total Semester Hours	44.0-50.0
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Minor in Environmental Studies

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

French

Hélène Diaz Brown, Professor

Karen Haire, Associate Professor

"Learning a foreign language fosters diversity, social inclusion and intercultural dialogue in Europe and beyond," said Dennis Abbott, the European Commission's spokesman for education, culture, multilingualism and youth, adding that "languages are a crucial asset for mobility and jobs, especially for young people." (Teffer, Peter. "E.U. Fights to Get Everyone Speaking Same Language on Education." *The New York Times*. March 16, 2014).

French is one of the only two global languages in the world with English, being spoken on all continents in over 40 countries.

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

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

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

Both French major concentrations will also equip students with 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 such as history, political science, and art history, some of which may also fulfill liberal arts distribution requirements (LADRs).

The program is designed to be compatible with other majors such as educational studies, business administration, global perspectives, history, and political science. Such combinations can lead to a broad range of career choices.

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

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

The French Program also offers a minor and a certificate, allowing students at different levels in their learning process to benefit from the global dimension of the French language.

Useful links include: <http://www.actfl.org>

<http://www.languagetesting.com>

Departmental Learning Outcomes

1. *Communication*

- Language majors will express themselves at the ACTFL advanced-low proficiency level.
- Studies majors will express themselves at the intermediate-high proficiency level.

2. *Cross-Cultural Competency*

- Students will demonstrate cross-cultural competency using the target language as a tool.

B.A. Major in French with a Concentration in French Language

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

Code	Title	Semester Hours
Nine semester hours from the following:		9.0
FREN 204	Intermediate French I	
FREN 205	Intermediate French II	
FREN 210	Intermediate Writing Review	
FREN 216	Intermediate Conversation	
FREN 220	Contemporary French Society	
FREN 225	Intermediate Grammar I	
FREN 226	Intermediate Grammar II	
FREN 230	Language and Culture Abroad II	
FREN 241	French Pronunciation	
12 semester hours from the following:		12.0
FREN 250	French Cultural Studies	
FREN 255	Textual Analysis and Writing	
FREN 260	Reading French Through Time	
FREN 270	Intro to French Literature	
FREN 310	Advanced French	
FREN 316	Advanced French Conversation	
FREN 325	Advanced French Grammar	
FREN 330	Language & Culture Abroad III	

Nine semester hours from the following:	9.0
FREN 300 Love, Reason, and Monarchy	
FREN 320 Topics in French Literature	
FREN 340 Image & Power in 19th C France	
FREN 350 20th Century: Mind Revolutions	
FREN 360 Seminar in French Literature	
FREN 470 Capstone	
Three semester hours from any of the above categories	3.0
Total Semester Hours	33.0

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

Code	Title	Semester Hours
ARTH 203	Medieval Art	3.0
ARTH 205	Topics in Art History	3.0
ARTH 235	19th Century European Art	3.0
ENGL 388	Literature and Critical Theory	3.0
HIST 228	History of France	3.0
WLIT 179	Reading French Society in Film	3.0

B.A. Major in French with a Concentration in French and Francophone Studies

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

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

Code	Title	Semester Hours
Six semester hours from the following:	6.0	
FREN 204	Intermediate French I	
FREN 205	Intermediate French II	
FREN 216	Intermediate Conversation	
FREN 220	Contemporary French Society	
FREN 225	Intermediate Grammar I	
FREN 230	Language and Culture Abroad II	
15 semester hours from the following:	15.0	
FREN 250	French Cultural Studies	
FREN 255	Textual Analysis and Writing	
FREN 260	Reading French Through Time	
FREN 270	Intro to French Literature	
FREN 300	Love, Reason, and Monarchy	
FREN 310	Advanced French	
FREN 330	Language & Culture Abroad III	
FREN 340	Image & Power in 19th C France	

FREN 350	20th Century: Mind Revolutions	
FREN 360	Seminar in French Literature	
FREN 470	Capstone	
Nine semester hours from the following complementary courses:		9.0
ARTH 235	19th Century European Art	
ENGL 388	Literature and Critical Theory	
HIST 228	History of France	
HIST 260	From Renaissance to Revolution	
HIST 264	Revolutionary Europe 1800-1914	
HIST 313	Africa	
SOAN 290	African Cultures	
WLIT 179	Reading French Society in Film	
Three semester hours from any of the above categories		3.0
Total Semester Hours		33.0

Minor in French Language

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

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

The Minor in French is a valuable option for those students who love French but do not have the time in their schedule to complete a major in the language. Since all language courses include a cultural component, the Minor in French is a way to become better acquainted with the cultures of the French-speaking world while developing fluency in French.

A Minor in French may open the door to various professional and cultural opportunities or internships.

Minor in French and Francophone Studies

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

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

The Minor in French and Francophone Studies is a valuable opportunity for those students who love French but do not have the time in their schedule to complete a major in the language. Since all language courses include a cultural component, the Minor in French is a way to become better acquainted with the cultures of the French-speaking world while developing fluency in French.

Certificate in French Language

The French Language certificate requires:

Completion of three courses in French at the 204 level or above	9.0
Achievement of at least intermediate proficiency level on an ACTFL (American Council on the Teaching of Foreign Languages) official, nationally-normed Oral Proficiency Interview (OPI) test	
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Total Semester Hours	9.0

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

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

This certificate is a valuable option for those students who love French but do not have the time in their schedule to complete a minor or a major in the language. Since all language courses include a cultural component, the certificate is an opportunity to become better acquainted with the cultures of the French-speaking world.

Global Studies

Sarah C. Andrews, Assistant Professor

Gregory W. Sandford, Professor

Sally A. Steindorf, Associate Professor

Faculty from other disciplines also support this program.

Global Studies at Principia College is the study of contemporary issues that are truly global in scope, such as poverty, refugees, human trafficking, environmental degradation, climate change, systemic conflict, etc. The focus is both on the complex problems raised by these issues, as well as their potential solutions. The program's purpose is to educate professionals who can communicate and work effectively across the boundaries of traditional bodies of knowledge; understand the interplay among local, national, regional, and global forces; and demonstrate the tools needed to solve complex global problems. Students with a major in Global Studies may choose to work for NGOs, government agencies or intergovernmental bodies tasked with addressing these problems on the ground, or they may prefer to become scholars working to create a more strategic understanding of complex global issues, developing solution landscapes, and deepening academic involvement.

Students meeting the language study and proficiency requirement through the French and Spanish offerings at Principia College must demonstrate proficiency at a minimum of the 205 level. Students meeting this requirement through a non-Western language must demonstrate proficiency by completion of study at a level appropriate for the demands of the particular language. Criteria for language proficiency are determined by the Department of Languages and Cultures. Any

transfer work applied to this requirement must meet institutional transfer policies administered by the Registrar's Office.

Departmental Learning Outcomes

1. Demonstrate understanding of the complex nature of and the interplay among local, national, regional, and global systems
2. Evaluate how global systems shape structures of inequality (e.g. race, ethnicity, class, religion, gender, etc.)
3. Apply transdisciplinary, solution-oriented strategies to complex global issues
4. Apply relevant globalization theories to global phenomena
5. Demonstrate global citizenship
 - a. Demonstrate intercultural competence
 - b. Participate in global service

B.A. Major in Global Studies

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

Code	Title	Semester Hours
Core courses for all major concentrations in Global Studies:		
GLBS 115	Global Citizenship	1.0
GLBS 225	Global Issues	3.0
GLBS 270	World Focus Seminar	1.0
GLBS 315	Strategies to Global Solutions	3.0
One of the following:		3.0
POLS 354	Globalization: Theory/Practice	
SOAN 375	Globalization and Culture	
One practical application course:		3.0-6.0
GLBS 350	Nonprofits: Theory & Practice	
GLBS 405	Internship	
POLS 340	Public Policy Analysis	
Capstone sequence:		6.0
GLBS 435	Capstone Proposal	
GLBS 440	Global Studies Capstone	
Language study and proficiency at a minimum of the 205 level		
International experience approved by the Global Studies Executive Board		
Two classes that focus on a non-US geographic area. At least one of these classes must be focused outside of Western Europe. Must be from two different disciplines. (See below for options.)		6.0

Three classes in one of the following concentrations: Sustainable Development, Peace and Conflict, Cultures in Contact, Social Justice. Students may also create their own concentration with the approval of the Global Studies Program Director. Classes in the selected concentration must come from at least two disciplines and include not more than one 100-level course and at least one 300-level course. (See below for options.)

Total Semester Hours 35.0-38.0

Code	Title	Semester Hours
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*Two classes that focus on a non-US geographic area. At least one of these classes must be focused outside of Western Europe. Must be from two different disciplines.		6.0
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ARTH 230	Asian Art	
ENGL 260	Scottish Literature	
FREN 220	Contemporary French Society	
HIST 222	Latin America	
HIST 228	History of France	
HIST 252	Britain	
HIST 265	20th Century Europe	
HIST 275	South African History	
HIST 281	China	
HIST 283	Japan	
HIST 313	Africa	
HIST 333	Russia	
HIST 335	Middle East	
HIST 382	Modern China	
HIST 386	India	
POLS 254	Latin American Politics	
POLS 255	Contemporary European Politics	
POLS 261	Politics of China	
POLS 263	Topics in Asian Politics	
POLS 264	Russia and the FSU	
SOAN 290	African Cultures	
SPAN 230	Hispanic Culture	
SPAN 355	Spanish Film	
SPAN 372	Modern Hispanic Literature	
WLIT 179	Reading French Society in Film	

Total Semester Hours 6.0

Concentration in Sustainable Development

The sustainable development concentration uses a global lens to examine the three interconnected spheres of sustainability (the social, environmental, and economic). Students selecting this concentration are interested in seeking solutions to some of the world's most pressing problems in ways that "meet the needs of the present without compromising the ability of future generations to meet their own needs" (United Nations World Commission on Environment and Development,

1987). The three courses for the concentration must come from at least two disciplines and include not more than one 100-level course and at least one 300-level course.

Code	Title	Semester Hours
One of the following:		3.0
SUS 151	Introduction to Sustainability	
SUS 260	Sustainable Development	
Two of the following:		6.0
BNR 190	Global Environmental Issues	
BNR 290	Environmental Policy	
ECON 271	Environmental Economics	
ECON 316	Economic Development	
EDST 170	Environmental Education	
ENGL 220	Environmental Literature	
PHIL 255	Global Ethics	
SOAN 160	"Race" and Ethnicity	
SOAN 244	Int'l Human Rights Law & Advcy	
SOAN 365	Global Perspectives of Women	
Total Semester Hours		9.0

Concentration in Peace and Conflict

This concentration is for students interested in both the root causes of conflict as they appear in different forms around the world, and in strategies that could lead us toward lasting peace. Students selecting this concentration will learn about why nations go to war, the role of power in governmental interrelationships, and how security can be achieved. The three courses for the concentration must come from at least two disciplines and include not more than one 100-level course and at least one 300-level course.

Code	Title	Semester Hours
Three of the following:		9.0
ENGL 262	Postcolonial Literature	
ENGL 263	Literature of Conflict	
HIST 180	World History	
HIST 189	Religious Conflict & History	
HIST 335	Middle East	
POLS 152	Politics Among Nations	
POLS 300	Rev:Politics of Violent Change	
POLS 348	U.S. and Global Security	
SOAN 200	Criminology and Criminal Law	
SOAN 244	Int'l Human Rights Law & Advcy	
SOAN 323	Refugees: Culture and Conflict	
SOAN 340	Peace and Conflict	
Total Semester Hours		9.0

Concentration in Cultures in Contact

Students focusing on this concentration specialize in understanding how globalization spreads cultural ideas (e.g. religion, art, education, literature, music) as different ethnic and religious groups interact with one another. Students learn about the socio-cultural beliefs, values and practices of other ethnicities, nationalities, and religions, enabling them to build skills in intercultural knowledge and communication. For additional course options under French or Spanish or courses applicable to the Cultures in Contact Concentration, see your Global Studies advisor. The three courses for the concentration must come from at least two disciplines and include not more than one 100-level course and at least one 300-level course.

Code	Title	Semester Hours
Three of the following:		9.0
ARTH 110	Survey Asia/Africa/Americas	
ARTH 282	Islamic Art	
BNR 225	Indigenous Ecol Knowledge	
EDST 130	Outdoor Education	
EDST 278	Child & Adolescent Literature	
EDST 285	Foundations in Experiential Ed	
EDST 310	Global Education	
ENGL 260	Scottish Literature	
ENGL 262	Postcolonial Literature	
HIST 180	World History	
HIST 240	The History of Islam	
MUS 213	Music of the World	
PHIL 255	Global Ethics	
POLS 365	Advanced Issues	
REL 130	World Religions	
REL 231	History of Christianity	
REL 240	Introduction to Islam	
REL 370	Jews, Christians, & Muslims	
SOAN 100	Intro to Global Sociology	
SOAN 160	"Race" and Ethnicity	
SOAN 240	Native American Cultures	
SOAN 290	African Cultures	
SOAN 323	Refugees: Culture and Conflict	
WLIT 131	Stories Around the Globe	
Total Semester Hours		9.0

Concentration in Social Justice

In the social justice concentration, students work to identify the social inequalities rooted in socio-economic status, gender, and ethnicity, and how these inequalities play out in different settings around the globe. Students seek an understanding of the root causes of these disparities and how to work effectively to eliminate them. The three courses for the concentration must come from at least two disciplines and include not more than one 100-level course and at least one 300-level course.

Code	Title	Semester Hours
Three of the following:		9.0
BNR 225	Indigenous Ecol Knowledge	
ECON 316	Economic Development	
ENGL 262	Postcolonial Literature	
GLBS 350	Nonprofits: Theory & Practice	
PHIL 222	Feminist Philosophy	
PHIL 255	Global Ethics	
SOAN 160	"Race" and Ethnicity	
SOAN 240	Native American Cultures	
SOAN 244	Int'l Human Rights Law & Advcy	
SOAN 290	African Cultures	
SOAN 323	Refugees: Culture and Conflict	
SOAN 365	Global Perspectives of Women	
SUS 260	Sustainable Development	
Total Semester Hours		9.0

Minor in Global Studies

A minor in Global Studies requires seven courses:

Code	Title	Semester Hours
Core Courses for all minor concentrations in Global Studies:		
GLBS 115	Global Citizenship	1.0
GLBS 225	Global Issues	3.0
GLBS 270	World Focus Seminar	1.0
GLBS 315	Strategies to Global Solutions	3.0
One of the following:		3.0
POLS 354	Globalization: Theory/Practice	
SOAN 375	Globalization and Culture	
Two classes in one of the following concentrations: Sustainable Development, Peace and Conflict, Cultures in Contact, or Social Justice. Classes in the selected concentration must come from two disciplines. (See below for options.)		6.0
Total Semester Hours		17.0

Concentration in Sustainable Development

The sustainable development concentration uses a global lens to examine the three interconnected spheres of sustainability (the social, environmental, and economic). Students selecting this concentration are interested in seeking solutions to some of the world's most pressing problems in ways that "meet the needs of the present without compromising the ability of future generations to meet their own needs" (United Nations World Commission on Environment and Development, 1987). The two courses for the concentration must come from at least two disciplines and include one 200 or 300-level course.

Code	Title	Semester Hours
One of the following:		3.0
SUS 151	Introduction to Sustainability	
SUS 260	Sustainable Development	
One of the following:		3.0
BNR 190	Global Environmental Issues	
BNR 290	Environmental Policy	
ECON 271	Environmental Economics	
ECON 316	Economic Development	
EDST 170	Environmental Education	
ENGL 220	Environmental Literature	
PHIL 255	Global Ethics	
SOAN 160	"Race" and Ethnicity	
SOAN 244	Int'l Human Rights Law & Advcy	
SOAN 365	Global Perspectives of Women	
Total Semester Hours		6.0

Concentration in Peace and Conflict

This concentration is for students interested in both the root causes of conflict as they appear in different forms around the world, and in strategies that could lead us toward lasting peace. Students selecting this concentration will learn about why nations go to war, the role of power in governmental interrelationships, and how security can be achieved. The two courses for the concentration must come from two disciplines and include at least one 300-level course.

Code	Title	Semester Hours
Two of the following:		6.0
HIST 180	World History	
HIST 189	Religious Conflict & History	
HIST 335	Middle East	
ENGL 262	Postcolonial Literature	
ENGL 263	Literature of Conflict	
POLS 152	Politics Among Nations	
POLS 300	Rev:Politics of Violent Change	
POLS 348	U.S. and Global Security	
SOAN 200	Criminology and Criminal Law	
SOAN 244	Int'l Human Rights Law & Advcy	
SOAN 323	Refugees: Culture and Conflict	
SOAN 340	Peace and Conflict	
Total Semester Hours		6.0

Concentration in Cultures in Contact

Students focusing on this concentration specialize in understanding how globalization spreads cultural ideas (e.g. religion, art, education, literature, music) as different ethnic and religious groups interact with one another. Students learn about the socio-cultural beliefs, values, and practices of other ethnicities, nationalities, and religions, enabling them to build skills in intercultural knowledge and communication.

For additional course options under French or Spanish for courses applicable to the Cultures in Contact thematic area, see your Global Studies advisor. The two courses for the concentration must come from two disciplines and include at least one 300-level course.

Code	Title	Semester Hours
Two of the following:		6.0
ARTH 110	Survey Asia/Africa/Americas	
ARTH 282	Islamic Art	
BNR 225	Indigenous Ecol Knowledge	
EDST 130	Outdoor Education	
EDST 278	Child & Adolescent Literature	
EDST 285	Foundations in Experiential Ed	
EDST 310	Global Education	
ENGL 260	Scottish Literature	
ENGL 262	Postcolonial Literature	
HIST 180	World History	
HIST 240	The History of Islam	
MUS 213	Music of the World	
PHIL 255	Global Ethics	
POLS 365	Advanced Issues	
REL 130	World Religions	
REL 231	History of Christianity	
REL 240	Introduction to Islam	
REL 370	Jews, Christians, & Muslims	
SOAN 100	Intro to Global Sociology	
SOAN 160	"Race" and Ethnicity	
SOAN 240	Native American Cultures	
SOAN 290	African Cultures	
SOAN 323	Refugees: Culture and Conflict	
WLIT 131	Stories Around the Globe	
Total Semester Hours		6.0

Concentration in Social Justice

In the social justice thematic area, students work to identify the social inequalities rooted in socio-economic status, gender, and ethnicity, and how these inequalities play out in different settings around the globe. Students seek an understanding of the root causes of these disparities and how to work effectively to eliminate them. The two courses for the concentration must come from two disciplines and include at least one 300-level course.

Code	Title	Semester Hours
Two of the following:		6.0
BNR 225	Indigenous Ecol Knowledge	
ECON 316	Economic Development	
ENGL 262	Postcolonial Literature	
GLBS 350	Nonprofits: Theory & Practice	

PHIL 222	Feminist Philosophy
PHIL 255	Global Ethics
SOAN 160	"Race" and Ethnicity
SOAN 240	Native American Cultures
SOAN 244	Int'l Human Rights Law & Advcy
SOAN 290	African Cultures
SOAN 323	Refugees: Culture and Conflict
SOAN 365	Global Perspectives of Women
SUS 260	Sustainable Development
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Total Semester Hours	6.0

History

Karen Haire, Associate Professor

Gregory W. Sandford, Professor

Peter C. P. van Lidth de Jeude, Assistant Professor

Winston Churchill once said, "The farther back you can look, the farther forward you are likely to see." The study of history provides a depth of perspective that allows us to address the problems of today's world with an understanding of how they have been shaped by human experience over time and what forces are likely to shape them in the future. It develops an ability to analyze processes of change, of cause and effect; to distinguish what is lasting and significant from what is relatively temporary and trivial; and to see beyond the boundaries of our own time and place.

Principia's history program emphasizes chronology, sequence, and the broader context of human events. It addresses the moral issues raised by these events and the ethics of how we analyze and record them. Because many issues historians focus on today are global and engage the expertise of multiple disciplines, attention is also given to developing a global perspective and an awareness of how multiple disciplines contribute to the historical narrative.

Students in Principia's History Department explore historical thinking, master historical knowledge, engage in historical research and analysis, and learn to communicate effectively within the discipline of history. The History Department offers programs of study in American, European, and non-Western history in conjunction with courses offered in literature, languages and culture, economics, political science, religion, philosophy, and sociology that enrich and complement the course offerings in history.

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

Courses taken in the introductory core may be applied to the area of focus if the student received a grade of B or higher in those courses; however, a total of 14 courses is required to complete the major. Students are required to take three upper

division courses in addition to the capstone courses, HIST 497 Designing Capstone Research and HIST 498 Capstone Research & Writing.

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

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

Departmental Learning Outcomes

1. *Understand Historical Thinking*

Students will demonstrate a comprehension of how chronology, contextual influences, and culture shape how historians think as they read, research, and write history.

2. *Master Historical Knowledge*

Students will demonstrate mastery of core knowledge and advanced knowledge in one or more specific areas.

3. *Engage in Historical Research*

Students will demonstrate an ability to frame historical questions, access and evaluate sources, and conduct historical research.

4. *Communicating Effectively Within The Discipline of History*

Students will demonstrate the ability to speak, write, read, and listen effectively in historical contexts.

B.A. Major in History

The B.A. major in History requires a minimum of 14 courses:

Code	Title	Semester Hours
Introductory History Core:		
One American history course from the following:		3.0
HIST 160	U.S. in the 20th Century	
HIST 202	American Revolution	
HIST 203	U.S. Civil War Era	
One European history course from the the following:		3.0
HIST 255	The Middle Ages	
HIST 260	From Renaissance to Revolution	
HIST 264	Revolutionary Europe 1800-1914	
HIST 265	20th Century Europe	
One non-Western history course from the following:		3.0

HIST 189	Religious Conflict & History	
HIST 240	The History of Islam	
HIST 275	South African History	
HIST 281	China	
Additional Required Courses:		
HIST 270	History Focus Seminar (taken twice)	2.0
HIST 297	Historical Thinking & Research	3.0
Six courses in a focus area		18.0
HIST 497	Designing Capstone Research ¹	3.0
HIST 498	Capstone Research & Writing ¹	3.0
Total Semester Hours		38.0

¹ History majors are required to take three upper division courses in addition to the capstone courses, HIST 497 Designing Capstone Research and HIST 498 Capstone Research & Writing.

Minor in History

A minor in History requires six courses:

Code	Title	Semester Hours
HIST 270	History Focus Seminar	1.0
HIST 297	Historical Thinking & Research	3.0
Four additional courses selected in conjunction with the department chair		12.0
Total Semester Hours		16.0

Individualized Majors

James H. Hegarty, Director of Academic Special Programs

Faculty from other disciplines also support this program.

Individualized Majors (IMs) give students an opportunity to design their own major or complete a major not regularly offered by Principia. IMs draw upon existing Principia courses and can include courses successfully completed at other institutions.

There are two types of IMs. Students can design an original major uniquely suited to their individual needs. Recent examples of original IMs include: theatrical design and film studies.

Alternately, students can declare an IM using an existing Template. IM Templates provide pre-approved curriculum in existing popular subjects. Current Templates are available in:

- Digital Media Production
- Art History
- Sociology and Anthropology

To participate in an IM program, students must work with a faculty advisor to develop an original plan for a major that must be approved by the College

Curriculum Committee. All IMs must also follow all requirements for the B.A. or the B.S. degree. For more information on the IM program please contact the Director of Academic Special Programs.

Principia College does not offer individualized minors.

Management Information Systems

John W. Broere, Instructor

Thomas H. Fuller Jr, Professor

Clinton A. Staley, Professor

Principia's Department of Computer Science offers a minor in management information systems. 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.

The minor in management information systems is designed to prepare students to work with business programming, emphasizing a professional approach. Students in this minor will study methodologies for complex software system development, database management, database design, and professional ethics.

The Computer Science Department also offers both a B.S. and a B.A. in computer science (p. 49). A student may not earn both a major in computer science and a minor in management information systems. To complete a major or minor offered by the Computer Science Department, a student must earn a cumulative average of 2.000 or higher for the courses (required and elective, within the department or outside it, such as math and engineering) taken for that program.

Minor in Management Information Systems

A minor in Management Information Systems requires seven courses:

Code	Title	Semester Hours
BUAD 215	Intro to Mgmt Info Systems	3.0
CSCI 171	Introduction to Programming	4.0
CSCI 310	Software Engineering	3.0
CSCI 320	Database Management Systems	4.0
CSCI 421	Computer Issues Seminar	3.0
Two additional courses from business administration or economics at the 200 level or above		6.0
<hr/>		
Total Semester Hours		23.0

Mass Communication

Stephanie M. Bauer, Instructor

Daniel D. Kistler, Associate Professor

Joan T. Wesman, Assistant Professor

Paul R. Wesman, Assistant Professor

John W. Williams, Professor

The goal of Principia’s Mass Communication program is to inspire students to use their knowledge, skill and talent in the media for constructive purposes—through business, journalism and the arts.

Through our program, students acquire familiarity with and knowledge of current media-related professions, to prepare them for a range of career options. These professions include public relations and advertising, corporate communications, journalism, film, television and video, as well as radio broadcasting and other forms of audio storytelling.

Students also learn the skills essential to working in these media professions. Skills taught include writing, reporting and editing, photography, video and audio production, graphic design, social media, and public speaking. These capabilities are the foundation for effective storytelling of all types, across all media platforms.

Lastly, and perhaps most importantly, students learn media literacy—developing and applying critical and creative thinking to all aspects of the media industry, including its messages and their effects on individuals and society. Media literacy involves understanding the business context of the media, the importance of informed media use, ethical and legal considerations, global media issues, and the role of media in a democratic society.

With a rich combination of classroom instruction, hands-on experience with professional equipment and facilities, team-based projects, internships, field programs, and academic study—students are exposed to the full spectrum of ideas, skills, and critical thinking they will need to make a positive contribution to the world as Principia-educated consumers and producers of media content.

Departmental Learning Outcomes

1. Historical Foundations

Mass Communication students need to know the basic timeline of significant media events as well as events in the development of the media itself. They need to understand the differences and similarities between current events and trends and those in the past. Students should be able to explain the connections between developments in culture and the evolution of communication technologies.

2. Theoretical Foundations

Students of Mass Communication should comprehend the effects of media on society, should be familiar with the forms of research used in the mass communication disciplines, and understand how messages come across differently in different media.

3. Contemporary Issues in Media

Mass Communication students are exposed to the prominent issues in the field, such as the convergence of information from analog to digital forms, the shifting roles between information providers and receivers and the shifting ethical implications of evolving technologies.

4. Proficiency in Communicating Across Platforms

Mass Communication students learn how to express ideas and stories through the written word, still images and video, in a clear, compelling, and structured way. They learn proficiency in use of media-related equipment and technology, to collaborate in teams and to develop a sense of quality and excellence.

5. *Awareness of professional ethical standards and Christian Science values in relation to work in the media*

Students become familiar with the range of ethical issues that can arise in the mass communication fields and with the accepted ethical standards of these professions. They are encouraged to think through how they would practice these standards in their own work, and to apply their own practice of Christian Science to the decisions they make as professionals in the media industries.

B.A. Major in Mass Communication with a Concentration in Journalism

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

Concentration in Journalism

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

Code	Title	Semester Hours
Five required core courses:		
MCOM 110	Intro to Mass Communication	3.0
MCOM 210	Media Reporting and Writing	3.0
MCOM 301	Mass Media in Society	3.0
MCOM 302	Media Law and Ethics	4.0
MCOM 411	Adv Topics in Communication	3.0
Three of the following advanced media writing courses:		9.0
MCOM 224	Feature Writing	
MCOM 226	Opinion Writing	
MCOM 240	Broadcast Journalism	
MCOM 266	Public Relations Writing	
MCOM 322	Advanced Reporting and Writing	
MCOM 339	Multi-Platform Storytelling	
One of the following visual media courses:		3.0-4.0
MCOM 181	Photography Fundamentals	
MCOM 281	Photojournalism	
MCOM 282	Intermediate Photography	
MCOM 292	Video Production	
MCOM 293	Corporate Video	
MCOM 388	The Photographic Essay	
MCOM 392	Documentary Video	
One of the following:		3.0
ARTS 170	Graphic Design I	

ARTS 175	Print Design	
ARTS 290	Web Design	
MCOM 140	Public Speaking	
MCOM 235	Communication Seminar	
MCOM 236	Mrs. Eddy and The C.S. Monitor	
MCOM 241	Television Workshop	
MCOM 242	Speech Skills for the Media	
MCOM 251	Radio Broadcasting	
MCOM 263	Public Relations	
MCOM 354	Advanced Radio Broadcasting	
MCOM 400	Internship	3.0-10.0
Practical Experience Requirement. At least four semesters of public service in:		0.0-4.0
MCOM 028	Newspaper Production	
MCOM 228	Newspaper Practicum	
Completion of a minor in an academic field that would serve as an area of writing specialization (e.g. political science, environmental studies, sociology and anthropology, economics, business administration, global perspectives, etc.)		
Total Semester Hours		34.0-46.0

B.A. Major in Mass Communication with a Concentration in Multi-Platform

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

Concentration in Multi-Platform

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

Code	Title	Semester Hours
Six required core courses:		
MCOM 110	Intro to Mass Communication	3.0
MCOM 210	Media Reporting and Writing	3.0
MCOM 263	Public Relations	3.0
MCOM 301	Mass Media in Society	3.0
MCOM 302	Media Law and Ethics	4.0
MCOM 411	Adv Topics in Communication	3.0
One of the following visual media courses:		3.0-4.0
MCOM 181	Photography Fundamentals	
MCOM 281	Photojournalism	
MCOM 282	Intermediate Photography	
MCOM 292	Video Production	
MCOM 293	Corporate Video	
MCOM 388	The Photographic Essay	
MCOM 392	Documentary Video	

One of the following graphics production or design courses:	3.0
ARTS 170 Graphic Design I	
ARTS 175 Print Design	
ARTS 290 Web Design	
One of the following advanced media writing courses:	3.0
MCOM 224 Feature Writing	
MCOM 226 Opinion Writing	
MCOM 240 Broadcast Journalism	
MCOM 266 Public Relations Writing	
MCOM 322 Advanced Reporting and Writing	
MCOM 339 Multi-Platform Storytelling	
One of the following broadcasting or speech courses:	3.0
MCOM 140 Public Speaking	
MCOM 241 Television Workshop	
MCOM 242 Speech Skills for the Media	
MCOM 251 Radio Broadcasting	
MCOM 354 Advanced Radio Broadcasting	
One additional course from:	3.0-4.0
Any of the lists above	
BUAD 326 Multi-Channel Marketing	
MCOM 235 Communication Seminar	
MCOM 236 Mrs. Eddy and The C.S. Monitor	
MCOM 400 Internship	3.0-10.0
Practical Experience Requirement. At least three semesters, two of which should be for non-credit, of public service in:	0.0-1.0
MCOM 028 Newspaper Production	
MCOM 042 Television Production	
MCOM 052 Radio on Air	
MCOM 053 Radio Station Management	
MCOM 228 Newspaper Practicum	
MCOM 246 Television Practicum	
MCOM 283 Yearbook Editing	
Total Semester Hours	37.0-47.0

Minor in Mass Communication

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

Code	Title	Semester Hours
MCOM 110	Intro to Mass Communication	3.0
MCOM 210	Media Reporting and Writing	3.0
One of the following visual media courses:		3.0-4.0
MCOM 181	Photography Fundamentals	
MCOM 281	Photojournalism	
MCOM 282	Intermediate Photography	

MCOM 292	Video Production	
MCOM 293	Corporate Video	
MCOM 388	The Photographic Essay	
MCOM 392	Documentary Video	
One of the following advanced media writing courses:		3.0
MCOM 224	Feature Writing	
MCOM 226	Opinion Writing	
MCOM 240	Broadcast Journalism	
MCOM 266	Public Relations Writing	
MCOM 322	Advanced Reporting and Writing	
MCOM 339	Multi-Platform Storytelling	
One of the following:		3.0
MCOM 236	Mrs. Eddy and The C.S. Monitor	
MCOM 241	Television Workshop	
MCOM 242	Speech Skills for the Media	
MCOM 251	Radio Broadcasting	
MCOM 263	Public Relations	
MCOM 354	Advanced Radio Broadcasting	
One additional MCOM course at the 200 level or above		3.0-4.0
Practical Experience Requirement. At least four semesters of public service in:		0.0-4.0
MCOM 028	Newspaper Production	
MCOM 042	Television Production	
MCOM 052	Radio on Air	
MCOM 053	Radio Station Management	
MCOM 228	Newspaper Practicum	
MCOM 246	Television Practicum	
MCOM 283	Yearbook Editing	
Total Semester Hours		18.0-24.0

Mathematics

Thomas H. Fuller Jr, Professor

Stephen G. Hinthorne, Professor

Andrew T. Parker, Associate Professor

David W. Robertson, Assistant Professor

Mathematics is a deductive science which studies pattern and structure with ideas grounded in numbers and shapes. The Mathematics Department at Principia College offers programs that lead to a Bachelor of Science in mathematics, a Bachelor of Arts in mathematics, and a minor in mathematics. The department also supports other departmental programs requiring mathematical training through various service courses.

The B.S. degree program prepares students for both graduate work in applied mathematics fields and careers in applied mathematics in industry. The B.A. degree program prepares students for graduate work in pure mathematics.

Mathematics majors must complete a core of required mathematics courses with a 2.000 grade point average or higher. This core consists of:

MATH 181	Calculus I	5.0
MATH 182	Calculus II	5.0
MATH 211	History of Mathematics	2.0
MATH 220	Mathematical Proofs	2.0
MATH 273	Linear Algebra	3.0
MATH 283	Multivariable Calculus	4.0

The major programs differ in the required elective options and some required courses more appropriate to a particular degree program at the upper division level. Both major programs require a Senior Capstone course and a research paper written primarily in that course.

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

Departmental Learning Outcomes

1. *Students will be able to demonstrate knowledge of the foundational elements of undergraduate mathematics such as geometry, analysis, algebra, and logic.*
2. *Students can solve problems appropriate for an undergraduate mathematics program.*
3. *Students can synthesize proofs of theorems appropriate for an undergraduate mathematics program.*

B.S. Major in Mathematics

The **B.S. major in Mathematics** requires 13 courses equaling 42 SH:

Code	Title	Semester Hours
MATH 181	Calculus I	5.0
MATH 182	Calculus II	5.0
MATH 211	History of Mathematics	2.0
MATH 220	Mathematical Proofs	2.0
MATH 273	Linear Algebra	3.0
MATH 283	Multivariable Calculus	4.0
Five courses from:		15.0
MATH 261	Discrete Math	
MATH 355	Applied Advanced Calculus	
MATH 360	Numerical Analysis	
MATH 364	Mathematical Statistics	
MATH 380	Differential Equations	
MATH 431	Complex Variables	
One approved elective		3.0
MATH 415	Senior Capstone	3.0
Total Semester Hours		42.0

B.A. Major in Mathematics

The **B.A. major in Mathematics** requires 12 courses equaling 39 SH:

Code	Title	Semester Hours
MATH 181	Calculus I	5.0
MATH 182	Calculus II	5.0
MATH 211	History of Mathematics	2.0
MATH 220	Mathematical Proofs	2.0
MATH 273	Linear Algebra	3.0
MATH 283	Multivariable Calculus	4.0
One of the following:		3.0
MATH 261	Discrete Math	
MATH 364	Mathematical Statistics	
MATH 304	Synthetic Geometry	3.0
MATH 374	Algebraic Structures	3.0
MATH 432	Real Analysis	3.0
One approved elective		3.0
MATH 415	Senior Capstone	3.0
Total Semester Hours		39.0

Minor in Mathematics

A **minor in Mathematics** requires six courses equaling 22 SH with an average grade of C or above:

Code	Title	Semester Hours
MATH 181	Calculus I	5.0
MATH 182	Calculus II	5.0
MATH 273	Linear Algebra	3.0
MATH 283	Multivariable Calculus	4.0
One of the following:		2.0
MATH 211	History of Mathematics	
MATH 220	Mathematical Proofs	
One of the following:		3.0
MATH 261	Discrete Math	
MATH 304	Synthetic Geometry	
MATH 320	Elementary Number Theory	
MATH 364	Mathematical Statistics	
Total Semester Hours		22.0

Music

James H. Hegarty, Professor

April Mok, Assistant Professor

Laura G. Parker, Assistant Professor

Joseph D. Van Riper, Associate Professor

Rose J. Whitmore, Assistant Professor

Music Department courses nurture development in musical artistry, personal and spiritual growth, as well as excellence in sacred and secular musical performance and scholarship, and an appreciation for the rich variety of musical expression and thought that leads to a greater understanding of people of all cultures.

The music program at Principia offers a breadth of major options which provide the opportunity to explore a range of musical rigor and emphases. The full B.A. in Music provides a solid preparation for graduate work while the B.A. in Music Studies provides a knowledge of music which may complement studies in other fields. The B.A. Major in Music Studies: Producer/Performer emphasizes the combined study of technology and performance. Music minor programs give students an opportunity to study music technology and music in general. All offerings are designed to provide both majors and non-majors a broad introduction to music through performance, history, theory, and appreciation.

Music Majors

B.A. in Music (p. 94):

This degree is for students wishing to pursue music studies beyond the undergraduate level. The courses required of a B.A. in Music provide a solid preparation for graduate work.

A grade of C or higher must be attained in each of the following courses in order to complete the major: Class Piano* (MUS 115 Class Piano I and MUS 116 Class Piano II); Music Theory & Musicianship (MUS 140 Music Theory & Musicianship I); Musicianship MUS 160 Musicianship II, MUS 265 Musicianship III, MUS 266 Musicianship IV); Music Theory (MUS 170 Music Theory II, MUS 275 Music Theory III, and MUS 302 Music Theory IV).

B.A. in Music Studies (p. 95):

This degree program is for students who will be entering a field where a knowledge of music will be helpful. A grade of C or higher must be attained in each of the following courses in order to complete the major: Class Piano* (MUS 115 Class Piano I and MUS 116 Class Piano II); Music Fundamentals (MUS 139 Intro to Music Fundamentals); Music Theory & Musicianship (MUS 140 Music Theory & Musicianship I); Musicianship (MUS 160 Musicianship II); Music Theory (MUS 170 Music Theory II)

B.A. in Music Studies: Producer/Performer (p. 96):

This degree is designed for students interested in pursuing a musical practice that draws upon a combination of performance and technology. Course work develops skills in music production, songwriting, performance, and sound design. A grade of C or higher must be attained in each of the following courses in order to complete the major: Class Piano* (MUS 115 Class Piano I and MUS 116 Class Piano II);

Music Fundamentals (MUS 139 Intro to Music Fundamentals); Music Theory & Musicianship (MUS 140 Music Theory & Musicianship I); Musicianship (MUS 160 Musicianship II); Music Theory (MUS 170 Music Theory II).

Music Minors

The music minors (Minor in Music General Emphasis (p. 97) and Minor in Music Technology (p. 98)) are designed to provide students with the opportunity to focus on specific areas of musical interest. Students work with the department chair and a music faculty member in the specific focus area to select courses that fulfill these interests and meet the requirements.

Piano Proficiency Requirement

The Music Department recognizes the essential need of its majors to acquire a basic skill level on the piano in order to be successful students of music. This requirement supports the students' work towards a solid grounding in music at the undergraduate level. To attain that basic skill level, the Music Department offers MUS 115 Class Piano I and MUS 116 Class Piano II. Successful completion of MUS 116 Class Piano II (a letter grade of C or higher) will satisfy the piano proficiency requirement for a B.A. Major in Music, a B.A. Major in Music Studies, and a B.A. Major in Music Studies: Producer/Performer.

*Students may test out of MUS 115 Class Piano I, or they may test out of the piano proficiency requirement fully by auditioning for the music faculty.

Guidelines:

1. MUS 115 Class Piano I and MUS 116 Class Piano II are repeatable one time only.
2. It is expected that the piano proficiency requirement will be satisfied by the end of junior year.

Studio Lesson Requirement

In addition to completing the piano proficiency requirement, music majors (B.A. in Music) are required to take studio lessons each semester in which they are declared music majors. They must register for MUS 120 Applied Lessons (50 Minutes) or MUS 130 Applied Lessons (25 Minutes). However, if registering for studio lessons for credit extends a student course-load beyond 18 semester hours in a particular semester, the student may register for the non-credit lessons MUS 040 Applied Lessons (50 Minutes) or MUS 044 Applied Lessons (25 Minutes). All performance majors must register for MUS 120 Applied Lessons (50 Minutes) or MUS 040 Applied Lessons (50 Minutes).

Studio lessons are available through the department for other majors as well. Any student interested in studio lessons must register for MUS 120 Applied Lessons (50 Minutes) or MUS 130 Applied Lessons (25 Minutes). However, if registering for studio lessons for credit extends a student course-load beyond 18 semester hours in a particular semester, the student may register for the non-credit lessons MUS 040 Applied Lessons (50 Minutes) or MUS 044 Applied Lessons (25 Minutes) that semester. Any combination of instruments in any combination of 50- or 25-minutes lessons may be taken. All lessons, with the exception of carillon, carry a fee.

Ensemble Requirement

Music majors (B.A. in Music or B.A. in Music Studies) are required to participate in choir, orchestra, or jazz ensemble each semester in which they are declared music majors, with a minimum of four semesters.

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 faculty. All students interested in the post-baccalaureate study of music education are strongly recommended to pursue the following work during the course of their music major:

One year of applied voice lessons

MUS 180	Instrumental Techniques	3.0
MUS 182	Choral Conducting	2.0
MUS 281	Instrumental Conducting	2.0

Departmental Learning Outcomes

1. *Students will perform and express themselves creatively in a variety of musical communities.*
2. *Students will demonstrate essential historical and theoretical concepts in music.*
3. *Students will demonstrate character unfoldment through their professional and personal growth.*
4. *Students will demonstrate an appreciation of multicultural musical styles.*

B.A. Major in Music

The B.A. major in Music requires 46-58 semester hours plus studio lessons:

Piano Proficiency Requirement ¹		2.0-4.0
MUS 115	Class Piano I	
MUS 116	Class Piano II	
MUS 140	Music Theory & Musicianship I	3.0
MUS 160	Musicianship II	2.0
MUS 170	Music Theory II	3.0
MUS 265	Musicianship III	2.0
MUS 266	Musicianship IV	2.0
MUS 275	Music Theory III	3.0
MUS 302	Music Theory IV	3.0
MUS 321	Music History I	4.0
MUS 322	Music History II	4.0
MUS 391	Form and Analysis	3.0
One of the following:		3.0
MUS 212	Traditional Korean Music	
MUS 213	Music of the World	
Two of the following:		6.0-8.0

MUS 100	Intro to the Art of Music (only if taken before MUS 321 or MUS 322)	
MUS 101	Symphonic Masterworks	
MUS 102	Operatic Masterworks	
MUS 200	Topics in Music History	
MUS 201	Beethoven: The Great Master	
MUS 203	American Musical Theater	
MUS 204	The Jazz Tradition in America	
MUS 205	The Creative World of Mozart	
MUS 207	Popular Music in America	
MUS 209	Songs through Time	
MUS 227	Field Studies in Music	
MUS 206	Student Recital ²	
	or MUS 303 Junior Recital	
One of the following: ³		6.0-10.0
MUS 401	Senior Project: Composition (taken concurrently with MUS 407 Recital Program Notes)	
MUS 402	SR Project: Music Research	
MUS 403	SR Project: Adv Performance (taken concurrently with MUS 407 Recital Program Notes)	
MUS 404	Senior Project: Analysis	
MUS 405	SR Proj: Performance/Research	
MUS 408	SR Project: Music Recital (taken concurrently with MUS 407 Recital Program Notes)	
Studio Lesson Requirement (See Overview page)		
Four semesters faculty-directed ensemble		0.0-4.0
Total Semester Hours		46.0-58.0

¹ Students may test out of Class Piano I, or they may test out of the piano proficiency requirement fully by auditioning for the music faculty. Piano performance majors must enroll in applied piano lessons and are expected to test out of MUS 115 and 116.

² This option requires 3-5 SH total in either one or both of these courses.

³ Normally a student will enroll in a senior capstone for two consecutive semesters in consultation with the music faculty.

B.A. Major in Music Studies

A B.A. Major in Music Studies requires 35-42 semester hours:

Piano Proficiency Requirement ¹		2.0-4.0
MUS 115	Class Piano I	
MUS 116	Class Piano II	
MUS 139	Intro to Music Fundamentals	3.0
MUS 140	Music Theory & Musicianship I	3.0
MUS 160	Musicianship II	2.0
MUS 170	Music Theory II	3.0
Three of the following: (two which must be at or above the 200 level)		9.0-13.0

MUS 100	Intro to the Art of Music (only if taken before MUS 321 or MUS 322)	
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 206	Student Recital ²	
	or MUS 303 Junior Recital	
MUS 207	Popular Music in America	
MUS 209	Songs through Time	
MUS 227	Field Studies in Music	
MUS 275	Music Theory III	
MUS 302	Music Theory IV	
MUS 321	Music History I	
MUS 322	Music History II	
MUS 391	Form and Analysis	
One of the following:		3.0
MUS 212	Traditional Korean Music	
MUS 213	Music of the World	
One of the following:		4.0
MUS 321	Music History I	
MUS 322	Music History II	
Two semesters applied lessons		1.0-2.0
Four semesters faculty-directed ensemble		4.0
Total Semester Hours		34.0-41.0

¹ Students may test out of Class Piano I, or they may test out of the piano proficiency requirement fully by auditioning for the music faculty. Piano performance majors must enroll in applied piano lessons and are expected to test out of MUS 115 and 116.

² This option requires 3-5 SH total in either one or both of these courses.

B.A. Major in Music Studies: Producer/Performer

A B.A. Major in Music Studies: Production/Performance requires 35-47 semester hours:

Piano Proficiency Requirement ¹		2.0-4.0
MUS 115	Class Piano I	
MUS 116	Class Piano II	
MUS 112	Music Recording Techniques	1.0
MUS 139	Intro to Music Fundamentals ²	3.0
MUS 140	Music Theory & Musicianship I	3.0
MUS 160	Musicianship II	2.0
MUS 170	Music Theory II	3.0

MUS 235	Advanced Recording	3.0
MUS 335	Advanced Music Production	3.0
One of the following:		3.0
MUS 212	Traditional Korean Music	
MUS 213	Music of the World	
Three of the following:		9.0-13.0
MUS 100	Intro to the Art of Music	
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 206	Student Recital	
MUS 207	Popular Music in America	
MUS 227	Field Studies in Music	
MUS 321	Music History I	
MUS 322	Music History II	
One of the Following:		3.0-5.0
For students interested in music performance: ³		
MUS 303	Junior Recital	
For students interested in music production:		
An internship in the area of music production		
Four semesters of applied lessons and/or faculty-directed ensemble		0.0-4.0
Total Semester Hours		35.0-47.0

¹ Students may test out of Class Piano I, or they may test out of the piano proficiency requirement fully by auditioning for the music faculty.

² It is strongly recommended that MUS 139 and MUS 115 be taken in the same semester, followed by MUS 116 the next semester.

³ Students choosing music performance are expected to enroll in a minimum of two semesters of applied lessons and demonstrate a level of proficiency on their instrument. Subject to music faculty approval.

Minor in Music General Emphasis

A minor in Music General Emphasis requires 18 - 26 semester hours:

Code	Title	Semester Hours
One of the following:		3.0-5.0
MUS 139	Intro to Music Fundamentals	
MUS 140	Music Theory & Musicianship I	
MUS 160 & MUS 170	Musicianship II and Music Theory II	
MUS 265 & MUS 275	Musicianship III and Music Theory III	
One of the following:		3.0-5.0

MUS 100	Intro to the Art of Music	
MUS 321	Music History I	
MUS 322	Music History II	
Four music electives (at least three semester hours each) ¹		12.0
Two semesters of class piano, studio lessons, or faculty-directed ensemble		0.0-4.0
Total Semester Hours		18.0-26.0

¹ Music electives should be chosen in consultation with the department chair.

Minor in Music Technology

A minor in Music Technology requires 16- 22 semester hours:

Code	Title	Semester Hours
MUS 112	Music Recording Techniques	1.0
MUS 235	Advanced Recording	3.0
MUS 335	Advanced Music Production	3.0
One of the following: ¹		3.0-5.0
MUS 139	Intro to Music Fundamentals	
MUS 140	Music Theory & Musicianship I	
MUS 160 & MUS 170	Musicianship II and Music Theory II	
MUS 265 & MUS 275	Musicianship III and Music Theory III	
A total of three semester hours from the following: ¹		3.0
MCOM 251	Radio Broadcasting	
MCOM 292	Video Production	
MCOM 354	Advanced Radio Broadcasting	
MUS 110	Introduction to Computer Music	
MUS 225	Music Composition	
One music history elective (at least 3 semester hours) ¹		3.0
Two semesters of class piano, studio lessons, or faculty-directed ensemble		0.0-4.0
Total Semester Hours		16.0-22.0

¹ Electives should be chosen in consultation with the music department chair.

Philosophy

Crystal R. Allen-Gunasekera, Assistant Professor
Christopher B. Young, Assistant Professor

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

Understanding and grappling with these questions can help students in all other disciplines and in any career. Courses in philosophy are specifically designed to

encourage broad-minded, critical, and compassionate thinking about the world and humanity's place therein. Students will read and study the ideas of philosophers, religious thinkers, and political leaders. Equally important, they will learn how to be philosophers themselves.

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

Departmental Learning Outcomes

Purpose: To cultivate in students a critical awareness of the issues and needs of humanity and the world and respond with critical, compassionate, sensitive understanding.

1. *Critical thinking*

Students will demonstrate critical thinking through analysis of texts using original ideas, defense of arguments with independent reasoning, and dialogical competence.

2. *Ethical reasoning and living*

Students will evaluate ethical theory based on an awareness of classical positions and particular environments.

3. *Commitment to Community and Communication*

Students will evaluate multiple viewpoints with an awareness of personal bias based on an understanding and respect of disparate worldviews and traditions.

4. *Philosophic Scholarship*

Students will demonstrate a working knowledge of philosophical themes/texts, which will result in a level of comfort and clarity in a state of constant inquiry.

B.A. Major in Philosophy

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

Code	Title	Semester Hours
	One course in critical thinking and logic	3.0
	Two courses in history of philosophy	6.0
	Two courses in value theory (axiology)	6.0
	One course with a non-Western focus (from any discipline)	3.0
	Two philosophy electives	6.0
PHIL 421	Seminar in Philosophy	3.0
PHIL 440	Capstone in Philosophy	3.0
Total Semester Hours		30.0

Minor in Philosophy

A minor in Philosophy requires five courses. The course work must be spread judiciously across at least these areas of philosophy: ethics, epistemology,

metaphysics, and the history of philosophy. The particular course of study is to be worked out individually between student and a member of the Philosophy Department faculty.

Physics

Jonathan S. Langton, Assistant Professor

Grant E. Larsen, Assistant Professor

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

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

Departmental Learning Outcomes

1. *Demonstrate a qualitative and quantitative understanding of the four major fields of physics: classical mechanics, electricity and magnetism, modern physics, and thermal physics.*
2. *Apply the key elements of scientific reasoning by designing and conducting experiments.*
3. *Communicate clearly the results of scientific inquiry, both in written and oral forms.*

B.S. Major in Physics

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

Code	Title	Semester Hours
CHEM 131	Fundamentals of Chemistry I	4.0
MATH 181	Calculus I	5.0
MATH 182	Calculus II	5.0
MATH 273	Linear Algebra	3.0
MATH 283	Multivariable Calculus	4.0
MATH 355	Applied Advanced Calculus	3.0
MATH 380	Differential Equations	3.0
PHYS 201	Phys for Scientists/Engrs I	4.0
PHYS 202	Phys for Scientists/Engrs II	4.0
PHYS 203	Phys for Scientists/Engrs III	4.0
PHYS 204	Phys for Scientists/Engrs IV	3.0
PHYS 283	Advanced Laboratory	4.0
PHYS 301	Classical Mechanics	3.0

PHYS 303	Electricity & Magnetism I	3.0
PHYS 305	Quantum Mechanics I	3.0
PHYS 307	Statistical Mechanics	3.0
PHYS 401	Research	1.0-6.0
Two of the following:		6.0-7.0
CHEM 311	Phys Chem I: Thermodynamics	
PHYS 304	Electricity & Magnetism II	
PHYS 306	Quantum Mechanics II	
PHYS 351	Astrophysics	
PHYS 352	Computational Physics	
Total Semester Hours		65.0-71.0

Minor in Physics

A minor in Physics requires six courses:

Code	Title	Semester Hours
PHYS 201	Phys for Scientists/Engrs I	4.0
PHYS 202	Phys for Scientists/Engrs II	4.0
PHYS 203	Phys for Scientists/Engrs III	4.0
PHYS 204	Phys for Scientists/Engrs IV	3.0
PHYS 283	Advanced Laboratory	4.0
One physics course numbered 301 or higher		3.0
Total Semester Hours		22.0

Note that MATH 181 Calculus I and MATH 182 Calculus II are prerequisites for PHYS 201 Phys for Scientists/Engrs I, PHYS 202 Phys for Scientists/Engrs II, PHYS 203 Phys for Scientists/Engrs III, PHYS 204 Phys for Scientists/Engrs IV, and that MATH 283 Multivariable Calculus is required for most 300-level physics courses.

Political Science

Julie Blase, Professor

Brian D. Roberts, Professor

John W. Williams, Professor

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

The program provides two concentrations: Politics and Policy, and International Relations. Non-majors can take either concentration as a minor. The Politics and Policy concentration focuses on core fields of political science, including American government and politics, international relations, comparative politics, political philosophy, and methodology. This concentration is strong preparation

for law school. The International Relations concentration considers issues of global significance, such as why nations go to war, when countries cooperate, the evolution of the world economy, the role of democratic ideals in different regions of the world, and how security can be achieved. Among the topics considered are the enduring influence of history and how culture, technology, and religion influence political identity.

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

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

Independent study courses on and off campus are available to majors by arrangement with political science faculty. No more than nine semester hours of independent study taken off campus can be applied toward the requirements of the major or three semester hours for the minor.

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

Departmental Learning Outcomes

1. *Students will analyze the forces shaping politics. This includes forces political, economic, social, cultural, and geographic.*
2. *Students will analyze political institutions and processes both international and domestic.*
3. *Students will analyze the behavior of political actors.*
4. *Students will evaluate theories and policies through guided research and evaluation of theories and policies.*
5. *Students will utilize the methods and analytical tools of political science, including prediction, statistics, qualitative and quantitative methods, temporality, periodization and analysis of historic and current political events.*

B.A. Major in Political Science with a Concentration in Politics and Policy

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

Code	Title	Semester Hours
POLS 120	American Government & Politics	3.0
POLS 152	Politics Among Nations	3.0
POLS/SOAN 215	Soc Science Research Methods	4.0

Eight political science electives (including at least three at the 300 level)	24.0
Total Semester Hours	34.0

B.A. Major in Political Science with a Concentration in International Relations

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

Code	Title	Semester Hours
POLS 120	American Government & Politics	3.0
POLS 152	Politics Among Nations	3.0
POLS/SOAN 215	Soc Science Research Methods	4.0
POLS 252	U.S. Foreign Policy	3.0
Seven of the following political science courses (including at least three courses at the 300 level): ¹		21.0
POLS 254	Latin American Politics	
POLS 255	Contemporary European Politics	
POLS 261	Politics of China	
POLS 263	Topics in Asian Politics	
POLS 264	Russia and the FSU	
POLS 265	Contemporary Issues (if international topic)	
PHIL/POLS 280	Classics of Political Thought	
POLS 300	Rev:Politics of Violent Change	
POLS 348	U.S. and Global Security	
POLS 352	International Relations Theory	
POLS 354	Globalization: Theory/Practice	
POLS 365	Advanced Issues (if international topic)	
One of the following history courses: ²		3.0-5.0
HIST 216	Ancient Greece and Rome	
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 310	The Cold War	
HIST 313	Africa	

HIST 333	Russia	
HIST 335	Middle East	
HIST 354	20th C U.S. Foreign Relations	
HIST 382	Modern China	
HIST 386	India	
One of the following economics courses:		3.0
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)		3.0-6.0
<hr/> Total Semester Hours		43.0-48.0

¹ Additional international or comparative political science electives or maximum of one 200 or 300-level non-international or non-comparative political science course may be applied toward this concentration with approval of the department chair.

² Additional modern history courses may be applied toward this concentration with approval of the Political Science Department chair; these courses examine the historical roots of political, social, and economic behavior and thought that explain international political activities and public policy.

Minor in Political Science – Politics and Policy

A minor in Political Science with a concentration in Politics and Policy requires six courses:

POLS 120	American Government & Politics	3.0
POLS 152	Politics Among Nations	3.0
Four political science electives (including at least one at the 300 level)		12.0
<hr/> Total Semester Hours		18.0

Minor in Political Science – International Relations

The International Relations concentration requires seven courses:

Code	Title	Semester Hours
POLS 120	American Government & Politics	3.0
POLS 152	Politics Among Nations	3.0
Three of the following political science electives (including at least one at the 300 level):		9.0
POLS 254	Latin American Politics	
POLS 255	Contemporary European Politics	
POLS 261	Politics of China	
POLS 263	Topics in Asian Politics	
POLS 264	Russia and the FSU	
POLS 265	Contemporary Issues	
POLS/PHIL 280	Classics of Political Thought	
POLS 300	Rev:Politics of Violent Change	
POLS 348	U.S. and Global Security	

POLS 352	International Relations Theory	
POLS 354	Globalization: Theory/Practice	
POLS 365	Advanced Issues	
One of the following history courses:		3.0-5.0
HIST 216	Ancient Greece and Rome	
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 310	The Cold War	
HIST 313	Africa	
HIST 333	Russia	
HIST 335	Middle East	
HIST 354	20th C U.S. Foreign Relations	
HIST 382	Modern China	
HIST 386	India	
One of the following economics courses:		3.0
ECON 231	Comparative Economic Systems	
ECON 316	Economic Development	
ECON 331	International Economics	
Total Semester Hours		21.0-23.0

Religion

Barry R. Huff, Assistant Professor

Heather Martin, Assistant Professor

Gretchen Starr-LeBeau, Associate Professor

William B. Stock, Professor

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

Religion majors will choose a subject in an area of particular interest to focus on for their senior project and take a methodology course to prepare for this project. Areas of interest could be, but are not limited to, Christian Science history, comparative religion, religion and culture, biblical studies, religious history or a focus on a particular religious tradition.

Departmental Learning Outcomes

1. *Students will be biblically literate.*

Students will be able to interpret and analyze biblical texts in contexts. They will be able to apply biblical texts to contemporary faith and life.

2. *Students will be ethically motivated thinkers and doers.*

Students will be able to articulate ethical messages of theological texts and their contemporary application in classrooms, on campus and in the community.

3. *Students will be culturally engaged and historically informed global citizens.*

Students will be able to appraise religious traditions and sacred texts and their intersection with religion, society, and culture, historically and today.

B.A. Major in Religion

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

Code	Title	Semester Hours
Two courses in biblical studies, one which must be at or above the 200 level:		6.0
REL 110	The Old Testament	
REL 120	The New Testament	
REL 215	The Hebrew Prophets	
REL 218	Wisdom Literature and Psalms	
REL 222	The Bible and the Environment	
REL 224	Christian Gospels	
REL 227	Paul the Apostle	
REL 300	Biblical Interpretation	
REL 304	Topics in Biblical Studies ¹	
One course in history of religions:		3.0
REL 231	History of Christianity	
REL 260	Religion in America	
One course from one of the following areas: philosophy of religion, history of religions, comparative religions, religious ethics, or religion and culture:		3.0
HIST 189	Religious Conflict & History	
PHIL 252	Philosophy of Religion	
REL 130	World Religions	
REL 225	The Bible & Comparative Ethics	

REL 230	Faith and Film	
REL 231	History of Christianity	
REL 240	Introduction to Islam	
REL 260	Religion in America	
REL 270	Gender & Religion	
REL 275	Christian Science Movement	
REL 307	Spiritual Autobiographies	
REL 310	Topics in Religious Studies ¹	
REL 332	The Life of Mary Baker Eddy	
REL 365	God and the Holocaust	
REL 370	Jews, Christians, & Muslims	
One course in methodology:		3.0
HIST 297	Historical Thinking & Research	
REL 300	Biblical Interpretation	
REL 390	Methods of Religious Study	
One of the following:		3.0
REL 304	Topics in Biblical Studies ¹	
REL 310	Topics in Religious Studies ¹	
Four of the following:		12.0
Any courses listed in one of the categories above		
REL 401	Capstone Project (minimum of two semester hours)	2.0-3.0
Total Semester Hours		32.0-33.0

¹ A specific topics course may be used to meet only one major or minor requirement. Additional offerings of REL 304 Topics in Biblical Studies or REL 310 Topics in Religious Studies covering different topics may be applied to other requirements.

Minor in Religion

A minor in Religion requires five courses. At least one course in the religion minor must be at or above the 300 level.

Code	Title	Semester Hours
Two courses in biblical studies:		6.0
REL 110	The Old Testament	
REL 120	The New Testament	
REL 215	The Hebrew Prophets	
REL 218	Wisdom Literature and Psalms	
REL 222	The Bible and the Environment	
REL 224	Christian Gospels	
REL 227	Paul the Apostle	
REL 300	Biblical Interpretation	
REL 304	Topics in Biblical Studies	
One non-biblical religion course:		3.0
HIST 189	Religious Conflict & History	
PHIL 252	Philosophy of Religion	
REL 130	World Religions	

REL 225	The Bible & Comparative Ethics	
REL 230	Faith and Film	
REL 231	History of Christianity	
REL 240	Introduction to Islam	
REL 260	Religion in America	
REL 270	Gender & Religion	
REL 275	Christian Science Movement	
REL 307	Spiritual Autobiographies	
REL 310	Topics in Religious Studies	
REL 332	The Life of Mary Baker Eddy	
REL 365	God and the Holocaust	
REL 370	Jews, Christians, & Muslims	
REL 390	Methods of Religious Study	
Any two additional courses listed in one of the categories above		6.0
Total Semester Hours		15.0

Second Languages

Faculty from several disciplines support this program.

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

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

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

The study of literature in the original languages is begun at the intermediate level of language courses, providing a foundation for deeper enjoyment of the works studied in more advanced courses. Literature courses offered in English translation enable students to become acquainted with literature in languages in which they are not versed.

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

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

Majors in French (p. 69) and Spanish (p. 109), and the Dual Language Major (p. 53) are described separately.

Sociology and Anthropology

Andrew M. Martin, Associate Professor

William Omari Miller, Associate Professor

Sally A. Steindorf, Associate Professor

The purpose of the Sociology and Anthropology Department is to produce students who are able to understand the complexities of stratification in terms of race, class, gender, and culture for the purpose of working towards social justice. Developing an awareness of and wrestling with social issues is paramount to becoming an effective change agent.

We focus on global and cultural awareness, community service, social responsibility, and sustainable community development in order to inspire students to become advocates for change. Qualitative reasoning, along with theoretical analysis, are integral parts of developing critical thinking proficiencies. Service learning projects and field experiences enhance classroom learning by linking community engagement to specific course content. These experiences give students a greater appreciation, empathy, and understanding of the complexities of the human experience.

Cultural sensitivity, compassion, integrity, communication, community-based problem solving, and critical observation are all values we strive to have our students express as agents for social change.

We currently offer a minor in Sociology and Anthropology. If a student is interested in majoring in SOAN, see the section on Individualized Majors (p. 83).

Minor in Sociology and Anthropology

A minor in Sociology and Anthropology requires a minimum of six courses:

Code	Title	Semester Hours
SOAN 050	Community Service Program	0.0
SOAN 160	"Race" and Ethnicity	3.0
SOAN/WOM 170	Gender Paradigms	3.0
Non-Western Culture. One of the following courses:		3.0
SOAN 240	Native American Cultures	
SOAN 251	Anthropology of India	
SOAN 290	African Cultures	
Two Electives (non-contract courses):		6.0
First elective can be a SOAN 200 or 300 level course		
Second elective must be numbered SOAN 301-385		
Total Semester Hours		15.0

Spanish

Duncan Charters, Professor

Cecily E. Lee, Associate Professor

Michael P. McGlynn, 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, international business, non-governmental organizations, and bilingual and second language teaching.

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

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

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

Upon request, the Spanish program faculty may waive the major requirement for SPAN 204 Grammar and Conversation for students placing directly into SPAN 216 Oral Expression & Conversation, thus reducing the required number of semester hours for the major from 31 to 28 SH in either concentration. Students will then take a different Spanish course approved by the advisor as a substitute for the SPAN 205 Intermediate Review major requirement. An alternative to the substitution is to request credit by examination for the equivalent of SPAN 205 Intermediate Review .

Spanish majors are encouraged to include an internship for the purpose of exploring career opportunities in the field. It is also worthwhile for majors to take additional Spanish courses beyond those required, as well as Hispanic Studies courses offered in other departments, in order to strengthen their background for the major. For options, see the course listings for each concentration.

Minors in Spanish Language and Hispanic Studies require six three-semester hour courses. No more than two transfer courses may be counted towards either concentration of the Spanish minor. Only courses taught in Spanish may be applied to a minor in Spanish Language, whereas one course taught in English may be applied to a minor in Hispanic Studies.

Departmental Learning Outcomes

1. Communication

Language majors will express themselves at the ACTFL advanced-low proficiency level.

Studies majors will express themselves at the intermediate-high proficiency level.

2. Intercultural Competence

Students will demonstrate intercultural competence using the target language as a tool.

B.A. Major in Spanish with a Concentration in Spanish Language

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

Code	Title	Semester Hours
SPAN 204	Grammar and Conversation	3.0
SPAN 205	Intermediate Review	3.0
SPAN 216	Oral Expression & Conversation	3.0
SPAN 260	Intro to Hispanic Literature (or any approved literature course offered in Spanish)	3.0
SPAN 315	Advanced Grammar & Composition	3.0
SPAN 410	Highlights of Hispanic Culture	1.0
SPAN 470	Spanish Capstone	3.0
One of the following advanced language courses:		3.0-6.0
SPAN 325	Advanced Span Language Study	
SPAN 336	Lang Wkshp Abroad: Advanced	
SPAN 338	Language Acquisition: Spanish	
One of the following Spanish literature courses:		3.0
SPAN 371	Classical Spanish Literature	
SPAN 372	Modern Hispanic Literature	
SPAN 380	Spanish Literature Seminar	
One of the following Hispanic culture courses:		3.0-5.0
SPAN 220	Hispanic Civilization	
SPAN 230	Hispanic Culture	
SPAN 330	Hispanic Culture Sem: Topics	
One of the following electives:		3.0-6.0
SPAN 210	Practical Spanish	
SPAN 236	Lang Wkshp Abroad:Intermediate	
SPAN 240	Composition	
SPAN 355	Spanish Film	

Any additional course approved by the Spanish faculty advisor

Total Semester Hours 31.0-39.0

B.A. Major in Spanish with a Concentration in Hispanic Studies

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

Code	Title	Semester Hours
SPAN 204	Grammar and Conversation	3.0
SPAN 205	Intermediate Review	3.0
SPAN 216	Oral Expression & Conversation	3.0
SPAN 260	Intro to Hispanic Literature (or any approved literature course offered in Spanish)	3.0
SPAN 315	Advanced Grammar & Composition	3.0
SPAN 410	Highlights of Hispanic Culture	1.0
SPAN 470	Spanish Capstone	3.0
One of the following advanced language courses:		3.0-6.0
SPAN 325	Advanced Span Language Study	
SPAN 336	Lang Wkshp Abroad: Advanced	
SPAN 338	Language Acquisition: Spanish	
One of the following Hispanic culture courses:		3.0-5.0
SPAN 220	Hispanic Civilization	
SPAN 230	Hispanic Culture	
SPAN 330	Hispanic Culture Sem: Topics	
SPST 285	Country Studies (Hispanic Focus)	
Two of the following electives:		6.0
HIST 221	Immigration and Acculturation	
HIST 222	Latin America	
HIST 224	Mexico	
POLS 254	Latin American Politics	
SOAN 160	"Race" and Ethnicity (with Hispanic culture included)	
SOAN 245	Studies in Culture (with Hispanic culture included)	
Total Semester Hours		31.0-36.0

Minor in Spanish Language

A **minor in Spanish Language** requires six courses:

Code	Title	Semester Hours
SPAN 204	Grammar and Conversation	3.0
SPAN 205	Intermediate Review	3.0
SPAN 216	Oral Expression & Conversation	3.0
One advanced language course		3.0-6.0
One literature or culture course taught in Spanish		3.0

One elective course taught in Spanish	3.0
Total Semester Hours	18.0-21.0

Minor in Hispanic Studies

A minor in Hispanic Studies requires six courses:

Code	Title	Semester Hours
SPAN 204	Grammar and Conversation	3.0
SPAN 205	Intermediate Review	3.0
SPAN 216	Oral Expression & Conversation	3.0
One advanced language course		3.0-6.0
One Hispanic literature or culture course		3.0
One Hispanic area studies elective course		3.0
(One of the above two may be a course taught in English.)		
Total Semester Hours		18.0-21.0

Certificate in Spanish Language

The Spanish Language certificate requires:

Completion of three courses (nine semester hours) in Spanish at the 204 level or above

Achievement of an intermediate proficiency level on the nationally normed Oral Proficiency Interview (OPI) of the American Council on the Teaching of Foreign Languages (ACTFL).

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

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

Sustainability

Karen L. Eckert, Professor

Nicholas H. Johnson, Instructor

Faculty from other disciplines also support this program.

The purpose of the interdisciplinary minor in sustainability is to provide an opportunity for students to focus their intellectual inquiry on issues and problems related to local and global sustainability. The program emphasizes connections between society and the environment, and is designed to complement any Principia College major. Sustainability minors join a community of students, faculty, and staff committed to seeking solutions to some of the world's most pressing problems in ways that "meet the needs of the present without compromising the ability of

future generations to meet their own needs” (United Nations World Commission on Environment and Development, 1987).

Students complete an introductory course, four courses selected from within five content spheres, and an independent project. Courses in the social sphere look at how human behavior and relations, ethical and theological values, and societal organization function as related to increasing sustainability. Courses in the economic sphere deal with business practices and governance systems that lead to sustainable societies. Courses in the environmental sphere focus on sustainable natural resource use and management, analyze environmental issues, and seek solutions to today's resource needs, while also conserving for future generations. Students choose between a built environment content sphere (prepares students to design human and mechanical systems that reduce resource consumption and environmental damage, promote regenerative processes, encourage innovation, build community, and enhance quality of life) and a leadership and communication sphere (prepares students to become successful “change agents” by examining strategies for motivating sustainable behavior, communicating effectively, resolving conflict, and developing effectual, ethical leadership styles).

To be listed as part of the sustainability minor, a course must address at least one of the sustainability minor learning outcomes and (with the exception of the skills-based leadership and communication sphere) must include a significant project or assignment looking at sustainability from the perspective of the course discipline. No more than two courses may be taken from any single academic department other than sustainability. SUS 280 Topics in Sustainability can be applied to any one of the content spheres, depending on the specific course topic when it is offered. SUS 395 Sustainability Internship and SUS 401 Sustainability Project must be taken for a minimum of 3 SH to be included in the six courses required to achieve the minor.

Minor in Sustainability

A minor in Sustainability requires six courses:

Code	Title	Semester Hours
SUS 151	Introduction to Sustainability	3.0
One course from the social sphere, selected from the following:		3.0
EDST 170	Environmental Education	
GLBS 225	Global Issues	
PHIL 221	Topics in Philosophy (Environmental Ethics)	
REL 222	The Bible and the Environment	
SOAN 235	Environmental & Social Change	
SOAN 265	Food in Society	
SUS 280	Topics in Sustainability	
One course from the economic sphere, selected from the following:		3.0
BNR 290	Environmental Policy	
BUAD 270	Business Sustainability	
ECON 203	Principles of Microeconomics	
ECON 271	Environmental Economics	
SUS 260	Sustainable Development	

One course from the environmental sphere, selected from the following:	3.0-4.0
BNR 190 Global Environmental Issues	
BNR 232 Wildlife Conservation	
BNR 255 Natural Resources Management	
CHEM 111 Environmental Chemistry	
CHEM 301 Adv Environmental Chemistry	
ERTH 225 Environmental Geology	
ERTH 230 Nonrenewable Resources	
PHYS 177 Environmental Physics	
One course from either the systems and the built environment sphere OR the leadership and communications sphere, selected from the following:	3.0-4.0
Systems and the built environment:	
ARTH 232 Art of the Italian Renaissance	
ARTS 295 Sustainable Design	
CHEM 201 Environmental Testing	
EDST 275 Pedagogy of Place	
ENGR 180 Project Management	
SUS 250 Energy and Living Systems	
SUS 395 Sustainability Internship	
Leadership and communication:	
BUAD 330 Management	
EDST 260 Communication	
EDST 295 Wilderness Literacy	
SMGT 360 Leadership	
SOAN 340 Peace and Conflict	
SUS 395 Sustainability Internship	
SUS 401 Sustainability Project	3.0
Total Semester Hours	18.0-20.0

Theatre

Leah R. Gallant-McFall, Assistant Professor

John J. O'Hagan, Associate Professor

Christine Calkins Steele, Associate Professor

Jeff C. Steele, Associate Professor

The performing arts play a vital role in a liberal arts education, the community, and society as a force that can educate, challenge, inspire, uplift, and heal both audience and artist. Realizing this potential requires skill in the art form, personal discipline, and humility—values our program strives to instill in our students. The Department of Theatre and Dance provides practical, rigorous, and thoughtful training that develops artistic, professional, and life skills for students to share with the world.

We offer our Theatre majors (p. 117) and Theatre minors (p. 118) and Dance minors (p. 52) multiple avenues through which to grow as artists, community members, and Christian Scientists. They demonstrate performance and production

skills; critical thinking; historical and cultural awareness; and personal character through discipline, compassion, and humility. Throughout our program students put theory into practice in the classroom, in the costume and scene shops, in theatre and dance productions, on interdisciplinary abroads, through participation in regional festivals, and in workshops with visiting professionals and guest artists. The Theatre major capstone, THEA 420 Directing, encourages students to synthesize their training by producing and directing a one-act play. Dancers have the opportunity to choreograph for the yearly mainstage Dance Production. Students also have opportunities to design, build, and work in all aspects of technical production.

We value the interdisciplinary nature of a liberal arts education and foster an expansive approach to performing arts by recognizing the value of related arts: literature, creative writing, studio art, and music. In the performing arts the student-artist is the canvas, making inseparable the progression from theory to practice to performance. As a result, students grow in their understanding of themselves and in their empathy for others, becoming more compassionate, thoughtful, inspired human beings whose work extends far beyond Principia.

All practicum classes require proper registration for student participation. The maximum transferable credit for a major in theatre is five courses or 15 semester hours. The maximum transferable credit for a minor in theatre or dance is two courses or six semester hours. Non-credit theatre and dance production courses are not transferable.

Visit our webpage (<http://admissions.principiacollege.edu/theatre-dance>) for more information and find us on Facebook (<https://www.facebook.com/Principia-College-Theatre-and-Dance-108296125870295>).

Departmental Learning Outcomes

1. Performance and Production (TRAIN DEEPLY)

Students develop skills necessary to take part in the collaborative artistic process through expressive and articulate use of voice and body, work as part of an ensemble, and as a translator of text and direction into performance.

2. Critical Thinking and Communication (THINK CRITICALLY)

Students demonstrate the ability to think and communicate clearly and effectively within the artistic discipline through research and analysis, articulating of vision, and evaluation and critique of both their own and others' performances and production-related responsibilities.

3. Character (GROW SPIRITUALLY)

Students demonstrate God-centered self-awareness, self-discipline, and self-reflection through performance and artistic endeavor. Students will self-assess their growth, demonstrate over limitations, and demonstrate professional standards and dispositions, including honesty, responsibility, openness and respect.

4. Historical and Cultural Awareness (SHARE FREELY)

Students recognize the value and importance of the historical and cultural traditions of theatre and/or dance and share their passion for performance with the community.

B.A. Major in Theatre

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

Code	Title	Semester Hours
THEA 101	Acting I	3.0
THEA 140	Stagecraft	3.0
THEA 201	Acting II	3.0
THEA 220	Intro to Technical Theatre	3.0
THEA 225	Voice and Speech	3.0
THEA 230	Theatre Movement	3.0
THEA 272	The History of Theatre	3.0
THEA 420	Directing	4.0
One of the following:		3.0
ENGL 286	History of British Drama	
THEA 210	Dramatic Literature	
Two of the following:		2.0-6.0
THEA 301	Acting III	
THEA 340	Advanced Voice and Movement	
THEA 352	Thea Practicum Mainstage Staff	
THEA 353	Thea Practicum Studio Staff	
One of the following:		3.0-15.0
DANC 250	Dance History	
ENGL 279	Shakespeare I	
ENGL 315	Shakespeare II	
THEA 260	Theatre Topics	
THEA 325	Voice for the Actor	
THEA 360	Acting Shakespeare	
THEA 401	Advanced Acting Topics	
THEA 402	Spec Creative or Research Proj	
THEA 494	Theatre or Dance Internship	
Six semester hours in theatre practicum, two semester hours of which must be THEA 354 or THEA 355 (Thea Practicum Crew):		6.0
THEA 350	Thea Practicum Mainstage Cast	
THEA 351	Thea Practicum Studio Cast	
THEA 352	Thea Practicum Mainstage Staff	
THEA 353	Thea Practicum Studio Staff	
THEA 354	Thea Practicum Mainstage Crew	
THEA 355	Thea Practicum Studio Crew	
Two of the following dance technique courses: ¹		0.0
DANC 043	Dance: Ballet I	
DANC 044	Dance: Ballet II	

DANC 045	Dance: Ballet III	
DANC 048	Dance: Jazz I	
DANC 080	Dance: Modern I	
DANC 081	Dance: Modern II	
DANC 082	Dance: Modern III	
DANC 083	Dance as Movement	
Total Semester Hours		39.0-55.0

¹ Foil Fencing may be substituted in place of one dance class.

Minor in Theatre

A minor in Theatre requires a minimum of eight courses:

Code	Title	Semester Hours
THEA 101	Acting I	3.0
One of the following:		3.0
THEA 140	Stagecraft	
THEA 220	Intro to Technical Theatre	
One of the following:		3.0
THEA 210	Dramatic Literature	
THEA 272	The History of Theatre	
Three of the following:		9.0-10.0
THEA 140	Stagecraft	
THEA 201	Acting II	
THEA 210	Dramatic Literature	
THEA 220	Intro to Technical Theatre	
THEA 225	Voice and Speech	
THEA 230	Theatre Movement	
THEA 260	Theatre Topics	
THEA 272	The History of Theatre	
THEA 301	Acting III	
THEA 401	Advanced Acting Topics	
THEA 420	Directing	
Three semester hours total from the following:		3.0
THEA 350	Thea Practicum Mainstage Cast	
THEA 351	Thea Practicum Studio Cast	
THEA 352	Thea Practicum Mainstage Staff	
THEA 353	Thea Practicum Studio Staff	
THEA 354	Thea Practicum Mainstage Crew	
THEA 355	Thea Practicum Studio Crew	
One of the following dance technique courses:		0.0
DANC 043	Dance: Ballet I	
DANC 044	Dance: Ballet II	
DANC 045	Dance: Ballet III	
DANC 048	Dance: Jazz I	

DANC 080	Dance: Modern I	
DANC 081	Dance: Modern II	
DANC 082	Dance: Modern III	
DANC 083	Dance as Movement	
Total Semester Hours		21.0-22.0

Women's and Gender Studies

Sally A. Steindorf, Associate Professor

Faculty from other disciplines also support this program.

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

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

Minor in Women's and Gender Studies

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

Code	Title	Semester Hours
Two of the following:		6.0
SOAN/WOM 170	Gender Paradigms	
SOAN/WOM 335	Gender & Masculinity	
SOAN/WOM 365	Global Perspectives of Women	
SOAN/WOM 360	Gender Theories	3.0
WOM 410	Senior Seminar	3.0
Two electives from the following:		6.0
ENGL 253	Gender Studies in Literature	
PHIL 222	Feminist Philosophy	
POLS 240	Women in Politics	
WLIT 179	Reading French Society in Film	
Total Semester Hours		18.0

Off-Campus Programs

Principia offers several types of off-campus programs:

- Principia abroads and field programs (contact: Principia Abroads)
- Academic internships (contact: Academic and Career Advising - ACA)
- Independent Course contracts when off campus, or interterm (contact: Registrar's Office)

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

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

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

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

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

- Develop a résumé and cover letter. Visit the ACA website and look under Career Resources for résumé samples and template; and be sure to ask ACA to check over your final materials before sending them to a potential employer.
- Begin to research possible internship locations. Look under Internship Opportunities on the ACA website for online listings, attend ACA workshops, or meet with ACA for additional help.

At least one term prior to the intended internship, a qualified student should complete the formal process of developing and obtaining approval of an Internship Contract between him/herself and Principia.

Check the published academic calendar for specific due dates.

For information on tuition charges see Fees and Personal Expenses (p. 215).

Courses of Instruction

Introduction

See Course Descriptions (<http://catalog.principiacollege.edu/courses-instruction/courses>) for a list of the courses in the college's curriculum. A list of subjects and their corresponding subject codes appears on this page. See Departmental Programs (p. 36) for descriptions of major and minor programs.

Course Numbering

Course numbers reflect the level of students for which the course is primarily designed and offered. Please see Registration Rules (p. 237) for a fuller explanation of the course numbering system.

001-099	Non-credit; open to all levels.
100-199	Introductory level; most appropriate for underclassmen.
200-299	Intermediate level; most appropriate for sophomores and juniors.
300-399	Advanced level; most appropriate for upperclassmen.
400-499	Advanced independent or seminar courses; most appropriate for upper-class majors.

Credit Value

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

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

Requirement Codes

General education requirements are indicated to the far right of the course subject heading and number. An attribute code in brackets [], indicates a course that will fulfill one of the general education Liberal Arts Distribution Requirements (LADR) that became effective Fall 2011. An attribute code in angle brackets < > indicates the new General Education Mathematics (GEM) code effective Fall 2014. Please see the current Liberal Arts Distribution Requirements (p. 25) and the appropriate catalog for previous requirements.

Fees

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

Prerequisites

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

Schedule of Courses

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

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

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

Subject Headings and Subject Codes

Subject Headings	Subject Codes
Art: Art History	ARTH
Art: Studio Art	ARTS
Biology and Natural Resources	BNR
Business Administration	BUAD
Careers	CAR
Chemistry	CHEM
Computer Science	CSCI
Dance	DANC
Earth Science	ERTH
Economics	ECON
Educational Studies	EDST
Engineering Science	ENGR
English	ENGL
French	FREN
General Education	GEN
German	GER
Global Studies	GLBS
History	HIST
Languages and Cultures	LANG
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	SOAN

Spanish	SPAN
Special Studies	SPST
Sports Management	SMGT
Sustainability	SUS
Theatre	THEA
Women's and Gender Studies	WOM
World Literature	WLIT
Writing	WRIT

Course Descriptions

Art: Art History (ARTH)

ARTH 100 Intro to Western Art to 1400 3.0 SH [GEA]

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

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

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

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

This course surveys the art of South and Southeast Asia, China, Korea, Japan, the Americas, the Pacific, and Africa from their beginnings to the present. It introduces key vocabulary terms, methods for understanding the meaning of the various works, the cultural context in which these works were formed, and the role of the artist in society.

ARTH 132 Themes in Renaissance Art 3.0 SH [GEA]

This course studies the art and architecture of Italy and Northern Europe from 1300 to 1600, focusing on the changing opportunities available to artists, the impact of liberal arts education on artists' and architects' success, and the means by which artists and architects became recognized as independent creative individuals.

Class Level Restriction: Freshman only.

ARTH 200 Ancient Art 3.0 SH [GEA]

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

ARTH 203 Medieval Art 3.0 SH [GEA]

This course opens with Early Christian and Byzantine art and architecture, explores the innovations in manuscript production, the ideals of the world of Charlemagne, the majesty of Romanesque churches, and the dazzling color, light, and space of Gothic cathedrals.

ARTH 205 Topics in Art History 3.0 SH [GEA]

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

- ARTH 230 Asian Art** **3.0 SH** **[GEA]**
This course examines bronzes, ceramics, paintings, sculpture, architecture, and other visual arts of the Asian world in their socio-political and historical contexts.
- ARTH 232 Art of the Italian Renaissance** **3.0 SH** **[GEA]**
This course explores art and architecture in Italy in the 15th and 16th centuries including major works by such world-famous artists and architects as Leonardo da Vinci, Michelangelo, Raphael, and Palladio. It explores the achievements of artists in major centers - Florence, Rome, and Venice - and in courtly settings and how they preserve their culture.
- ARTH 234 17th - 18th Century Art** **3.0 SH** **[GEA]**
This course studies paintings, sculpture, architecture, and other visual art in Europe from 1600 to the end of the 18th century, from Bernini to Vermeer, David to Houdon, with special attention to the emergence of influential women artists such as Artemisia Gentileschi and Angelica Kauffmann.
- ARTH 235 19th Century European Art** **3.0 SH** **[GEA]**
This course investigates the work of artists in Spain, France, Germany, and Great Britain during the nineteenth century, with an emphasis on how their art was influenced by different national perspectives.
- ARTH 237 20th Century Art** **3.0 SH** **[GEA]**
This course examines the major artistic movements of the 20th century, including Fauvism, Cubism, Expressionism, Abstract Expressionism, and performance art. How the historical and socio-political contexts shaped artistic expression is a major consideration, along with the initiative of individual artists.
- ARTH 257 Architecture in America** **3.0 SH** **[GEA]**
This course considers the variety of architecture in America from its origins in the pre-Revolutionary world to contemporary environmental issues, not overlooking the complex figures of Bernard Maybeck and Alexander Wadsworth Longfellow.
- ARTH 258 Art in the USA** **3.0 SH** **[GEA]**
This course traces the innovations and achievements of visual artists in the USA from the eighteenth through the twenty-first centuries with particular emphasis on artists' responses to themes such as wilderness, the growth of cities, the industrial revolution, war and peace, women's rights, urban life, and internationalism.
- ARTH 260 History of Photography** **3.0 SH** **[GEA]**
This course explores the history of photography from its early-19th-century origins to the present, giving special attention to the innovations of such major figures as Daguerre and Niépce, Henry Fox Talbot, Nadar, Stieglitz, Ansel Adams, Cindy Shearman, Andy Warhol, and other 21st-century photographers.
- ARTH 282 Islamic Art** **3.0 SH** **[GEA]**
This course examines Islamic art from its beginnings in the Arabic peninsula through its response to local traditions in Syria and Palestine, and its expansion into Egypt, Spain, North Africa, and India.
- ARTH 285 20th Century Architecture** **3.0 SH** **[GEA]**
This course covers major movements of 20th-century architecture, including the Arts and Crafts movement, Modernism, Post-Modernism, and contemporary movements, as well as urban planning.
- ARTH 300 Adv Studies/Ancient** **3.0 SH** **[]**
This seminar studies current issues in ancient Greek and Roman art and architectural history. Topics treated thematically will vary, and the title will be extended to describe the current topic. The emphasis is on research/writing, oral presentation, and various approaches. May be repeated up to a total of six semester hours provided the topics differ.
Prerequisite: ARTH 200.
Class Level Restriction: Junior and Senior only.
- ARTH 304 Advanced Topics in Art History** **3.0 SH** **[]**
This seminar studies current issues in art history. Topics related thematically will vary, and may relate to special exhibitions at the St. Louis Art Museum or other local museums. The emphasis is on research/writing, oral presentation, and various approaches. The title will be extended to describe the current topic. May be repeated up to a total of 12 semester hours provided the topics differ.
Class Level Restriction: Junior and Senior only.

ARTH 332 Adv Studies/Medieval & Renaiss 3.0 SH []

This seminar studies current issues in Medieval and Renaissance art history. Topics treated thematically will vary, and the title will be extended to describe the current topic. The emphasis is on research/writing, oral presentation, and various approaches. May be repeated up to a total of six semester hours provided the topics differ.

Class Level Restriction: Junior and Senior only.

ARTH 354 Adv Studies/17th-18th C Art 3.0 SH []

This seminar studies current issues in 17th- and 18th-century art history. Topics treated thematically will vary, and the title will be extended to describe the current topic. The emphasis is on research/writing, oral presentation, and various approaches. May be repeated up to a total of six semester hours provided the topics differ.

Class Level Restriction: Junior and Senior only.

ARTH 355 Adv Studies/19th-20th C Art 3.0 SH []

This seminar studies current issues in the history and theory of 19th- and 20th-century art. Topics treated thematically will vary and the title will be extended to describe the current topic. The emphasis is on research/writing, oral presentation, and various methodological approaches. May be repeated up to a total of six semester hours provided the topics differ.

Class Level Restriction: Junior and Senior only.

Art: Studio Art (ARTS)**ARTS 102 Visual Fundamentals 3.0 SH [GEA]**

Introduction to the components of visual expression: subject matter, form, and content. Topics include composition, perspective theory, line/value drawing, and basic color exploration. Practice includes studio as well as on-location work outside of regular class hours.

Fee=\$50.00.

ARTS 103 Three Dimensional Design 3.0 SH [GEA]

An introduction to three-dimensional design; this hands-on approach to materials offers an in-depth exploration of expression in space. Students are challenged with ideas that build awareness of the potential of shaping space and how that new understanding can contribute to a more creative life and work.

Fee=\$75.00.

ARTS 150 Drawing I 3.0 SH [GEA]

Continued study of line and value including additional perspective and composition studies, focusing primarily on the development of facility and perception. Emphasizes both technical and abstract observations.

Fee=\$30.00.

ARTS 170 Graphic Design I 3.0 SH [GEA]

Introduction to aspects of graphic design with emphasis on the development of problem-solving skills. Form and content are explored with focus on the thought process which underlies graphic design. Application of computer software as it applies to the discipline. Various projects include logo design, poster design, and typography.

Fee=\$50.00.

ARTS 175 Print Design 3.0 SH []

The course provides students with the foundational skills across different applications and media types. Develops skills in digital imaging concepts and techniques, in using/altering photographs, illustrations, and type to create advertisements, magazines, brochures, and direct mail. Fundamental principles of graphic design are stressed. Students practice skills individually and in teams. Critical class for students considering a career in graphic design.

Fee=\$50.00.

- ARTS 203 Sculpture I** **3.0 SH** []
 An introduction to sculpture with emphasis on understanding and manipulating three-dimensional space using form and scale. Students explore various processes, materials, techniques, tools, and studio safety. Emphasis is on the development of a personal visual vocabulary and the cultivation of individual creative expression. Includes an historical overview spanning ancient artifacts to early Modernists.
Fee=\$100.00.
- ARTS 210 Oil Painting I** **3.0 SH** []
 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 and interpretation considered significant in contemporary and past painting traditions.
Prerequisite: ARTS 102 and ARTS 150.
Fee=\$100.00.
- ARTS 220 Watercolor Painting I** **3.0 SH** [GEA]
 Introduction to various watercolor techniques and the thought process which accompanies issues of painting. Practical emphasis on composition, color and value relationships, and coordination with a transparent medium. This studio course will require that a majority of work be completed outside of the studio class time.
Prerequisite: ARTS 102 and ARTS 150.
Fee=\$100.00.
- ARTS 230 Color Studies** **3.0 SH** [GEA]
 Using color as a means of conveying individuality through art is unparalleled in context with any other element of design. Studio assignments and lecture notes focus on the artistry, physics, chemistry, psychology and metaphysics of color. Students build a concise portfolio demonstrating an understanding of color interaction and perception.
Fee=\$75.00.
- ARTS 250 Drawing II** **3.0 SH** []
 Development of visual skills that deepen the student's ability to find the dynamics of abstraction in the landscape and still-life. A large portion of the term will involve on-location drawing in graphite with the remaining portion of the term devoted to studio rendering techniques in graphite. Emphasis on compositional analysis.
Prerequisite: ARTS 150.
Fee=\$40.00.
- ARTS 251 The Language of Drawing** **3.0-4.0 SH** [GEA]
 An immersive study of on-location drawing practices and techniques where drawing becomes a tool for observation and recording of cultures, historical sites, and landscapes. Drawing will also be explored as a vehicle to communicate content. This course develops skills in composition, observation, facility with mixed-media, drawing terminology, critiquing, and perspective. Offered only on abroad programs.
- ARTS 255 Field Research Journal** **2.0-3.0 SH** []
 An in-depth focused study of techniques and processes for visual observation and recording of information in the field. Mapping, writing, memory drawing, diagraming, and other methods will be explored, learned, and used. Students use the journal to daily record and organize data, problem solve ideas, and prepare ideas for communicable visual solutions. Offered only on abroad programs.
- ARTS 256 Exhibition Project Management** **1.0 SH** []
 This course is designed to develop skills in the layout and design of a visual exhibition. Students will apply the general principles of effective communication, develop skills in organizing and managing content, and develop skills in working as a creative team. An understanding of planning, research, and audience will be emphasized. May be taken up to three times.

ARTS 270 Graphic Design II 3.0 SH []

This course builds on the foundational skills developed in Graphic Design I and becomes more technical and intricate with the media/assignments. Emphasis is placed on the design process, the quality of the concepts, and designed outcomes. Projects explore large/small scale design, visual identity and communication, typography, information design, and package design. Students practice skills both individually and in teams.

Prerequisite: ARTS 170.

Fee=\$50.00.

ARTS 280 Printmaking 3.0 SH []

An introduction to three basic printmaking areas: relief printing, mono-printing, and Solar-printing. Emphasis is placed on the student's original development of ideas and imagery. Aesthetic and theoretical issues concerning the influence of digital imagery will also be discussed. A printmaking portfolio is the major outcome of the course.

Prerequisite: ARTS 102, or ARTS 103, or ARTS 150.

Fee=\$75.00.

ARTS 285 Illustration 3.0 SH []

An introduction to the broad based thinking skills required to illustrate verbal communication in various manifestations. Several formats will be utilized reflecting the instructor's strengths: book, poster design, musical interpretation, scientific rendering, and communication arts. Mixed media will frequently be engaged. Emphasis is on the book as an art form - as a valuable professional activity.

Prerequisite: ARTS 102, ARTS 150, and ARTS 220.

Fee=\$50.00.

ARTS 290 Web Design 3.0 SH []

Introduction to the design/management of web sites with an emphasis on the development of design strategy processes. This course builds skills in terminology, design principles, and visual problem solving. Students learn skills in organizing information, loading and maintaining web pages, applying design theory and page layout, overcoming technical challenges, and publishing a portfolio site showcasing the class projects.

Prerequisite: ARTS 170.

ARTS 295 Sustainable Design 3.0 SH []

This course is based on the analysis of green design in the built environment. The course content and organization model the breadth of societal cooperation necessary to solve sustainability problems while it explores the principles of current energy strategies. The course also teaches basic visual communication skills, drafting practices, discussion techniques, and culminates in a build-design project constructed by class members.

Prerequisite: ARTS 102 or ARTS 103.

Class Level Restriction: Sophomore and Junior and Senior only

Fee=\$50.00.

ARTS 298 Designing in Space 3.0 SH []

Examines a specific topic in studio art practice that includes spatial elements such as those used in kinetic art, architectural and product design, and installation and public art. As a studio course, it helps students cultivate a creative practice that incorporates multi-disciplinary elements in their personal artwork; it also includes exposure to current dimensional themes. This course is built around the special expertise of the faculty. Open to all with at least one previous studio art course. A specific topic can only be taken once.

Fee=\$50.00.

ARTS 299 Experimental New Media Seminar 3.0 SH []

Examines a specific topic in studio art practices that may include sound, video, photography, motion, design, and installation. The course is built around the special expertise of the faculty. The title will be extended to describe the current topic. May be repeated once up to a total of six semester hours provided the topics differ.

Prerequisite: ARTS 102 or ARTS 150 or ARTS 170.

- ARTS 301 Portraiture** **3.0 SH** []
 For the student seeking experience in drawing the human form. Focus includes grounding in specific drawing skills, including ability to represent proportion, anatomic architecture, volume, and experience with various mediums. Learning about major practitioners of the genre will instill an appreciation for portraiture - it's usefulness and influence as an important art form for content in past and present art traditions and cultures.
Prerequisite: ARTS 150 or permission of the instructor.
Fee=\$50.00.
- ARTS 302 Figure Studies** **3.0 SH** []
 The human figure is used as a vehicle for exploring issues of fine drawing. Includes proportion, anatomy, gesture, content, and some historical background. May be repeated with instruction at increasingly advanced levels.
Prerequisite: ARTS 102 or ARTS 150.
Class Level Restriction: Sophomore and Junior and Senior only
Fee=\$100.00.
- ARTS 304 Figure Modeling** **3.0 SH** []
 Introduces students to fundamental principles of modeling from a live model. These include studies in scale, proportion, surface interpretation, and gesture. Students will engage with historical, cultural, and aesthetic aspects of figurative expression. All assignments will build to the culmination of an original figurative work for the student's portfolio. It may be repeated up to two times for a total of nine semester hours; however, only six semester hours may be counted toward the Art major or minor.
Prerequisite: ARTS 102 or ARTS 103.
Class Level Restriction: Sophomore and Junior and Senior only
Fee=\$100.00.
- ARTS 310 Oil Painting II** **3.0 SH** []
 Builds on knowledge gained during the introductory course. Oil II constitutes a further development of skills and image making paired with strong emphasis on research, critical discourse, and experimentation in handling of medium. Students will develop research and production models that reflect contemporary painting practices.
Prerequisite: ARTS 210.
Fee=\$100.00.
- ARTS 320 Watercolor Painting II** **3.0 SH** []
 Focused introduction to the process of developing large studio paintings based upon varied field observations, advanced watercolor techniques, and critique skills. Concentration on development of individual style or "point of view." This studio course will require that a majority of work be completed outside of the studio class time.
Prerequisite: ARTS 220.
Class Level Restriction: Junior and Senior only
Fee=\$100.00.
- ARTS 330 Studio Seminar** **1.0-6.0 SH** []
 Group study of selected topics in art. The title will be extended to describe the current topic. May be offered for variable credit from one to six semester hours. May be repeated up to a total of six semester hours provided the topics differ.
Class Level Restriction: Sophomore and Junior and Senior only.
- ARTS 350 Drawing III** **3.0 SH** []
 An intense exploration of the relationship of visual language to content in art via mixed drawing media. Production of several different series formats and a focused preparation of a portfolio quality series are covered during the term. Preparation of an aesthetic statement.
Prerequisite: ARTS 150 and either ARTS 250 or one painting course.
Class Level Restriction: Junior and Senior only
Fee=\$30.00.

- ARTS 360 Figurative Painting** **3.0 SH** []
 For the art major who benefits from painting and is ready to revisit the figure within new technical and aesthetic contexts in painting. The theme centers around portraiture but includes the whole figure - the first half comprised of working directly from the model with frequent critiques. Includes exploration of conceptual content and creation of a large scale painting. May be repeated once with instruction at an increasingly advanced level.
Prerequisite: ARTS 210 or ARTS 220, and ARTS 302.
Class Level Restriction: Junior and Senior only
Field of Study Restrictions: Studio Art Majors only
Fee=\$100.00.
- ARTS 370 Advanced Design Practices** **3.0 SH** []
 Examination of professional graphic design practices within the context of a design consulting firm or as a free-lance graphic designer. Specialized activities/problems that commonly occur inside a design office are explored. Students work in design teams, design over a network, learn research methods, and create a portfolio of forms/contracts used in the field. Instructional methods: lectures, discussion/critiques, demonstrations, and readings.
Prerequisite: ARTS 170 and ARTS 270.
Class Level Restriction: Junior and Senior only
Fee=\$45.00.
- ARTS 390 Advanced Web Design** **3.0 SH** []
 The course builds on the skills developed in ARTS 290 and expands those skills with more intricate and complex problems. The course will include focus on UX and UI design. The course will also include projects that develop skills in working with CSS and HTML.
Prerequisite: ARTS 290.
- ARTS 401 Creative Research Project** **3.0-6.0 SH** []
 An in-depth focused study in the visual arts shaped by previous studio art course work. Teaching methods include critical readings in professional art journals, open studio practice, weekly critique, and museum/studio field trips. Students present research and creative output in critique sessions with other students and at least one studio art faculty. May be offered for variable credit from three to six semester hours. May be taken twice up to a total of six semester hours.
Prerequisite: six ARTS courses.
Class Level Restriction: Junior and Senior only.
- ARTS 402 On-Location Studies** **1.0-6.0 SH** []
 Offered by permission of the program faculty to students enrolled in field-oriented classes such as internships or off-campus independents. Course work provides opportunity for in-depth, individual research based upon previous studio classes at Principia College. May be offered for variable credit from one to six semester hours. May be repeated up to a total of six semester hours.
Class Level Restriction: Junior and Senior only.
- ARTS 404 Advanced Series** **1.0-6.0 SH** []
 A course designed for advanced students who would benefit from the production of a cohesive body of work, commonly referred to as a "series." The student prepares a portfolio which reveals consistent use of visual language, content-based purpose, and exhibition caliber results. The class functions as an independent with the addition of a seminar component. Students apply for the class by submitting a written application to the art department identifying the series format options. May be offered for variable credit from one to six semester hours. May be repeated up to a total of six semester hours. For junior and senior students who have completed eight or more art major requirements.
Class Level Restriction: Junior and Senior only.
- ARTS 495 Portfolio Seminar** **1.0-3.0 SH** []
 Portfolio ingredients such as a digital representation of a senior's work, resumés, post-college options, etc. are focused towards professional goals. At the culmination, students present a quality exhibit for the community. May be offered for variable credit from one to three semester hours.
Class Level Restriction: Senior only
Field of Study Restrictions: Art Majors only
Fee=\$50.00.

ARTS 496 Capstone Writing Seminar 2.0 SH []

This course involves the preparation of four writing components for art majors in studio: an aesthetic statement, a character essay, a series of critical reviews, and a verbally supported visual portfolio. Students are taught the components for completing the statement and the paper; the essays include prompts but are otherwise written without faculty assistance.

Class Level Restriction: Senior only

Field of Study Restrictions: Art Majors only

Fee=\$20.00.

Biology and Natural Resources (BNR)**BNR 050 BNR Service Learning 0.0 SH []**

Students volunteer in positions as naturalists, outdoor teachers, land managers, research technicians, and community recyclers. Projects may serve Principia or other communities or outside agencies such as the Two Rivers National Wildlife Refuge.

BNR 111 Introductory Botany 4.0 SH []

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. Designed primarily for students intending to major in biology or environmental studies.

Corequisite: BNR 112, BNR 191, BNR 201.

Class Level Restriction: Freshman and Sophomore only.

BNR 112 Introductory Zoology 4.0 SH []

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.

Class Level Restriction: Freshman and Sophomore only.

BNR 120 Plants and Society 4.0 SH [GESL]

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).

Class Level Restriction: Freshman and Sophomore only.

BNR 141 Intro to Marine Fisheries 4.0 SH [GESL]

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

BNR 161 Field & Natural History 4.0 SH [GESL]

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.

Class Level Restriction: Freshman and Sophomore only

Fee=\$30.00.

BNR 190 Global Environmental Issues 3.0 SH [GESN]

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.

Class Level Restriction: Freshman and Sophomore only.

BNR 191	Introduction to Ecology	4.0 SH	[GESL]
<p>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. Designed primarily for students intending to major in biology or environmental studies.</p> <p>Corequisite: BNR 111, BNR 112, BNR 201. Class Level Restriction: Freshman and Sophomore only.</p>			
BNR 201	Methods in Research & Writing	4.0 SH	[]
<p>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. Designed primarily for students intending to major in biology or environmental studies.</p> <p>Corequisite: BNR 111, BNR 112, BNR 191. Class Level Restriction: Freshman and Sophomore only.</p>			
BNR 215	Biometry	3.0 SH	[]
<p>This course provides an introduction to statistics emphasizing applications to biology and natural resource management. Topics include descriptive statistics, distributions, confidence intervals, T-tests, correlation, linear regression, analysis of variance (ANOVA), multiple and nonlinear regression, multiple ANOVA, and nonparametric statistics. The course emphasizes application of statistical methodology. (A student may receive credit for only one of the courses BNR 215 or MATH 164.)</p> <p>Prerequisite: BNR 201 or permission of instructor.</p>			
BNR 220	Marine Biology	3.0 SH	[]
<p>This survey course covers a broad range of subject areas in marine biology including basic oceanography, biology of life in the seas, and management/conservation of oceanic biological resources. Also focuses on learning about marine ecosystems (types, locations, and biological structure).</p> <p>Prerequisite: BNR 112.</p>			
BNR 225	Indigenous Ecol Knowledge	3.0 SH	[]
<p>The course provides an introduction to the ways in which indigenous people understand the world and the land. Special attention will be paid to interactions between indigenous knowledge and Western science. Students will explore aspects of indigenous ecological knowledge and the role it plays in contemporary ecology. The relevance of indigenous knowledge to contemporary resource management will also be explored.</p>			
BNR 230	Ornithology	4.0 SH	[GESL]
<p>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.</p>			
BNR 231	Herpetology	4.0 SH	[GESL]
<p>A survey of the biology of reptiles and amphibians. Topics covered include evolutionary origins, morphology, life history, ecology, and identification, emphasizing Principia College campus species. Field work, collecting, and identifying the Principia herpetofauna constitute a significant portion of the course. Students undertake a research project on the amphibian or reptile of their choice.</p>			
BNR 232	Wildlife Conservation	3.0 SH	[]
<p>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.</p>			
BNR 236	Sea Turtle Biology	3.0 SH	[]
<p>This course teaches the biology of sea turtles (evolution, anatomy, physiology, behavior, life history, and population dynamics) and their conservation needs. Basic ecological concepts are integrated with related topics of conservation and management of endangered species, the contributions of technology to the management of migratory marine species, and the role of research in national and international law and policy.</p>			

- BNR 237 Sea Turtle Biology: Trinidad** 4.0 SH [GESL]
 This course teaches the biology of sea turtles (see description for BNR 236) and their conservation needs. During spring break students travel to Trinidad in the Caribbean to study marine turtles. They assist in ongoing research, as well as interact with local resource managers in a "real world" context where the complexities of biodiversity conservation can be learned. (A student may receive credit for only one of the courses BNR 236 or BNR 237.)
Fee=\$760.00.
- BNR 245 Natural History** 2.0-4.0 SH [GESL]
 This course focuses on the study of the natural history of flora and fauna in a specific country or region. Ecosystems studied may include: marine, alpine, forest, grasslands, riverine. Offered on Principia abroad only, with a star (*) grade until following midterm. May be offered for variable credit from two to four semester hours. The title will be extended to describe the current topic. May be taken more than once provided the topics differ.
- BNR 255 Natural Resources Management** 4.0 SH []
 This course focuses on the biological and physical science aspects of natural resource management at local, national, and global scales. Topics covered include management of soil, water, forest, and watershed resources. In the laboratory component, students will learn field measurement techniques and computer skills commonly used in managing natural resources as well as develop and write scientific lab reports.
- BNR 256 Conservation Genetics** 4.0 SH []
 Classical and modern genetic theory and technique, with an emphasis on the role of genetic variability in the development of species, and in the conservation of biodiversity.
Prerequisite: BNR 111 or BNR 112.
- BNR 264 Sugarbush Management** 4.0 SH [GESL]
 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.
Fee=\$30.00.
- BNR 280 Plant Taxonomy** 4.0 SH []
 Study of plant families illustrated by their morphology and reproductive structures. Emphasis is on the development of skills used to identify and classify plants in the field.
Prerequisite: BNR 111.
- BNR 290 Environmental Policy** 3.0 SH []
 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 312 Grassland Ecology** 4.0 SH []
 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.
Prerequisite: BNR 111 and BNR 191.
Class Level Restriction: Junior and Senior only.
- BNR 313 Forest Ecology** 4.0 SH []
 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.
Prerequisite: BNR 111 and BNR 191.
Class Level Restriction: Junior and Senior only.

- BNR 315 Freshwater Ecology** 4.0 SH []
 A survey course in the ecological functioning of lakes, rivers, streams, and wetlands. The course has a special focus on the great rivers of the Midwest, including their ecological and environmental problems. Students learn field skills needed to conduct ecological research and write scientific lab reports and a final research paper on freshwater ecosystem topics.
Prerequisite: BNR 111 and BNR 191.
Class Level Restriction: Junior and Senior only.
- BNR 317 Wetland Ecology** 4.0 SH []
 The study of bogs, fens, swamps, bottomland hardwood forests, salt marshes and mangroves with an emphasis on the formation, hydrology, biogeochemistry, and community dynamics of these systems. Management, policy, and restoration strategies will also be discussed. Students will learn field skills needed to conduct wetland research and write lab reports and a final research paper on wetland ecosystem topics.
Prerequisite: BNR 111 and BNR 191.
Class Level Restriction: Junior and Senior only.
- BNR 325 Wildlife Management** 4.0 SH []
 This course is designed to give students an understanding of wildlife and conservation management methods. Covers techniques in population estimation, radio and satellite telemetry and other electronic data gathering methods as well as studying when and how to apply such methods. The course combines lecture and field work, with a heavy emphasis on the field work.
Prerequisite: BNR 112.
Class Level Restriction: Junior and Senior only.
- BNR 340 Adv Natural History** 2.0-4.0 SH []
 An advanced course that focuses on natural history of flora and fauna in a specific country or region. It also focuses on the ecological dynamics of populations, communities, and ecosystems in the region. Case studies are drawn from a variety of systems including marine, freshwater, forest, grassland, alpine and other ecosystems. May be offered for variable credit from two to four semester hours. The title will be extended to describe the current country or region. May be taken more than once provided the regions differ.
- BNR 356 Global Change Biology** 3.0 SH []
 This course examines changes in Earth's atmosphere, soils, and waters, the distribution of heat and precipitation, the continuity of landscapes, and exotic species invasions. Responses are examined at multiple levels of biological organization. Special attention is paid to positive and negative feedback loops. The course relies on current scientific literature and requires synthesis of diverse physical and biological sciences.
Prerequisite: BNR 111, BNR 112, BNR 191, BNR 201, and any 300-level BNR course.
Class Level Restriction: Junior and Senior only.
- BNR 360 Vertebrate Zoology** 4.0 SH []
 Studies include the evolutionary development of vertebrates, from their origins to the divergence of groups. It focuses on comparative anatomy to understand common ancestral linkages. Students study the broad diversity of modern vertebrates, including life histories, physiology, and ecological adaptations. Laboratory work focuses on anatomy as well as key features of the major vertebrate groups.
Prerequisite: BNR 112.
Class Level Restriction: Junior and Senior only.
- BNR 362 Conservation** 2.0-4.0 SH [GESN]
 This course focuses on how natural resources of a given country are managed. Students study conservation management strategies of representative ecosystems as well as species management and the interface of native culture and resource conservation. Offered on Principia abroad only, with a star (*) grade until following midterm. The title will be extended to describe the current country. May be offered for variable credit from two to four semester hours.
Class Level Restriction: Junior and Senior only.

- BNR 380 Advanced Ecology Seminar** **1.0-3.0 SH** []
 Offered when regular or visiting faculty are available to work with students on selected topics in ecology. Recent topics have included ecological modeling and soils ecology. The title will be extended to describe the current topic. May be offered for variable credit from one to three semester hours. May be taken more than once provided the topics differ.
Class Level Restriction: Junior and Senior only.
- BNR 381 Adv Natural Resources Seminar** **1.0-3.0 SH** []
 Offered when regular or visiting faculty are available to work with students on selected topics in natural resources conservation. The title will be extended to describe the current topic. May be offered for variable credit from one to three semester hours. May be taken more than once provided the topics differ.
Class Level Restriction: Junior and Senior only.
- BNR 390 Forest Resource Management** **4.0 SH** []
 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.
Class Level Restriction: Junior and Senior only.
- BNR 391 Soil and Water Conservation** **3.0 SH** []
 Past and present issues in soil and water conservation will be examined. Principles of erosion, conservation tillage, irrigation, and drainage will be discussed. Current issues such as water conflicts, integrated watershed management, and green roofs will also be covered.
Prerequisite: BNR 191.
Class Level Restriction: Junior and Senior only.
- BNR 400 Senior Thesis Seminar** **1.0 SH** []
 This course is designed to assist senior biology and environmental studies majors as they design, conduct, and plan for the presentation of a capstone project. Weekly class activities may include presentations from the research librarian, discussions with BNR faculty about project design and methodology, preparation of an annotated bibliography and coaching on presentation skills and technology. Students develop a formal research proposal and a plan for the project. Open only to biology or environmental studies majors.
Class Level Restriction: Junior and Senior only.
- BNR 401 Senior Thesis** **1.0-6.0 SH** []
 Project selected in accordance with student's qualifications, interests, and needs. May be taken for variable credit from one to six semester hours. May be taken more than once with BNR department chair approval. May be repeated up to a total of 12 semester hours.
Prerequisite: five or more BNR courses numbered above 150 including BNR 400.
Class Level Restriction: Senior only.
- BNR 402 Internship** **1.0-6.0 SH** []
 An opportunity to gain practical experience in biology, natural resource conservation, environmental policy, consulting, and many other related environmental fields. Recent student internships have included waterfowl research for the U.S. Fish and Wildlife Service, amphibian research in Puerto Rico, coyote behavior studies in Yellowstone, and aquarium management at the New England Aquarium. May be taken for variable credit from one to six semester hours. May be taken more than once if topics differ. Offered on an independent contract basis.
Class Level Restriction: Junior and Senior only.

BNR 403 Biology Research Experience 3.0-6.0 SH []

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

Prerequisite: BNR 111, BNR 191, and BNR 201, and at least one of the following: BNR 312, BNR 313, BNR 315.

Class Level Restriction: Junior and Senior only

Field of Study Restrictions: Biology Majors only.

BNR 410 Senior Readings 3.0 SH []

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

Prerequisite: five BNR courses.

Class Level Restriction: Junior and Senior only.

Business Administration (BUAD)**BUAD 090 Business Internship 0.0 SH []**

Professional internship in an off-campus, 3rd party business setting that will prepare the student for a career in business. Position may be in any area of marketing, finance, operations, or management but must provide a professional career-based experience. The internship supports the Business Administration major by providing context and experience relative to the concepts taught within the major.

Field of Study Restrictions: Business Administration Majors only.

BUAD 110 Discovering Business 3.0 SH [GESS]

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

BUAD 215 Intro to Mgmt Info Systems 3.0 SH []

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

Prerequisite: BUAD 251 (with a grade no lower than C).

Class Level Restriction: Sophomore and Junior and Senior only.

BUAD 251 Financial Accounting 3.0 SH []

Stresses the recording and analysis of business transactions. The accounting cycle and preparation of those financial statements required for evaluating the financial status of proprietorships and corporations are emphasized. Also covers specific categories of assets, liabilities, and equity, including corporations. Includes Excel applications and an Internet-based practice set.

Prerequisite: ECON 203 (with a grade no lower than C). Concurrent registration permitted.

BUAD 252 Managerial Accounting 3.0 SH []

Builds on the accounting principles studied in BUAD 251. The primary emphasis is the use of accounting for internal management. Cost accounting systems, accounting information for managerial decisions, tax considerations and capital budgeting are stressed.

Prerequisite: BUAD 251 (with a grade no lower than C).

- BUAD 255 Entrepreneurship** **4.0 SH** []
 Students gain an understanding of how the functions of a business enterprise - management, marketing, accounting, finance, and information technology - are interrelated and interdependent. Students are assigned to a small business team in which they apply their understanding to the development of a business plan for a new venture.
Prerequisite: BUAD 251 and ECON 203 (with a grade no lower than C in each course).
Class Level Restriction: Sophomore and Junior and Senior only.
- BUAD 261 Business Analytics** **3.0 SH** []
 Covers the business use of analytical methods such as decision trees, scorecards, forecasting, clustering, regression and optimization to solve business problems and make business decisions. Descriptive, inferential and predictive statistics and probability are covered as the foundation of business analytic decisions and the study of operational variability. A business analytic team project is included.
Prerequisite: BUAD 251 and ECON 203 (with a grade no lower than C in each course).
- BUAD 270 Business Sustainability** **3.0 SH** []
 Explores the historical and current context for sustainable business including sustainable business models that emphasize long-term value for all business stakeholders and support eco and socio-efficiency and eco and socio-effectiveness sustainability principles. Techniques are studied to embed sustainable development into the functions of business: Marketing, Accounting, Operations, Investing, Product Design, and Management. Case studies, readings, and projects are used.
Class Level Restriction: Sophomore and Junior and Senior only.
- BUAD 310 Investments** **3.0 SH** []
 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.
Class Level Restriction: Junior and Senior only.
- BUAD 320 Marketing** **3.0 SH** []
 An introduction to the principles of creating value for customers and building and managing strong, profitable customer relationships. Students study the nature of consumer and business-to-business markets and the role of strategic marketing planning, marketing research, pricing, distribution, and advertising. Students study and analyze contemporary cases to understand how marketing principles are used to guide decision-making in organizations.
Prerequisite: BUAD 251 and ECON 203 (with a grade no lower than C in each).
Class Level Restriction: Junior and Senior only.
- BUAD 321 Marketing Research** **3.0 SH** []
 Emphasizes the role of marketing research and consumer behavior in marketing management. Topics included are research design, test marketing, secondary sources, survey research, questionnaire design and data analyses, attitude measurement, and product, pricing, and promotional research. The course emphasizes the importance of consumer focus from recognizing needs to generating pre through post purchase satisfaction.
Prerequisite: BUAD 320.
Class Level Restriction: Junior and Senior only.
- BUAD 326 Multi-Channel Marketing** **3.0 SH** []
 Interdisciplinary course open to students majoring in Business Administration or Mass Communication. The course addresses changes in the marketing environment and how an integrated approach is necessary for success. Students integrate outbound channels such as cable, radio, public relations, print, direct mail, and email with inbound channels such as blogs, social media, website optimization, and pay-per-click for superior results.
Prerequisite: business administration majors: BUAD 320; mass communication majors: MCOM 263.
Class Level Restriction: Junior and Senior only.

BUAD 330	Management	3.0 SH	[GESS]
<p>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.</p> <p>Class Level Restriction: Junior and Senior only.</p>			
BUAD 335	International Business	3.0 SH	[]
<p>Business competition and strategy is global, and to successfully manage and operate an international corporation requires an understanding of complex economic, political, cultural, and governmental issues. This course uses case studies, discussions, papers, and projects to explore the methods and operational strategy of businesses and multi-nationals within a global context. ECON 203 and ECON 204 are recommended but not required.</p> <p>Class Level Restriction: Junior and Senior only.</p>			
BUAD 336	Organizational Effectiveness	3.0 SH	[GESS]
<p>Students will learn about the theories and practices that create effective organizations. This course presents theories relating to the behavior of individuals and groups within formal organizations and focuses on organizational behavior, organizational structure, organizational development, and organizational change management. These theories are applied to case studies and work experiences to gain a practical understanding.</p> <p>Class Level Restriction: Junior and Senior only.</p>			
BUAD 340	Operations & Supply Chain Mgmt	3.0 SH	[]
<p>Covering both a firm's operations and supply chain management, topics include production, logistics, quality, capacity, and inventory management. This course incorporates many applied quantitative business methods such as optimization, forecasting, and business process design.</p> <p>Prerequisite: BUAD 261.</p>			
BUAD 350	Business Law	3.0 SH	[]
<p>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.</p> <p>Class Level Restriction: Junior and Senior only.</p>			
BUAD 351	Intermediate Accounting	3.0 SH	[]
<p>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.</p> <p>Prerequisite: BUAD 252 (with a grade no lower than C).</p> <p>Class Level Restriction: Junior and Senior only.</p>			
BUAD 360	Managerial Finance	3.0 SH	[]
<p>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.</p> <p>Prerequisite: ECON 204, BUAD 252 (with a grade no lower than C) and BUAD 261.</p> <p>Class Level Restriction: Junior and Senior only.</p>			
BUAD 375	New Venture Incubator	1.0-3.0 SH	[]
<p>This course is a project-based, hands-on learning course that supports students starting businesses and new innovation product ideas. The class will support the entrepreneurial drive of students in taking steps to start and nurture their own businesses by using a lean startup model of business development that supports testing business assumptions and by encouraging entrepreneurial learning and collaboration.</p>			
BUAD 400	Seminar	1.0 SH	[]
<p>A seminar in selected topics in business administration or economics. The contents will vary, and the title will be extended to describe the current topic. May be taken more than once provided the topics differ.</p> <p>Class Level Restriction: Junior and Senior only.</p>			

BUAD 401 Business Consulting Practicum 1.0-3.0 SH []

Group participation in an ongoing project providing business consulting services to companies involved in retail, manufacturing, and services. Project integrates and applies students' knowledge to financial, marketing, and management situations. May be offered for variable credit from one to three semester hours. May be taken more than once, up to a total of 12 semester hours.

Class Level Restriction: Junior and Senior only.

BUAD 404 Business Mgt Study Project 3.0-9.0 SH []

Offered on a field program or on a contract basis. May be offered for variable credit from three to nine semester hours. Work done independently with a corporation or other organization.

Class Level Restriction: Junior and Senior only.

BUAD 430 Strategic Management 3.0 SH []

Integration of the functional areas of business management in formulating and implementing the policies of the enterprise. Topics included are mission statements; industry analysis; internal SWOT analysis; corporate, business, and functional level strategies; generic and grand strategies; empowerment; restructuring; and strategic control. Course includes a capstone research paper.

Prerequisite: completion of all other business administration major requirements.

Class Level Restriction: Senior only

Field of Study Restrictions: Business Administration Majors only.

BUAD 440 New Venture Creation 3.0 SH []

Students apply understandings of the multiple functions of a business enterprise - management, marketing, accounting, operations, and finance. Students will demonstrate a mastery of business principles and teamwork, developing a business plan for a new venture. They will be required to participate in a New Venture Incubator. A final pitch presentation will be given to a group of simulated "investors".

Prerequisite: BUAD 320, BUAD 340, and BUAD 360.

Class Level Restriction: Senior only.

Careers (CAR)

CAR 091 Career Conference 0.0 SH []

Intensive, three-day conference/seminar that helps students prepare for life after graduation. Includes lectures, seminars, hands-on sessions, interviews, and professional events that give students an introduction to the processes and procedures for internship and job searches, graduate school application processes, social media and its application to career development, and other related topics. May be repeated twice.

Class Level Restriction: Sophomore and Junior and Senior only

Fee=\$145.00.

CAR 101 You. Your Major. Your Career 1.0 SH []

This course provides students with an understanding of the relationship between their college experiences - academic, social, extra-curricular - and the "world of work." Through self-discovery, major exploration, and initial career tool development, each student will learn more about his/her skills and interests, and how to "intentionally" include experiential activities during college to prepare smartly for life after college.

Class Level Restriction: Freshman and Sophomore only.

CAR 201 Navigating Internships 1.0 SH []

Course prepares students to intentionally plan and complete an internship or REU in a target field before graduation. Students will gain a deeper understanding of their personal strengths, relate academics to the working world, research and evaluate specific opportunities, develop professional competencies and tools, gain confidence through professional development, and complete an academic contract, if needed.

Class Level Restriction: Freshman and Sophomore and Junior only.

CAR 301 Investigating Career Options **3.0 SH** []
 Provides students with an in-depth and strategic approach to career development. Students leverage their college experiences and develop tools and resources with which to pursue professional opportunities. Activities include exploring the hidden job market and graduate school programs, connecting with professionals, enhancing résumés and cover letters, managing online professional profiles, and practicing interviewing skills.
Class Level Restriction: Junior and Senior only
Fee=\$35.00.

Chemistry (CHEM)

CHEM 111 Environmental Chemistry **4.0 SH** [GESL]
 Introduction to environmental problems and the chemical aspects of these concerns. Basic concepts of chemistry are introduced in the context of environmental issues. Designed to develop an awareness of environmental issues and to use that information as informed global citizens and voters. Includes labs.

CHEM 113 Chemistry: A Vector of History **3.0 SH** [GESN]
 The evolution of chemistry through history follows the development of the scientific method and the role that new material plays in defining the society one lives in. Demonstration of experiments that mark turning points in chemistry will form the central theme of the course and examining the lives of notable scientists will form the context in which their discoveries occur.

CHEM 114 Chemistry of Art Objects/Media **4.0 SH** [GESL]
 Selected fundamentals of chemistry relevant to the creation, conservation, and preservation of art objects. Survey of pigments, dyes, paints, ceramics, glassy and metallic media, paper, lithography, engraving, and fresco. Other topics will include conservation, the museum environment, scientific examination of art, forgery detection by scientific means, and safety in the studio. Includes labs.

CHEM 115 Introduction to Chemistry **4.0 SH** [GESL]
 A one-semester introduction to chemistry relevant to biology and environmental science. Students learn how understanding chemical concepts and chemical reactions is important to biology and environmental science. Includes labs. Prepares students for taking Organic Survey.
Prerequisite: Success in this course depends upon students having completed a high school second-year algebra course and a high school geometry course with a grade of C or above.

CHEM 117 Food Chemistry **4.0 SH** [GESL]
 The course applies basic scientific principles to food systems and their practical applications. Chemical/biochemical reactions of carbohydrates, lipids, proteins, and other constituents in fresh and processed foods are discussed with respect to food quality and processing. Reaction conditions that affect color, flavor, texture, nutrition, and food safety are studied. Food-related lab experiments and an independent project are included.

CHEM 131 Fundamentals of Chemistry I **4.0 SH** [GESL]
 First of a three-course introductory sequence in chemistry. Develops problem-solving and research skills. Includes atomic structure, stoichiometry, bonding, gases, liquids, and solids. Includes labs. Students should consider taking MATH 181 concurrently.
Prerequisite: Score of 3 on former Math Placement Exam or equivalent (including being excused from test or passing course such as Math 110). Success in this course depends upon students having completed a high school second-year algebra course and a high school geometry course with a grade of C or above.

Class Level Restriction: Freshman only.

CHEM 132 Fundamentals of Chemistry II **4.0 SH** []
 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.

Class Level Restriction: Freshman and Sophomore only.

- CHEM 133 Fundamentals of Chemistry III** 4.0 SH []
 Third part of the introductory chemistry sequence. Topics covered include nuclear, organic, and descriptive chemistry of metals and non-metals. Introduces laboratory methods of quantitative analysis and instrumentation. Topics include titrimetric and gravimetric methods of analysis, statistical treatment of data, error propagation and analysis, and instrumental techniques of chromatography and spectroscopy. Includes labs. Students should consider taking MATH 182 concurrently.
Prerequisite: CHEM 131 and CHEM 132.
Class Level Restriction: Freshman and Sophomore only.
- CHEM 201 Environmental Testing** 4.0 SH [GESL]
 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 241 Research Project** 1.0-3.0 SH []
 Research under faculty supervision. May receive a star (*) grade, with final grade being assigned on completion of the project. May be taken for variable credit from one to three semester hours. May be repeated twice for a maximum of 9.0 SH.
- CHEM 260 Organic Survey** 4.0 SH []
 Principal classes of organic compounds, nomenclature, properties, reactions, essentials of structure and mechanisms. Applications to biological systems. Includes labs.
Prerequisite: CHEM 115 or CHEM 131.
- CHEM 262 Organic Chemistry I** 4.0 SH []
 First of a two-course sequence on organic chemistry. Includes major classes of organic compounds, nomenclature, structure and properties, acid-base theory, spectroscopy, stereochemistry, thermodynamics, reactions, and mechanisms. Includes labs.
Prerequisite: CHEM 133.
- CHEM 263 Organic Chemistry II** 4.0 SH []
 A continuation of CHEM 262. Includes labs.
Prerequisite: CHEM 262.
- CHEM 274 General Biochemistry** 4.0 SH []
 Molecular components of cells, metabolic and energy transfer pathways, biosynthesis, molecular genetics. Includes labs.
Prerequisite: CHEM 260 or CHEM 262.
- CHEM 301 Adv Environmental Chemistry** 4.0 SH []
 Study of the chemistry of air, water, and soil and how industries and activities affect the chemical balances in nature. Includes a laboratory section which concentrates on environmental chemical analysis.
Prerequisite: BNR 191 or CHEM 133 or CHEM 201.
Class Level Restriction: Junior and Senior only.
- CHEM 311 Phys Chem I: Thermodynamics** 4.0 SH []
 The study of classical thermodynamics both from a theoretical and an experimental viewpoint. Topics include gas laws, enthalpy, entropy, liquids, solutions, mixtures, kinetic rates, and mechanisms. Includes labs.
Prerequisite: CHEM 133 or PHYS 204.
Class Level Restriction: Junior and Senior only.
- CHEM 313 Phys Chem II: Quantum Chem** 4.0 SH []
 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.
Prerequisite: CHEM 133 and PHYS 202.
Class Level Restriction: Junior and Senior only.

CHEM 321 Applied Spectroscopy 4.0 SH []

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.

Prerequisite: CHEM 262 and CHEM 311.

Class Level Restriction: Junior and Senior only.

CHEM 333 Instrumental Analysis 4.0 SH []

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.

Prerequisite: CHEM 133 and CHEM 263.

Class Level Restriction: Junior and Senior only.

CHEM 441 Senior Research Project 1.0-6.0 SH []

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

Class Level Restriction: Junior and Senior only

Field of Study Restrictions: Chemistry BS Majors only.

Computer Science (CSCI)**CSCI 170 Intro to Computer Science 4.0 SH [GESN]**

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

CSCI 171 Introduction to Programming 4.0 SH [GESN]

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

CSCI 181 Accelerated Intro Programming 2.0 SH []

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

Prerequisite: successful completion of a programming competency test. (A student may receive credit for only one of the courses CSCI 171 or CSCI 181.)

CSCI 182 Intro to Data Structures 4.0 SH []

In-depth coverage of programming concepts, with emphasis on data structures, including arrays, structs, class objects, stacks, queues, and lists. Algorithms and complexity analysis for searching and maintaining sorted and unsorted lists. Explicit pointer data type and dynamic allocation of memory. Introduction to object-oriented programming and recursive functions.

Prerequisite: CSCI 171 or CSCI 181.

CSCI 201 Programming Strategies 1.0 SH []

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

CSCI 220	Programming Languages	4.0 SH	[]
A survey and comparison of programming languages, learned through study and considerable programming practice. Intended to form the programming language basis for courses in object-oriented programming and database management systems.			
Prerequisite: CSCI 182.			
CSCI 240	Object-Oriented Programming	4.0 SH	[]
Students design, code, document, and debug computer programs using classes, object-oriented design, inheritance, polymorphism, and recursion. They demonstrate problem-solving skills using object-oriented concepts.			
Prerequisite: CSCI 220.			
CSCI 263	Computer Software Architecture	3.0 SH	[]
Topics include assembler language programming, system organization, parallelism and serialization, pipelining, memory management, recursion, and microprocessor design.			
Prerequisite: ENGR 262.			
CSCI 310	Software Engineering	3.0 SH	[]
Methodologies for developing and maintaining large complex software systems. Case studies and team exercises are included. Focus on complete software life cycle, including specification, design, implementation, testing, debugging, and documentation.			
Prerequisite: CSCI 171 or CSCI 181.			
Class Level Restriction: Junior and Senior only.			
CSCI 320	Database Management Systems	4.0 SH	[]
The utilization of database systems within organizational settings. Includes features of database management systems, various data models, database design, normalization, SQL, query optimization, various indexing techniques, and data integrity and recovery issues.			
Prerequisite: BUAD 215 or CSCI 240.			
CSCI 324	Web Development	4.0 SH	[]
Design and development of client and serverside web applications, using libraries, and technologies relevant as of the time of course offering. Coverage of scripting language concepts including closure, dynamic typing, and prototypes. The class is project-oriented, and students will complete a significant web application.			
Prerequisite: CSCI 320.			
Class Level Restriction: Junior and Senior only.			
CSCI 330	Operating Systems	3.0 SH	[]
The inner workings of several popular multiprogramming operating systems are compared. Topics include processor scheduling, device management, memory management, and parallel processing.			
Prerequisite: CSCI 263.			
CSCI 333	Computer Networking	3.0 SH	[]
Introduction to Local Area and Wide Area computer networks. Topics include network topologies, ISO protocols, Ethernet, TCP/IP, and network support for distributed computing. The course emphasizes the science of networking (as opposed to network administration).			
Prerequisite: CSCI 171 or CSCI 181.			
Class Level Restriction: Junior and Senior only.			
CSCI 340	Advanced Algorithms	4.0 SH	[]
Survey of algorithms, with an emphasis on the application of algorithmic theory to the solution of practical problems. Categories include algorithm taxonomy, greedy algorithms, dynamic programming, divide-and-conquer, and intelligent search. Various specific algorithms exemplifying these categories are drawn from a variety of application areas such as compression, encryption, graph problems, sorting, computational geometry, and string matching.			
Prerequisite: CSCI 240.			
Class Level Restriction: Junior and Senior only.			

- CSCI 380 Compilers** **4.0 SH** []
 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.
Prerequisite: CSCI 240 and CSCI 263.
Class Level Restriction: Junior and Senior only.
- CSCI 390 Topics in Computer Science** **1.0-5.0 SH** []
 Topics will vary from year to year based on the needs and interests of students and instructor. All offerings will involve in-depth study of a specific topic, software design, the construction of working software, and self-instruction in addition to standard instruction. May be taken more than once if topics are different.
Prerequisite: CSCI 240.
Class Level Restriction: Junior and Senior only.
- CSCI 410 Capstone Proposal** **1.0 SH** []
 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.
Class Level Restriction: Junior and Senior only.
- CSCI 415 Capstone** **3.0 SH** []
 A student-designed project with a significant programming component which pulls together the student's major. Choices include independents, internships, or group projects.
Prerequisite: CSCI 410.
Class Level Restriction: Junior and Senior only.
- CSCI 421 Computer Issues Seminar** **3.0 SH** []
 An examination and discussion of pressing computer issues facing society. Topics include personal impact, societal impact, artificial intelligence, privacy, and ethics. Majors from other disciplines are encouraged to take this course if they have taken any other computer science course.
Class Level Restriction: Senior only.

Dance (DANC)

- DANC 043 Dance: Ballet I** **0.0 SH** [GEPE]
 Introduction to the basic principles and vocabulary of ballet. Flexibility, strength, and control are emphasized.
- DANC 044 Dance: Ballet II** **0.0 SH** [GEPE]
 Provides the intermediate dancer with ongoing training in ballet technique. Emphasis is on center work and adagio.
- DANC 045 Dance: Ballet III** **0.0 SH** [GEPE]
 Provides the more advanced dancer with an upper-level technique class emphasizing pointe work and petit allegro.
- DANC 048 Dance: Jazz I** **0.0 SH** [GEPE]
 Introduction to the basic principles and vocabulary of jazz technique and rhythm.
- DANC 080 Dance: Modern I** **0.0 SH** [GEPE]
 Introduction to the basic principles and vocabulary of modern dance. Emphasis is on individual expression through the use of improvisation, modern dance technique, and rhythm.
- DANC 081 Dance: Modern II** **0.0 SH** [GEPE]
 Builds on the basic modern dance techniques and allows greater exploration of improvisation and movement sequences.
- DANC 082 Dance: Modern III** **0.0 SH** [GEPE]
 Continuation of DANC 081. Further development of modern technique and improvisation and floorwork. Exploration of different styles of modern dance, e.g. Limón, Graham, and others.

DANC 083 Dance as Movement 0.0 SH [GEPE]

This introductory course is provided to train the student dancer in spatial awareness, weight transfer, and basic studio-dance movement. It is a generic dance class designed to enable dancers to make connections between basic pedestrian movement and dance vocabulary movements.

DANC 200 Topics in Dance History 3.0 SH [GEA]

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

DANC 250 Dance History 3.0 SH [GEA]

An introduction to western dance history. Periods covered include, but are not limited to, the Baroque, Romantic, and Classical ballet eras and the Modern and Post Modern eras. Both ballet and modern dance luminaries are studied. Video is used and an emphasis is placed on historical context as regards dance styles and periods.

DANC 330 Dance Composition 3.0 SH []

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

Class Level Restriction: Junior and Senior only.

DANC 370 Dance Practicum Cast 1.0-3.0 SH []

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

DANC 371 Dance Practicum Staff 1.0-3.0 SH []

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

Earth Science (ERTH)

ERTH 050 Service Learning in Earth Sci 0.0 SH []

Students volunteer in some capacity to assist in educational outreach in earth science and/or environmental studies or in research as a technician. Projects may serve Principia or other communities or outside agencies.

ERTH 111 Introductory Geology 4.0 SH [GESL]

This course studies the internal and external processes that form and shape the Earth and interprets the resulting landforms. Internal processes include tectonic plate movement, volcanoes, earthquakes, and mountain building. External processes include weathering, erosion, streams, wind, ocean currents, and glaciers. Labs cover mineral and rock identification, topographic, and geologic map reading. Field trips reinforce class material.

Class Level Restriction: Freshman and Sophomore only.

ERTH 170 Earth Science 4.0 SH [GESL]

Covers earth science topics that will explore the relationship between the earth's systems and human activities within a region. Topics include the Earth's physical processes (terrestrial and/or oceanographic), tectonic history and mineral and water resources. Title extended to describe region and/or topic. May be taken up to three times provided topics differ. Offered on Principia abroads or field programs only.

ERTH 205 Introduction to Oceanography 4.0 SH [GESL]

An introductory survey of oceanography as an interdisciplinary marine science. Topics include geological features and structures of ocean basins; the chemistry of sea water; heat, circulation, the carbon cycle, and air-sea interactions as they relate to climate; and biology processes in the sea.

ERTH 225 Environmental Geology 3.0 SH [GESN]

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.

ERTH 230 Nonrenewable Resources 3.0 SH [GESN]

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.

ERTH 242 Historical Geology 4.0 SH [GESL]

The geologic history of the Earth and the evolution of life through the study of fossils. Includes the movement of tectonic plates, shaping of continents, and formation of mountains, all interpreted from the study of rock and fossil records. Labs include rock and fossil identification, physical and biostratigraphic correlation of rock units, and interpretation of local geologic history.

ERTH 280 Earth Sci Field Investigations 1.0-4.0 SH []

Field investigation and related lab work for a special earth science project. Involves library and/or field research and reporting of scientific findings. Offered on demand. The title will be extended to describe the current topic. May be repeated up to a maximum of 12 SH provided topics or depth of research differ.

Prerequisite: EARTH 111 or EARTH 205.

ERTH 301 Environmental Mapping & GIS 4.0 SH []

Introduction to the concepts, techniques, and applications of mapping and monitoring the environment. Students become familiar with the uses of topographic maps, aerial photography, satellite imagery, Global Positioning Systems (GPS), and Geographic Information Systems (GIS). Students design and implement an ecosystem mapping project.

Prerequisite: at least one earth science or 200-level field biology course.

Class Level Restriction: Junior and Senior only.

ERTH 401 Senior Thesis 1.0-6.0 SH []

Project selected in accordance with student's qualifications, interests, and needs. Project may be a component of an internship. May be offered for variable credit from one to six semester hours. May be taken three times up to a total of six semester hours.

ERTH 410 Senior Readings 3.0 SH []

This course introduces students to seminal pieces of environmental literature and to cutting edge thinking on environmental problems. It challenges students to define and defend their personal values with regard to the environment and to become active citizens in the environmental issues facing society.

Prerequisite: four EARTH courses.

Class Level Restriction: Junior and Senior only.

Economics (ECON)

ECON 203 Principles of Microeconomics 3.0 SH []

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 supranational organizations. Students develop economic perspectives on a wide variety of topics; examples include the minimum wage, environmental legislation, Social Welfare policy, and entrepreneurship. First course in the economics and in the business administration majors' sequence.

- ECON 204 Principles of Macroeconomics 3.0 SH []**
 Continues the study of economic theory and analysis begun in ECON 203. Major topics include aggregate demand and supply, money, employment, economic growth, monetary and fiscal stabilization policy, national income and product accounts, inflation, and international economics. The assumptions of Keynesian, neoclassical, monetarist, and "supply-side" programs are also explored.
Prerequisite: ECON 203.
- ECON 231 Comparative Economic Systems 3.0 SH [GESS]**
 Examines resource allocation systems of various nations; stresses comparison of free market, social democratic, market socialist, and centrally planned economies.
- ECON 271 Environmental Economics 3.0 SH []**
 This course provides an economic perspective on natural resource and environmental issues. Topics such as sustainability, pollution, allocation of non-renewable resources, ecosystem management, and global climate change are examined using two different approaches: traditional economic theory; and ecological economics, which considers economic activity in the context of the biological and physical systems in which it occurs.
Class Level Restriction: Sophomore and Junior and Senior only.
- ECON 303 Intermed Microeconomic Theory 3.0 SH []**
 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.
Prerequisite: ECON 203 and ECON 204.
Class Level Restriction: Junior and Senior only.
- ECON 304 Intermed Macroeconomic Theory 3.0 SH []**
 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.
Prerequisite: ECON 203 and ECON 204.
Class Level Restriction: Junior and Senior only.
- ECON 316 Economic Development 3.0 SH []**
 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.
Class Level Restriction: Junior and Senior only.
- ECON 321 Money and Banking 3.0 SH []**
 Principles of money and the monetary system; commercial bank and thrift operations; central banking and monetary management.
Prerequisite: ECON 203 and ECON 204.
Class Level Restriction: Junior and Senior only.
- ECON 331 International Economics 3.0 SH []**
 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.
Class Level Restriction: Junior and Senior only.
- ECON 431 Evolution of Economic Thought 3.0 SH []**
 Historical development of economic thought from its origins to the present. Open only to economics majors.
Class Level Restriction: Junior and Senior only
Field of Study Restrictions: Economics Majors only.

Educational Studies (EDST)

EDST 101 Pathways to Success 3.0 SH []

This course gives students a foundation for lifelong learning and helps them to succeed in college and beyond. Focus will be on communication, professionalism, study skills, 21st-century skills, creativity, presentation skills, time and distraction management, collaboration, critical reading and thinking skills, note taking, and effective study techniques.

EDST 120 Signs of the Times 3.0 SH [GESS]

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

EDST 130 Outdoor Education 3.0 SH [GESS]

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

Class Level Restriction: Freshman and Sophomore only
Fee=\$50.00.

EDST 170 Environmental Education 3.0 SH []

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

Fee=\$50.00.

EDST 183 Adolescence and Society 3.0 SH [GESS]

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.

EDST 184 Children and Society 3.0 SH [GESS]

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

EDST 210 21st Century Learning 3.0 SH [GESS]

Introduces students to 21st century skills and concepts that have been identified as key to successful and effective global citizenship. These include innovation, creativity, critical thinking, and technological proficiency. Experiential and discussion-based classwork will engage students in an ongoing conversation about the educational reform movement as a response to the call to prepare for the demands of the future.

EDST 218 Education in America 3.0 SH []

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

- EDST 222 Field Experiences in Education 2.0 SH []**
 Students gain firsthand experiences in public, private, and alternative schools. Course will include extensive and frequent field trips to observe a variety of educators implement classroom methods and management strategies. They will also observe and reflect upon the influence of race, gender, and socioeconomic differences in the classroom.
Prerequisite: EDST 260.
Corequisite: EDST 223, EDST 251, EDST 253, EDST 254, EDST 325.
Fee=\$150.00.
- EDST 223 Classroom Methods & Management 3.0 SH []**
 This course will provide students with a strong foundation in best practices in education which are rooted in educational theory and cultural awareness. This includes methods of unit and lesson design, classroom management approaches, development of learning environments, and pedagogical strategies.
Prerequisite: EDST 260.
Corequisite: EDST 222, EDST 251, EDST 253, EDST 254, EDST 325.
- EDST 235 Outdoor Leadership 2.0-4.0 SH []**
 Exploration of outdoor education in an experiential and hands-on way with an emphasis on the application of its related theories, skills, and methods. Emphasis will be on experiential, environmental, and adventure education. Core competencies of outdoor leadership will include facilitation skills, technical skills, decision-making skills, teambuilding, self awareness, safety and risk management, diversity mindfulness, and environmental stewardship. Offered on Principia abroad or field programs only. May be offered for variable credit from 2-4 semester hours. The title will be extended to reflect the specific country, region, or focus topic.
- EDST 240 Contemporary Topics 3.0 SH []**
 An exploration of a contemporary topic or issue in education. Examples of topics include design thinking, creativity and innovation, project-based learning, differentiation and inclusion, grit, instructional design, coaching, and adult education. Students will develop critical and reflective thinking skills, effective communication, and pedagogical knowledge. Title will be extended to describe the topic. May be taken more than once if the topics differ.
- EDST 242 Outdoor Ed Topics 3.0 SH []**
 This course may focus on interpretive studies, leadership, leisure and recreation, hard skills, country-specific themes, adventure theory, or other current and evolving topics in the field of outdoor education. Coursework will require students to demonstrate critical and reflective thinking, effective oral and written communication skills, and pedagogical knowledge. Title will be extended to describe the topic. May be taken more than once if the topics differ.
- EDST 250 Educational Psychology: Majors 3.0 SH []**
 Application of general principles of psychology to educational settings. Theories of teaching and learning and the study of curriculum in a critical, historical, and social context are included. Consideration of such educational issues as race, class, gender, methodology, research, evaluation, assessment, management, and learning processes are also examined. Taken as part of Beginning Block.
Prerequisite: EDST 260.
Class Level Restriction: Sophomore and Junior and Senior only
Field of Study Restrictions: Educational Studies Majors only.
- EDST 251 Educational Theory 3.0 SH []**
 Addresses critical questions related to teaching and learning: What is learning? How do people learn? How do I learn best and how does that inform my practice? Through an exploration of selected educational theorists, students will explore and question their own beliefs about teaching and learning. These theories are evaluated through the lenses of cultural, racial, socioeconomic, and gender differences.
Prerequisite: EDST 260.
Corequisite: EDST 222, EDST 223, EDST 253, EDST 254, EDST 325.

- EDST 253 Dynamic Learning Communities 2.0 SH []**
 Students will research and practice communication, collaboration, and professionalism in the context of learning communities. Students will participate in complex dialogs, group interactions, decision making, and visioning. These skills will be applied to individual and group learning needs, and the design of safe and inviting learning environments. Awareness and appreciation of diversity and multiple perspectives will be included.
Prerequisite: EDST 260.
Corequisite: EDST 222, EDST 223, EDST 251, EDST 254, EDST 325.
- EDST 254 Child & Adolescent Development 3.0 SH []**
 Study of the development of children from childhood to adolescence in diverse school contexts. Study is grounded in related development theory and school issues related to physical, social, and cognitive development. Applicable Illinois standards for middle school teachers are addressed.
Prerequisite: EDST 260.
Corequisite: EDST 222, EDST 223, EDST 251, EDST 253, EDST 325.
- EDST 260 Communication 3.0 SH [GESS]**
 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 communication 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.
- EDST 275 Pedagogy of Place 3.0 SH [GESS]**
 Place-based education uses the community, cultural heritage, environment, landscapes, geography, economics, sustainability, and current issues to immerse students in authentic experiences that foster connections between the environmental and human forces that shape a region. This interdisciplinary approach builds ecological and cultural literacy. Title will be extended to describe the current topic. May be repeated once provided the topics differ.
- EDST 277 Tutor Training Seminar 1.0 SH []**
 This course provides practical and theoretical instruction for student peer tutors and teaching assistants across the disciplines. Recommended for students planning to be tutors, TAs, and those hoping to be Principia post-graduate teaching interns. Communication skills, lesson planning, and developing a teaching philosophy are among topics covered. This course is not a substitute for WRIT 350 Teaching the Writing Process.
- EDST 278 Child & Adolescent Literature 3.0 SH [GESS]**
 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.
- EDST 285 Foundations in Experiential Ed 3.0 SH []**
 Provides a framework for understanding the history, theories, philosophies, current trends, best practices, and pedagogical approaches in experiential and outdoor education. Students will explore the connections between experience, knowledge, and learning processes. Research methods, scholarly works, and sub-categories such as service learning, cooperative learning, and project-based learning will be studied in relation to this topic.
Class Level Restriction: Sophomore and Junior and Senior only.
- EDST 287 Character Education 3.0 SH [GESS]**
 Exploration of philosophical and practical theory and issues about character growth focused by approaches to character education at The Principia. What is character education in today's contemporary culture? Special historical, social, political, religious emphasis, based on Mary Kimball Morgan's writings, as well as a wide array of readings on related moral theorists.

- EDST 295 Wilderness Literacy** **3.0 SH** []
 Outdoor educators have many opportunities to facilitate the exploration of wilderness through discussions, readings, and field experiences. Methods associated with teaching and learning about attitudes and beliefs regarding wilderness will be modeled and taught through the study of writers, philosophers, poets, and their relationship to the Wilderness Act, land conservation, and the establishment of the National Park System.
Class Level Restriction: Freshman may not enroll.
- EDST 300 Exper. Educ Practicum/Intern** **3.0 SH** []
 Students will creatively demonstrate a mature understanding of experiential teaching and learning by designing original curriculum in the form of an expedition, course, or program. The design may include budget considerations, safety precautions, lesson plans, equipment and staffing needs, risk management considerations, identification and application of learning theory and best practices, and a personal philosophy of experiential teaching and learning.
Prerequisite: EDST 130 and EDST 285.
Class Level Restriction: Junior and Senior only
Field of Study Restrictions: Outdoor & Experiential Studies Majors and Educ St:Outdoor & Experiential Minors only.
- EDST 310 Global Education** **3.0 SH** []
 Explores historical and contemporary issues in educational systems around the world. Course will examine international education through political, social, and cultural lenses. Students will compare and evaluate the progress of education on a global scale.
Class Level Restriction: Junior and Senior only.
- EDST 312 Teacher as Leader** **3.0 SH** []
 Teachers with effective leadership skills are needed in a variety of educational settings. This course will focus on learning about and developing positive teacher dispositions and associated character traits applicable to classroom and administrative settings. Students will participate in an in-depth exploration of leaders in the field of education.
Class Level Restriction: Junior and Senior only.
- EDST 325 Literacy Across the Curriculum** **3.0 SH** []
 Reading and writing instruction and methods in the context of all content areas. Includes a study of what literacy is, how it occurs, and different philosophies of how it can be taught. This course uses a student-centered approach where students examine their own experiences in literacy training and their own literacy traits.
Corequisite: EDST 222, EDST 223, EDST 251, EDST 253, EDST 254.
- EDST 330 Math for Elem/Mid Sch Teachers** **3.0 SH** []
 This course focuses on understanding mathematical thinking and best current practices through experiencing math. Considers methodology, materials, integration with total curriculum. Special attention given to differentiated instruction and culturally responsive teaching.
Prerequisite: EDST 223.
Class Level Restriction: Junior and Senior only.
- EDST 342 Science Methods for Teachers** **3.0 SH** []
 Through a constructivist approach, students will learn educational theory and methodology appropriate for STEM classrooms. Science content will be explored with an emphasis on inquiry-based teaching and learning and best practices in assessment. Special attention is given to differentiating science instruction to meet the needs of diverse learners and to make science accessible to everyone.
Prerequisite: EDST 223.
Class Level Restriction: Junior and Senior only.
- EDST 352 Inclusive Learning Environment** **2.0 SH** []
 Content will include instructional theory and methodology focused on establishing learning environments that include and embrace all students. Strategies for curriculum, instruction, and management modifications for all learning styles and needs will provide future educators with the foundation they need in order to structure learning environments where all students will be valued and find success.
Prerequisite: EDST 260 and EDST 330.
Class Level Restriction: Junior and Senior only.

EDST 383 Adolescent Development 3.0 SH []

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.

Class Level Restriction: Junior and Senior only.

EDST 388 Philosophy of Education 3.0 SH []

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

Class Level Restriction: Junior and Senior only.

EDST 420 Capstone: Educational Studies 2.0-3.0 SH []

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

Prerequisite: EDST 260.

Class Level Restriction: Junior and Senior only.

Engineering Science (ENGR)**ENGR 060 Engineering Seminar Non-Credit 0.0 SH []**

Non-credit version of ENGR 260. The title will be extended to describe the current topic.

ENGR 101 Graphical Communications 3.0 SH []

This is a course in graphical communication, expression, and interpretation applicable to engineering, sciences, and other technology fields of study. The ability to visualize in three dimensions is developed through shape description, sketching, and multi-view projection exercises. The course includes, but is not limited to, the engineering and architectural scales, engineering lettering, geometric constructions, use of instruments, and dimensioning.

ENGR 160 Intro Engineering Profession 2.0 SH []

Exploration of engineering, including fields of engineering; expectations of engineering schools; and engineering topics such as time management, project management, CAD design, modeling, computing, fabrication, and ethical issues.

ENGR 180 Project Management 3.0 SH []

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 201 Engineering Mechanics:Statics 3.0 SH []

This course is to introduce students to some fundamental principles of the mechanics and their applications to problems of engineering. It is also geared towards helping students to thoroughly understand the presentation of the theory and its application to all disciplines of engineering as one decides to choose (civil, mechanical, electrical, computer, etc.) and stimulate an interest in engineering.

Prerequisite: MATH 182 (may be taken concurrently) and PHYS 201.

ENGR 202 Engineering Mechanics:Dynamics 3.0 SH []

This course is an application of the fundamental concepts of mechanics, including resultants of force systems, free-body diagrams, equilibrium of rigid bodies, and analyses of structures as studied in ENGR 201.

Prerequisite: PHYS 201, MATH 182, and ENGR 201.

- ENGR 203 Mechanics of Materials** 3.0 SH []
 This course is the branch of mechanics that deals with the relationship between external loads and reactions and the intensities of the internal loads within a deformable body. For the design of a structure or verification of the safety of an existing structure, it is necessary to determine the forces acting on and within the structural members.
Prerequisite: ENGR 201 and MATH 380 (may be taken concurrently) with a grade of "C" or better in both courses.
- ENGR 204 Mech. Engr. Student Design** 3.0 SH []
 This course familiarizes students with the operation and safety of machine tools. This gives students knowledge of what goes into engineering designs in building a prototype and also enables them to operate shop machinery as a part of future courses.
- ENGR 206 Elect. Engr. Circuit Analysis** 4.0 SH []
 This lab course introduces fundamental circuit analysis for EE or other engineering majors. Topics include Ohm's Law, KCL, KVL, mesh and node-based circuit analysis, op amps, RLC circuits, sinusoidal analysis and phasors, and three-phase power. Emphasis on intuitive circuit comprehension using equivalences, superposition, etc. Lab activities emphasize both simulated and physical circuits.
Prerequisite: MATH 181 with a grade of C or higher.
- ENGR 242 3-D Printing Technology** 4.0 SH [GESL]
 This course provides an overview of open-source hardware in theory and practice introducing the Maker movement and 3-D printing. Each student builds a custom 3D printer and designs objects for printing using a variety of open-source software design programs. The body of the course involves using the 3D printer and design software for a progressive series of projects.
Class Level Restriction: Junior and Senior only
Fee=\$100.00.
- ENGR 260 Engineering Seminar** 1.0 SH []
 Topics will vary based on the needs and interests of the students and instructor, and the title will be extended to describe the current topic. May be taken eight times up to a total of eight semester hours provided the topics differ.
Prerequisite: ENGR 160.
- ENGR 262 Computer Hardware Architecture** 5.0 SH []
 Digital electronic logic explored in theory and laboratory from simple switching to electronic architecture of digital computers. Topics include electronic valving and switching, logic-gate design, Boolean algebraic proofs of gate equivalence, counters, registers, arithmetic, operations, memory addressing and information transfer, microprogramming, interfacing and control.
Prerequisite: MATH 261.
- ENGR 279 Engineering Project Proposal** 1.0 SH []
 Students research and prepare an engineering project proposal in preparation for ENGR 280. The proposal must be approved by engineering science faculty prior to taking ENGR 280. May be taken four times up to a total of four semester hours provided the projects differ.
Prerequisite: ENGR 180.
- ENGR 280 Engineering Projects** 1.0-6.0 SH []
 A hands-on course that allows students to learn vital lessons through active participation in a project. Topics may vary between offerings and are chosen according to needs and interests of students and instructor. The title will be extended to describe the current topic. May be offered for variable credit from one to six semester hours. May be taken eight times up to a total of 48 semester hours regardless of the topic.
- ENGR 340 Prof Integrity in Engineering** 3.0 SH []
 This course emphasizes the need for technical professionals to develop personal integrity and moral character in order to benefit society. Students will develop an appreciation for the global context of their decisions, the ability to make sound ethical decisions, and communicate their ideas effectively. This course also explores the impact of engineering and applied science on society.
Class Level Restriction: Junior and Senior only.

English (ENGL)

- ENGL 150 Introduction to the Major** 1.0 SH []
 Required of all majors. This course invites students to explore the theoretical, philosophical, or creative groundings of the English major. Students read a central text focused on these questions and respond metacognitively. From this examination, students create a proposal of study designed to help them engage productively and cohesively in their areas of interest in and out of the major.
Field of Study Restrictions: English Majors only.
- ENGL 178 Renaissance Themes** 3.0 SH [GEH]
 This course explores the major themes of Renaissance thought. It includes readings from both Italian and English Renaissance writers.
Class Level Restriction: Freshman and Sophomore only.
- ENGL 202 Understanding Poetry** 3.0 SH [GEH]
 Gives students an overview of poetic form and introduces students to a variety of reading strategies when approaching poetry. May focus this study on the work of three to five major poets.
- ENGL 204 Understanding Short Fiction** 3.0 SH [GEH]
 Selections from several major short fiction writers from a range of historical periods and cultural backgrounds, designed to equip students with a variety of critical reading strategies.
- ENGL 220 Environmental Literature** 3.0 SH [GEH]
 This course focuses on the ways in which the environment has been portrayed in English language literature and the relationship between that portrayal and treatment of the environment. The course may focus either chronologically or regionally. Students are also introduced to theories of environmental aesthetics and their ethics.
- ENGL 232 The Gothic Novel** 3.0 SH [GEH]
 The study of a specific kind of literature which began to flourish in the middle decade of the eighteenth century and which remains with us today in horror films and novels. The course traces the development of this literature, mainly in the form of the novel, from its beginnings in sentimentality and basic conventions, through romanticism and the addition of psychological elements, to modern existential and sociological themes.
- ENGL 234 The Language of Film** 3.0 SH [GEH]
 The course serves to acquaint students with basic film theory and terminology as tools for the analysis of film as a type of text.
- ENGL 238 Orality and Literacy** 3.0 SH [GEH]
 Orality and Literacy explores the way in which "literature" is created, transmitted, and retained. For most of human history, people have been largely illiterate, yet that has not prevented the creation of stories, tales, myths, and legends. Student will gain a greater awareness of how the different paradigms of oral performance/composition and written texts influence literary art.
Class Level Restriction: Freshman may not enroll.
- ENGL 239 Intro to Creative Nonfiction** 3.0 SH [GEA]
 An introduction to the art and craft of creative nonfiction. Students study the elements of creative nonfiction and apply that study to their own creative writing. Students read published essayists and write multiple creative nonfiction essays themselves, including essays of place, portraits, and memoir.
- ENGL 240 Poetry Writing I** 3.0 SH [GEA]
 An introduction to the art and craft of poetry writing. Students study formal poetics and apply that study to their own creative writing. A substantial portion of the course is devoted to writers' workshop in which students read and critique each other's poetry. Students also read and write about the work of important contemporary poets in order to discover and understand the ways in which these writers apply formal poetics in their work.

- ENGL 241 Fiction Writing I** **3.0 SH** **[GEA]**
 An introduction to the art and craft of fiction writing. Students study the elements of short fiction and apply that study to their own creative writing. A substantial portion of the course is devoted to writers' workshop in which students read and critique each other's short stories. Students also read and write about the work of important contemporary fiction writers in order to discover and understand the ways in which these writers use such elements as pacing, structure, voice, dialogue, character, and scene in their work.
- ENGL 242 Theory as Creative Practice** **3.0 SH** **[GEH]**
 This class explores the links between critical theory and creative practice in contemporary literature and visual culture. Regarding critical theory as a creative practice, students investigate the ways in which writers and artists pose creative problems, solve them by developing working methods based on ideas, and cultivate distinct voices through inventive and informed reformulation of extant practices and theoretical models.
- ENGL 243 Theory as Practice on Location** **3.0 SH** **[GEH]**
 This class explores the links between critical theory, creative practice, and cultural context. The location in which the course is taught determines its focus and usually includes interaction with working artists and writers. The title will be extended to describe the current location. May be taken more than once provided the locations differ. Offered only on Principia abroads and field programs.
- ENGL 253 Gender Studies in Literature** **3.0 SH** **[GEH]**
 Analyzes texts (which may include fiction, films, poetry, and essays) by authors from a range of cultural backgrounds that focus on and question the dominant gender roles of their time and place. These texts may span historical eras or focus on one particular period. Students examine the literature primarily through the lens of feminist and gender theories and historical context.
- ENGL 256 U.S. Literature to 1860** **3.0 SH** **[GEH]**
 A survey of European-American writers, including Puritans, Transcendentalists, and reactionary writers, as well as early slave narratives and traditional Native American texts in translation.
- ENGL 257 U.S. Literature 1860-1940** **3.0 SH** **[GEH]**
 An exploration of the rise of naturalism, realism, and modernism in U.S. literature from the end of the Civil War to the beginning of World War II.
- ENGL 258 U.S. Literature Since 1940** **3.0 SH** **[GEH]**
 Explores texts by a diverse range of authors vis-a-vis geography, ethnicity, religion, gender, and sexuality, focusing on the experimental nature of their writing, the questions they raise about U.S. identity and history, and the social and political concerns they address, including the Civil Rights and feminist movements, the Vietnam War, and the emergence of gay culture and identity.
- ENGL 260 Scottish Literature** **3.0 SH** **[GEH]**
 Introduces students to Scottish literature. The course emphasizes literature written in the 18th and 19th centuries, though literature before and after that period may also be addressed. Emphasis is placed on issues of Scotland's complex relationship with England and the English language.
- ENGL 262 Postcolonial Literature** **3.0 SH** **[GEH]**
 Explores literature and theory by writers from previously colonized countries. These texts may span a variety of geographic areas, such as the West Indies, South Asia, Africa, and Ireland, or may focus in depth on writers from one particular continent. Texts by white Europeans writing from the perspective of the colonizing power may be included as a basis for comparison.
- ENGL 263 Literature of Conflict** **3.0 SH** **[GEH]**
 A study of the literature of conflict, with emphasis on war literature and its related literature of dislocation, social disruption, and dissent.
- ENGL 264 Southern Literature** **3.0 SH** **[GEH]**
 A study of the literature of the southern United States with emphasis on both contemporary writers and such writers as James Dickey, Ralph Ellison, William Faulkner, Zora Neale Hurston, Harper Lee, Carson McCullers, Flannery O'Connor, Walker Percy, Eudora Welty, and Richard Wright.

- ENGL 265 Native American Literature 3.0 SH [GEH]**
 This course centers on texts from the Native American Renaissance in the 1960s to the present, by writers such as N. Scott Momaday, Leslie Marmon Silko, Sherman Alexie, and Louise Erdrich. The class may also include some traditional Native American texts in translation, as well as examples of representations of Native Americans by European-American writers and filmmakers.
- ENGL 266 African American Literature 3.0 SH [GEH]**
 This course examines African American texts (which may include fiction, poetry, essays, slave narratives, memoirs, speeches, or sermons). Various literary periods from colonial to contemporary times may be covered.
- ENGL 277 Shakespeare in England 6.0 SH [GEH]**
 Taught as part of an abroad program, this course introduces students to the life and writings of William Shakespeare. Besides studying plays in a classroom setting, students attend productions at the Globe Theatre and the Royal Shakespeare Theatre. Students also undertake intensive research at the British Library and the Shakespeare Birthplace Trust regarding a single character from a Shakespearean play.
- ENGL 279 Shakespeare I 3.0 SH [GEH]**
 This course offers an overview of Shakespeare's writings including both his poetry and his plays. The course is designed to help students gain confidence in reading Shakespeare's work and to understand it in the context of both his culture and our own.
- ENGL 282 17th & 18th Cent British Lit 3.0 SH [GEH]**
 This course offers a survey of British literature from 1600 to the end of the long 18th century.
- ENGL 283 Romantic Literature 3.0 SH [GEH]**
 Examines the important themes of the British Romantic period and their cultural contexts through the study of the works of poets and prose writers of the period.
- ENGL 284 Victorian Literature 3.0 SH [GEH]**
 Explores texts of the period, focusing on questions of nationalism, colonialism, religion, gender roles, and sexual orientation, and emerging psychological and evolutionary theories, by considering how authors such as Brontë, Eliot, Dickens, and Wilde reflected the dominant ideologies of their day and called them into question.
- ENGL 285 Modern British Literature 3.0 SH [GEH]**
 Fiction, poetry, and drama of the early 20th century, with emphasis on writers such as Yeats, Eliot, Conrad, Woolf, and Beckett.
- ENGL 286 History of British Drama 3.0 SH [GEH]**
 This course examines British drama from the medieval period to the 21st century both as literature and as performance. This course is usually taught on an abroad program to England.
- ENGL 290 Poetry Writing II 3.0 SH []**
 An intermediate-level poetry-writing seminar for students familiar with the formal elements and techniques of poetry writing. Emphasis is placed on beginning to cultivate distinct voices as writers, more advanced study of poetics, and research about poets and their creative processes. Students produce a number of original poems within the writer's workshop structure of the course.
Prerequisite: ENGL 240.
Class Level Restriction: Junior and Senior only.
- ENGL 291 Fiction Writing II 3.0 SH []**
 An intermediate-level fiction-writing seminar for students familiar with the formal elements and techniques of fiction writing. Emphasis is placed on beginning to cultivate distinct voices as writers, more advanced study of narrative elements and structures, and research about fiction writers and their creative processes. Students produce a number of original short stories within the writer's workshop structure of the course.
Prerequisite: ENGL 241.
Class Level Restriction: Junior and Senior only.

- ENGL 315 Shakespeare II** **3.0 SH** []
 Examines Shakespeare's plays through either specific themes or critical approaches. Some familiarity with Shakespeare's works will be helpful as the course is not a survey course but instead delves deeply into a select number of plays.
Class Level Restriction: Junior and Senior only.
- ENGL 320 History of the British Novel** **3.0 SH** []
 Novels selected from early and late periods trace development of this form.
Class Level Restriction: Junior and Senior only.
- ENGL 325 Film as Literature** **3.0 SH** []
 The study of film as a text. Students read and apply film theory and literary criticism to the in-depth analysis of films as alternative narratives.
Prerequisite: ENGL 234 and one additional English literature or world literature course.
Class Level Restriction: Junior and Senior only.
- ENGL 330 Single Author** **3.0 SH** []
 Examines the work of a single author. Analyzes the style of the author and introduces major biographical or critical approaches to the author. The title will be extended to describe the current topic. May be taken three times provided the authors studied differ.
Class Level Restriction: Junior and Senior only.
- ENGL 335 Contemporary Issues** **3.0 SH** []
 An advanced seminar examining contemporary literature in the context of current critical debate. The title will be extended to describe the current topic. May be taken more than once provided the topics differ.
Class Level Restriction: Junior and Senior only.
- ENGL 345 Creative Writing on Location** **3.0 SH** [GEA]
 Creative writing on location for students enrolled in an abroad, field program, or a course focused on site-specific writing. Coursework provides opportunities for in-depth individual research and creative work based upon the cultural and programmatic content of the abroad or field program, or course site. The title will be extended to describe the current location. May be taken more than once provided the locations differ.
- ENGL 351 Adv Creative Writing Seminar** **3.0 SH** []
 An advanced creative writing seminar for poets, fiction writers, and creative nonfiction writers. The course is organized as a community of serious writers who are beginning to develop portfolios of coherent work, exploring and articulating their influences, and expanding their practical understanding of what it means to maintain a creative literary practice.
Prerequisite: one complete sequence in the creative writing series (ENGL 240 and ENGL 290) or (ENGL 241 and ENGL 291).
Class Level Restriction: Junior and Senior only.
- ENGL 353 Literary Editing** **3.0 SH** []
 A workshop in which students learn the fundamental skills and methods of arts/literary editing and are introduced to the issues involved in editing a literary publication (either print or electronic).
Class Level Restriction: Junior and Senior only.
- ENGL 354 Literary Editing Practicum** **2.0 SH** []
 Production staff for the annual online literary journal "Mistake House." Provides experiential training in various production positions, including copy editing, project management, editorial assistance, web site coordination, circulation and promotion, etc. May be repeated up to three times.
Prerequisite: ENGL 353.

- ENGL 358 Seminar** **3.0 SH** []
Centering upon a literary theme or form at the advanced level, this topics course is designed primarily for majors to engage in intense study or original research under the guidance of the professor. It is conducted with an emphasis on student-defined learning and incorporates sophisticated expectations for scholarship and scholarly writing. The title will be extended to describe the current topic. May be taken more than once provided the topics differ.
Class Level Restriction: Junior and Senior only.
- ENGL 388 Literature and Critical Theory** **3.0 SH** []
The application of various critical theories to literary texts.
Class Level Restriction: Junior and Senior only.
- ENGL 399 Capstone Proposal** **2.0-3.0 SH** []
Prepares students for their capstones. Students research possible topics and write a formal proposal for their capstones. Usually taken the semester preceding the capstone but can be taken concurrently. May be offered for variable credit from two to three semester hours.
Prerequisite: ENGL 388 (may also be taken concurrently).
Class Level Restriction: Junior and Senior only
Field of Study Restrictions: English Majors only.
- ENGL 400 Capstone in Literature** **3.0 SH** []
Individual reading, research, and writing on a single literary issue or author culminating in an in-depth thesis essay. Required for the major.
Class Level Restriction: Junior and Senior only.
- ENGL 401 Capstone in Creative Writing** **3.0 SH** []
This course is the culmination of the creative writing concentration in the English major. Students create a substantial and coherent body of original fiction or poetry, accompanied by an artist's statement. Students also read deeply the work of writers who have influenced them and conduct serious research about their work and working process. A public presentation - a reading or some other form of publication - at the completion of the capstone is encouraged.
Prerequisite: one complete sequence in the creative writing series (ENGL 240 and ENGL 290 or ENGL 241 and ENGL 291) and ENGL 351.
Class Level Restriction: Senior only
Field of Study Restrictions: English Majors only.
- ## French (FREN)
- FREN 104 Elementary French I** **3.0 SH** []
In this first semester of the two-semester elementary sequence students learn from video, lab CD exercises, and classroom activity how to listen and speak, read and write French sentences. They describe themselves and others, and their present and future activities. They also begin work with the past tense and elements of French culture as they follow the video story.
- FREN 105 Elementary French II** **5.0 SH** [GE2L]
In this second course of the two-semester elementary language sequence, students fulfill the general education second language requirement. They understand and speak, read, and write sentences and paragraphs in the present, future, and past tenses in order to function in everyday situations in French-speaking cultures they are beginning to learn about.
Prerequisite: FREN 104 or placement.
- FREN 110 Elementary Review** **3.0 SH** [GE2L]
Intensive review of first year French with emphasis on normal conversational French and grammar correctness. Fulfills all-college language requirement for students entering Principia with insufficient preparation for exemption from further language study.
Prerequisite: FREN 104 or placement.

FREN 130	Language and Culture Abroad I	3.0-6.0 SH	[GE2L]
Elementary language study with native speakers at a French institute. May be offered for variable credit from three to six semester hours. Offered only on Principia abroad.			
Class Level Restriction: Freshman and Sophomore only.			
FREN 200	French Culture: Cinema	1.0 SH	[]
Weekly watching and discussion of French/Francophone movies. Class taught in English, movies with subtitles, open to all students.			
FREN 204	Intermediate French I	3.0 SH	[]
Develops speaking, reading, and writing skills. Culture and history used as basis for reading and speaking.			
Prerequisite: FREN 105 or placement.			
FREN 205	Intermediate French II	3.0 SH	[]
Development of fluency and accuracy in oral and written expression, through reading and listening comprehension.			
Prerequisite: FREN 204 or placement.			
FREN 210	Intermediate Writing Review	1.0-3.0 SH	[]
Allows students to develop their writing skills and to review some aspects of French grammar, through weekly compositions based on written texts or video material. May be taken for up to 4 SH in any combination.			
FREN 216	Intermediate Conversation	3.0 SH	[]
Discussions on issues of French/Francophone civilization and culture, through video watching, conversation and reading, with an emphasis on developing oral comprehension skills.			
Prerequisite: FREN 204.			
FREN 220	Contemporary French Society	3.0 SH	[]
An analysis of contemporary French society focusing on social class/power, gender, immigration/ethnicity, plus the religious and educational systems. Students who complete all assignments in French receive credit towards a French major. May be offered on campus as well as on Principia abroad.			
FREN 225	Intermediate Grammar I	3.0 SH	[]
Exercise in grammar and style. This course reinforces the student's foundation in written French at the intermediate level, as a preparation for further studies in French or as a refresher course.			
Prerequisite: FREN 204 and FREN 205, or placement.			
FREN 226	Intermediate Grammar II	1.0-3.0 SH	[]
Exercises in grammar and style to complement and strengthen the student's foundation in grammar at the intermediate level.			
Prerequisite: FREN 204 and FREN 205 or placement.			
FREN 230	Language and Culture Abroad II	3.0-6.0 SH	[]
Intermediate language study with native speakers at a French institute. May be offered for variable credit from three to six semester hours. Offered only on Principia abroad.			
FREN 241	French Pronunciation	1.0 SH	[]
Introduction to French phonetic theory and practice of pronunciation of modern French.			
Prerequisite: FREN 255 and either FREN 250 or FREN 260.			
FREN 250	French Cultural Studies	3.0 SH	[]
Develops reading skills and understanding of Francophone literature. Prepares students for further study of French literature.			
Prerequisite: FREN 205.			
FREN 255	Textual Analysis and Writing	3.0 SH	[]
Develops style and grammatical correctness; intensive work on creative writing with some reading. Includes practice in textual analysis and analytic writing about literary texts.			
Prerequisite: FREN 205, FREN 225, or FREN 226.			

- FREN 260 Reading French Through Time** 3.0 SH []
 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.
Prerequisite: FREN 205 and FREN 255.
- FREN 270 Intro to French Literature** 3.0 SH [GEH]
 This course covers genre studies across the centuries, from the classics to the modern period, with the reading of complete works related to French culture. Students learn to analyze texts and improve their oral and written expression.
Prerequisite: FREN 255 and either FREN 250 or FREN 260.
Class Level Restriction: Junior and Senior only.
- FREN 300 Love, Reason, and Monarchy** 3.0 SH [GEH]
 Genre studies in 17th and 18th century literature showing how power, love, and reason interplay in the French society of absolute monarchy.
Prerequisite: FREN 255 and either FREN 250 or FREN 260.
Class Level Restriction: Junior and Senior only.
- FREN 310 Advanced French** 3.0 SH []
 Intensive analytical grammar and reading. Develops writing skills.
Prerequisite: three French courses above FREN 205 or placement.
Class Level Restriction: Junior and Senior only.
- FREN 316 Advanced French Conversation** 1.0 SH []
 Reading, conversation, and writing on topics of French/Francophone culture and history.
Class Level Restriction: Junior and Senior only.
- FREN 320 Topics in French Literature** 1.0 SH []
 Allows students to develop their reading skills and to broaden their knowledge of French literature. May be taken up to four times, with the consent of the instructor. Counts only once toward the French major.
Class Level Restriction: Junior and Senior only.
- FREN 325 Advanced French Grammar** 1.0 SH []
 Course develops writing skills at the advanced level, focusing on grammar through exercises.
Prerequisite: two French courses at the 200 level.
Class Level Restriction: Junior and Senior only.
- FREN 330 Language & Culture Abroad III** 3.0-6.0 SH []
 Advanced language study with native speakers at a French institute. May be offered for variable credit from three to six semester hours. Offered only on Principia abroads.
Class Level Restriction: Junior and Senior only.
- FREN 340 Image & Power in 19th C France** 3.0 SH []
 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.
Prerequisite: FREN 255 and either FREN 250 or FREN 260.
Class Level Restriction: Junior and Senior only.
- FREN 350 20th Century: Mind Revolutions** 3.0 SH []
 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.
Prerequisite: FREN 255 and either FREN 250 or FREN 260.
Class Level Restriction: Junior and Senior only.

FREN 360 Seminar in French Literature 3.0 SH []

Seminar in a particular topic of French literature. Offered upon sufficient demand. The title will be extended to describe the current topic.

Prerequisite: FREN 255 or FREN 260.

Class Level Restriction: Junior and Senior only.

FREN 470 Capstone 1.0-3.0 SH []

This independent course consists primarily of self-directed research concerning French literature or culture. After research and reading of original texts dealing with a topic (primary and secondary sources), the student writes a capstone paper, but will also demonstrate, through other review and written or oral tests, mastery and understanding of essential aspects of the French language and culture. Open to French majors.

Prerequisite: at least two of the following: FREN 300, FREN 340, FREN 350.

Class Level Restriction: Senior only

Field of Study Restrictions: French Majors only.

General Education (GEN)

GEN 101 FYE: Integrated Learning 3.0 SH []

This foundational course serves to develop, practice, and apply college-level reading, critical thinking, writing, information literacy, and speaking skills. As part of each FYE program, this course develops skills through one or two content areas of the specific FYE program. Students complete an annotated bibliography, a written research project, and a presentation.

Class Level Restriction: Freshman only.

German (GER)

GER 104 Elementary German I 5.0 SH []

Understanding, speaking, reading, and writing of simple German. Emphasis on gaining command of the German sentence structure in the present tense, speaking idiomatic German, and absorbing elements of German culture.

GER 105 Elementary German II 5.0 SH [GE2L]

This second semester of the elementary language sequence continues the goals of the first semester with an emphasis on the acquisition and practice of the past and future tenses in written and spoken German.

Prerequisite: GER 104 or placement.

Global Studies (GLBS)

GLBS 115 Global Citizenship 1.0 SH []

This course introduces students to both the Global Studies major and the concept of global citizenship which is one of the learning outcomes for the Global Studies major. Students will discuss various definitions, values, and practices of a global citizen and will define the concept for themselves.

Class Level Restriction: Freshman and Sophomore only.

GLBS 225 Global Issues 3.0 SH []

This course introduces students to issues that are global in scope and that raise complex problems that need to be considered with the concepts and tools of more than one discipline.

Class Level Restriction: Freshman and Sophomore and Junior only.

GLBS 250 Contemporary Global Topics 2.0-3.0 SH []

This course is an exploration of a contemporary topic or issue in Global Studies. The course will examine both factors that make this issue complex as well as potential solution-oriented strategies for this issue.

Title extended to identify current topic. May be taken more than once provided topics differ. Only one 3SH course may count toward the Global Studies major/minor.

GLBS 270 World Focus Seminar 1.0 SH []

In this course, students develop an awareness of the major problems of the world and the way in which these problems are interconnected through the study of geography and current events. May be taken four times up to a total of four semester hours.

GLBS 315 Strategies to Global Solutions 3.0 SH []

This course introduces students to strategies that could be used to solve complex, global issues. These strategies include the lenses of social innovation, systems thinking, transdisciplinary thinking; problem solving; and intercultural communication. Students first study a complex, global issue of their choice and then create their own project-based social innovation for this issue.

Prerequisite: GLBS 225.

Class Level Restriction: Sophomore and Junior and Senior only.

GLBS 350 Nonprofits: Theory & Practice 3.0 SH []

This course introduces students to the U.S. and international nonprofit sectors including historical and social foundations, best practices and theories within the sector, and major trends. As a service learning course, students are required to volunteer with a local nonprofit while enrolled in this course.

Class Level Restriction: Sophomore and Junior and Senior only.

GLBS 405 Internship 1.0-6.0 SH []

This course provides an opportunity to gain practical experience in fields related to Global Studies. Includes field sponsor supervision, journals, colleague interviews, and final research paper. Title will be extended to describe the topic. May be offered for variable credit from one to six semester hours. May be repeated once for a total of 6 SH if internship sites differ.

GLBS 431 Worldography 3.0 SH []

A seminar involving critical reading and discussion of outstanding books on different world-encompassing issues. A set of criteria is applied to each book to determine its effectiveness. Open only to Global Studies majors.

Class Level Restriction: Junior and Senior only

Field of Study Restrictions: Global Studies Majors only.

GLBS 435 Capstone Proposal 3.0 SH []

A seminar in which students select and research a capstone topic, critically analyze appropriate sources for these topics, and write a formal proposal for their capstones.

Class Level Restriction: Junior and Senior only

Field of Study Restrictions: Global Studies Majors only.

GLBS 440 Global Studies Capstone 3.0 SH []

Individual research and writing on the research question developed in GLBS 435. Course work culminates in a significant research paper and/or project.

Prerequisite: GLBS 435.

Class Level Restriction: Junior and Senior only.

History (HIST)

HIST 111 Historical Perspectives 3.0 SH [GEH]

Develops a particular historical theme or subject for the exploration of the nature and purpose of history and what the historian does. Analyzes the connection between historical study and the modern world.

The title will be extended to describe the current topic. May be taken twice provided the topics differ.

Class Level Restriction: Freshman and Sophomore only.

HIST 150 The Holocaust 3.0 SH [GEH]

A study of the historical background and causes that led to the attempt by Nazi Germany to exterminate European Jewry and other minorities, and the implications of this experience for Europe in particular and humankind in general.

Class Level Restriction: Freshman and Sophomore only.

- HIST 160 U.S. in the 20th Century 3.0 SH [GEH]**
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.
Class Level Restriction: Freshman and Sophomore only.
- HIST 180 World History 3.0 SH [GEH]**
This course explores the concept of global civilization and studies the patterns and trends found in the emergence, development, and fall of civilizations in an increasingly interconnected world.
- HIST 189 Religious Conflict & History 3.0 SH [GEH]**
The course emphasizes the importance of global religions on the world political scene with greater relevance to the historical roots of religious and political disputes in such hotly-contested areas as Israel, India-Pakistan, Northern Ireland, Sudan, and South Sudan.
- HIST 195 People of Courage 3.0 SH [GEH]**
Course explores people of courage who took dramatic initiatives, often facing tradition, hostility, prejudice, and skepticism, and made a lasting contribution to humanity. Students study the people and their times, the conditions and environment within which they worked.
Class Level Restriction: Freshman and Sophomore only.
- HIST 202 American Revolution 3.0 SH [GEH]**
Discusses the late colonial period, the Revolutionary War, and the emerging republic. Focuses on the issues surrounding the emergence of the new democracy in North America, with emphasis on the period from 1754-1800. Students who take HIST 202 or 203 may not take HIST 205, and students who take HIST 205 may not take HIST 202 or 203.
- HIST 203 U.S. Civil War Era 3.0 SH [GEH]**
The great cultural tragedy of 19th-century American experience. Focus is on the causes and effects of divergent growth patterns of South and North including a careful examination of American slavery; personalities of the sections; political, social, and military activities of the war; specific focus on Abraham Lincoln's impact on the crisis. Students who take HIST 202 or 203 may not take HIST 205, and students who take HIST 205 may not take HIST 202 or 203.
- HIST 205 American Revolution:Then&Now 3.0 SH [GEH]**
This course looks at the American Revolution as a work in progress from colonial anticipations and concerns through the Civil War which brought contemporary closure to two outstanding issues, slavery and states' rights, and then to more contemporary issues under the Constitution and Bill of Rights: free speech, religious freedom, individual liberty, equal opportunity, the right to bear arms, and privacy. Students who take HIST 202 or 203 may not take HIST 205, and students who take HIST 205 may not take HIST 202 or 203.
- HIST 216 Ancient Greece and Rome 3.0 SH [GEH]**
A study of classical Greek and Roman civilization from the age of Homer to the fall of Rome. Emphasis is placed on Athenian democratic institutions and cultural achievements and on Roman political, economic, and judicial developments.
- HIST 220 Civilization 3.0-5.0 SH [GEH]**
The application of historical method to the observation, description, and survey of a national culture. Each time the course is taught, it focuses on a particular nation and the title will be extended to describe the current civilization studied. May be taken more than once provided the cultures studied are different. Taught only on Principia abroad programs.
- HIST 221 Immigration and Acculturation 3.0 SH [GEH]**
Using a historical lens, students are introduced to major periods of immigration in America and the issues of immigration at each point in time. Students examine and use data sets to see how social scientists gather, interpret, and report data on immigration and acculturation at the local, state, and national level.
- HIST 222 Latin America 3.0 SH [GEH]**
Background and historical development of Latin American countries of South and Central America. Emphasis is placed on understanding their historic and present importance to the U.S., difficulties they face, and issues of current importance.

- HIST 224 Mexico** **3.0 SH** **[GEH]**
 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 Mexico-United States relations today.
- HIST 227 Women in American History** **3.0 SH** **[GEH]**
 This course examines women's lives in the United States from the colonial period to the present. Themes include the private and family experiences of women, the nature of women's work and education, and the political and civic role of women. The class also looks at how differences of class, ethnicity, and race have affected women's experiences.
- HIST 228 History of France** **3.0 SH** **[GEH]**
 A survey of France's central role in the shaping of European civilization from pre-Roman times to the present day. The course traces France's development through the consolidation and centralization of the nation-state, the French revolutions of the 18th and 19th centuries, and France's modern struggle to accommodate to a powerful Germany within an increasingly integrated Europe.
- HIST 234 Radicalism in Modern America** **3.0 SH** **[GEH]**
 The course examines radical organizations on both sides of the political spectrum. Focuses on the individuals and groups that decided only radical actions could solve America's problems. The class covers the 19th century to the present, with a focus on the Ku Klux Klan, the Populists, the Communist Party, and the Weather Underground Organization.
Class Level Restriction: Sophomore and Junior and Senior only.
- HIST 235 African American History** **3.0 SH** **[GEH]**
 This course surveys African American history from the Atlantic slave trade through the present day. Students examine the social, economic, intellectual, and political forces that shaped the lives of African Americans, as well as the ways African Americans shaped the course of United States history. A particular focus is African Americans' long fight for civil rights.
- HIST 240 The History of Islam** **3.0 SH** **[GEH]**
 This course explores the roots of the Muslim religion in the Middle East and its rich cultural legacy. It also examines the complex and sometimes bitter relationship of Islam to the West. While the course highlights the achievements of the Ottoman and Mughal empires in Turkey and India respectively, it also serves to address the current ideological contest between Western secularism and Islamic fundamentalism as reflected in the current controversies over Jihad.
- HIST 252 Britain** **3.0 SH** **[GEH]**
 A survey of British history from the time of Roman occupation to the 21st century. There is a particular focus on the role of the monarchy, the emergence of Britain's political and social structure in an analysis of the revolutionary nature of British history, and the collapse of the empire at the end of World War II.
- HIST 255 The Middle Ages** **3.0 SH** **[GEH]**
 The events, ideas, and people that shaped the foundations of Western civilization. This course covers the period from the fall of the Roman Empire until the Renaissance of the 15th century. Topics include the evolution and legacy of feudalism, the rise of towns, the growth of national monarchies, the medieval church and its influence, the Crusades, and the intellectual contest between faith and reason.
- HIST 260 From Renaissance to Revolution** **3.0 SH** **[GEH]**
 This survey examines the events and changes in thought that shaped the modern European world and its global impact between the end of the Middle Ages about 1400 C.E. and the American and French Revolutions at the end of the 18th century. Major topics include the Renaissance, the Protestant Reformation, the scientific revolution, the growth of nation-states, Europe's global expansion, the Enlightenment, and the movement toward democracy and industrial society by the close of this period.
- HIST 264 Revolutionary Europe 1800-1914** **3.0 SH** **[GEH]**
 This course focuses on the dramatic political, economic, and social transformations of 19th century Europe with special emphasis on France, Germany, and Britain. It examines new thought patterns that took form in the many "isms" of these times and their implications for the contemporary world. Covers the period from the French Revolution to World War I.

- HIST 265 20th Century Europe 3.0 SH [GEH]**
An examination of the major developments in Europe since World War I with special emphasis on Germany and the Soviet Union. The course investigates the continuing development of new thought patterns, especially those that result from reactions to World Wars I and II.
- HIST 270 History Focus Seminar 1.0 SH []**
This seminar develops an awareness of major problems/issues in the world today, including a geographical understanding of those problems/issues and an historical understanding of the way in which they are interconnected. May be taken four times up to a total of four semester hours.
Field of Study Restrictions: History Majors and/or Minors only.
- HIST 275 South African History 3.0 SH [GEH]**
The course explores the complicated pattern of race relations in South Africa, intensifying under the apartheid system and the country's emergence as a fully democratic state in the modern era.
- HIST 281 China 3.0 SH [GEH]**
Past political, social, and cultural characteristics which help to explain the nature of present-day challenges in China.
- HIST 282 German Democracy Before Hitler 3.0 SH [GEH]**
An examination of the reasons for the failure of Germany's first experiment with democracy in 1918-33. Students consider the effects of the Versailles Treaty, German political traditions and attitudes, contemporary cultural and intellectual trends, economic factors, and the international context. They also try to identify criteria that help determine success or failure for a fledgling democracy.
- HIST 283 Japan 3.0 SH [GEH]**
Survey of the political, economic, social, intellectual, and foreign policy aspects of Japanese history from 600 AD to the present. Particular focus is placed on Japan's attempts to establish a central government prior to 1600, as well as Japan's quest for national identity and security in the 20th century.
- HIST 288 The Age of FDR 3.0 SH [GEH]**
This class focuses on how all Americans endured and eventually prevailed over the dual travails visited on their country between 1929 and 1945: the Great Depression and World War II.
- HIST 289 American Biography 3.0 SH [GEH]**
Biographical studies form the core for the study of American history. Lesser known Americans also played pivotal roles in that history, and this class examines four of them. The class also examines how the role of character played out in their lives and if they can serve as role models today.
- HIST 297 Historical Thinking & Research 3.0 SH []**
Students are introduced to the discipline as a way of thinking and an evolving body of research. The development of history as a field of study is explored through the following topics: what is history; an introduction to historiography, the theory of history, the practice of history, locating sources, using quantitative data in historical research, bridging the disciplines, utilizing a multicultural lens with cultural sensitivity, recognizing moral issues, the ethics of the profession. Open only to history and religion majors and minors.
Class Level Restriction: Sophomore and Junior only.
- HIST 301 Social Issues and the Courts 3.0 SH [GEH]**
This course looks at current social issues such as free speech, abortion, privacy, affirmative action, crime, hate speech, "taking," and states' rights from the perspective of evolving discussions of the meaning of the United States Constitution/Bill of Rights in society and in the courts. The focus is on legal reasoning in U.S. Supreme Court cases and the attempt to balance historical and evolving interpretations of the Constitution with the contemporary circumstances that generated the legal cases.
Class Level Restriction: Junior and Senior only.
- HIST 302 Seminar: American Revolution 3.0 SH []**
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.
Class Level Restriction: Junior and Senior only.

- HIST 303 Seminar: Civil War & Reconstr** **3.0 SH** []
 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.
Class Level Restriction: Junior and Senior only.
- HIST 305 Seminar: 20th Century America** **3.0 SH** []
 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.
Class Level Restriction: Junior and Senior only.
- HIST 310 The Cold War** **3.0 SH** []
 An examination of the causes, development, and eventual resolution of the U.S. - Soviet confrontation from the breakdown of the World War II alliance to the disintegration of the Soviet Union. Topics include the division of Germany and Europe, the Korean conflict, the nuclear arms race, superpower competition for the Third World, detente, and the reasons for the Soviet Union's ultimate collapse.
Class Level Restriction: Junior and Senior only.
- HIST 311 Topics in History** **3.0 SH** [GEH]
 A seminar on a topic in history at the advanced level. The content varies, and the title will be extended to describe the current topic. May be repeated up to a total of three times provided the topics differ.
Class Level Restriction: Junior and Senior only.
- HIST 313 Africa** **3.0 SH** [GEH]
 A survey of ancient civilizations, to the European conquest and colonization of the continent, to contemporary liberation and modernization. Source readings include anthropological studies.
Class Level Restriction: Junior and Senior only.
- HIST 333 Russia** **3.0 SH** [GEH]
 A survey analyzing the origins of Russian nationality, the rise of the Muscovite Tsarist state, Imperial development from Peter the Great to the Revolution of 1917, the Soviet System and its fall.
Class Level Restriction: Junior and Senior only.
- HIST 335 Middle East** **3.0 SH** [GEH]
 Past political, social, and cultural circumstances which explain the nature of present problems.
Class Level Restriction: Junior and Senior only.
- HIST 354 20th C U.S. Foreign Relations** **3.0 SH** []
 This course concentrates on the emergence of the U.S. as a great power and its growing global role in the 20th century, especially regarding major junctures such as World War I, World War II, and post-war arrangements arising from these conflicts. Considers the U.S.'s economic influence as well as more traditional political and security issues.
Class Level Restriction: Junior and Senior only.
- HIST 363 Conflict in Amer: The 1960s** **3.0 SH** [GEH]
 Analysis of the history of the United States during the 1960s, with emphasis on events reflecting social, cultural, and political conflict and protest. Analyzes pre-1960s trends and post-1960s effects. Covers social movements, political protest and radicalism, Vietnam, civil rights, music, and the counterculture.
Class Level Restriction: Junior and Senior only.
- HIST 382 Modern China** **3.0 SH** []
 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.
Class Level Restriction: Junior and Senior only.
- HIST 386 India** **3.0 SH** [GEH]
 Past political, social, religious, and cultural characteristics which help to explain the nature of present-day problems.
Class Level Restriction: Junior and Senior only.

HIST 402 Reading in History 3.0 SH []

Individual reading in student-selected and faculty-approved topics in history. Designed for majors seeking to deepen their knowledge of a specific field of history.

Class Level Restriction: Junior and Senior only

Field of Study Restrictions: History Majors only.

HIST 431 Historiography 3.0 SH []

Critical readings of a selection of historical works focused on a common theme. Seminar conducted by the entire history faculty.

Prerequisite: 3.0 GPA.

Class Level Restriction: Junior and Senior only.

HIST 497 Designing Capstone Research 3.0 SH []

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

Class Level Restriction: Junior and Senior only

Field of Study Restrictions: History Majors only.

HIST 498 Capstone Research & Writing 3.0 SH []

Advanced research methods for senior history majors as they conduct their research and complete their history capstone requirement.

Class Level Restriction: Junior and Senior only.

Languages and Cultures (LANG)**LANG 100 Elementary Language Study 1.0-6.0 SH []**

An introductory-level course to one of the world languages. The course title will be modified to reflect the language. Languages recently taught include Arabic, Chinese, Japanese, Portuguese, Russian, Esperanto, Greek, and Hindi. Offered either on campus or Principia abroad. May be repeated in any combination of languages up to a maximum total of six semester hours, with no more than a total of three semester hours in any single language. May not count toward any language major.

LANG 335 Introduction to Linguistics 2.0-3.0 SH []

This course provides an introduction to linguistics, or the science of language. This discipline includes phonology, morphology, and syntax as well as semantics or the study of meaning. Students learn about different schools of linguistics and how this science can be applied to the understanding and teaching of languages.

Class Level Restriction: Junior and Senior only.

Mass Communication (MCOM)**MCOM 028 Newspaper Production 0.0 SH []**

Participation in *The Pilot*-the student-run news publication-through reporting, writing, editing, photography, graphic design, or other staff functions.

MCOM 042 Television Production 0.0 SH []

Participation in television production activities at the college under the supervision of the faculty advisor.

MCOM 052 Radio on Air 0.0 SH []

Participation in broadcast activities of the college's radio station, Principia Internet Radio.

MCOM 053 Radio Station Management 0.0 SH []

Participation in the operations of the college's radio station, Principia Internet Radio.

Prerequisite: MCOM 052.

- MCOM 110 Intro to Mass Communication** **3.0 SH** **[GESS]**
 Provides an exposure to today's wide range of mass media. Subjects covered include the history, organization, economics, and practices of mass communication - such as print, broadcast, film, Internet, and social media. A heavy emphasis is placed on the importance of developing critical thinking and media literacy skills, to help students interpret media messages in an intelligent, balanced, and realistic way.
Class Level Restriction: Freshman and Sophomore only.
- MCOM 140 Public Speaking** **3.0 SH** **[]**
 Provides opportunities to develop effective oral communication skills applicable in many settings including on-the-job, in management and leadership, and other professional, academic, or community environments. Includes speeches of introduction, informative speeches, persuasive speeches, group discussions, speech research and organization, audience analysis, and delivery skills, such as voice, gesture, movement, and confidence in front of an audience.
Class Level Restriction: Freshman and Sophomore only.
- MCOM 181 Photography Fundamentals** **3.0 SH** **[GEA]**
 A foundation course to learn the craft of digital photography. Students learn how to tell stories visually while developing their photographic skills by learning how to control their cameras and the photographic process. The nature of assignments range from photojournalism to the fine-art type.
Class Level Restriction: Freshman and Sophomore only
Fee=\$65.00.
- MCOM 210 Media Reporting and Writing** **3.0 SH** **[]**
 A beginning course for those aspiring to work in the media or in a media-related field such as public relations. Students have intensive training in interviewing, gathering information, and writing in a clear, news style. They learn to edit and critically evaluate media writing as well as write to a standard worthy of publication in print or on-line.
- MCOM 224 Feature Writing** **3.0 SH** **[]**
 Instructs students in writing a wide variety of feature stories, ranging from the types commonly associated with newspapers to those in print, broadcast, and online magazine formats.
Prerequisite: MCOM 210.
- MCOM 226 Opinion Writing** **3.0 SH** **[]**
 For students who have mastered the basics of news writing, this class explores the foundations of expressing advocacy and opinion on topics of contemporary significance. Students practice writing and editing editorials, op-ed columns, and reviews.
- MCOM 228 Newspaper Practicum** **0.5-1.0 SH** **[]**
 Practicum for writers/reporters, editors, and staff of *The Pilot*, the college newspaper. May be offered for variable credit from .5 to one semester hour. May be taken six times up to a total of six semester hours.
- MCOM 235 Communication Seminar** **3.0 SH** **[]**
 This course is tailored to examine recent developments, social trends, and shifting technologies not covered in the regular mass communication curriculum. It could utilize the special areas of expertise when taught by visiting faculty in addition to using the core skills of current faculty. The title will be extended to describe the current topic. May be taken twice provided the topics differ.
Prerequisite: MCOM 110 and MCOM 210.
Class Level Restriction: Junior and Senior only.
- MCOM 236 Mrs. Eddy and The C.S. Monitor** **3.0 SH** **[]**
 This course explores the historical context in which Mary Baker Eddy founded *The Christian Science Monitor*. This includes examination of the period of yellow journalism, relevant developments in Mrs. Eddy's life, and the *Monitor's* impact in the world of media.

- MCOM 240 Broadcast Journalism** 3.0 SH []
 This course introduces students to the processes, skills, and ethics of developing, writing, delivering, and producing journalistic content for the broadcast media. Topics covered may include the following: on-air news writing; adapting print news for on-air delivery; producing feature stories and interviews for radio and television.
Prerequisite: MCOM 210.
- MCOM 241 Television Workshop** 3.0 SH []
 Students plan, write, videotape, edit, anchor, and produce a television news program for broadcast to the community. Topics may range from news to election coverage.
Fee=\$25.00.
- MCOM 242 Speech Skills for the Media** 3.0 SH []
 Provides students with a variety of speech skills that would be useful to them in media professions. Among the skills included are interviewing on and off camera, radio and television news reading, extemporaneous speaking, oral reading, group discussion, and impromptu speaking.
- MCOM 246 Television Practicum** 0.5-1.0 SH []
 Develops television skills through experience working on special broadcasting projects under supervision of mass communication faculty. May be offered for variable credit from .5 to one semester hour. May be taken six times up to a total of six semester hours.
- MCOM 251 Radio Broadcasting** 3.0 SH []
 Using Principia Internet Radio (PIR) facilities, students create, produce, direct, voice, and operate their own live radio programs and create promotional materials in a variety of formats. Emphasis on effective communication of ideas. Students in the workshop also assist each other in critiquing and improving their work on a regular basis.
- MCOM 263 Public Relations** 3.0 SH []
 This introductory class instructs students in the theory and techniques of public relations practice: why organizations must deal effectively with various publics, how to write a news release, how to interact with the media. Corporate and agency public relations are both examined. Case studies that highlight effective public relations strategies are considered. A special section on crisis communications is included.
- MCOM 266 Public Relations Writing** 3.0 SH []
 Students learn to write effectively across a variety of formats and media used by today's public relations professionals. Various forms include press releases; public service announcements; query, pitch, and cover letters; media alerts; features; newsletters; backgrounders; and elements of public relations presentations. There is particular emphasis on strategizing and crafting persuasive public relations messages.
Prerequisite: MCOM 263.
- MCOM 281 Photojournalism** 3.0 SH []
 An applied study of how photojournalists report the news in a visual form. Working in digital photography, students learn how to capture the peak moment while refining their sense of content, aesthetics, news judgment, and ethics.
Prerequisite: each student must supply a digital single lens reflex camera.
- MCOM 282 Intermediate Photography** 3.0 SH []
 This course is both a theoretical and a practical study of photography with a particular focus on lighting. Through a critical study of the current and past masters of photography, students work toward defining their own vision and photographic portfolio.
Prerequisite: each student must supply a digital single lens reflex camera.
Fee=\$90.00.
- MCOM 283 Yearbook Editing** 1.0 SH []
 Practicum for the editor(s) of *The Sheaf*, the college yearbook. A team approach is encouraged. May be taken twice.
Prerequisite: member of *The Sheaf* editing staff.

- MCOM 284 Photography Practicum** 1.0 SH []
Practicum for staff photographers of *The Sheaf*, the college yearbook. Students receive focused instruction on photography including composition, working with subjects, and ethics in photography. May be taken more than once up to a total of four semester hours.
- MCOM 286 On-Location Digital Media Prod** 3.0-4.0 SH []
An introduction to graphic design with an emphasis in digital media and design. Develops basic skills in designing with photographs, illustrations, and typography for print and digital media devices. Strategies and processes are examined and developed for work on location. Fundamental design principles are explored in depth. To be taught only on an abroad program.
- MCOM 292 Video Production** 3.0 SH []
A foundation course exploring video production in both a theoretical and practical way. Through hands-on assignments, students develop their skills in camera operation, audio, lighting, and editing, as well as gaining experience expressing messages and stories visually. Prior knowledge or production experience is not necessary.
Fee=\$20.00.
- MCOM 293 Corporate Video** 3.0 SH []
Students study the theoretical approaches to creating the very specific video messages that companies and organizations use to deliver corporate messages to internal and external target audiences. Includes practical experiences producing corporate videos for clients on or off campus. Prior knowledge or production experience is not required.
Fee=\$20.00.
- MCOM 301 Mass Media in Society** 3.0 SH []
Explores the relationship between media and society, in particular how one can influence the other. Looks at theories of media impact as well as methods of research to determine those impacts. Includes readings and discussion of contemporary media controversies. Builds a foundation for understanding the power, and limits, of media.
Prerequisite: MCOM 110.
Class Level Restriction: Junior and Senior only.
- MCOM 302 Media Law and Ethics** 4.0 SH []
Study of the legal and ethical foundations of mass media, as well as how they are changing. Explores the constitutional issues of free press and privacy, as well as the regulation of broadcasting and advertising. Taught as a lab course, using case studies.
Prerequisite: MCOM 110.
Class Level Restriction: Junior and Senior only.
- MCOM 322 Advanced Reporting and Writing** 3.0 SH []
The advanced study of print and web journalism, including practice of various styles of writing, ranging from editorials and investigative reporting to features and blogging. Also explores traditional and emerging organizational structures of newsrooms, web sites, and other journalistic entities.
Prerequisite: MCOM 210.
Class Level Restriction: Junior and Senior only.
- MCOM 339 Multi-Platform Storytelling** 3.0 SH []
Course explores the proliferation of new media forms driving the growth of trans-media or multi-platform storytelling. The course teaches both storytelling across different media using the same source material and complex (multi-dimensional) storytelling across multiple media.
Prerequisite: MCOM 210 or MCOM 240.
Class Level Restriction: Junior and Senior only.
- MCOM 354 Advanced Radio Broadcasting** 3.0 SH []
Using the facilities of Principia Internet Radio (PIR), students develop advanced techniques to create, produce, direct, voice, and operate their own live radio programs and create promotional materials in a variety of formats. Emphasis on effective communication of ideas. Students in the workshop also assist each other in critiquing and improving their work on a daily basis.
Prerequisite: MCOM 251.
Class Level Restriction: Junior and Senior only.

MCOM 388 The Photographic Essay 4.0 SH []

This advanced study of photojournalism occurs through working in-depth on a specific project culminating in a photo story/essay. Through this course, students expand their photographic skills while further refining their sense of content, aesthetics, news judgment, and ethics.

Prerequisite: MCOM 281, and each student must supply a digital single lens reflex camera.

Class Level Restriction: Junior and Senior only

Fee=\$105.00.

MCOM 392 Documentary Video 3.0 SH []

Students add to skills learned in previous video classes as they learn to document reality in an informative and entertaining way, telling stories visually about real life.

Prerequisite: MCOM 292 or MCOM 293.

Class Level Restriction: Junior and Senior only

Fee=\$20.00.

MCOM 400 Internship 3.0-10.0 SH []

Students participate in an off campus pre-professional field experience in media, television, film, radio, photography, graphics, journalism, or public relations. Students have primary responsibility for locating an internship opportunity with the assistance of a Mass Communication faculty advisor.

Class Level Restriction: Junior and Senior only.

MCOM 411 Adv Topics in Communication 3.0 SH []

This seminar for juniors and seniors is built around the reading and study of historical and contemporary key non-fiction texts in the field of mass communication linked to a theme, such as the history of media, the foundational differences across the globe, and theories about media impact. The title will be extended to describe the current topic. May be taken twice provided the topics differ.

Prerequisite: MCOM 110 and MCOM 301.

Class Level Restriction: Junior and Senior only.

Mathematics (MATH)

MATH 099 Basic Math Tutorial 0.0 SH []

A two-hour-per-week, non-credit guided tutorial for students needing review of arithmetic.

MATH 110 Mathematical Applications 3.0 SH <GEM> [GEQR]

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.

Prerequisite: Success in this course depends upon students having successfully completed the equivalent of two years of high school algebra and one year of high school geometry with grades of C or above.

Class Level Restriction: Freshman and Sophomore only.

MATH 111 A Survey of Mathematics 3.0 SH <GEM> [GEQR]

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: Success in this course depends upon students having successfully completed the equivalent of two years of high school algebra and one year of high school geometry with grades C or above.

Class Level Restriction: Freshman and Sophomore only.

- MATH 140 Trigonometry** 3.0 SH <GEM> []
 Geometry review, angle measures, trigonometric functions - properties and graphs, trigonometric identities, inverse functions, trigonometric equations, solving general triangles. Possible additional topics: polar coordinates, spherical trigonometry, and hyperbolic trigonometry.
Prerequisite: High School Geometry and Intermediate Algebra. Success in this course depends upon students having completed a high school second-year algebra course and a high school geometry course with a grade of C or above.
- MATH 141 College Algebra** 3.0 SH <GEM> []
 Topics include the theory of solving polynomial equations; solving simultaneous linear equations; graphs and properties of polynomial functions, rational functions, exponential functions, logarithmic functions, and conic sections; and mathematical induction and the general binomial expansion.
Prerequisite: Success in this course depends upon students having successfully completed the equivalent of two years of high school algebra and one year of high school geometry with grades of C or above.
- MATH 143 Precalculus** 4.0 SH <GEM> []
 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 and trigonometry.
Prerequisite: Success in this course depends upon students having successfully completed the equivalent of two years of high school algebra and one year of high school geometry with grades of C or above.
Class Level Restriction: Freshman and Sophomore only.
- MATH 164 Introduction to Statistics** 3.0 SH <GEM> [GEQR]
 Descriptive statistics including measures of central tendency, measures of dispersion, correlation and regression; basic concepts of probability; inferential statistics including estimation and hypothesis testing. Applications in biological and social sciences.
Prerequisite: Success in this course depends upon students having successfully completed the equivalent of two years of high school algebra and one year of high school geometry with grades of C or above. (A student may receive credit for only one of the courses MATH 164 or BNR 215.).
- MATH 181 Calculus I** 5.0 SH <GEM> []
 First semester of single-variable calculus. Includes a review of properties of elementary functions, limits, derivatives, applications of derivatives, continuity, the definite integral, basic antiderivative formulas, the Mean Value Theorem, and the Fundamental Theorem of Calculus.
Prerequisite: MATH 143.
Class Level Restriction: Freshman and Sophomore only.
- MATH 182 Calculus II** 5.0 SH <GEM> []
 Second semester of single-variable calculus. Includes a review of Calculus I, techniques of integration, applications of the definite integral, an introduction to differential equations, parametric equations, polar coordinates, and the theory of infinite sequences and series, including tests for convergence and Taylor Series.
Prerequisite: MATH 181.
Class Level Restriction: Freshman and Sophomore only.
- MATH 211 History of Mathematics** 2.0 SH []
 A concise history of mathematics. Includes topics from mathematics in early civilizations, Greek mathematics from classical, first Alexandrian, and second Alexandrian periods, Hindu and Arabic contributions, European Renaissance, the calculus controversy, non-Euclidean geometry, the rise of analysis, Gödel's Incompleteness Theorem, and the loss of certainty.
Prerequisite: MATH 181 or taken concurrently.
- MATH 220 Mathematical Proofs** 2.0 SH []
 Investigates the nature and structure of mathematical proofs found in calculus, algebra, and geometry. Includes set theoretic foundations, the rules of propositional logic, the principle of mathematical induction, and the nature of deductive reasoning. Analyzes various proofs from geometry, algebra, and calculus as well as provides students with practice in constructing such proofs.
Prerequisite: MATH 182.

MATH 261	Discrete Math	3.0 SH	<GEM>	[]
Nature of proof, sets, graph theory, logic, Boolean algebra, functions and relations.				
Prerequisite: MATH 143.				
MATH 273	Linear Algebra	3.0 SH		[]
Vector spaces, vector and matrix operations, determinants, linear transformations, systems of linear equations, change of basis, eigenvalues.				
Prerequisite: MATH 181.				
MATH 283	Multivariable Calculus	4.0 SH		[]
Includes vector algebra and coordinate geometry in two and three dimensions, partial differentiation, directional derivatives, slope fields, multiple integration and applications, line and surface integrals, Lagrange multipliers, vector calculus including Green's, Divergence, and Stokes' theorems.				
Prerequisite: MATH 182.				
MATH 304	Synthetic Geometry	3.0 SH		[]
An axiomatic development of Euclidean geometry using Hilbert's axioms; hyperbolic geometry and its models; a comparison of Euclidean, spherical, and hyperbolic trigonometries; may include an introduction to projective geometry.				
Prerequisite: MATH 273. Strongly recommended MATH 220.				
Class Level Restriction: Junior and Senior only.				
MATH 320	Elementary Number Theory	3.0 SH		[]
Divisibility theory of integers, primes and their distribution, theory of congruences, Fermat's "Little Theorem," Euler's phi function, quadratic reciprocity, perfect numbers and Mersenne primes, Fermat's "Last Theorem."				
Prerequisite: Strongly recommend MATH 220.				
Class Level Restriction: Junior and Senior only.				
MATH 355	Applied Advanced Calculus	3.0 SH		[]
Introduction to vector analysis: vector differential calculus, integral theorems, curvilinear coordinates. Fourier analysis: Fourier series and integrals, orthogonal functions, applications in boundary value problems. Offered every other year.				
Prerequisite: MATH 283.				
Class Level Restriction: Junior and Senior only.				
MATH 360	Numerical Analysis	3.0 SH		[]
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.				
Prerequisite: MATH 273 and MATH 283.				
Class Level Restriction: Junior and Senior only.				
MATH 364	Mathematical Statistics	3.0 SH		[]
Probability, random variables, probability distributions, mathematical expectation, moments, moment generating functions, sampling distributions, Central Limit Theorem, estimation and hypothesis testing, correlation, curvilinear and multiple regression.				
Prerequisite: MATH 283.				
Class Level Restriction: Junior and Senior only.				
MATH 370	Topology	3.0 SH		[]
Introductory point-set topology. Topological spaces, open and closed sets, bases, interior, closure, limit points and boundary of subsets, metric spaces, continuous functions, homeomorphisms, connectedness and compactness, as well as some applications.				
Prerequisite: MATH 182. Strongly recommend MATH 220.				
MATH 374	Algebraic Structures	3.0 SH		[]
Group theory, Boolean algebra, rings, integral domains and fields. Offered every other year.				
Prerequisite: MATH 273.				
Class Level Restriction: Junior and Senior only.				

MATH 380	Differential Equations	3.0 SH	[]
Linear differential equations, Laplace transform methods, series solutions, numerical solutions, introduction to partial differential equation, applications. Offered every other year.			
Prerequisite: MATH 182.			
Class Level Restriction: Junior and Senior only.			
MATH 415	Senior Capstone	3.0 SH	[]
Synthesizes and extends material from courses in the major using topics such as integration, linearity, optimization, periodicity, and expansions. Open only to mathematics majors.			
Class Level Restriction: Senior only.			
MATH 421	Math Seminar	1.0-3.0 SH	[]
A seminar in selected topics in mathematics. The contents will vary, and the title will be extended to describe the current topic. May be taken more than once provided the topics differ.			
Class Level Restriction: Junior and Senior only.			
MATH 431	Complex Variables	3.0 SH	[]
Analytical functions, Cauchy's theorem, Taylor and Laurent series, residues, contour integration, integral transforms, conformal mapping.			
Prerequisite: MATH 283.			
Class Level Restriction: Junior and Senior only.			
MATH 432	Real Analysis	3.0 SH	[]
Formal development of the concepts of real analysis. Includes limits and continuity, sequence and series, uniform convergence, Riemann integral.			
Prerequisite: MATH 283. Strongly recommended: MATH 220.			
Class Level Restriction: Junior and Senior only.			

Music (MUS)

MUS 040	Applied Lessons (50 Minutes)	0.0 SH	[]
Applied instrumental or vocal instruction. Thirteen 50-minute lessons per semester, with two hours of practice daily. For applied music lessons for credit, refer to MUS 120.			
Fee=\$689.00.			
MUS 044	Applied Lessons (25 Minutes)	0.0 SH	[]
Applied instrumental or vocal instruction. Thirteen 25-minute lessons or equivalent per semester, with one hour practice daily. For applied music lessons for credit, refer to MUS 130.			
Fee=\$362.00.			
MUS 050	College Choir - No Credit	0.0 SH	[]
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	0.0 SH	[]
Preparation and performance of chorus parts for the musical production. By audition only. Offered only in semesters when there is a musical production.			
MUS 052	Prin Music Tour - No Credit	0.0 SH	[]
Preparation of music literature for performance on tour focusing on style, ensemble, presentation, and tour logistics. A star (*) grade will be assigned until completion of the tour. Offered by invitation only. Offered on demand.			
MUS 053	Baccalaureate Choir	0.0 SH	[]
Preparation and performance of choral selections for the Baccalaureate service held during commencement weekend. Open to the community without audition.			
MUS 061	Orchestra - No Credit	0.0 SH	[]
Preparation and performance of instrumental literature covering style, expressive interpretation, and ensemble. Open to the entire community.			

MUS 065	Jazz Ensemble	0.0 SH	[]
Reading and rehearsing music from various big band and combo styles. Special attention is given to style awareness, ensemble, and improvisation techniques. Open to the entire community.			
MUS 071	Chamber Music - No Credit	0.0 SH	[]
Small chamber ensemble, vocal or instrumental. May be taken more than once.			
MUS 080	Student Recital - No Credit	0.0 SH	[]
Thirty-minute recital on instrument or voice, demonstrating performance ability and understanding of various musical styles. Subject to music faculty approval.			
Prerequisite: demonstrated proficiency on instrument or voice.			
MUS 100	Intro to the Art of Music	3.0 SH	[GEA]
Provides music listening skills, a knowledge of the elements and vocabulary of music, and an acquaintance with the styles and characteristics of classical music through the ages. Designed primarily for the non-major.			
MUS 101	Symphonic Masterworks	3.0 SH	[GEA]
A survey of symphonic masterworks. Focuses on the style characteristics of the great symphonic composers, a study of symphonic forms, and listening to selected symphonic masterworks. For majors and non-majors.			
MUS 102	Operatic Masterworks	3.0 SH	[GEA]
A survey of operatic masterworks. Focusing on the style characteristics of the great opera composers through viewing complete performances of the operas studied. For majors and non-majors.			
MUS 110	Introduction to Computer Music	1.0 SH	[]
Students learn to use the computer to create music. Various methods are presented including sound design and graphic software for sound creation and performance. Collaborative performance such as laptop orchestra is emphasized. May be taken six times up to a total of six semester hours.			
MUS 112	Music Recording Techniques	1.0 SH	[]
A study of the methods and techniques necessary to make basic and intermediate level acoustic audio recordings in a studio environment, including microphone placement, effects processing, mixing, basic mastering, and the use of the computer software. Study of the role of the producer and recording engineer is emphasized.			
MUS 115	Class Piano I	2.0 SH	[]
Keyboard skills covered include major and minor 5-finger patterns, beginning repertoire, major scales and arpeggios, basic chord progressions, triads, dominant-seventh chords, sight-reading, harmonization, transposition, and improvisation. No musical background is required.			
MUS 116	Class Piano II	2.0 SH	[]
Course continues development of skills learned in MUS 115. Content includes increased focus on keyboard technique, minor scales and arpeggios, intermediate solo and ensemble repertoire, chord progressions, sight-reading, harmonization, transposition, and improvisation.			
Prerequisite: MUS 115 (with a grade of C or higher).			
MUS 120	Applied Lessons (50 Minutes)	1.0 SH	[]
Applied instrumental or vocal lessons. Thirteen 50-minute lessons per semester, with two hours of practice daily.			
Fee=\$689.00.			
MUS 130	Applied Lessons (25 Minutes)	0.5 SH	[]
Applied instrumental or vocal lessons. Thirteen 25-minute lessons per semester, with one hour of practice daily.			
Fee=\$362.00.			
MUS 139	Intro to Music Fundamentals	3.0 SH	[]
Introduction to musical notation, rhythm, meter, scales, key signatures, triads, popular song forms and chord progressions, and basic musicianship skills.			

- MUS 140 Music Theory & Musicianship I 3.0 SH []**
 Review of notation, rhythm, meter, scales, key signatures, (intervals,) and triads. The course will advance to basic voice-leading. Involves melodic and rhythmic dictation, sight-singing, and performance skills. Students considering a B.A. Major in Music should complete Musicianship & Theory I and II (MUS 140 and MUS 160 & MUS 170) by the end of their sophomore year.
Prerequisite: music background.
- MUS 160 Musicianship II 2.0 SH []**
 Sight-singing, melodic dictation, rhythmic studies, diatonic chord recognition, keyboard harmony. Students considering a B.A. Major in Music should complete Musicianship & Theory I and II (MUS 140 and MUS 160 & MUS 170) by the end of their sophomore year.
Prerequisite: MUS 140 (with a grade of C or higher).
Corequisite: MUS 170.
- MUS 165 Jazz Ensemble 1.0 SH []**
 Reading and rehearsing music from various big band and combo styles. Special attention is given to style awareness, ensemble, and improvisation techniques. Open to the entire community. May be taken more than once.
- MUS 170 Music Theory II 3.0 SH []**
 A study of harmonic materials. Part-writing, tonal function, voice leading, harmonization of melody lines. Students considering a B.A. Major in Music should complete Musicianship & Theory I and II (MUS 140 and MUS 160 & MUS 170) by the end of their sophomore year.
Prerequisite: MUS 140 (with a grade of C or higher).
Corequisite: MUS 160.
- MUS 180 Instrumental Techniques 3.0 SH []**
 Techniques, characteristics, and usage of brass, woodwind, and string instruments. Acquisition of playing ability on one instrument from each group.
- MUS 182 Choral Conducting 2.0 SH []**
 Introduction to the basics of conducting choral music. Includes emphasis on conducting patterns, rehearsal pedagogy, vocal production, choral literature, score analysis, and choral performance practices.
- MUS 200 Topics in Music History 3.0 SH [GEA]**
 A comprehensive study of a notable composer or topic of music history. The course serves to acquaint students with a significant body of music and its importance in music history. Includes historical context, analysis, and listening. The title will be extended to describe the current topic, e.g., Johannes Brahms, Women in Music, Charles-Marie Widor, Native American Music, Legendary Pianists. May be taken more than once provided the topics differ.
- MUS 201 Beethoven: The Great Master 3.0 SH [GEA]**
 A survey of the life and music of Ludwig van Beethoven (1770-1827) including his symphonies, string quartets, piano music, chamber music, and "Fidelio." No music background is required.
- MUS 203 American Musical Theater 3.0 SH [GEA]**
 An overview of the development of the modern American musical theater with emphasis on the music, lyrics, composers, writers, producers, directors, and the history and folklore of "Broadway." No musical background is required.
- MUS 204 The Jazz Tradition in America 3.0 SH [GEA]**
 Explores the connection between jazz music and its cultural and social contexts. The heritage of the lives and music of jazz artists is discussed. Traces the legacy of jazz from its roots in African and American music to current styles. No musical background is required.
- MUS 205 The Creative World of Mozart 3.0 SH [GEA]**
 A survey of the music of Wolfgang Amadeus Mozart (1756-1791). An exploration of the beauty, peace, grandeur, drama, and grace of Mozart's operas, symphonies, piano concertos, chamber music, and choral music. No musical background is required.

- MUS 206 Student Recital** 1.0-5.0 SH []
 Thirty-minute recital on instrument or voice, demonstrating performance ability and understanding of various musical styles. Subject to music faculty approval. May be taken for variable credit from one to five semester hours. May be taken more than once.
Prerequisite: demonstrated proficiency on instrument or voice.
- MUS 207 Popular Music in America** 3.0 SH [GEA]
 A study of the popular music of America as the voice of the people in society and culture. The rich and varied styles of popular music are discussed in the context of the artists, recordings, and political events surrounding them. No musical background is required.
- MUS 209 Songs through Time** 3.0 SH [GEA]
 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 212 Traditional Korean Music** 3.0 SH [GEA]
 This course provides a moderately in-depth look at traditional Korean Music and its social and historical contexts. We will study traditional instruments, systems of notation, types of music (determined by their function) and their formal and stylistic differences and similarities, as well as the unifying ethos in the musical sensibilities expressed.
- MUS 213 Music of the World** 3.0 SH [GEA]
 A selected survey of classical, popular, and folk music traditions from around the world. The role of music as ritual, mode of communication, and artistic expression is studied.
- MUS 225 Music Composition** 1.0 SH []
 Study of the methods and techniques of music composition including historical, social, cultural, and aesthetic considerations. Emphasis on preparation for students who intend to do a capstone in music composition. May be taken more than once.
- MUS 227 Field Studies in Music** 3.0 SH [GEA]
 Field study of materials covered in music courses such as MUS 100, MUS 101, and MUS 102. Offered only as part of an abroad or field study program.
- MUS 228 Great Composers & Their Culture** 3.0 SH [GEA]
 This course includes a study of the great composers and their individual cultures that will be experienced on a music abroad. A specialized survey of music, history, art, and culture directly related to countries visited and composers studied.
- MUS 235 Advanced Recording** 3.0 SH []
 Advanced study in music recording leading to a strong working knowledge of standard studio production practice. Microphone selection and placement, automation, critical listening skills, and session management will be discussed.
Prerequisite: MUS 112.
- MUS 250 College Choir** 1.0 SH []
 Preparation and performance of choral literature focusing on concepts of style, ensemble, and vocal production. May be taken more than once. Open to the entire community.
- MUS 251 Chorus for Musical** 1.0-2.0 SH []
 Preparation and performance of chorus parts for the musical production. By audition only. Offered only in semesters when there is a musical production. May be offered for variable credit from one to two semester hours. May be taken four times up to a total of eight semester hours.
- MUS 252 Principia Music Tour** 1.0-2.0 SH []
 Preparation of music literature for performance on tour focusing on style, ensemble, presentation, and tour logistics. A star (*) grade will be assigned until completion of the tour. May be offered for variable credit from one to two semester hours. May be taken more than once. Offered by invitation only.
- MUS 261 Orchestra** 1.0-2.0 SH []
 Preparation and performance of instrumental literature focusing on style, expressive interpretation, and ensemble. May be offered for variable credit from one to two semester hours. May be taken more than once. Open to the entire community.

MUS 265	Musicianship III	2.0 SH	[]
Continuation of MUS 160.			
Prerequisite: MUS 160 (with a grade of C or higher).			
Corequisite: MUS 275.			
MUS 266	Musicianship IV	2.0 SH	[]
Concentrates on practical musicianship, including harmonic and rhythmic exercises of increasing complexity. Literature from chant to 20th century, harmonic dictation, and intricate rhythms and keyboard skills are studied.			
Prerequisite: MUS 265 (with a grade of C or higher).			
Corequisite: MUS 302.			
MUS 271	Chamber Music for Credit	1.0-2.0 SH	[]
Small chamber ensemble, vocal or instrumental. May be offered for variable credit from one to two semester hours. May be taken more than once.			
MUS 275	Music Theory III	3.0 SH	[]
Analysis and exercises in common-practice harmony concentrating on advanced chromatic techniques and species counterpoint.			
Prerequisite: MUS 170 (with a grade of C or higher).			
Corequisite: MUS 265.			
MUS 281	Instrumental Conducting	2.0 SH	[]
Introduction to the basics of conducting instrumental music. Includes all essential beat patterns, expressive gestures, score-reading, learning of instrumental transpositions, and score reduction at the keyboard. May be taken four times up to a total of eight semester hours.			
Prerequisite: completion of piano proficiency requirement.			
MUS 302	Music Theory IV	3.0 SH	[]
Analysis and exercises in two-part counterpoint. Study of 20th century styles including set theory, atonality, dodecaphony, and minimalism.			
Prerequisite: MUS 275 (with a grade of C or higher).			
Corequisite: MUS 266.			
MUS 303	Junior Recital	1.0-5.0 SH	[]
Thirty-minute recital of instrumental or vocal music demonstrating performance ability and understanding of various musical styles. Subject to music faculty approval. May be offered for variable credit from one to five semester hours. May be taken more than once.			
Prerequisite: demonstrated proficiency on instrument or voice.			
Class Level Restriction: Junior only.			
MUS 321	Music History I	4.0 SH	[GEA]
A study of musical styles and forms of the Medieval, Renaissance, Baroque, and Classic periods with considerable emphasis on listening to the music from these periods.			
Class Level Restriction: Sophomore and Junior and Senior only.			
MUS 322	Music History II	4.0 SH	[GEA]
A study of musical styles and forms of the Romantic period through the present, with considerable emphasis on listening to music from these periods.			
Class Level Restriction: Sophomore and Junior and Senior only.			
MUS 335	Advanced Music Production	3.0 SH	[]
Advanced study in standard studio practice in the areas of audio editing, MIDI sequencing, mixing, and mastering for albums and media. Focus is on post-production techniques in a music environment. Additional skills addressed include knowledge of hardware and software synthesizers, syncing to video, and integration of hardware and software studio techniques.			
Prerequisite: MUS 112.			

- MUS 391 Form and Analysis** **3.0 SH** []
 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.
Prerequisite: MUS 265 and MUS 275.
Class Level Restriction: Junior and Senior only.
- MUS 401 Senior Project: Composition** **4.0 SH** []
 An original composition prepared for performance, demonstrating competency in compositional devices and understanding of formal and idiomatic considerations. A written analysis is also required. Will receive a star (*) grade until the semester in which the composition is performed. May be taken twice.
Corequisite: MUS 407.
Class Level Restriction: Junior and Senior only.
- MUS 402 SR Project: Music Research** **5.0 SH** []
 Fifty-page research paper on a special topic in music history or ethnomusicology. Will receive a star (*) grade until the semester in which the project is completed. May be taken twice.
Class Level Restriction: Junior and Senior only.
- MUS 403 SR Project: Adv Performance** **4.0 SH** []
 Sixty-minute recital of instrumental or vocal music demonstrating performance ability and understanding of various musical styles. Will receive a star (*) grade until the semester in which the recital is given. May be taken twice.
Corequisite: MUS 407.
Class Level Restriction: Junior and Senior only.
- MUS 404 Senior Project: Analysis** **5.0 SH** []
 Analysis of a major work plus a paper presenting the analysis and placing the work in its historical and theoretical context. Will receive a star (*) grade until the semester in which the project is completed. May be taken twice.
Class Level Restriction: Junior and Senior only.
- MUS 405 SR Proj: Performance/Research** **5.0 SH** []
 Thirty-minute recital of instrumental or vocal music demonstrating performance ability and understanding of various musical styles plus a 25-page research/analysis paper of the music performed. May be taken twice. Will receive a star (*) grade until the semester in which the recital is given.
Class Level Restriction: Junior and Senior only.
- MUS 407 Recital Program Notes** **1.0 SH** []
 By writing program notes for the senior project, students learn how to use research and organizational skills to synthesize the knowledge gained during undergraduate study. Will receive star (*) grade until the term in which the project is completed. May be taken twice.
Corequisite: MUS 401, MUS 403 or MUS 408.
Class Level Restriction: Junior and Senior only.
- MUS 408 SR Project: Music Recital** **2.0,4.0 SH** []
 Thirty-minute (minimum) recital of instrumental or vocal music demonstrating performance ability and understanding of various musical styles. May be taken twice up to a total of four semester hours. Will receive a star (*) grade until the semester in which the recital is given. Open only to students who double major in music and another area that also requires a capstone. Enrollment requires approval of the music faculty.
Prerequisite: demonstrated proficiency on instrument or voice.
Corequisite: MUS 407.
Class Level Restriction: Junior and Senior only
Field of Study Restrictions: Music Majors only.

Philosophy (PHIL)

- PHIL 120 Critical Thinking** **3.0 SH** []
 This course is an introduction to logic and basic argument. Students identify, analyze, evaluate, and construct basic arguments.
Class Level Restriction: Freshman and Sophomore only.
- PHIL 150 Introduction to Philosophy** **3.0 SH** [GEH]
 An introductory inquiry into the nature of philosophy, examining various branches of the discipline, typically including epistemology, aesthetics, metaphysics, ethics, and philosophy of mind. Attention is given to both classic and contemporary philosophers. Primary source readings form the base of the course.
- PHIL 170 Film and Philosophy** **3.0 SH** [GEH]
 This course is a survey of philosophical ideas as they appear in films and written texts. The course is not a philosophical study of film so much as it a study of philosophical ideas through film. Basic themes covered through film include but are not limited to ethics, free-will, metaphysics, and epistemology.
- PHIL 220 Introduction to Ethics** **3.0 SH** [GEH]
 An exploration of western moral philosophy, focusing on issues of moral duty, rights, and the nature of the good. The course offers a critical survey of traditional ethical theories and provides an introduction to contemporary responses.
- PHIL 221 Topics in Philosophy** **3.0 SH** []
 A seminar for lower division students on a topic of current philosophic interest. The title will be extended to describe the current topic. May be repeated up to a total of six semester hours provided the topics differ.
- PHIL 222 Feminist Philosophy** **3.0 SH** []
 This course explores the connections between traditional western philosophy and recent feminist discourse. Students consider ways in which feminists have criticized traditional philosophy and ask whether these criticisms are justifiable. Students examine ways in which feminist scholars have infused the discipline of philosophy with revisions or alternatives to philosophical thinking and evaluate the validity of these new insights.
- PHIL 223 The Problem of Evil** **3.0 SH** []
 This course traces a long-standing issue of human thought: the problem of evil. Students use several philosophers' work on the subject in conjunction with both historical and theoretical situations that have motivated the age-long human question: why do bad things happen to good people?.
- PHIL 230 Philosophic Classics** **3.0 SH** []
 An introduction to philosophy through the study of classic texts in philosophy.
- PHIL 235 Philosophy and Race** **3.0 SH** []
 Considers current philosophical thinking about race, ethnicity, identity, and culture. Examines the notion of race itself, and applies analytic and empathic skills to complex issues such as racial constructions, racial tensions, and public policies such as affirmative action.
- PHIL 245 History of Philosophy Survey** **3.0 SH** []
 A rapid survey of philosophy from earliest to most recent times to provide context and a timeline for other studies.
- PHIL 250 Contemporary Moral Problems** **3.0 SH** []
 Introductory study of various moral and social problems facing society today. Topics may include abortion, capital punishment, euthanasia, animal rights, racial inequities, sexual orientation, pornography, and cloning. Readings in applied ethics and the critiquing of arguments form the basis for the course.
- PHIL 252 Philosophy of Religion** **3.0 SH** []
 A philosophical analysis of concepts, claims, and arguments that have traditionally been employed in support of and in challenge to religious belief. Topics typically include proofs for God's existence, the problem of evil, arguments against belief in God, and the possibility of life after death.

PHIL 255	Global Ethics	3.0 SH	[]
Course focuses on ethics and moral problems both as they relate to the world community and from various standpoints within that community. Ethical traditions from Africa, Asia, Europe, and Latin America are considered. Intercultural moral conflicts are examined from a wide array of religious, cultural, and moral vantage points. More sensitivity, understanding, and assessment of needs are stressed.			
PHIL 265	Business Ethics	3.0 SH	[]
This course focuses on major philosophical and ethical questions surrounding modern western business practices. Students receive a brief introduction to moral philosophy, become familiar with important literature in the field of business ethics, and begin to understand the place of morality in business.			
PHIL 275	Aesthetics	3.0 SH	[]
Philosophical inquiry into the nature of art, the aesthetic experience, and aesthetic appreciation.			
PHIL 280	Classics of Political Thought	3.0 SH	[]
Exploration of the most important writings of authors who have had a profound impact on the West's conception of politics. The emphasis is on original texts by authors such as Plato, Aristotle, Hobbes, Rousseau, Machiavelli, and Marx. Also listed as POLS 280.			
PHIL 311	Ancient & Medieval Philosophy	3.0 SH	[]
Philosophical ideas of the ancient and medieval worlds with emphasis on the Presocratics, Plato, Aristotle, Augustine, and Aquinas. Class Level Restriction: Junior and Senior only.			
PHIL 312	17th & 18th C Philosophy	3.0 SH	[]
Philosophical ideas of the 17th and 18th centuries. Emphasized: rationalist and empiricist movements. Class Level Restriction: Junior and Senior only.			
PHIL 313	19th & 20th C Philosophy	3.0 SH	[]
Philosophical ideas of the 19th and 20th centuries. Emphasized: idealist, existential, pragmatic, and analytical movements. Class Level Restriction: Junior and Senior only.			
PHIL 320	Ethical Theory	3.0 SH	[]
This course in moral philosophy examines historical and contemporary ethical theories and their problems. Students study three classical theories (i.e., Aristotle's virtue ethics, Kant's deontology, and Mill's Utilitarianism) as well as more recent approaches concerning rights and justice (e.g., care ethics and discourse ethics). Prerequisite: three semester hours in philosophy. Class Level Restriction: Junior and Senior only.			
PHIL 321	Epistemology	3.0 SH	[]
Exploration of classical and contemporary theories of knowledge and truth inclusive of theories of mind. Class Level Restriction: Junior and Senior only.			
PHIL 402	Advanced Topics in Philosophy	1.0-3.0 SH	[]
This course is an advanced seminar for upper division students on a topic of current philosophical interest. The title will be extended to describe the current topic. May be offered for variable credit from one to three semester hours. May be repeated up to a total of six semester hours provided the topics differ. Prerequisite: PHIL 120. Class Level Restriction: Junior and Senior only.			
PHIL 421	Seminar in Philosophy	3.0 SH	[]
A seminar in a selected problem or topic in philosophy. Course content varies from year to year. Research and writing techniques are developed. The title will be extended to describe the current topic. May be repeated up to a total of six semester hours provided the topics differ. Class Level Restriction: Junior and Senior only.			

PHIL 440 Capstone in Philosophy 3.0 SH []

Independent reading, research, and writing on a topic of philosophical interest. The product is a high quality thesis paper demonstrating original thought, philosophical maturity, and depth. Required for the major.

Class Level Restriction: Junior and Senior only.

Physical Education: Academic Courses (PHED)**PHED 300 Lifeguard Training 2.0 SH []**

Following the American Red Cross program, this course is designed to provide entry-level lifeguard participants with the knowledge and skills to prevent, recognize and respond to aquatic emergencies and to provide care for a variety of emergency situations.

Prerequisite: 15 years of age and successful completion of a swimming skills test.

Corequisite: PE 061.

Fee=\$90.00.

Physical Education: Activity Courses (PE)**PE 015 Foil Fencing 0.0 SH [GEPE]**

An introduction to the skills and strategies of foil fencing as well as the rules, etiquette, and equipment.

PE 016 Ultimate Frisbee 0.0 SH [GEPE]

An introduction to the basic skills and strategies of ultimate frisbee. Covers rules, scoring, and vocabulary.

PE 022 Tennis 0.0 SH [GEPE]

Students learn the basics of the game of tennis, its background, rules, strategies, strokes, terminology, and etiquette through short lectures, demonstration/instruction, and competition.

PE 025 Foil Fencing II 0.0 SH [GEPE]

Continuation of instruction in the sport of basic foil fencing. Additional instruction is given in technique and bouting.

PE 026 Baseball Theory and Practice 0.0 SH [GEPE]

Students learn the history, philosophy, and technique of America's favorite pastime. Students learn the historic and cultural perspective of the sport. The physical foundation of the game as well as the technical aspects of throwing, fielding, base running and hitting are also included. Students learn the language of the game: statistics, scoring, and nomenclature.

PE 029 Biking 0.0 SH [GEPE]

Designed to develop the skills and knowledge necessary to fully enjoy bicycling.

PE 030 Squash: Beginning 0.0 SH [GEPE]

An introduction to the basic skills and strategies of squash as well as vocabulary, rules, scoring, equipment, and etiquette.

PE 031 Racquetball: Beginning 0.0 SH [GEPE]

An introduction to the basic skills and strategies of racquetball as well as vocabulary, rules, scoring, equipment, and etiquette.

PE 034 Fitness Through Weightlifting 0.0 SH [GEPE]

Teaches the use of machines and free weights in development of an individual exercise program. Course is suitable for beginners as well as experienced lifters.

PE 035 Circuit Training 0.0 SH [GEPE]

Students engage in a variety of activities in order to develop aerobic strength. Students utilize the weight room in conjunction with medicine balls and isometric exercises.

PE 036 Triathlon 0.0 SH [GEPE]

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	0.0 SH	[GEPE]
Exposes students to a wide variety of lifetime physical activities. Includes conditioning and technical instruction.			
PE 038	Advanced Sports Training	0.0 SH	[GEPE]
Designed for students interested in learning and participating in a variety of training methods and modalities (i.e. plyometrics, balance, stability, bodyweight movement, weights/cables/medicine balls, physio-balls, etc.). Students engage in a circuit-style workout to enhance individual and group performance. Students also learn how to develop their own program based on their current activity level and future goals. This course is not for beginners.			
PE 039	Volleyball: Beginning	0.0 SH	[GEPE]
An introduction to the fundamental skills and techniques of power volleyball. Including present status, vocabulary, rules, scoring, and strategy.			
PE 040	Volleyball: Intermediate	0.0 SH	[GEPE]
Continuation of PE 039 at the intermediate level.			
PE 049	Ballroom Dance	0.0 SH	[GEPE]
This class is designed for students interested in learning ballroom dancing. The course will cover 4-6 different styles of dance and will include history, musicality, and technique.			
PE 050	Basketball	0.0 SH	[GEPE]
Focus is on the basic skills and strategies of basketball, including rules, scoring, etiquette, and vocabulary.			
PE 051	Soccer	0.0 SH	[GEPE]
An introduction to the fundamental techniques and strategies, etiquette, vocabulary, and rules of soccer.			
PE 052	Softball	0.0 SH	[GEPE]
Emphasizes the basic skills and strategies necessary to enjoy and understand the game of softball. Covers rules, scoring, and vocabulary.			
PE 054	Fitness: Balance & Flexibility	0.0 SH	[GEPE]
This course focuses on strength, flexibility, coordination, concentration, and balance. Students learn and demonstrate various movements/exercises and skills, including but not limited to sustaining static positions, increasing individual flexibility, demonstrating balance and stability, and learning proper breathing technique.			
PE 057	Fitness in Swimming	0.0 SH	[GEPE]
Fitness class designed for qualified students. Course for students who want to develop their fitness through lap swimming. Students swim a minimum of 1500 yards per week. Prerequisite: swimming ability intermediate or above.			
PE 061	Emergency Water Safety	0.0 SH	[GEPE]
An aquatics course which introduces people to increased awareness of water-related safety issues and an understanding of how to respond in an aquatic emergency; includes practical and written activities. Prerequisite: successful completion of American Red Cross Basic Water Safety or successful completion of a swimming skills test. Corequisite: PHED 300.			
PE 065	Swimming: Beginning	0.0 SH	[GEPE]
Designed to meet the individual skill needs of non- and beginning swimmers. Students are required to participate in 42 hours of supervised swimming instruction.			
PE 066	Swimming: Intermediate	0.0 SH	[GEPE]
Designed to meet the individual skill needs of students. Develops proficiency of intermediate swimming technique.			
PE 069	Water Polo	0.0 SH	[GEPE]
Provides an opportunity to develop the basic skills of water polo and to learn its strategies, rules, scoring, and vocabulary. Prerequisite: intermediate swimming ability.			

PE 073 Rugby 0.0 SH [GEPE]

This course exposes students to the basic skills, strategies, and fundamentals of competitive rugby. Students have the opportunity to compete against collegiate and club level teams sanctioned by USA Rugby and its affiliated unions.

PE 074 Lacrosse 0.0 SH [GEPE]

This course exposes students to the basic skills, strategies, and fundamentals of competitive lacrosse. Students have the opportunity to compete against collegiate teams in the Central Plains Women's Lacrosse League of the Women's Division Intercollegiate Associates of US Lacrosse.

PE 085 Hiking/Backpacking 0.0 SH [GEPE]

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 0.0 SH [GEPE]

An introduction to running outside over various terrains and under various conditions.

Physical Education: Varsity Sports (PVAR)

PVAR 083 Varsity Cross Country 0.0 SH [GEPE]

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership and spirituality.

PVAR 085 Varsity Volleyball 0.0 SH [GEPE]

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership and spirituality.

PVAR 086 Varsity Track and Field Indoor 0.0 SH [GEPE]

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership and spirituality.

PVAR 087 Varsity Soccer 0.0 SH [GEPE]

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership and spirituality.

PVAR 089 Varsity Basketball 0.0 SH [GEPE]

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership and spirituality.

PVAR 090 Varsity Swimming 0.0 SH [GEPE]

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership and spirituality.

PVAR 091 Varsity Diving 0.0 SH [GEPE]

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership and spirituality.

PVAR 093 Varsity Tennis 0.0 SH [GEPE]

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership and spirituality.

PVAR 094 Varsity Track & Field Outdoor 0.0 SH [GEPE]

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership and spirituality.

PVAR 095 Varsity Baseball 0.0 SH [GEPE]

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership and spirituality.

PVAR 096 Varsity Softball 0.0 SH [GEPE]

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership and spirituality.

PVAR 098 Varsity Beach Volleyball 0.0 SH [GEPE]

Designed to provide the student-athlete with an experience of consistent progression, preparing for and engaging in intercollegiate competition. Players are trained in the proper fundamentals and skills as well as strength, fitness, and strategy. Daily practices and NCAA D-III competitions allow players the opportunity to demonstrate growth in character, team work, leadership, and spirituality.

Physics (PHYS)**PHYS 121 Life in the Universe 4.0 SH [GESL]**

Survey course covering the basics of astrobiology. Topics include the conditions necessary to support life, terrestrial life in extreme environments, the possibilities for life in our solar system, planetary habitability, and the Drake Equation and Fermi Paradox. Includes a lab component. Math at the level of high school algebra may be expected, but is not a primary focus of the course.

PHYS 151 Descriptive Astronomy 4.0 SH [GESL]

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.

Class Level Restriction: Freshman and Sophomore only.

PHYS 161 Physics of Musical Sound 4.0 SH [GESL]

Principles and applications of sound for all students, musically inclined or not. Sources of sound, sound wave types and propagations, and aural perceptions of sound. Extensive examples of musical instruments and how they exhibit basic concepts of acoustics. Math at the level of high school algebra and geometry may be expected. Class includes one two-hour lab per week.

Class Level Restriction: Freshman and Sophomore only.

PHYS 177 Environmental Physics 3.0 SH [GESN]

Physics governing the interaction between humanity and the environment; focuses on energy. Covers the basic physics of energy, methods of energy generation and use, and the relationship between environmental energy flows and climate. May include mathematics up to the level of high school algebra.

PHYS 199 Physics for World Leaders 3.0 SH [GESN]

The physics behind policy, technology, and the everyday: energy sources, climate, electricity, nuclear weapons, etc. Energy is emphasized throughout. Science journalism is read and evaluated. A modest amount of math at the level of "Algebra I" is used.

- PHYS 201 Phys for Scientists/Engrs I** **4.0 SH** **[GESL]**
 Introductory physics with calculus. Covers the major themes of physics, including mechanics, conservation laws, electricity, magnetism, waves, light, sound, relativity, early quantum theory, and thermodynamics. Laboratories approximately weekly. Emphasis on mechanics. Continues as PHYS 202, PHYS 203, and PHYS 204.
Prerequisite: Completion of or concurrent enrollment in MATH 181. CHEM 131 recommended.
- PHYS 202 Phys for Scientists/Engrs II** **4.0 SH** **[]**
 Second term in the introductory physics sequence with calculus and laboratory; further emphasis on classical mechanics.
Prerequisite: PHYS 201 and completion of or concurrent enrollment in MATH 182.
- PHYS 203 Phys for Scientists/Engrs III** **4.0 SH** **[]**
 Third term in the introductory physics sequence with calculus and laboratory; emphasis on electricity and magnetism.
Prerequisite: MATH 182 and PHYS 201.
- PHYS 204 Phys for Scientists/Engrs IV** **3.0 SH** **[]**
 Fourth term in the introductory physics sequence with calculus; emphasis on optics and thermodynamics. Does not include a laboratory component.
Prerequisite: PHYS 202 and PHYS 203.
- PHYS 231 Introduction to Cosmology** **3.0 SH** **[GESN]**
 The course focuses on the study of the universe as a whole. Topics include general relativity, the expansion of space, the distribution of galaxies, black holes, and the origin and fate of the universe. The emphasis is on conceptual understanding; however, math at the level of high school algebra and trigonometry is utilized.
- PHYS 283 Advanced Laboratory** **4.0 SH** **[]**
 Laboratory requirement for physics majors. Experiments in acoustics, optics, electrical measurement, spectroscopy, nuclear physics, and gravitation. Emphasis on techniques of measurement.
Prerequisite: PHYS 203.
- PHYS 301 Classical Mechanics** **3.0 SH** **[]**
 Advanced course in analytic mechanics, including analysis of systems of forces, acceleration, momentum, and energy. Emphasis on dynamics, including space and orbital mechanics. Full use is made of differential equations and vector analysis wherever appropriate.
Prerequisite: PHYS 203 and MATH 283; MATH 380 strongly recommended. Offered in alternate years.
Class Level Restriction: Junior and Senior only.
- PHYS 303 Electricity & Magnetism I** **3.0 SH** **[]**
 Advanced course in electricity and magnetism, including electro-statics, magnetic induction, magnetostatics, and electromagnetic waves. Basic laws of Gauss, Ampere, Faraday, and Maxwell in their differential form. Vector analysis and differential equations are used throughout. Emphasis on solving boundary value problems, such as those appropriate to fields at interfaces between two media.
Prerequisite: PHYS 203 and MATH 283; MATH 355 and MATH 380 strongly recommended. Offered in even years.
Class Level Restriction: Junior and Senior only.
- PHYS 304 Electricity & Magnetism II** **3.0 SH** **[]**
 Continuation of PHYS 303. Applications in astrophysics and ham radio will be included. Offered in even years.
Prerequisite: PHYS 303.
Class Level Restriction: Junior and Senior only.

PHYS 305 Quantum Mechanics I 3.0 SH []

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.

Prerequisite: PHYS 203 and MATH 182.

Class Level Restriction: Junior and Senior only.

PHYS 306 Quantum Mechanics II 3.0 SH []

Continuation of PHYS 305.

Prerequisite: PHYS 305.

Class Level Restriction: Junior and Senior only.

PHYS 307 Statistical Mechanics 3.0 SH []

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.

Prerequisite: MATH 283, PHYS 203, PHYS 204.

Class Level Restriction: Junior and Senior only.

PHYS 351 Astrophysics 3.0 SH []

Advanced course applying the laws of physics to astronomical phenomena. Star formation and evolution, formation of planetary systems, large-scale evolution, and eventual fate of the universe will be covered.

Prerequisite: MATH 283, PHYS 203.

Class Level Restriction: Junior and Senior only.

PHYS 352 Computational Physics 3.0 SH []

Application of computer modeling to complex physical systems. Subjects include numerical integration, the Monte Carlo method, genetic and simulated annealing algorithms, chaotic systems, fluid flow, and gravitational scattering. Of special interest to computer science students.

Prerequisite: CSCI 171, MATH 283, PHYS 203.

Class Level Restriction: Junior and Senior only.

PHYS 401 Research 1.0-6.0 SH []

Experimental or theoretical research under faculty supervision. May receive a star (*) grade, with final grade being assigned upon completion of the project. May be offered for variable credit from one to six semester hours. May be repeated multiple times, but only six semester hours may be used to fulfill major or minor requirements.

Class Level Restriction: Junior and Senior only.

Political Science (POLS)**POLS 020 Model Illinois Government 0.0 SH []**

Model Illinois Government is the annual intercollegiate simulation of the Illinois General Assembly, held each winter in the State Capitol. Students serve as the various elected officers of the executive and legislative branches of the state government.

POLS 021 Moot Court (Model IL Govt) 0.0 SH []

Teams of students prepare and argue appellate cases before mock state or U.S. Supreme Courts in the annual collegiate judicial simulations at state or national levels.

POLS 052 Model United Nations 0.0 SH []

Students simulate the actions of the various bodies of the United Nations - the General Assembly, the Security Council, the Economic and Social Council - in annual intercollegiate competition.

- POLS 111 Intro to Political Behavior** 3.0 SH [GESS]
 Course considers how U.S. citizens form values, beliefs, and preferences toward politics and public policies. Sources of knowledge explored include family, the media, and political elites. The impact of participatory and deliberative processes that may contribute to or detract from tolerance of others is also examined. Specific attention is devoted to political ramifications of attitudes concerning race, ethnicity, and gender.
Class Level Restriction: Freshman only.
- POLS 120 American Government & Politics** 3.0 SH [GESS]
 Study of the American political system and formation of public policy, primarily at the national level: political culture, constitutions and constitutionalism, democratic theory, federalism, public opinion, interest groups, political parties, the electoral system, Congress, the presidency, and the judicial system.
- POLS 125 Moot Court: Reason & Argument** 2.0 SH []
 Students prepare legal briefs and argue appellate cases before mock Illinois or U.S. Supreme Court in the intercollegiate judicial simulations at state or national levels. Students learn legal reasoning and analysis, learn to think under intense pressure, and develop oral argumentation skills.
Prerequisite: POLS 120.
- POLS 152 Politics Among Nations** 3.0 SH [GESS]
 Introduction to international politics, with emphasis on what causes conflict between nations, why nations cooperate, and how contemporary forces influence international politics.
- POLS 215 Soc Science Research Methods** 4.0 SH <GEM> [GESS]
 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 SOAN 215.
- POLS 220 American Parties & Elections** 4.0 SH [GESS]
 Theoretical study of political parties, elections, and public opinion, supplemented with case studies, guest speakers, and field research. Students attend political rallies and conduct surveys. Taught in election years. (A student may receive credit for only one of the courses POLS 220 and POLS 221.).
- POLS 225 Dynamics of U.S. Federalism** 3.0 SH [GESS]
 The study of the dynamics of intergovernmental relations among the national, state, and local governments, as practiced within the constitutional structure of federalism in the United States.
- POLS 231 American Congress** 3.0 SH [GESS]
 Study of the representational nature, institutional structures, and deliberative processes of the United States Congress. Topics addressed include member goals and political resources, party organizations, the committee structures, legislative rules and procedures, and interbranch relations.
- POLS 232 American Presidency** 3.0 SH [GESS]
 Study of the constitutional and prerogative powers, institutional arrangements, public dimensions, and policy-making roles of the modern presidency. The institution's relationships with the legislative and judicial branches as well as the federal bureaucracy are considered along with the impact individual presidents make on the exercise of power and authority.
- POLS 240 Women in Politics** 3.0 SH [GESS]
 Examination of the experience of women in U.S. politics, particularly at the federal and state level. Considers the impact of gender on political participation, political attitudes, policy preferences, voting behavior, campaign styles, and institutional norms.
- POLS 252 U.S. Foreign Policy** 3.0 SH [GESS]
 Values, process, and governmental institutions involved in the formulation of American foreign policy. In-depth analysis of American foreign policy since 1945 dealing with Cold War and post-Cold War challenges, the developing nations, and international organizations including the United Nations.
- POLS 254 Latin American Politics** 3.0 SH []
 Study of the historical, economic, and social forces influencing the politics of Latin America as a whole with special focus on the most politically significant countries.

- POLS 255 Contemporary European Politics** 3.0 SH [GESS]
Comparative survey of the political process and issues in Britain, France, and Germany: organization of political interests, decision-making processes, governmental bureaucracies, and political responses to social and economic change.
- POLS 261 Politics of China** 3.0 SH [GESS]
Study of the cultural, historical, and ideological origins of the People's Republic of China, the role of the Chinese Communist Party and its leaders, the structure and processes of its political institutions, and the nature of issues facing contemporary China, from rapid economic growth to human rights.
- POLS 263 Topics in Asian Politics** 3.0 SH []
Focuses on government, politics, and public policies of one or more countries in Asia. Designed to deepen the student's work in political science, international relations, or Asian studies. Specific topics vary, from Southwest Asia to the Vietnam War to the politics of Japan. The title will be extended to describe the current topic. May be taken more than once provided the topics differ.
- POLS 264 Russia and the FSU** 3.0 SH [GESS]
Study of the cultural and historical origins of post-Soviet Russia and the various former Soviet republics, the person and rule of Vladimir Putin, the structure and processes of Russia's political institutions, and the nature of issues facing contemporary Russia, from reassertion of a global presence to the decline of democratic institutions.
- POLS 265 Contemporary Issues** 3.0 SH []
Focuses on one or more current political issues. Designed to deepen the student's previous political studies. May focus on either domestic or international topics. The title will be extended to describe the current topic. May be taken more than once provided the topics differ.
- POLS 280 Classics of Political Thought** 3.0 SH []
Exploration of the most important writings of authors who have had a profound impact on the West's conception of politics. The emphasis is on original texts by authors such as Plato, Aristotle, Hobbes, Rousseau, Machiavelli, and Marx. Also listed as PHIL 280.
- POLS 300 Rev:Politics of Violent Change** 3.0 SH [GESS]
Study of violent political change: its causes, frequency, varieties, process. Various revolutions and their leaders considered at length, including the classic revolutions (English, American, French, Bolshevik), Mao Zedong's Chinese Revolution, Che Guevara in Latin America, and Eastern Europe in the post-cold war era.
Class Level Restriction: Junior and Senior only.
- POLS 311 Political Behavior** 3.0 SH []
Seminar examines the nature of both political socialization and political participation of United States citizens. Influences on socialization studied include family, education, socioeconomic status, political elites and the media. Forms of participation include voting and membership in both interest groups and voluntary civic organizations.
Prerequisite: POLS 120.
Class Level Restriction: Junior and Senior only.
- POLS 325 The Legal Process** 4.0 SH []
How the nature of law, including its history, development, and efficient administration, affects our political system. Modern American legal system is studied with the idea of understanding law as ongoing process - how the process works and its political ramifications. Useful for students considering law school.
Class Level Restriction: Junior and Senior only.
- POLS 330 American Constitutional Law** 3.0 SH []
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.
Class Level Restriction: Junior and Senior only.

POLS 332 Presidential Leadership 3.0 SH []

Seminar examines personal, public, constitutional and institutional sources of power modern presidents utilize in their attempts to lead their various constituencies - the public, the legislative branch, and the federal bureaucracy. In addition to the critical analysis of various models of modern presidential leadership, students also conduct case studies of presidential leadership during the modern presidency (1945-present).

Prerequisite: POLS 120.

Class Level Restriction: Junior and Senior only.

POLS 340 Public Policy Analysis 4.0 SH []

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.

Prerequisite: POLS 120 and POLS 215.

Class Level Restriction: Junior and Senior only.

POLS 348 U.S. and Global Security 3.0 SH [GESS]

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.

Class Level Restriction: Junior and Senior only.

POLS 352 International Relations Theory 3.0 SH []

Advanced study of the means and methods of theory construction in the field of international relations.

Prerequisite: POLS 152.

Class Level Restriction: Junior and Senior only

Field of Study Restrictions: Political Science Majors only.

POLS 354 Globalization: Theory/Practice 3.0 SH []

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.

Class Level Restriction: Junior and Senior only.

POLS 365 Advanced Issues 3.0 SH []

Advanced study and analysis of one or more current political issues. Designed to deepen the advanced student's previous political studies. May focus on domestic or international topics. The title will be extended to describe the current topic. May be taken more than once provided the topics differ.

Class Level Restriction: Junior and Senior only.

Religion (REL)

REL 110 The Old Testament 3.0 SH [GEB]

Introduction to the Hebrew Scriptures as history, as literature, and as a statement of faith. God's covenant with Israel forms a unifying motif, seen against the background of the ancient Near East. A brief overview of the New Testament is also included.

REL 120 The New Testament 3.0 SH [GEB]

An introductory overview of the historical context, literary genres, and theological and ethical messages of the New Testament, with focus on its contemporary relevance, the identity of Jesus, and what it means to be his follower. A brief overview of the Old Testament is also included.

REL 130 World Religions 3.0 SH [GEH]

An introduction to the world's religious traditions, including the three Abrahamic faiths (Judaism, Christianity, Islam), Hinduism, Buddhism, Daoism, and other traditions at the discretion of the instructor. This course provides an opportunity to learn about the diversity of religious practice in the world and prepares students for a world impacted by religion at every level.

REL 215 The Hebrew Prophets 3.0 SH [GEH]

Prophecy as a quest for leadership and as insight into social and moral conditions in Israel before, during, and after the exile.

- REL 218 Wisdom Literature and Psalms** 3.0 SH [GEH]
Close reading of Psalms, Proverbs, Job, and Ecclesiastes, with reference to wisdom traditions of the ancient Near East.
- REL 222 The Bible and the Environment** 3.0 SH [GEH]
This course critically examines and interprets relevant biblical texts within the context of the current ecological crisis with the intent of articulating a biblical case that responds to the challenge to live faithfully and responsibly as stewards of the Earth and its resources.
- REL 224 Christian Gospels** 3.0 SH [GEH]
An examination of the origins and development of Christian gospels in and outside the New Testament canon, as historical, literary, and theological products of the early Church, and of their contemporary interpretations.
- REL 225 The Bible & Comparative Ethics** 3.0 SH [GEH]
A survey of systems of biblical ethics and their basis in the Hebrew and Christian scriptures serves as the basis for comparative study of other religious and secular systems of ethics, and the interaction between ethical teachings of world religions.
Prerequisite: REL 110 or REL 120.
- REL 227 Paul the Apostle** 3.0 SH [GEH]
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** 3.0 SH [GEH]
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.
- REL 231 History of Christianity** 3.0 SH [GEH]
An exploration of the Christian churches from their beginnings in the apostolic period to their most recent expressions in the twenty-first century. The course considers how Christianity has shaped societies and how societies have shaped Christianity. Major movements, leading figures, theological developments, and religious trends will be examined to better understand the global spectrum of Christian expressions.
- REL 240 Introduction to Islam** 3.0 SH [GEH]
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).
- REL 260 Religion in America** 3.0 SH [GEH]
An historical survey of religious groups and movements that shaped and were shaped by the American experience.
- REL 270 Gender & Religion** 3.0 SH [GEH]
This course examines underlying assumptions about gender roles in the context of scripture and religious practice. It explores historical, cultural, and religious expectations about men's and women's attitudes and interests, and how those appear in scriptures and in various religious traditions. The title will be extended to describe the current topic. May be taken two times provided the topics differ.
- REL 275 Christian Science Movement** 3.0 SH [GEH]
This course allows students to engage in in-depth study of specific aspects of the history and/or cultural practice of Christian Science at various times and places. May be repeated once provided the topics differ.

- REL 300 Biblical Interpretation** 3.0 SH []
 An analysis and practicum of the methods scholars and others have used to interpret biblical literature, from antiquity to the present.
Prerequisite: REL 110 or REL 120.
- REL 304 Topics in Biblical Studies** 1.0-3.0 SH []
 A seminar on a topic in biblical studies at the advanced level. The content varies, and the title will be extended to describe the current topic. May be offered for variable credit from one to three semester hours. May be repeated up to a total of nine semester hours provided the topics differ.
Prerequisite: REL 110 or REL 120.
Class Level Restriction: Junior and Senior only.
- REL 307 Spiritual Autobiographies** 3.0 SH []
 In this course we will explore classic and contemporary spiritual autobiographies and learn about the practices of faith that sustained and challenged diverse religious people. Students study texts from different cultures and historical periods, discovering how historical and cultural context shapes faith. Through critical examination of the texts, students will reflect on their own spiritual journeys and identities.
Class Level Restriction: Junior and Senior only.
- REL 310 Topics in Religious Studies** 1.0-3.0 SH []
 A seminar on a topic in religious studies at the advanced level. The content varies, and the title will be extended to describe the current topic. Topic areas include comparative religions, history of religions, philosophy and ethics of religions, and religion in society. May be offered for variable credit from one to three semester hours. May be repeated up to a total of nine semester hours provided the topics differ.
Prerequisite: at least one REL course.
- REL 332 The Life of Mary Baker Eddy** 3.0 SH []
 An historical survey of the life and times of Mary Baker Eddy, from her childhood through her work as Discoverer, Founder, and Leader of Christian Science.
Prerequisite: completion of one course in religion, history, or philosophy.
Class Level Restriction: Junior and Senior only.
- REL 365 God and the Holocaust** 3.0 SH [GEH]
 This course helps students understand the historical background, context, events, and aftermath of the Holocaust. We will also be addressing the implications and repercussions of the Holocaust on religious practice and theology. Finally, the course is intended to encourage students independently to develop their own prayerful response to examples of violence and evil.
Class Level Restriction: Sophomore and Junior and Senior only.
- REL 370 Jews, Christians, & Muslims** 3.0 SH [GEH]
 Judaism, Christianity, and Islam sometimes interact harmoniously, but at other periods have fought bitterly. This course compares these religions theologically, legally, and culturally; traces the history of the interactions among these religions; and also examines contemporary relations between these three religions.
- REL 390 Methods of Religious Study** 3.0 SH []
 This course provides students with an understanding of the methodological tools used in the study of religion; it also gives students the opportunity to reflect upon which of those methods will be most helpful to them in undertaking a specific research project in which religion is a significant category of analysis.
Prerequisite: REL 110 or REL 120 and two REL courses numbered 200 or above.
Class Level Restriction: Junior and Senior only.
- REL 401 Capstone Project** 1.0-3.0 SH []
 A selected topic, area, or problem providing opportunity for survey, investigation, research, creative activity, or approved travel-study. May be offered for variable credit from one to three semester hours. May be taken three times up to a total of six semester hours. May be offered on an independent contract basis.
Class Level Restriction: Junior and Senior only.

Russian (RUSS)

RUSS 104 Elementary Russian I 5.0 SH []

In this first semester of the two-semester elementary sequence students learn from video, CD exercises, and classroom activity, how to listen and speak, read and write, and understand Russian sentences in the present tense. This course includes an introduction to Russian culture through video and texts.

Class Level Restriction: Freshman and Sophomore only.

RUSS 105 Elementary Russian II 5.0 SH [GE2L]

In this second course of the two-semester elementary language sequence, students fulfill the general education second language requirement. Students understand and speak, read, and write sentences and paragraphs in the present, future, and past tenses in order to function in everyday situations in Russian-speaking countries. This course includes an introduction to Russian culture through video and texts.

Prerequisite: RUSS 104.

RUSS 136 Language and Culture Abroad II 3.0 SH [GE2L]

Elementary Russian language/culture study during a Russian Study Abroad Program.

Prerequisite: RUSS 104 or placement.

Science (SCI)

SCI 360 Current Science Literature 1.0 SH []

Introduction to the current scientific literature in field(s) of students' choice. Initial readings are selected by faculty. Students present findings orally. Readings are selected from peer-reviewed scientific journals, e.g. *Physical Review*, *Journal of Geophysical Research*, etc. May be taken four times up to a total of four semester hours.

Sociology and Anthropology (SOAN)

SOAN 050 Community Service Program 0.0 SH []

In local, national, and international communities, with agencies, and institutions, students work together with others committed to meeting social needs. Students are encouraged to learn from those they serve, broaden their knowledge of diversity, develop social responsibility and realize their obligation to serve our global community.

SOAN 100 Intro to Global Sociology 3.0 SH [GESS]

An introduction to the basics of sociology as a way of understanding the world. This course is designed to provide a general introduction to the discipline of sociology. Although a domestic (US) sociological perspective is examined, a global sociological perspective is at the core of the course. Students will be introduced to the field by focusing on key sociological topics, including but not limited to social theory, the social construction of knowledge, socialization, social stratification, "race" and ethnicity, gender, culture, geography, religion, global social movements, globalization, global stratification, post-colonialism, and global ecology.

Class Level Restriction: Freshman and Sophomore only.

SOAN 130 Introduction to Archaeology 3.0 SH [GESS]

A survey course which explores theory, methods, and techniques for investigating, reconstructing, interpreting, preserving, and learning about human behavior in the past. It reviews human cultural chronology from the earliest Paleolithic ages, to the present, and examines the artifact remains. Throughout the course archaeology as anthropology and the relevance of archaeology to modern society and politics is emphasized.

Class Level Restriction: Freshman and Sophomore only.

SOAN 150 Intro to Cultural Anthropology 3.0 SH [GESS]

Introduction to the field of cultural anthropology. Explores various cultures around the world using some or all of the following as a basis of comparison: gender roles, language, social structure, family and kinship, identity, and spirituality. Also examines how cultures have been impacted by globalization.

Class Level Restriction: Freshman and Sophomore only.

- SOAN 160 "Race" and Ethnicity** **3.0 SH** **[GESS]**
Examines the Native, African, Latino/Latina, Asian, and European American experience. Also, provides a critical and comparative analysis of racial ideology and the social construction of "race," its origins and present day consequences from a global perspective. Ethnicity, ethnic conflict, genocide, and conflict solutions are examined as well.
Class Level Restriction: Freshman and Sophomore only.
- SOAN 170 Gender Paradigms** **3.0 SH** **[GESS]**
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.
Class Level Restriction: Freshman and Sophomore only.
- SOAN 180 Social Stratification** **3.0 SH** **[GESS]**
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.
Class Level Restriction: Freshman and Sophomore only.
- SOAN 200 Criminology and Criminal Law** **3.0 SH** **[GESS]**
Explores criminological theories, the criminal judicial system, and the consequences of crime in the United States and around the world. Typologies and case studies of crimes include, but are not limited to contemporary, historical, celebrity, corporate, crimes against humanity, and "terrorism".
- SOAN 215 Soc Science Research Methods** **4.0 SH** **<GEM>** **[GESS]**
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 POLS 215.
- SOAN 230 Archaeological Field Studies** **3.0 SH** **[GESS]**
This course is an on-site, practical program in the methods and techniques of archaeological excavation and interpretation. In this course students will learn archaeological field skills including survey, mapping, excavation, classification, and recording of features and artifacts. Students will learn to identify features in the ground and in the landscape and to use a variety of precision surveying equipment.
- SOAN 235 Environmental & Social Change** **3.0 SH** **[GESS]**
Examines the interface between social and environmental problems plus strategies to resolve such problems. Analyzes the impact of industrialization and globalization on humanity and ecosystems in traditional and more industrialized societies. Evaluates the feasibility of ecologically, economically, and socially sustainable rural and urban human settlement patterns.
- SOAN 240 Native American Cultures** **3.0 SH** **[GESS]**
Develops an appreciation for Native North American cultures from a sociological and historical perspective. Examines common issues facing many Native Americans as they work to maintain their cultural practices and ways of knowing in the midst of a dominant Euro-American society. Explores contemporary political, socio-economic, and resource management issues related to ecological, economic, and social sustainability.
- SOAN 244 Int'l Human Rights Law & Advcy** **3.0 SH** **[GESS]**
This course examines the global mechanisms, forces, and laws for promoting and protecting human rights; rights implementation via issues of evidence, ethics, and socio-political feasibility; legal concepts that apply to torture, political repression, war crimes and genocide, women's rights, children's rights, and violations of non-human rights; advocacy on behalf of those oppressed by violations of human and non-human rights law.
Class Level Restriction: Junior and Senior only.

- SOAN 245 Studies in Culture** 1.0-3.0 SH []
 Analysis of selected cultures. The contents will vary, and the title will be extended to describe the current topic. May be offered for variable credit from one to three semester hours. May be taken more than once provided the topics differ.
- SOAN 250 African American Cultural Hist** 3.0 SH [GESS]
 An historical and cultural exploration of the African American experience from African antiquity to the present.
- SOAN 251 Anthropology of India** 3.0 SH [GESS]
 A survey of contemporary India that examines the society through an anthropological lens. Explores the lived experiences of socio-economic class, caste, gender roles, marriage, family life, religion, politics, and globalization in the context of both rural and urban India. Uses India as a starting point from which to discuss questions pertaining to understanding cultural difference.
- SOAN 255 The Anthropology of Religion** 3.0 SH [GESS]
 In this course we will examine the theory and methods available to anthropologists to understand ancient and indigenous religions that do not have a written record. Starting with the social and anthropological theory used to interpret religions, we will then examine the religions of Native American and other indigenous peoples to try and understand the commonalities and differences between them.
- SOAN 265 Food in Society** 3.0 SH [GESS]
 The course will demonstrate how the political economy of the food system has emerged as a significant area of sociological/anthropological research and become essential to the study of sustainability. Drawing on interdisciplinary sources, this course explores the consequences raised by the relation of food and food consumption to inequality, diet, and food as a cultural symbol.
Class Level Restriction: Junior and Senior only.
- SOAN 270 Indigenous Cultures** 3.0 SH [GESS]
 Explores practices of indigenous peoples around the world and uses the lens of globalization to examine present day issues. Examines the process of "modernization" and its effects on the role of the state and cultural preservation. Explores the role of indigenous peoples' values and knowledge related to resource management and environmental sustainability as well as cultural preservation.
Class Level Restriction: Freshman and Sophomore only.
- SOAN 280 Global Urban Studies** 3.0 SH []
 This course examines urban areas (cities) in a global context and is divided into four parts: global cities defined, living in cities, the health of cities, and the future of cities. Primary emphasis will be placed on analysis of "slums" and "ghettos" as well as the sustainable cities global movement.
Class Level Restriction: Sophomore and Junior and Senior only.
- SOAN 290 African Cultures** 3.0 SH [GESS]
 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.
Class Level Restriction: Junior and Senior only.
- SOAN 300 Social Theory** 3.0 SH []
 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.
Class Level Restriction: Junior and Senior only.

- SOAN 323 Refugees: Culture and Conflict** **3.0 SH** []
 This course looks at refugee groups around the world along with governmental and non-governmental organizations that service refugees. Explores the kinds of conflicts leading ethnic groups to become refugees; the options for resettlement for refugee groups; the issues related to resettlement; as well as how refugee groups adapt culturally to their new surroundings during the resettlement process; how "race," class, and gender impact both how refugees experience conflict and their integration into new communities. This course is intended to be a service learning course in that students are encouraged to enroll in the SOAN 050 community service at the International Institute.
Class Level Restriction: Junior and Senior only.
- SOAN 325 Youth Advocacy Services** **3.0 SH** []
 Covers a wide range of youth and family issues in the USA and abroad, including child abuse and neglect, adoption and foster care, special needs children, families and children, and child welfare practices. Private and government efforts to respond to these issues are explored and evaluated.
Class Level Restriction: Junior and Senior only.
- SOAN 330 Social Field Work Methods** **4.0 SH** []
 Designed for students considering human service, social work, or alternative education as a profession. Students learn about the social work profession and various social service systems. Students learn how to identify problems necessitating social work services and then devote time to skill development in interviewing, counseling, observing, and case work.
Prerequisite: Two of the following: SOAN 160, SOAN/WOM 170, SOAN 180.
Class Level Restriction: Junior and Senior only.
- SOAN 335 Gender & Masculinity** **3.0 SH** []
 This course examines the social construct of masculinity. What does it mean to be a male in contemporary American society? How does this compare with notions of manhood in other cultures and in other time periods? Readings include representative selections of the diverse literature on men and theories of masculinity. Also listed as WOM 335.
Prerequisite: SOAN/WOM 170.
Class Level Restriction: Junior and Senior only.
- SOAN 340 Peace and Conflict** **3.0 SH** []
 Traces the creation, causes and consequences of war, war tipping points, jus bellum iustum (just war theory) and bellum avertio (aversion of war) paradigms. Explores interpersonal, inter-group and international conflict, and resolution. Exposes students to cutting edge critical thinking around issues of violence and non-violent advocacy within the sociological framework of peace, war and social conflict.
Class Level Restriction: Junior and Senior only.
- SOAN 345 Advanced Studies in Culture** **1.0-3.0 SH** []
 Advanced analysis of cultures. The contents vary, and the title will be extended to describe the current topic. May be offered for variable credit from one to three semester hours. May be taken more than once provided the topics differ.
Class Level Restriction: Junior and Senior only.
- SOAN 360 Gender Theories** **3.0 SH** []
 Attempts to answer the questions of how and why gender oppression and discrimination occur. Covers a variety of theoretical perspectives and focuses on solutions for ending aggression and oppression. Also listed as WOM 360.
Prerequisite: SOAN/WOM 170.
Class Level Restriction: Junior and Senior only.
- SOAN 365 Global Perspectives of Women** **3.0 SH** []
 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.
Class Level Restriction: Junior and Senior only.

SOAN 375 Globalization and Culture 3.0 SH []

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.

Class Level Restriction: Junior and Senior only.

SOAN 385 Ethnographic Research 4.0-6.0 SH [GESS]

Qualitative research that includes participant observation and structured and unstructured interviews. Students will conduct independent field research of a student-selected, faculty-approved topic. They will then analyze the data they collect with the purpose of developing theories and writing an ethnography, a detailed description of a culture. May be offered for variable credit from four to six semester hours.

SOAN 390 Independent Study 1.0-12.0 SH []

Individual study under faculty supervision in any aspect of sociology or anthropology. Allows exploration of topics not considered in regular courses, or advanced work in areas like human services, criminology, archaeology, community organization, race, ethnicity, social class, gender roles, or family studies. May be taken for variable credit from one to twelve semester hours. May be taken more than once if topics differ.

Class Level Restriction: Junior and Senior only.

SOAN 395 Internship 3.0-12.0 SH []

Field experience in social service agency, organization, or institution. Application of interpersonal and organizational skills, plus knowledge gleaned from courses. Includes field sponsor supervision, periodic self-assessments, final paper, and weekly faculty contact. May be taken more than once if topics differ. Any internship may extend beyond one semester if the total semester hours in that internship do not exceed 12 semester hours. If an internship is extended beyond one semester, the extension may be as few as two semester hours. Offered on an independent contract basis.

Prerequisite: CAR 301.

Class Level Restriction: Junior and Senior only.

SOAN 399 Capstone Proposal 2.0 SH []

Prepares students for their capstones. Students research possible topics, write a formal proposal for their capstones, and defend this proposal orally to the SOAN department for feedback. Usually taken the semester preceding the capstone but can be taken concurrently.

Prerequisite: SOAN 300.

Class Level Restriction: Junior and Senior only

Field of Study Restrictions: Sociology and Anthropology Majors only.

SOAN 400 Senior Capstone Seminar 3.0-6.0 SH []

Research projects which include the application of theory and library research to contemporary social issues. May be offered for variable credit from three to six semester hours.

Prerequisite: SOAN 399.

Class Level Restriction: Senior only.

Spanish (SPAN)

SPAN 100 Introduction to Spanish 2.0 SH []

An introduction to Spanish and some of the skills needed for learning a second language. This is the first course of a three-course sequence for fulfillment of the language requirement (GE2L) in Spanish and is required for students with no previous study of Spanish.

Class Level Restriction: Freshman and Sophomore and Junior only.

SPAN 104 Elementary Spanish I 3.0 SH []

This course is the second in the three-course sequence to fulfill the language requirement (GE2L) in Spanish. Students become effective language learners as they develop basic communication skills in Spanish: speaking, listening, reading, and writing, using the present tense. They are also introduced to the cultures of the Hispanic world.

Prerequisite: Spanish 100 or placement.

- SPAN 105 Elementary Spanish II** **3.0 SH** **[GE2L]**
Continuation from SPAN 104. Fulfills the second language requirement. The course focuses on developing sufficient oral communication skills for students to survive in daily life interactions with Spanish speakers, including speaking in the past and simple future. (A student may receive credit for only one of the courses SPAN 105, SPAN 110, or SPAN 136.)
Prerequisite: SPAN 104 or placement.
- SPAN 110 Intensive Elementary Review** **3.0 SH** **[GE2L]**
A one-course intensive review of first year Spanish with emphasis on basic grammatical structure and on development of ability to speak Spanish. Fulfills the general education second language requirement for students needing only one semester of review. (A student may receive credit for only one of the courses SPAN 105, SPAN 110, or SPAN 136.)
Prerequisite: Placement.
- SPAN 136 Language Wkshp Abroad: Elem** **3.0-6.0 SH** **[GE2L]**
Elementary language study with native speakers at an academic institution or language learning center in a Spanish-speaking country. Offered only for study abroad but may include on-campus study in the case of shorter stays abroad. (A student may receive credit for only one of the courses SPAN 105, SPAN 110, or SPAN 136.)
Prerequisite: SPAN 104 or placement into SPAN 110.
- SPAN 204 Grammar and Conversation** **3.0 SH** **[]**
Conversation, vocabulary and idiom building, grammar review.
Prerequisite: SPAN 105 or SPAN 110 or SPAN 136 or placement.
- SPAN 205 Intermediate Review** **3.0 SH** **[]**
Continuing oral review and practice of the basic structures of Spanish. Develops pronunciation, listening comprehension, speaking, reading, and writing.
Prerequisite: SPAN 204 or placement.
- SPAN 210 Practical Spanish** **3.0 SH** **[]**
After the first-year language requirement, students have the opportunity to further develop their Spanish in a practical way. This includes working on Internet sites for reading skills, the use of film and broadcasts for listening comprehension and cultural learning, and a major project on a subject of personal interest in the context of Hispanic culture.
Prerequisite: SPAN 105 or SPAN 110 or SPAN 136 or placement.
- SPAN 216 Oral Expression & Conversation** **3.0 SH** **[]**
Emphasis on a variety of activities developing oral expression, as well as listening comprehension.
Prerequisite: SPAN 205 or placement.
- SPAN 220 Hispanic Civilization** **3.0-5.0 SH** **[]**
This course, typically taught on a Principia abroad program to a Spanish-speaking area, requires study and work in Spanish to understand the historical and contemporary civilization of the area. The title will be extended to describe the current area being studied. May be taken more than once provided the area culture studied is different.
Prerequisite: SPAN 216 or placement.
- SPAN 230 Hispanic Culture** **3.0 SH** **[]**
Backgrounds of Spanish and Spanish-American culture. Special focus on contemporary Spanish-speaking cultures, including Hispanic culture in the United States. Taught in Spanish, with readings in Spanish and English. The title will be extended to describe the current culture studied. May be taken more than once provided the cultures studied differ.
Prerequisite: SPAN 204 and SPAN 205.
- SPAN 236 Lang Wkshp Abroad:Intermediate** **3.0-6.0 SH** **[]**
Intermediate language study with native speakers at an academic institution or a language learning center in a Spanish-speaking country. May include on-campus study in the case of shorter stays abroad.
Prerequisite: SPAN 105, SPAN 110, SPAN 136, or placement.

- SPAN 240 Composition** **3.0 SH** []
 Writing in Spanish is the main activity of this course. Students will be supported in their writing activity with relevant grammatical explanations as evidenced by the needs shown in their writing. Some specific readings in Spanish will be used to generate ideas for creative writing.
Prerequisite: SPAN 205 or placement.
- SPAN 241 Phonetics & Diction** **1.0-3.0 SH** []
 Theory and practice of pronunciation of the Spanish of modern Spain and Spanish-America. Audio and computer software used for drill, recording, self-criticism. May be taken twice up to a total of three semester hours.
- SPAN 260 Intro to Hispanic Literature** **3.0 SH** []
 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.
Prerequisite: SPAN 216 or placement.
- SPAN 306 Advanced Oral Expression** **3.0 SH** []
 Advanced expression in Spanish through the use of drama, video, simulated situations. Discussion topics draw from current issues in the Hispanic world and human experience.
Prerequisite: SPAN 216.
Class Level Restriction: Junior and Senior only.
- SPAN 315 Advanced Grammar & Composition** **3.0 SH** []
 Translation and free composition, based on an intensive study of grammar, verbs, and idioms.
Prerequisite: SPAN 216.
- SPAN 316 Advanced Conversation** **3.0 SH** []
 Advanced language study with a focus on developing conversational skills. Offered on Principia abroads and for credit by examination.
Prerequisite: SPAN 315.
Class Level Restriction: Junior and Senior only.
- SPAN 325 Advanced Span Language Study** **3.0 SH** []
 Continuing work in mastery of the spoken language, with emphasis on everyday vocabulary, colloquial expressions, and idioms; introduction to translating and interpreting (consecutive and simultaneous) between English and Spanish.
Prerequisite: SPAN 315.
Class Level Restriction: Junior and Senior only.
- SPAN 330 Hispanic Culture Sem: Topics** **3.0 SH** []
 Advanced study of special topics in modern Hispanic culture. Readings and discussions of texts from authentic sources that reflect the uniqueness and diversity of the cultures studied through the use of movies, songs, media images, and art within historical, political, and social contexts. Allows some in-depth research on topics of special interest to students. The title will be extended to describe the current topic. May be taken twice up to a total of six semester hours provided the topics differ.
Prerequisite: SPAN 230 and SPAN 315 or placement.
Class Level Restriction: Junior and Senior only.
- SPAN 335 Spanish Applied Linguistics** **1.0 SH** []
 Students study the phonetic, phonological, morphological, syntactic, and semantic rules of Spanish to understand what rules govern the intuitions of a native speaker in selecting how to structure utterances for communication to others and to learn how this knowledge helps us explain and teach ourselves and others.
Prerequisite: SPAN 315.
Class Level Restriction: Junior and Senior only.

SPAN 336 Lang Wkshp Abroad: Advanced 3.0-6.0 SH []

Advanced language study with native speakers at an academic institution or a language learning center in a Spanish-speaking country. Offered for study abroad only but may include on-campus study in the case of shorter stays abroad.

Prerequisite: SPAN 315.

Class Level Restriction: Junior and Senior only.

SPAN 338 Language Acquisition: Spanish 3.0 SH []

Study in Spanish of theories of second language acquisition as applied to the learner's ability to develop a near-native control of the language. Students are trained in precise self-assessment of all their linguistic and intercultural communication skills, and develop a language portfolio along with an individualized plan for continuing progress in their learning and acquisition of the Spanish language.

Prerequisite: SPAN 216 or equivalent level.

Class Level Restriction: Sophomore and Junior and Senior only.

SPAN 355 Spanish Film 3.0 SH []

Combines the viewing and discussion of classic and contemporary Spanish films with the reading of related scripts and literature. In addition to written and oral responses to the films, students present either a brief acting project or a contemporary film from Spain or Latin America. Some background in reading literature in Spanish is needed.

Prerequisite: SPAN 216.

Class Level Restriction: Sophomore and Junior and Senior only.

SPAN 371 Classical Spanish Literature 3.0 SH [GEH]

Selected masterpieces of Spanish literature before 1700.

Prerequisite: SPAN 260 or other experience reading literature in Spanish.

Class Level Restriction: Junior and Senior only.

SPAN 372 Modern Hispanic Literature 3.0 SH []

Selected works from modern and contemporary literature of Spain and/or Latin America.

Prerequisite: SPAN 260 or other experience reading literature in Spanish.

Class Level Restriction: Junior and Senior only.

SPAN 380 Spanish Literature Seminar 3.0 SH [GEH]

Seminar in a special topic of the literature of Spain or Spanish America. Example: Cervantes' Don Quijote. The title will be extended to describe the current topic. Offered upon sufficient demand.

Prerequisite: SPAN 371 or SPAN 372.

Class Level Restriction: Junior and Senior only.

SPAN 410 Highlights of Hispanic Culture 1.0 SH []

This lecture series sets in context the major achievements of Spanish-speaking peoples in Spain and Latin America from an historical, cultural, and literary perspective.

Prerequisite: one Spanish course at the 300-level.

Class Level Restriction: Junior and Senior only.

SPAN 470 Spanish Capstone 3.0 SH []

An in-depth independent research project, typically consisting of a 20-page paper written in Spanish and utilizing sources in Spanish, and a public presentation of the findings during the last week of the semester.

Class Level Restriction: Junior and Senior only.

Special Studies (SPST)

SPST 081 PAC Executive Board 0.0 SH []

A non-credit course offered to members of the Public Affairs Conference Executive Board. All board members are engaged in substantive work for at least 25 hours during the semester in preparation for the annual conference. May be taken four times.

SPST 260 Building Learning Communities 1.0 SH []

This course focuses on the theory and practice of developing learning communities. Theory emphasizes stages of group development, communication skills, principles of feedback, and conflict resolution. Practice includes skill development in listening and varied communication techniques. Students will participate in activities that support the development of a cohesive learning community. Taught by Center for Teaching and Learning. Non-repeatable.

SPST 261 Learning Communities Abroad: 1.0 SH []

Course focuses on the theory and practice of developing learning communities within the context of another culture as part of an abroad/field program. Theory emphasizes stages of group development and communication skills. Practice includes skill development in communication techniques, as well as participating in and debriefing group building activities. May be taken twice if associated with a different abroad/field program.

SPST 270 International Field Experience 1.0 SH []

An experiential field course offered during a term break as an elective supplement to an associated course scheduled within the term. This course applies topics and content from the associated course (reflected in title extension) in an experiential or project-based learning environment at one or more international locations. Cultural context and global citizenship will be emphasized.

Prerequisite: Offered only in association with an Abroad Office approved International Field Experience.

SPST 280 Orientation Seminar 0.5-1.0 SH []

The orientation seminar is an opportunity for students to prepare academically, culturally, and logistically for upcoming abroads and field programs. Seminar meetings may include topics such as geography, cultural norms and standards, introduction to abroad course material, success strategies for studying abroad, or language orientation. Offered only in association with study abroads and field programs. The title will be extended to describe the current location. May be taken more than once if associated with a different abroad or field program. May be offered for variable credit from .5 to one semester hour. There will be a significant additional academic component when the course is offered for one semester hour.

Prerequisite: acceptance on the associated abroad or field program.

SPST 281 Reentry Seminar 1.0 SH []

The reentry seminar is an opportunity for students to articulate the personal and academic learning gained from their study abroad or field program experience. Students share their growth and experiences through reflection, writing assignments, and the creation of a documentary presentation for the community. Offered only in association with study abroads or field programs. The title will be extended to describe the current location. May be taken more than once if associated with a different abroad or field program.

Prerequisite: successful completion of the associated abroad or field program.

SPST 284 Field Studies 1.0-5.0 SH []

Offered only in association with Principia field programs, this course provides an interdisciplinary survey of contemporary issues in the destination city or region. These issues may include geography, cultural history, politics, economics, religion, foreign relations, environment, the arts, etc. The title will be extended to describe the current location. May be offered for variable credit from one to five semester hours. May be taken more than once if associated with a different location.

Prerequisite: acceptance on the associated field program.

SPST 285 Country Studies 1.0-5.0 SH []

Offered only in association with Principia abroad programs, this course provides an interdisciplinary survey of contemporary issues in the destination country or countries. These issues may include geography, cultural history, politics, economics, religion, foreign relations, environment, the arts, etc. The title will be extended to describe the current location. May be offered for variable credit from one to five semester hours. May be taken more than once if associated with a different location.

Prerequisite: acceptance on the associated abroad.

SPST 375 Internship 3.0-9.0 SH []

An opportunity to gain practical experience in one's chosen field of study. Offered on an independent contract basis for students who wish to incorporate an internship into their special major. Designed in collaboration with the special studies program chair, the internship coordinator, and their faculty advisor. Also offered, without independent course contract, on some abroads and field programs as a course for program participants. Designed to provide students with work experience in their discipline within the larger academic and cultural focus of the abroad or field program. Students' work includes metacognitive journals, a portfolio of work, interviews with professionals, paper writing, and field sponsor supervision. May include a service-learning component. May be taken for variable credit from three to nine semester hours. May be taken more than once if the internships differ, up to a total of 15 semester hours.

SPST 405 Capstone Project 2.0-10.0 SH []

Capstone projects are selected in accordance with student qualifications, interests, and needs. Projects must be approved by the student's special major advisory committee. The contents will vary, and the title will be extended to describe the current topic. May be offered for variable credit from two to ten semester hours. May be repeated up to a total of ten semester hours with advisory committee approval. Open only to approved special majors nearing the completion of their program.

Class Level Restriction: Junior and Senior only

Field of Study Restrictions: Special Major Majors only.

Sports Management (SMGT)**SMGT 360 Leadership 3.0 SH []**

Designed to survey the dynamic nature of leadership. Goals include: to explore basic theories and concepts of leadership, to identify personal leadership styles and learn how to adopt and use them, to improve and expand one's range of leadership skills, and to develop a personal approach to effective leadership by integrating personal leadership style and experience with leadership theory.

Class Level Restriction: Junior and Senior only.

SMGT 420 Focused Research in Sports Mgt 1.0-3.0 SH []

Designed to allow students the opportunity for focused research on topics of interest in one of four areas (marketing, operations, event and facility management, or leadership) within the field of sports management. May be offered for variable credit from one to three semester hours. May be repeated up to a total of six semester hours provided topics differ. Offered on an independent contract basis only.

Class Level Restriction: Junior and Senior only.

Sustainability (SUS)**SUS 151 Introduction to Sustainability 3.0 SH []**

An introduction to the basic principles underlying the topic of sustainability. Students discuss sustainability from different perspectives and scales, explore how sustainability relates to their lives and values, and demonstrate knowledge of sustainable practices and their effects on the economy, the environment, and social equity. Guest lecturers provide students with a view of contemporary issues from a multi-disciplinary approach.

Class Level Restriction: Freshman and Sophomore only.

SUS 250 Energy and Living Systems 3.0 SH []

In this course students begin to think about the mechanical and living systems in everyday life and how to make them more sustainable. Students learn a systems approach to thinking as they focus on the home and building energy systems such as insulation, conservation measures, and home energy generation important to sustaining our modern way of life.

SUS 260 Sustainable Development 3.0 SH []

An introduction to the interdisciplinary field of sustainable development. Drawing from the social, policy, and physical sciences, the course explores how the world economy can continue to develop in a way that is socially inclusive and environmentally sustainable and offers a broad overview of the key challenges and potential solutions to achieve sustainable development in the 21st century.

Prerequisite: SUS 151.

SUS 280 Topics in Sustainability 1.0-4.0 SH []

Offered when regular or visiting faculty are available to work with students on advanced topics in sustainability. May be offered on Principia abroads. The title will be extended to describe the current topic or region. May be repeated more than once for a maximum of 8 SH, provided the topics differ. Depending on Abroad timing, a star(*) grade may be offered until the following midterm.

SUS 395 Sustainability Internship 1.0-3.0 SH []

The issue of sustainability is one of the most theoretically and practically complex questions of our time. Experiential learning outside the classroom provides an opportunity to gain hands-on experience with corporations, organizations and agencies successfully acting as change agents in solving problems related to local, national and global sustainability. Available to students enrolled in any major degree discipline.

Class Level Restriction: Junior and Senior only.

SUS 401 Sustainability Project 1.0-3.0 SH []

Practical project under faculty supervision designed in accordance with student qualifications and interests. May be offered on a contract basis. May receive a star (*) grade if the project spans more than one semester, with a final grade assigned upon completion of the project. May be repeated up to a maximum of six semester hours, which may apply to the sustainability minor.

Class Level Restriction: Junior and Senior only.

Theatre (THEA)

THEA 050 Thea Practicum Mainstage Cast 0.0 SH []

Practical application in a mainstage production of classroom courses in theatre performance. Students develop character, analyze text, research cultural and historical background, and engage with an ensemble through a rehearsal process in preparation for performance.

THEA 051 Thea Practicum Studio Cast 0.0 SH []

Practical application in a studio production of classroom courses in theatre performance. Students develop character, analyze text, research cultural and historical background, and engage with an ensemble through a rehearsal process in preparation for performance.

THEA 052 Thea Practicum Mainstage Staff 0.0 SH []

Practical application in a mainstage production of classroom work in the non-performance aspects of theatre, including stage management, assistant direction, choreography, dramaturgy, business management, publicity, etc. Students gain experience in the creative and technical aspects of production.

THEA 053 Thea Practicum Studio Staff 0.0 SH []

Practical application in a studio production of classroom work in the non-performance aspects of theatre, including design, stage management, assistant direction, choreography, dramaturgy, business management, publicity, etc. Students gain experience in the creative and technical aspects of production.

THEA 054 Thea Practicum Mainstage Crew 0.0 SH []

Practical application in a mainstage production of classroom work in technical theatre, including set and costume construction, and hanging and focusing lights, as well as additional crew work. Students gain practical experience in the technical aspects of production.

THEA 055 Thea Practicum Studio Crew 0.0 SH []

Practical application in a studio production of classroom work in technical theatre, including set, costume, and lighting design, set and costume construction, and additional crew assignments. Students gain practical experience in the technical aspects of production.

THEA 101 Acting I 3.0 SH [GEA]

Basic acting technique and improvisation methods. Includes voice work and stage movement.

THEA 102	Oral Interpretation	3.0 SH	[GEA]
<p>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.</p> <p>Class Level Restriction: Freshman and Sophomore only.</p>			
THEA 140	Stagecraft	3.0 SH	[]
<p>An introduction to basic design and construction techniques, and may include scene painting and lighting, in support of department productions.</p> <p>Fee=\$50.00.</p>			
THEA 201	Acting II	3.0 SH	[]
<p>Continues work done in THEA 101, with added emphasis on more advanced monologues and scene study. Some work may explore dramaturgy beyond contemporary naturalism.</p> <p>Prerequisite: THEA 101.</p>			
THEA 210	Dramatic Literature	3.0 SH	[]
<p>A survey of dramatic literature from the 5th century B.C.E. to present day. Representative plays will be read with emphasis on theatre as live performance. Discussions will explore the social, political, and cultural context of the plays and performance.</p> <p>Prerequisite: THEA 101 and THEA 201.</p>			
THEA 220	Intro to Technical Theatre	3.0 SH	[GEA]
<p>A project-based course focusing on three major aspects of theatrical design: set, costume, and lighting. Students will produce set and costume designs and learn fundamentals and practical skills with lighting. The course may also include technical theatre topics like scene painting, prop making, and stage makeup, depending on projects that may be happening in the theatre in a given semester.</p> <p>Fee=\$50.00.</p>			
THEA 225	Voice and Speech	3.0 SH	[GEA]
<p>This course introduces vocal techniques, including Linklater voice work designed to "free the natural voice" of the student actor or public speaker. Through breathing, relaxation, alignment, and physical awareness exercises, students increase their ability to be expressive and honest in their vocal communication. Texts used include poetry, Shakespeare sonnets, and dramatic literature.</p>			
THEA 230	Theatre Movement	3.0 SH	[GEA]
<p>Focuses on movement techniques inspired by the demands of the stage. The content varies, and the title will be extended to describe the current topic. Topics covered can include: Alexander Technique, LMA/Bartenieff, Suzuki/Viewpoints. May be taken more than once provided the topics differ.</p>			
THEA 260	Theatre Topics	1.0-3.0 SH	[]
<p>Group study of selected topics in theatre. The title will be extended to describe the current topic. May be taken more than once provided the topics differ.</p>			
THEA 272	The History of Theatre	3.0 SH	[]
<p>The course examines the history of theatre within political, religious, socio-economic, and technological contexts. Both Western and non-Western influential theatrical venues, writers and their works, actors, designers, directors, and theoreticians are studied.</p>			
THEA 285	Theatre Costuming	3.0 SH	[]
<p>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.</p>			
THEA 301	Acting III	3.0 SH	[]
<p>This course extends the performer's acting technique developed in Acting I and Acting II. Scene work includes some specific period styles and is worked to performance level. Specific emphasis is given to vocal and physical development of the characters performed.</p> <p>Prerequisite: THEA 101 and THEA 201.</p> <p>Class Level Restriction: Sophomore and Junior and Senior only.</p>			

- THEA 325 Voice for the Actor** **3.0 SH** []
 Building on the skills developed in Voice and Speech, this class explores the Linklater vocal progression in greater depth and incorporates techniques of other voice teachers, such as Patsy Rodenburg and Cecily Berry. Students analyze and perform more challenging texts both individually and as an ensemble.
Prerequisite: THEA 225.
Class Level Restriction: Junior and Senior only
Field of Study Restrictions: Theatre Majors and/or Minors only.
- THEA 340 Advanced Voice and Movement** **3.0 SH** []
 Students will build on skills developed in Voice and Speech and in Theatre Movement, deepening their understanding and practice of techniques necessary to the actor's craft.
Prerequisite: THEA 225 and THEA 230.
Field of Study Restrictions: Theatre Majors and/or Minors only.
- THEA 350 Thea Practicum Mainstage Cast** **1.0-3.0 SH** []
 Practical application in a mainstage production of classroom courses in theatre performance. Students develop character, analyze text, research cultural and historical background, and engage with an ensemble through a rehearsal process in preparation for performance. May be offered for variable credit from one to three semester hours. May be taken more than once.
- THEA 351 Thea Practicum Studio Cast** **1.0-3.0 SH** []
 Practical application in a studio production of classroom courses in theatre performance. Students develop character, analyze text, research cultural and historical background, and engage with an ensemble through a rehearsal process in preparation for performance. May be offered for variable credit from one to three semester hours. May be taken more than once.
- THEA 352 Thea Practicum Mainstage Staff** **1.0-3.0 SH** []
 Practical application in a mainstage production of classroom work in the management area including stage management, assistant direction, choreography, dramaturgy, business management, publicity, etc. Students gain experience in the creative and technical aspects of production. May be offered for variable credit from one to three semester hours. May be taken more than once.
- THEA 353 Thea Practicum Studio Staff** **1.0-3.0 SH** []
 Practical application in a studio production of classroom work in the non-performance aspects of theatre, including design, stage management, assistant direction, choreography, dramaturgy, business management, publicity, etc. Students gain experience in the creative and technical aspects of production. May be offered for variable credit from one to three semester hours. May be taken more than once.
- THEA 354 Thea Practicum Mainstage Crew** **1.0-3.0 SH** []
 Practical application in a mainstage production of classroom work in technical theatre, including set and costume construction, hanging and focusing lights, as well as additional crew work. Students gain experience in the technical aspects of production. May be offered for variable credit from one to three semester hours. May be taken more than once.
- THEA 355 Thea Practicum Studio Crew** **1.0-3.0 SH** []
 Practical application in a studio production of classroom work in technical theatre, including set and costume construction, hanging and focusing lights, as well as additional crew work. Students gain experience in the technical aspects of production. May be offered for variable credit from one to three semester hours. May be taken more than once.
- THEA 360 Acting Shakespeare** **6.0 SH** [GEA]
 Trains students in the fundamentals of Shakespearean acting. Through workshops, lectures, and instruction from the Globe Theatre in London, the Shakespeare Birthplace Trust in Stratford-upon-Avon, and the Principia classroom, students learn the cultural and historical context of Shakespeare's plays and the fundamentals of textual analysis and performance. The course culminates in a full production of one of Shakespeare's plays. Offered only on Principia abroads.

THEA 401 Advanced Acting Topics 3.0 SH []

Advanced course in acting focused on specific performance techniques. Areas covered are style, audition techniques, improvisation, voice, movement, and specific acting methods such as the Chekhov Technique. Subject matter will change based on the needs of the students. The title will be extended to describe the current topic. May be taken more than once provided the topics differ.

Prerequisite: THEA 101, THEA 201, and THEA 301.

Class Level Restriction: Junior and Senior only.

THEA 402 Spec Creative or Research Proj 3.0 SH []

Advanced creative or research project in performance or scholarship. May be repeated for a maximum of twelve semester hours, three of which may apply toward the major or minor.

Class Level Restriction: Junior and Senior only

Field of Study Restrictions: Theatre Majors and/or Minors only.

THEA 420 Directing 4.0 SH []

Practical application of skills acquired in Acting I, II, and Practicum through working with actors to direct scenes and one-act plays. The fundamental directing principles of text analysis, communication, picturization, blocking, and design principles are learned and practiced.

Prerequisite: THEA 101, THEA 201, either THEA 210 or THEA 272, and either THEA 301 or THEA 352.

Class Level Restriction: Junior and Senior only

Fee=\$50.00.

THEA 494 Theatre or Dance Internship 3.0-15.0 SH []

Practical experience in one of the various areas of theatre and dance (management, performance, technical theatre, or dramaturgy). May be offered for variable credit from three to 15 semester hours. May be repeated up to a total of 15 semester hours.

Class Level Restriction: Sophomore and Junior and Senior only.

Women's and Gender Studies (WOM)

WOM 170 Gender Paradigms 3.0 SH [GESS]

Examines underlying assumptions about male and female roles throughout history, then focuses on contemporary issues. Addresses the questions of why status differences exist between the sexes, how people are socialized into stereotyped sex roles, and how individuals can move beyond limitations imposed by prescribed sex roles. Also listed as SOAN 170.

Class Level Restriction: Freshman and Sophomore only.

WOM 335 Gender & Masculinity 3.0 SH []

This course examines the social construct of masculinity. What does it mean to be a male in contemporary American society? How does this compare with notions of manhood in other cultures and in other time periods? Readings include representative selections of the diverse literature on men and theories of masculinity. Also listed as SOAN 335.

Prerequisite: SOAN/WOM 170.

Class Level Restriction: Junior and Senior only.

WOM 360 Gender Theories 3.0 SH []

Attempts to answer the questions of how and why gender oppression and discrimination occur. Covers a variety of theoretical perspectives and focuses on solutions for ending aggression and oppression. Also listed as SOAN 360.

Prerequisite: SOAN/WOM 170.

Class Level Restriction: Junior and Senior only.

WOM 365 Global Perspectives of Women 3.0 SH []

An in-depth study of the critical areas of concern for women's empowerment around the world.

The course includes theoretical critiques of women's movements and methodologies. Also listed as SOAN 365.

Class Level Restriction: Junior and Senior only.

WOM 410 Senior Seminar 3.0 SH []

The senior seminar serves to culminate the minor in women's and gender studies. A topic and/or experiential project is selected and treated in depth with readings, discussion, and/or implementation. Students bring with them to the course depth and variety from two electives in women's and gender studies.

Prerequisite: SOAN/WOM 170, SOAN/WOM 360, and two electives in women's and gender studies.

Class Level Restriction: Junior and Senior only.

World Literature (WLIT)**WLIT 131 Stories Around the Globe 3.0 SH [GEH]**

Students gain insight into different cultures as well as their own through careful reading and discussion of stories from different countries. Students explore the relationship between literature and culture in class discussions and writing.

Class Level Restriction: Freshman and Sophomore only.

WLIT 179 Reading French Society in Film 3.0 SH [GEH]

This course looks at different aspects of French society through both literature and film. These texts serve as tools to both understand French society and to analyze the interplay between literary text and film. Taught in English. No prior experience with French necessary.

WLIT 231 Themes and Forms 3.0 SH [GEH]

Centers on a literary theme or form on literature from around the world. The contents vary, and the title will be extended to describe the current topic or form.

WLIT 421 Masterpieces of World Lit 1.0-3.0 SH []

Close study of individual great works in the context of the development of literary tradition. Seminar conducted by English and foreign language faculty. May be offered for variable credit from one to three semester hours.

Prerequisite: one English course and 3.0 GPA.

Class Level Restriction: Junior and Senior only.

Writing (WRIT)**WRIT 099 Phase Four Writing Seminar 0.0 SH []**

A required course for students who have not completed phase four of the all-college writing requirement within 60 semester 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.

Class Level Restriction: Junior and Senior only.

WRIT 120 Reading Words and the World 3.0 SH [GESS]

This course focuses on the ethnographic study of reading behavior in social contexts. Students will read various social science texts including case studies, ethnographies, biographies, and autobiographies. Students will research, write and discuss findings, and work with others to apply reading theory to success in social contexts. In addition, students will examine reading behaviors that contribute to success in college.

Class Level Restriction: Freshman and Sophomore only.

WRIT 140 Writing for College Students 3.0 SH []

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

WRIT 151 Fundamentals of Acad Writing 3.0 SH []

A study of fundamentals applied by academic writers in the arts, natural sciences, social sciences, and humanities. This course examines how current conventions for reading and writing are used in disciplines associated with these subject areas. Students are introduced to thesis (persuasive) writing, revision strategies, and five habits of academic writing (analysis, narration, exploration, experimentation, and metacognition).

WRIT 152	Revising and Editing	2.0 SH	[]
<p>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 proofreading and application of revision strategies appropriate to different academic disciplines.</p>			
WRIT 153	Editing and Style	2.0 SH	[]
<p>Course investigates different strategies for editing and revising text, particularly at the sentence and paragraph level, applied by academic writers in the arts, natural sciences, social sciences, and humanities. Writers will learn to understand and demonstrate versatility in writing and editing to add clarity, style, and authority to both academic and professional pieces of writing.</p>			
WRIT 155	Grammar and Punctuation	2.0 SH	[]
<p>This course provides instruction and practice in using current conventions of grammar and punctuation in academic and professional writing.</p>			
WRIT 156	Multilingual Literacy	2.0 SH	[]
<p>This course provides instruction and practice in the knowledge, skills, and dispositions necessary for academic reading and writing across multiple disciplines when English is not a native language. It addresses the needs and strengths of readers and writers who are multilingual.</p>			
WRIT 157	Research Fundamentals	2.0 SH	[]
<p>This course offers instruction and practice in the fundamental knowledge, skills, and dispositions necessary for college-level research. It encourages strategies and habits that help students to avoid unintentional plagiarism.</p>			
WRIT 158	Reading and Writing Inquiry	3.0 SH	[GEH]
<p>This course provides instruction and practice in the knowledge, skills, dispositions, and strategies that readers and writers need for engaging with challenging academic texts across disciplines. Students will read texts on a pertinent topic and join the conversation through writing. The course encourages critical reading habits such as examining images, language and logic, asking critical questions, and weighing arguments.</p>			
WRIT 159	Journaling: Writer's Practice	2.0 SH	[]
<p>Application of journaling as a tool for thinking. This course also includes examination of types of journaling associated with five habits of successful writers: analysis, narrative, exploration, experimentation, and metacognition. Creative modes of thinking and writing are considered and connections to academic writing encouraged. Students develop journal writing into more polished, often creative, pieces.</p>			
WRIT 230	Analytical Reading	2.0 SH	[]
<p>Development of skills, approaches, and techniques for academic reading. Emphasis is placed on the thinking skills that contribute to analytical reading (e.g., questioning and making critical evaluations). May be taken three times.</p>			
WRIT 292	Reading the Liberal Arts	3.0 SH	[]
<p>Literacy strategies are linked to content knowledge from various academic disciplines to improve analytical thinking about difficult texts. Social science theory is examined to understand why strategies for analytical discourse make reading, writing, and research effective. While this course is recommended for students preparing for major portfolio or capstone, all students are welcome.</p>			
WRIT 350	Teaching the Writing Process	3.0 SH	[]
<p>Development of skills, strategies, and attitudes needed for tutoring, writing, and excelling at in-depth writing and research projects. Theories and philosophies of the writing and teaching processes are explored. Research skills are covered as well. Required for Principia writing/research tutors. Appropriate for students anticipating extensive writing in graduate school. Serves as an elective for Educational Studies minor.</p>			
<p>Class Level Restriction: Sophomore and Junior and Senior only.</p>			

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 Church or Sunday School.

Personal Expectations

Community Expectations

Principia's primary purpose is to serve the Cause of Christian Science. Fulfilling this purpose includes participating in a "community of practice" where all are working to grow in their understanding and practice of Christian Science. Therefore, students who enroll at Principia must be active students of Christian Science.

Prior to applying to Principia, applicants are expected to have relied on Christian Science for all their needs, including physical healing, and they should have regularly attended a Christian Science church and/or Sunday School for at least six months.

Principia also expects community members, including students, to uphold community standards beginning at least six months prior to enrollment at the College. These standards and expectations include freedom from any use of illegal or alcohol- or tobacco- related substances, or any form of medical regimen. You are also expected to be free from engagement in any premarital or extra-marital sexual activities.

Academic Preparation

To ensure a smooth transition from high school to college, we recommend that students will have taken 16 academic courses in their high school program.

The following minimum distribution of high school courses is strongly recommended in preparation for Principia College:

- 4 years of English (composition, literature)
- 4 years of math, including pre-calculus or an equivalent (such as math analysis or college algebra)
- 3 years of natural science, including some lab work
- 2 years of history and social science (including U.S. history)
- 2 or 3 years of the same foreign language
- 2 years of academic electives (from any of the five academic categories above)

In order to enroll in Principia College, students must submit evidence of graduation from high school by

1. a final transcript which shows that a high school diploma has been earned; or
2. a document showing that the GED (General Education Diploma) has been received.

Students who take the GED must have a minimum total score of 580 and no score below 145 on any of the four individual tests. (The maximum possible score for all four GED tests is 800.)

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/ACT

All applicants to Principia College, including international applicants and transfers, are required to take either the Scholastic Assessment Test (SAT) or the American College Testing Board Exam (ACT). 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 from taking the SAT or ACT, at the discretion of the Admissions Committee.

Students may arrange to take these tests through their high school guidance counselor or by contacting the College Board or ACT, Inc. Principia's College Entrance Board Examination (CEEB) code is 1630 and the ACT 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. U.S. citizens who attend secondary school outside of the U.S. where classes are not conducted in English are required to take the TOEFL exam. The TOEFL scores must be received by the Office of Admissions and Financial Aid before the application deadline. Principia's TOEFL code is 1630.

As previously stated, first-time international applicants are also required to take the SAT Reasoning Test or the ACT examination.

How to Apply for Admission and Scholarships

Step 1

Principia College accepts the Common Application (Common App). For your convenience, there is no application fee. By completing the application for admission, students will automatically be considered for all scholarships. The information contained in the student's application file will be used to match the student with the appropriate scholarship(s). This process will occur on a rolling basis as funds are available. No additional scholarship application is needed.

Reference forms are also available as PDF files at www.admissions.principiacollege.edu/apply. 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 all application items electronically as early as possible, beginning in the fall, to apply for the following year. Application deadlines for domestic students are as follows:

Fall Semester	March 1 priority deadline for those applying for admission, scholarship, and financial aid. The online application will be available September 1, at which time the rolling admissions process will begin.
Spring Semester	December 15 for those applying for admission, scholarship, and financial aid.

For international application deadlines, please see below.

For the most current information about the scholarship program, please visit www.principiacollege.edu/scholarships.

Step 3

If you are applying for financial aid, the deadline is March 1 for complete applications, including current tax returns. For further information about financial aid, visit www.principiacollege.edu/finaid.

Spring semester admissions applicants who also plan to apply for financial aid must contact the Office of Admissions and Financial Aid regarding the deadline for submitting financial aid applications.

If you have additional questions about admissions or scholarships, contact your admissions counselor or contact the Office of Admissions and Financial Aid:

Principia College
Office of Admissions and Financial Aid
One Maybeck Place
Elsah, IL 62028
Admissions phone: 800.277.4648, ext. 2802
Admissions phone: 618.374.5181
Email: collegeadmissions@principia.edu
Fax: 618.374.4000
website: www.principiacollege.edu/admissions

First-Time Freshmen

The following items, constituting a complete application for a first-time freshman, must be received by the Office of Admissions and Financial Aid before the application can be considered by the Admissions Committee:

- Online application (Common App)
- Two Christian Science references
- One academic reference
- Guidance counselor reference (not applicable to transfers and most international students)
- SAT or ACT scores
- High school transcript, including courses in progress

Once we've received your completed application (including references), your materials will be reviewed by the Admissions Committee. Reviewing your application may take up to two weeks.

Once admitted, a deposit (an acknowledgment of acceptance) of US \$100 must be paid by May 1 to reserve space in the new student class (see Reservation Deposits (<http://admissions.principiacollege.edu/admit>)).

Transfer Students

We welcome applications from students enrolled at other colleges who wish to transfer to Principia College. Please see Principia's residency requirement (p. 23) which may affect transfers.

To apply as a transfer student, follow the general admissions plan outlined above. (Note: Transfer students do not need to submit a guidance counselor reference). You must also arrange to have an official final high school transcript and official college transcripts representing all previous college work sent to the Office of Admissions and Financial Aid, including a listing of college courses in progress.

In addition, if you have previously taken the SAT 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. (See Academic and Non-Academic Credit Rules (p. 232).)

International Students

Principia College welcomes qualified applicants from all countries. Two programs are available for international students: the regular degree program leading to a B.A. or B.S. degree, and the one-year enrichment program designed for non-degree seeking students. International students must be 18 years of age or older prior to enrolling at Principia College. Canadian citizens and Permanent Lawful Residents follow the same application procedures as U.S. citizens. If applying for financial aid from Principia, international applicants who already hold a college or university degree are eligible only for the enrichment program. Students enrolled in the one-year enrichment program are not eligible to play varsity (competitive) sports at Principia per NCAA Division III regulations. All international applicants must have completed secondary school and have earned a diploma or certificate

of completion, which makes them eligible for admission to higher or advanced education in their home country.

The application deadline for international students is 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
International Admissions Counselor
One Maybeck Place
Elsah, IL 62028
USA

Telephone: 618.374.5179
Email: intladmissions@principia.edu
Fax: 618.374.4000
website: www.principiacollege.edu/international

Non-Traditional Students

Principia welcomes students of any age provided admission requirements have been fulfilled. In order to ensure that Principia can best meet the needs of non-traditional students (students who are married, single parents, or 25 or older), we require that non-traditional students living in the U.S. visit Principia during the academic year prior to an admissions decision. Such issues as employment, financial aid, schooling for children, and housing needs can be discussed in person with appropriate officials at that time.

Returning Students

If a student has been away from Principia for two semesters or more, for any reason, a new application is required. The following items constitute a complete application:

- Online application (Common App)
- 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 from any suspension, an application including all of the listed elements for returning students is required and additional requirements for admission may be necessary.

Financial Aid

In a real sense, every student admitted to Principia receives financial aid because income from tuition and fees covers less than 25% of Principia's operating budget. Income from our endowment and gifts from generous donors pay the balance.

Principia College provides a generous financial aid program which is based on individual family need. Grants, loans and employment are available to qualified students who submit applications by the due date. Applications submitted after this date will be considered and awards made as long as funds are available. Last year Principia awarded more than \$10 million in merit scholarships and need-based aid to approximately 90% of the enrolled students.

Application Process

A student must apply for each year that financial aid is requested. Financial aid is available through completion of a normal academic program for eight semesters. Exceptions require special review and approval.

New students should submit their financial aid applications at the same time as their admissions application, but no later than March 1. Applications received after that date will be considered and awards made as long as funds are available. Continuing students should submit complete financial aid packages no later than April 15.

The items shown below are needed to submit your application to the financial aid committee for consideration. Please mail, email or fax them to:

Principia College
Office of Admissions and Financial Aid
One Maybeck Place
Elsah, IL 62028
Fax: 618.374.4000
Email: finaid@principia.edu

1. College Scholarship Service PROFILE (*New students only, or those applying for financial aid for the first time*)
 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 (<http://www.collegeboard.com>). Principia's CSS code number is 1630.
2. Principia's Application for Financial Aid (*Returning Students Only*)
 Every returning student must complete the financial aid application in BannerWeb.
3. Federal Income Tax Returns
 Every application must be accompanied by a complete copy of the parent's and the student's tax return for the most recent tax year. New students may submit last year's tax return for an estimated award.

After a student is admitted and upon receipt of all necessary documents mentioned above, the financial aid committee will notify students about aid awarded.

The Office of Admissions and Financial Aid would be happy to answer your questions at any time. You may reach them at 618.374.5187 or 800.277.4648 ext. 2813. The email address is finaid@principia.edu.

Application Process for International Students

Students must complete the “Principia Application for Financial Aid for International Students” and the “Certification of Finances” forms 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–Gifts that do not need to be repaid and are part of most financial aid packages.

Loans–Financial aid packages usually include a low-interest student loan. These loans are payable in monthly installments beginning nine months after graduation or when the student ceases to be enrolled in any educational institution at least half time.

Outside Resources

Students are encouraged to actively pursue outside sources of college funding from their community, employers, and civic organizations.

Conditions Governing Financial Aid Awards

Recipients of financial aid awards are required to maintain satisfactory academic progress (p. 230) 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 Student Employment as soon as they arrive on campus. While it is not feasible for a student to cover the entire cost of a Principia education by working on campus, income earned through student employment can be a significant help toward meeting expenses.

Scholarships

Principia’s generous donors provide financial support for several different types of scholarships for qualifying 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	1420	30
Chairman's	3/4 tuition	3.8	1380	29
President's	1/2 tuition	3.7	1340	28
Dean's	1/4 tuition	3.6	1280	27

All of these scholarships are available to first-time freshmen. Transfer students are eligible to receive the Dean's scholarship (3.5 or higher College GPA required) or the Arthur F. Schulz Jr. Alumni Scholarship (3.0 or higher College GPA required and must be the child or grandchild of Principia Alumni). Eligibility for academic scholarships is automatically determined upon submission of a complete Admissions application.

Arthur F. Schulz Jr. Alumni 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. First-time freshmen must have a 3.0 high school GPA to qualify; transfer students must have a 3.0 or higher college GPA. Eligibility for this scholarship is automatically determined upon submission of a complete Admissions application.

Founders' Scholarship

Named for Principia's founder, Mary Kimball Morgan, and the many other dedicated educators committed to its ideals, the Founders' Scholarship is awarded to prospective students who have demonstrated a significant commitment to Christian Science, good character, academics, and citizenship through participation in varied activities. The annual value varies, and both first-time freshmen and transfer students are eligible. Scholarship awards are automatically determined upon submission of a complete Admissions application.

DiscoveryBound National Leadership Council (NLC) Scholarship

This scholarship recognizes the hard work and dedication of students graduating from the NLC program, a multi-year leadership program for high-school-age Christian Scientists across the country that is dedicated to fostering spiritual growth, leadership qualities, and a service perspective on life. This renewable scholarship is valued at \$5,000 annually.

Scholarship Renewal

Each scholarship described above is renewable provided the specific renewal criteria are maintained. Scholars will receive renewal information each year from the Scholarship Committee.

Costs and Fees

Costs ¹

Costs of the Principia College program for the year 2017-2018 are as follows:

Fixed Charges (Tuition, Room, Board, and Fees)

Fixed charges include tuition, Traditional Meal Plan², and cost of residence on campus during each semester (two per year), academic counseling services, admission to all on-campus athletic events, admission to The Principia Concert and Lecture Series, subscriptions to annual and weekly student publications, and other services. They do not include books, personal expenses, laboratory fees,

miscellaneous fees, student activity fees, or the cost of residence on campus between semesters.

Resident Students

	Year	Semester
Tuition	\$28,320	\$14,160
Room	5,430	2,715
Board	6,000	3,000
	\$39,750	\$19,875

Day Students

	Year	Semester
Tuition	\$28,320	\$14,160

This tuition includes all day student charges except meals taken on campus, occasional overnight residence on campus, student activity fees, books, personal expenses, laboratory fees, and miscellaneous fees.

¹ Because of the possibility of substantial increases beyond our control in our operation expenses, the financial arrangements published in this catalog are subject to revision at the beginning of any semester. Notification of any necessary change in rates will be sent to you at least 30 days prior to the beginning of the semester.

² The Traditional Meal Plan is a declining balance meal plan that provides sufficient funds each semester to cover twenty-one meals per week, subject to student food choices. Meal plan dollars can be used in both the Student Dining Room and the Piasa Pub. \$100 of the meal plan dollars are put into a plus account and can also be used in the College Store. Those who choose to eat more meals in the Pub, larger quantities of food, and/or more expensive specialty food items, may enroll in an upgraded meal plan or larger plus account. Meal plan and plus account enrollments occur twice a year, by semester. More information on meal plans and plus accounts may be found at the College Dining Services website.

Fees and Personal Expenses

Laboratory and Miscellaneous Fees

These charges, with a few exceptions, are due in full when billed each semester and apply to resident and day students.

Student Fees

(billed to all student master accounts on a term basis)

Student activity fee	\$350 (\$175 per semester)
Athletics fee	\$125 (\$62.50 per semester)
Technology fee	\$125 (\$62.50 per semester)

Student Fees (optional)

Parking fee	\$100 (\$50 per semester)
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Academic Fees (billed to student accounts as incurred)

Student software and online testing fee	\$170 (first-time students only)
Independent study/course contract administrative fee	\$50

Overload tuition fee	\$944 per semester hour (SH) over 18 SH
Independent study off campus tuition fee	\$944 per SH
Internship for academic credit tuition fee	\$944 per SH
Principia Abroad administrative fee	\$500 per program
Regular audit	\$100 per course
Credit by examination	\$100 per course

Laboratory Fees

For lab fees, see the course descriptions (<http://catalog.principiacollege.edu/courses-instruction/courses>). Fees cover overhead for class and not all individual student expenses.

Registrar's Fees

Late registration fee	\$25
Late schedule change fee	\$25
Late graduation application fee	\$50
Transcript fee	\$10

Personal Expenses

Expenses for personal items, general school supplies, services, dues, etc., average between \$20 and \$50 monthly. Students are expected to use cash, check, or credit/ATM card to pay for their school supplies, fees, and other items and services available through the College Store and otherwise. Miscellaneous fees of the kind described above are due at time of purchase. These items may not be charged to the student's account.

Each semester, all students on a meal plan are given \$100 on a Plus Account that can be used in the College Store to make personal purchases. This Plus Account can also be used in the Student Dining Room and Pub. Additional points can be purchased with cash or credit card and added to the student's Plus Account during the semester for a nominal fee.

Textbooks are the biggest personal expense incurred by students and generally average \$500 each semester—depending on the courses being taken. Information on course textbooks is available online in the Course Information Sheet (<https://prinweb.principia.edu/internal/aca/syllabi>) for each course. Students are responsible for purchasing their own textbooks from any source of their choosing. They should make sure they are ordering the correct title, author, and edition. Books should be in the student's possession by the first day of classes.

Student Health Insurance Requirement

Principia policy requires that all students attending the College have health insurance coverage.

Principia College students who are US citizens or permanent residents must demonstrate they are covered by an ACA-approved health insurance plan. If unable to obtain coverage through a parent's insurance plan or the Health Insurance Marketplace, Principia College has identified a student health insurance plan which may be purchased to meet this requirement. Students who do not provide proof of

ACA-approved health insurance by August 6 will be automatically enrolled in and billed for this plan.

Principia College international students must demonstrate they are covered by a health insurance plan that is valid in the US and has a national network of health care providers. Principia's International Student Program Manager can provide information on insurance plan options and is available to assist international students in enrolling in the plan of their choice.

For more information on the College's student health requirement, including deadlines for demonstrating coverage and details and costs of the default insurance plan please contact the Admissions Office.

Payments

Principia College students are expected to pay their bills by the due dates of each PrinBill. All students will be automatically enrolled in a payment plan each semester.

Education at The Principia: Policy 20

The administration, faculty, staff, and student body are expected to adhere to Policy 20 from *Education at The Principia* as stated below:

The Principia shall conduct its activities on the basis that all obligations of whatever nature incurred by or due to The Principia shall be met promptly and fully.

The practices of the business department shall not be controlled by sentiment and shall be based upon the inspiration of the Golden Rule. This policy shall not only govern the business dealings of the institution and its members in contractual or financial matters, but shall be reflected also in the demand that all obligations resting upon members of the administration, faculty, staff, and student body as members of this educational community shall be met squarely and promptly. (pp. 235-236)

www.PrinBill.com

PrinBill is Principia's online billing and bill payment service. Principia bills are viewable online and payments can be made using secure online access. All PrinBill accounts have a personal, secure login. More information on PrinBill, payment plans, and authorized users will be communicated to enrolled students and families prior to the start of school.

Monthly Billing Statements

Students will receive email communication when the monthly eStatement is available online. Current account activity can be viewed throughout the month. Authorized users can be set up by the students to view their eStatement and make online payments. The first payment of the school year is due by August 26. Communication regarding delinquent accounts is with the student. Authorized users may be included in this communication.

Student Responsibility for Payments

Principia holds the student primarily responsible for ensuring that payments are made by the due date. Each student is expected to be aware of the status of her/his PrinBill account each month, even though an authorized user might be making the

payment. If an account becomes past due, the student is responsible for resolving the situation in demonstration of Policy 20 of the “Purpose and Policies of The Principia.”

PrinBill Payment Methods

Available payment methods include electronic bank withdrawals, credit card payments, or checks. Credit card payments incur a convenience fee of 2.75% (\$3.00 minimum per transaction). Students are encouraged to pay by electronic bank withdrawal. There are no fees for paying by electronic bank withdrawal. Payments must be received by the 26th of the month.

All checks written for payment of student accounts must be on U.S. banks, in U.S. dollars, and made payable to “The Principia.” Please send them to:

The Principia
Attention: Cashier
13201 Clayton Road
St. Louis, MO 63131

Insufficient Funds and Declined Payments

There will be a service charge of \$20 for each returned or declined payment.

Late Fee

A 1% service charge on delinquent amounts will be billed monthly.

Past Due Accounts

Failure to pay charges when due or according to an approved payment plan classifies the amount as past due. Unless corrected, this could lead to financial suspension of the student. It is important to communicate with Billing Services if there are problems so that solutions can be worked out.

Accounts must be kept current on an ongoing basis. Students may not be allowed to register with their class group for the next semester’s classes unless the account is current. Students whose accounts are past due at the end of the semester will be placed on financial suspension, prohibiting admission to classes and participation in sports and other activities (including working on campus or living in campus housing) until satisfactory arrangements have been completed with Billing Services.

Grades, Transcripts, Diplomas

Grades and transcripts are furnished on request provided that all financial obligations to Principia have been met. Transcript requests may be submitted to the Registrar’s Office via either our secure online ordering system (electronic or paper delivery) or in person in the Registrar's Office (paper delivery only). To place online orders, current students and former students who have maintained an account may log in via BannerWeb (SSB); (<http://www.principia.edu/bannerweb>) former students who are not able to access BannerWeb should log in via Principia's eScrip-Safe (<https://iwantmytranscript.com/principia>) page. More information about ordering transcripts can be found at www.principiacollege.edu/transcriptrequest.

Diplomas are issued to graduates when their accounts are paid in full.

Reservation Deposits

New Resident Students

When an applicant has been accepted, a good-faith deposit of \$100 is required to demonstrate the student's intention to enroll. The deposit is credited to the student's account when the student is fully enrolled. No future reservation deposits are required as long as the student stays enrolled at Principia. The reservation deposit is due by May 1. Acceptances offered after May 1 or for spring semester require a deposit within one week of the acceptance notification.

The deposit is refundable if the Office of Admissions and Financial Aid is notified in writing before June 1 that an accepted student has decided not to enroll. The deposit is forfeited if the student withdraws on or after June 1.

The student should notify the Office of Admissions and Financial Aid as soon as possible if he or she does not intend to pay the reservation deposit, thus canceling the acceptance.

Rebates in Cases of Withdrawal or Dismissal

In the event it becomes necessary for a student to withdraw or be dismissed before the end of a semester for any cause whatsoever, refunds of tuition, room, and board are governed by the policies listed below.

To withdraw from the college, the student must notify the Enrollment Coordinator. The effective date of withdrawal is the day of this notification.

If tuition payments are being made under Principia's installment payment plan, the adjusted balance due for the semester becomes immediately due and payable.

The reservation deposit is normally forfeited in cases of withdrawal or dismissal.

Tuition Rebate

- 100% of tuition will be rebated for withdrawals made by Friday of week two of the semester.
- 50% of tuition will be rebated for withdrawals made between the Saturday at the end of week two and Friday of week three of the semester.
- 25% of tuition will be rebated for withdrawals made between the Saturday at the end of week three and Friday of week four of the semester.
- No tuition will be rebated for withdrawals made after Friday of week four of the semester.
- No tuition will be rebated for administrative withdrawals.

These rules apply to students withdrawing from individual courses or an entire college program. 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.

Rebate Rules for Summer Coursework

Students may withdraw from Summer Interterm coursework from Monday, week 1 through Friday, week 4 at 5:00pm central time with permission from the instructor

and the student's academic advisor(s). Since the students, advisor(s), and faculty may be in different locations, especially if the course is taught online, the withdraw process will take place by email and is the responsibility of the student.

- 100% of tuition will be rebated for withdrawals made by Friday of week two of the program.
- 50% of tuition will be rebated for withdrawals made between the Saturday at the end of week two and Friday of week three of the program.
- 25% of tuition will be rebated for withdrawals made between the Saturday at the end of week three and Friday of week four of the program.
- No tuition will be rebated for withdrawals made after Friday of week four of the program.
- No tuition will be rebated for administrative withdrawals.

These refund rules are for 8-week programs. Other interterm programs may have their own refund rules.

Room Rebate

- 100% of room charge will be rebated for withdrawals made by Friday of week two of the semester.
- 50% of room charge will be rebated for withdrawals made between the Saturday at the end of week two and Friday of week three of the semester.
- 25% of room charge will be rebated for withdrawals made between the Saturday at the end of week three and Friday of week four of the semester.
- No room charge will be rebated for withdrawals made after Friday of week four of the semester.
- No room charge will be rebated for administrative withdrawals.

Board Rebate

- 100% of board charge, less actual dollars expended on the student's meal card, will be rebated for withdrawals made by Friday of week two of the semester.
- 50% of board charge, less actual dollars expended on the student's meal card, will be rebated for withdrawals made between the Saturday at the end of week two and Friday of week three of the semester.
- 25% of board charge, less actual dollars expended on the student's meal card, will be rebated for withdrawals made between the Saturday at the end of week three and Friday of week four of the semester.
- No board charge will be rebated for withdrawals made after Friday of week four of the semester.
- No board charge will be rebated for administrative withdrawals.

Student Employment

The purpose of the Student Employment Program at Principia is to provide students with the opportunity to develop and practice a good work ethic, to learn new skills, and to contribute to the Principia community by providing valued services as part-time student employees. All student employees are required to engage in 150 hours

of work in a service department (Facilities or Dining Services) during their first two semesters of employment.

Students are responsible for completing employment applications and providing proper identification in order to secure employment. The Human Resources Office works to find a good match between a student's interests, skills, experience, class schedule, and the needs of departments seeking student workers.

Academic Rules and Procedures

In this section you will find important details about your academic work at Principia College. Academic rules, grading policies, and other information are outlined and explained in these pages. You are responsible for knowing and following these rules so please take some time to read through this section. In print it's only about 20 pages long but if you are familiar with its contents it will help you navigate your academic career here.

The Registrar's Office is responsible for managing these policies and rules. If you have questions about anything here or need help either understanding or following these policies please come to the Registrar's Office. We are here to help.

Graduation Rules

Choice of Catalogs for Degree, Major, and Minor Requirements

If the all-college degree requirements are altered during a student's college career, the student may choose any set of requirements published during his or her particular career, provided that any requirements not already fulfilled can be met through the current program of the college. No special courses will be offered to meet previous catalog requirements. A student must meet all of the all-college degree requirements for the catalog chosen, with the exceptions noted below. See Expiration of Degree Credit below.

If the requirements of a major or minor are altered after a student has declared the major or minor, the student may choose the requirements listed in the catalog in effect when the major or minor was declared or the requirements of the catalog listing the change. If some courses are no longer taught in support of the old major or minor requirements, the program will allow appropriate substitutions. See Expiration of Degree Credit below.

A student may choose one catalog for the all-college degree requirements and another for major and/or minor requirements. A student who elects to change catalogs, either for all-college degree requirements or for a major or a minor, must submit the appropriate form to the Registrar's Office.

General Education Requirements - pre Fall 2011

A student who entered Principia College prior to Fall 2011 who desires to move to the current general education requirements published in the 2015-2016 catalog will be excused from the Integrated Learning Course (ILC) associated with the First Year Experience (FYE) program, if he or she completed an FYE program prior to Fall 2011.

A student who wishes to move to the current general education requirements will be regarded as having already completed the Baseline Writing Sample in the general education program if he or she completed phase one of the previous all-college writing requirement before the transition to the new requirements. However, to fulfill the purpose of the Writing Fundamentals Portfolio, the student must submit this portfolio within his or her first two terms of enrollment after the new requirements went into effect Fall 2011. It is the student's responsibility to enroll within this time frame in a course that will provide the opportunity to produce the required writing samples and to submit the portfolio by the end of that term. Failure

to do so will make the student ineligible to change to the new general education requirements. See Writing Program Policy (p. 30).

A student who makes this change must fulfill each Liberal Arts Distribution Requirement (LADR) with at least one course taken after the transition to the new general education requirements. Any remaining requirements may be fulfilled with courses taken before Fall 2011, provided the same course fulfills a LADR under both the old and new distribution requirements.

Expiration of Degree Credit

If a student does not complete a degree within ten years from the date of matriculation, that student will need to meet the general education requirements stated in the most recent college catalog and may be required to retake some or all of the general education courses. Courses previously taken will be reviewed to determine whether they meet the current general education standard.

With regard to courses required for majors and/or minors, each department will review credit achieved in prior years to determine which ones may be used toward completing the major/minor as described in the new catalog.

Transfer credit older than ten years will be evaluated under the same standards as above even if that credit was previously awarded as general education or major/minor credit.

Graduation Application

Each student is required to file a graduation application in the Registrar's Office prior to graduation. Applications are due as follows:

May graduation	one year prior to graduation
September graduation	end of spring semester a full year prior to graduation
January graduation	end of fall semester a full year prior to graduation

Specific due dates are published on the academic calendar. Late applications will be accepted with a late fee until the end of the drop/add period the semester prior to graduation. See Late graduation application fee (p. 215).

Approval of Course Attributes

The College 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 Credit by Examination (p. 232).

One Degree with Multiple Majors

A student's transcript will acknowledge each major the student has declared and for which degree requirements have been met.

B.S. degree candidates who have completed course work for a B.A. major and B.A. candidates who have completed course work for a B.S. major will have that major acknowledged on their transcripts.

Receipt of Two Degrees

It is the policy of Principia College that no individual be awarded both a B.A. and a B.S. degree after earning 120 semester hours, even if requirements for both degrees have been fulfilled. An individual who wishes to earn two degrees must successfully complete 150 semester hours and spend a minimum of five semesters in residence. See Residency Requirement (p. 23). Students earning two degrees may elect to receive the first degree upon its completion or wait to receive both degrees simultaneously upon completion of the additional requirements.

An individual with a degree from another college may be accepted as a transfer student. To earn a Principia degree, this student will have to meet all of the graduation requirements and earn a minimum of 36 Principia College semester hours. The courses which must be taken at Principia in a major program (specific courses and/or number of courses) will be determined by the department faculty.

Graduation Honors

Graduation honors are based on a student's college work at Principia. A student whose cumulative grade point average at graduation is 3.65 or higher is granted a degree with scholastic honors. A degree with highest scholastic honors is granted for a cumulative grade point average of 3.85 or higher.

Commencement

Principia College holds an annual commencement ceremony in May. Students who have met all graduation requirements are eligible to participate. Students who graduate in September or January are welcome to participate in the commencement ceremony the following May.

Grades and Grading

Grade Reports

At midterm and at the end of each term students may view their grade reports online through BannerWeb. To access BannerWeb go to: <http://www.principia.edu/bannerweb>. If a student has signed a release of academic information for his parent(s), a printed grade report will be sent to those listed on the release form. Such forms authorizing the release of grades are available in the Registrar's Office.

All requests for transcripts (<http://www.principiacollege.edu/transcriptrequest>) must be made in writing, and grades will not be released over the telephone.

Grading System

Grades are on a letter basis from A through F, including pluses and minuses, earning quality points through D minus. Quality points are based on a four-point scale, where one semester hour with a grade of A earns 4.0 quality points. A three semester-hour course with a grade of A earns 12.0 quality points, etc. A student's grade point average is computed by dividing the total quality points earned by the total GPA hours.

	Grade Meaning	Quality Points Earned: 1 semester hour	Quality Points Earned: 3 semester hours
Satisfactory			
A	Excellent	4.000	12.00
A-		3.668	11.00
B+		3.334	10.00
B	Good	3.000	9.00
B-		2.668	8.00
C+		2.334	7.00
C	Satisfactory	2.000	6.00
Unsatisfactory			
C-		1.668	5.00
D+		1.334	4.00
D	Deficient	1.000	3.00
D-		0.668	2.00
F	Failure; no credit	0	0
Withdrawn ¹			
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

¹ based on grades at the time of withdrawal

Midterm Grades

Midterm grades are given to all students in all courses. Only the grades A through F (no I's or *'s) are appropriate for midterm grades. S and U are appropriate as midterm grades in non-credit courses only.

Withdrawal Grades

Instructors may give withdrawal grades as final grades in accordance with the college's withdrawal policies. See Withdrawals (p. 237) on the Registration Rules page.

Star (*) Grades

This grade means the course is still in progress at the end of a semester or interterm. The star grade is given only by pre-arrangement in special courses. These courses will be indicated in the catalog or on the course contract. The College Curriculum Committee approves such courses for the catalog and sets guidelines for acceptance of such contracts.

Incomplete (I) Grades

This grade indicates that the instructor has granted an extension in accordance with the guidelines below to a student who has not finished course work on time. Incompletes from fall and spring semesters and interterms must be resolved by the following midterm. At that time a grade must be given, even if the grade is an F.

If an extension beyond midterm is deemed necessary, the professor must petition the Scholastic Committee giving specific reasons for such an extension; the petition must be in the hands of the registrar a week before the deadline for midterm grades. The extension should at no time go beyond one year after the term in which the incomplete (I) grade was given.

In order to allow evaluation of academic standing before a new semester begins, I grades for students whose academic standing could be affected by the resolution of the incomplete must be resolved by one week before the first day of the following term rather than at the following midterm when incompletes normally resolve.

A student who is suspended during the term and is asked to leave before the end of the term may not receive an incomplete grade. The student will receive withdrawal grades in all of his or her classes. See Withdrawals (p. 237) on the Registration Rules page.

If a student's suspension goes into effect at the end of a term, the student is allowed to complete the courses taken during the term. If any incomplete grades are recorded, they must resolve within two weeks of the last day of the term when the incomplete was recorded rather than at the following midterm when incompletes normally resolve.

Guidelines for Giving Incompletes

Meeting deadlines is viewed as part of character education at Principia. Students are expected to meet end-of-term deadlines; therefore, incomplete grades (I) are not given simply because a student's work has not been finished. Incomplete grades may be given when:

1. Extenuating circumstances have arisen which have prevented the student from completing work, and which are completely outside the student's control (usually unforeseeable); and

2. It is the opinion of the instructor that it is in the best interest of the student and the school.

Students are expected to have enough flexibility so that a short unexpected interruption in their schedules early in the term can be made up by the end of the term.

Three examples of extenuating circumstances are:

1. Student was called home during the last two weeks of the semester.
2. Student was in Cox Cottage during the last week of the semester.
3. Laboratory equipment ordered for a research project was unavoidably detained.

Repeat Grades

Courses for which academic credit may be earned only once may be repeated if the previous grade earned in the course is lower than a C. When such a course is repeated, the highest grade is used to form the student's overall grade point average; all grades remain on the student's record; academic credit is earned only once. Although students are encouraged to repeat courses when the grade earned is lower than a C, the college is not obligated to offer courses specifically for this purpose.

Grade Changes

Policy

A grade change should be made only to reflect more accurately the student's work done during the semester (or other class term), but not to take into account work done or submitted after the original grade was recorded.

Procedure

Faculty may recommend grade changes in their own classes to the academic dean. The academic dean sends grade changes to the registrar, who implements them.

Students have twelve months after a grade is posted during which they may petition the Scholastic Committee when they feel they have received an incorrect grade. The committee, after consultation with the faculty member involved, may, in turn, recommend a grade change to the academic dean.

If cheating or plagiarism is discovered after a final grade has been submitted, the grade may be changed according to the above procedures.

Academic Honors

Phi Alpha Eta

Phi Alpha Eta is the scholastic honor society on campus. Degree-seeking students whose cumulative grade point average (GPA) is 3.800 or higher and who have earned at least 50 total semester hours, of which 20 must be Principia semester hours, are eligible for membership.

Members of Phi Alpha Eta who are currently enrolled in a degree-seeking program at Principia may audit one class each semester without paying the normal audit fee.

The Phi Alpha Eta award is made each year to the graduating senior whose work was completed with the highest Principia grade point average and who has at least 90 Principia semester hours.

Dean's List

To be on the Dean's List, a student must be in good standing and earn a term GPA of 4.000 in 12 or more semester hours, with no grade less than a C in any course, including non-credit courses.

Honor Roll

To be on the Honor Roll a student must be in good standing and must earn a term GPA of 3.800 or better in 12 or more semester hours, with no grade less than a C in any course, including non-credit courses.

Academic Standing

A student's academic standing is set at the end of each grading period (including each regular academic semester, after interterms, and when pending grades resolve) based on the minimum cumulative grade point average (GPA) scale outlined below. Total semester hours earned indicated in the table below include Principia College courses only.

In order to allow evaluation of academic standing before a new semester begins, incomplete (I) grades for students whose academic standing could be affected by the resolution of the incomplete must be resolved by one week before the first day of the following term rather than at the following midterm when incompletes normally resolve.

Notification of suspension and other academic standing changes is sent to students in writing after final grades are processed.

Good Standing

A student will remain in or return to good standing provided his or her Principia cumulative GPA meets these requirements:

Total Semester Hours Earned	Minimum GPA Required
0-15	1.600
>15-30	1.700
>30-45	1.800
>45-59	1.900
>59	2.000

Academic Probation

A student will be placed on academic probation if his or her cumulative GPA is below the minimum required.

At the end of a semester, a student on academic probation whose cumulative GPA remains below the minimum on the GPA requirements scale will be continued on

academic probation provided his or her term GPA for the semester just completed meets the minimum GPA requirement.

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. Occasionally, a student may be suspended directly from good standing for extremely poor performance (for example, a term GPA below 1.0).

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 re-admittance after suspension, a student will return as a conditional admit. See About Academics (p. 13). The student will be in good standing for the returning semester, at the end of which academic standing will be set according to the normal rules for academic standing.

Any student who has been withdrawn from Principia College for two semesters or more for any reason must re-apply through the Office of Admissions and Financial Aid. A student on academic suspension becomes eligible to re-apply to Principia upon completion of a full year of satisfactory coursework at another accredited college or a full year of combined academic work and employment (including at least 9 semester hours of college-level work). It is expected that a student who has been academically suspended will work with The Center for Teaching and Learning to develop a success plan for the student to follow during suspension, following our process for transfer credit.

A student may appeal an academic suspension in writing to the academic dean. Appeals are rarely granted, but may be considered in cases where there were extreme circumstances outside the student's control that interfered with successful academic work. Appeals must be submitted no later than two weeks before the beginning of the following semester.

Academic Integrity

A Principian is expected to pursue a life of integrity. See the Principia Student Community Commitment (p. 17). Therefore academic honesty is essential to a Principia College education.

Academic Misconduct Policy

Students are expected to refrain from all forms of academic misconduct, including but not limited to lying for academic gain, cheating, plagiarizing, unauthorized sharing of work, and any form of misrepresenting another's work as one's own. Students are also expected to refrain from helping others with any of these or other forms of academic misconduct.

Faculty members are required to report alleged academic misconduct to the Scholastic Committee via the registrar. The Scholastic Committee will review the incident(s) and first determine if the case constitutes academic misconduct. If it is determined that academic misconduct has occurred, the committee then recommend steps for supporting the student in upholding an appropriate standard of integrity in academic work. Course faculty may impose consequences for academic misconduct that include, but are not limited to, failure on the assignment and/or failure in the class. Additionally, egregious or multiple incidents of academic misconduct can lead to academic misconduct suspension. When a student is reported for academic misconduct, the student has the right to see the report and respond in writing and/or through a hearing process as outlined in the academic misconduct policy and procedures. Prior to an academic suspension a student has the right to a hearing, and may appeal the decision to the dean of academics (see Academic Misconduct - Procedures and Form (<http://www.principiacollege.edu/current-students/registrar/policies-and-procedures/academic-misconduct-policy-and-procedures>)).

Academic Progress Policy

Any student in good academic standing or on academic probation is considered to be making satisfactory progress. A student who is not making satisfactory progress is not allowed to continue at Principia.

Confidentiality of Student Records

Principia considers a student's record to be confidential, with the exception of the following "directory information": student's name, date of birth, 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, phone number, courses taken and current registration, status (full or part-time), dates of attendance, degrees received, academic honors and awards, and most recent educational institution attended.

The term "student" includes current, former, and prospective students (those who have applied). Some examples of confidential and private student information are social security numbers, transcripts, grades, and student disciplinary records.

Principia's requirement of protecting the confidentiality of private student information such as social security numbers extends to all Principia departments, Principia agents such as the Credentials eScrip-Safe, and Principia research consultants who are contractually bound to Principia's confidentiality requirement of strict non-disclosure of private student information. With written notice to the registrar, students may opt out of any Principia disclosure of directory or private information to any third party except for Principia agents or consultants bound by Principia's privacy policy.

Academic and Non-Academic Credit Rules

Principia Credit Units

Principia's academic credit unit is the semester hour. Each course is assigned a schedule type, which indicates the ratio between contact time and out-of-class preparation. On the average, students should expect to devote three hours per week for 14 weeks, including in-class contact time and homework, for each semester hour of credit. It is the student's responsibility to devote sufficient time to achieve the outcomes of the course.

One Principia PE non-credit course is equal to a minimum of 42 contact hours.

Transfer Credit

Principia College accepts transfer credit and general education attributes from another institution if it meets the following criteria:

1. It must come from a regionally accredited college or university.
2. It must be comparable in nature, content, and level to the learning experience offered by Principia College.
3. It must be appropriate and applicable to the learning experience of the programs offered by Principia College.

For courses to meet criteria 2 and 3, the course must have been completed with a grade of a C- or higher, although credit toward a major may have a higher grade requirement. The Registrar's Office handles transfer credit and College Curriculum Committee (CCC) authorizes general education credit. Currently-enrolled students must get prior approval from the Registrar's Office to guarantee that a course they plan to take from another institution will receive transfer credit. For May 2018 graduates, transcripts from other institutions must be received by 5:00 p.m., February 2, 2018.

To begin the process of seeking credit, transfer students must have official transcripts sent directly from their previous institution(s) to the Registrar's Office at Principia College and must provide access to course descriptions, and in some cases a syllabus.

For courses that are clearly comparable to Principia courses, the Registrar's Office will assign credit for the matching course number. For courses that are not clearly comparable, the chair of the appropriate department will review the information and determine whether or not credit can be given. For courses across departments or units the review will be completed by the unit head (for courses within a single unit) or by the College Curriculum Committee (for courses across more than one unit). When a course is reviewed, whether by a department chair or the unit head, a recommendation may be made as to whether or not the transfer course seems to meet the requirements for a LADR (Liberal Arts Distribution Requirement) designation.

If a transfer course receives credit as a comparable Principia course that has a LADR attribute, the transfer course will also receive the LADR attribute. If the course is received for general credit, a student may apply to CCC for a LADR attribute. CCC will review these requests, taking into consideration the recommendation from the

department chair or unit head. If either course credit or a LADR attribute is denied, the student will receive a brief written explanation as to which criteria have not been met and how the determination was made.

Transcripts from countries outside the United States must be evaluated at the student's expense by a service approved by the Registrar's Office. The report from the evaluation service must be sent directly to the Registrar's Office at Principia College. If the transcript or course descriptions are not in English, a certified English translation must be submitted. Prior to making arrangements for international evaluations, please contact the Registrar's Office.

Transfer credit is not figured into a student's Principia grade point average. Transfer courses may be used to fulfill major or minor requirements at the discretion of the department chairs concerned; however, some departments may require a grade higher than a C- for such courses.

One semester hour equals 1.5 quarter hours. One quarter hour equals 0.667 semester hours.

Fulfillment of General Education Requirements through Transfer Work

In order to ensure that students address the Student Learning Outcomes and the Liberal Arts Distribution Requirements (LADR) outcomes, they are expected to complete some of their LADR courses at Principia. Transfer courses may be applied to the Liberal Arts Distribution Requirements as follows:

- For the Bachelor of Arts degree: In each LADR area, a transfer course may be used to fulfill one of the two Liberal Arts Distribution Requirements (LADR).
- For the Bachelor of Science degree: Students must take one course from each of the different Liberal Arts Distribution Requirements (LADR) areas at Principia, but may transfer in the other two LADR requirements in any of the three other areas, provided they meet other criteria. Any of the 24 semester hours of Math and Natural Science courses outside the major discipline may be met by transfer credit.
- One PE transfer course may be used toward fulfilling the PE distribution requirement, but one PE course must be taken at Principia College.

For use of transfer credit to fulfill the second language proficiency requirement, see Second Languages (p. 108).

Advanced Placement (AP), College Level Examination Program (CLEP), and International Baccalaureate Examinations

A student who enters with satisfactory scores in AP 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 are parallel to courses given at Principia may receive college credit with approval of the department chairs concerned. No further examination or fee is required. Transfer credit rules apply to these credits. Some AP credit also meets general education requirements.

Credit By Examination

A student may obtain credit by examination in one of two ways.

1. A student whose instructor determines that the 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 (3.000) or above, credit is granted and recorded on the student's scholastic record, but the credit carries no quality points. Upon approval of the petition, the student will be charged a credit by examination fee.

Credit by examination may be granted only in courses in which the student would normally be permitted to enroll and for the amount of credit normally assigned to that course. Credit by examination is not awarded for courses from which a student withdrew due to suspension. Students may not take Credit by exam for a course for which they have received a grade.

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 (p. 223).

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.

To be eligible for an independent study course, students must be in good academic standing. Exceptions must be approved by Scholastic Committee. The academic department sponsoring the independent study course determines the level of writing proficiency required for each specific independent course.

There are two types of independent course work:

Type A: A student may complete a course that is already in the college catalog but do so independently rather than by attending regular classes. This option is used when a student must take or wants to take a course at a time other than when it is offered as a regular class at Principia. This may be because the student has a time

conflict when the course is offered or the student may need to take the class during a term it is not offered.

Type B: A student may want to study something that is not currently listed in the college catalog, but that a faculty member is qualified to teach and feels is of value to the student. Type B independent study is generally reserved for students who are far along in their major and have a particular interest in a topic that is outside of current catalog course offerings.

Both types of independent study can be taken either on or off campus.

Procedure

If a student is planning a Type A catalog course independent study, the proposal must include the course description from the catalog, a syllabus for the course as it was recently taught, and it must match the current catalog offering in every way, including number of semester hours; LADR attribute, if any; outcomes of the course; and assignments required.

If the student is planning Type B independent study, the proposal must include a clear course description and a detailed explanation of why this course is requested. In outlining a study format, the student and instructor should plan at least 42 hours of work for every semester hour or PE credit. For each component of the study, the time required and the grading criteria should be specified. The date by which work must be completed should be stated if it is other than the last day of the term for which the contract is registered. The proposal should include similar content found in a syllabus for a regular catalog course.

For on-campus independent courses, instructors should meet with students a minimum of one hour per week throughout the term. For off-campus independent courses, the contract should specify both the type and frequency of instructor/student contact.

Contracts must be approved by the student's advisor, the instructor, the chair of the department in which it is offered, and the unit head. If the course is to be done off campus or during an interterm, the contract also needs approval from the dean of academics. Students are charged the regular tuition rate for the number of semester hours specified on the contract for any independent course.

In the case of Type A independent study, the course will only receive a LADR if the course in the catalog receives a LADR. For a Type B independent study course, application may be made for a course to fulfill a distribution requirement with approval of College Curriculum Committee. This application must include an explanation of how the learning outcomes for the LADR will be met. An additional LADR application must be completed and attached to the Type B Independent Course Proposal Form.

Official forms for Type A and Type B independent study contracts are available through the college's internal computer network on the Registrar's Forms page (<https://prinweb.principia.edu/internal/registrar/forms>).

For Type A independent study, the completed forms must be turned in to the Registrar's Office before the end of the drop/add period for the term in which it

will be taken. However, students need to be alert to earlier departmental and unit deadlines.

For Type B independent study, *completed forms are due in the Registrar's Office by **5:00pm Friday of week 11 the term before** the proposed course work* (i.e., spring semester contracts are due week eleven of fall semester).

Registration Rules

Student Responsibility for Registration

Students are responsible for completing their own registration, after meeting with their academic advisor, according to the schedule published in the academic calendar. Detailed information about how and when to register is provided in the course schedule and drop/add instructions each term. Registration is considered valid only when it is recorded in the Banner Student data system. Students are responsible for confirming that their registration is complete and accurate.

Normal Load, Overload, and Underload

Normal load	12 to 18 semester hours
Overload	more than 18 semester hours
Underload	fewer than 12 semester hours

Normal Load

The usual course load is 15 semester hours, but students may take as few as 12 or as many as 18 semester hours for credit without special permission. In addition, students often take a PE or other non-credit activity course. **A student must average 15 semester hours per term in order to be on track to graduate in four years.**

Overloads and Planned Underloads

A resident student who wants to carry more or less than the normal load must submit a petition to the Scholastic Committee. Students who plan to do so should consult the financial aid office regarding the financial implications including impact on financial aid awards.

Day students may register for an underload without special permission and pay for courses on a semester hour basis. Day students who want to carry more than the normal load must submit a petition to the Scholastic Committee.

Underloads may impact a student-athlete's NCAA eligibility or an international student's visa.

Changes in Registration (Drop/Adds)

Registration changes may be processed through the second week of the semester without charge and without withdrawal grades. Specific dates for the drop/add period are published in the academic calendar.

A student may drop a course during the drop/add period without instructor permission. After the first five days of the semester, courses may be added only with instructor permission.

Late Registration Changes

A late registration fee is charged for all changes made after the drop/add deadline. See Late registration fee (p. 215) information in the Costs and Fees section of the catalog. After the deadline, students may, with the instructor's permission:

- add credit courses
- add or drop non-credit courses

In order to drop a credit course after the drop/add period, a student must petition the Scholastic Committee for approval.

Withdrawals

The withdrawal period begins at the end of the drop/add period and ends four weeks before the last day of classes each semester. Specific dates for the withdrawal period are published in the academic calendar. Withdrawal grades are not allowed in courses from which a student has already been excluded with a failing grade.

Students may withdraw from courses under the following conditions:

- During the withdrawal period, a student desiring to withdraw from any credit course while retaining a normal load may do so with the approval of his or her advisor(s) and the instructor of the course.
- After the withdrawal period, a student desiring to withdraw from a credit course must petition the Scholastic Committee. Withdrawals during the last four weeks of classes will be allowed only under exceptional circumstances outside the student's control, such as health conditions or family situations. Poor performance or lack of time management is not considered a legitimate reason for withdrawal during this period.
- A student desiring to withdraw to an underload at any point in the semester must petition the Scholastic Committee.
- A student desiring to withdraw from a non-credit course may do so at any point in the semester after notifying the instructor.
- A student who voluntarily withdraws from school during the withdrawal period will receive withdrawal grades in his or her classes.
- A student who voluntarily withdraws from school during the last four weeks before the last day of classes may petition for withdrawal grades which may be allowed in exceptional circumstances as indicated above.
- A student who is suspended during the term and asked to leave before the end of the term will receive withdrawal grades in his or her classes.

Students who are allowed to withdraw from courses after the drop/add period will receive withdrawal grades rather than having the courses dropped from their records. If a student is allowed to withdraw, it is the instructor's prerogative to assign a WP (withdrew passing), WF (withdrew failing), or WX (withdrew with no basis for a grade). Students withdrawing after midterm should receive either a WP or WF.

Students not allowed to withdraw are held responsible for completing all course work. A student who stops attending class risks receiving an F.

Withdrawing During the Semester to an Underload

A student wishing to withdraw to an underload (less than 12 semester hours) during a term must petition the Scholastic Committee. Factors the committee will consider are:

- Need for the course credit to make adequate progress toward graduation
- Possible loss of a visa (for international students)
- Ineligibility for varsity athletes
- Input from the Office of Student Life about the student living on campus with an underload.

Administrative Changes

At any time, the registrar may process “adds” and “drops” which simply correct clerical errors and do not reflect changes in the student load or schedule.

Audits

To audit a course, an individual must either be enrolled in the college or be a faculty or Christian Science staff member (or a Christian Science 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 occasionally attend colleagues’ classes without registering to audit.

Auditing students are not permitted to take part in class discussions, except by invitation of the instructor, nor to make demands upon the instructor either in or out of class. There are no requirements imposed upon auditing students for reading or written work. No attendance records for auditors are kept by instructors, nor are audits recorded on the permanent record in the Registrar’s Office. A student may drop an audited course at any time without formal office approval.

A fee is charged for auditing. See Academic Fees (p. 215). The fee for one audit per semester is waived for benefits-eligible faculty or staff members, one-year enrichment students, and members of Phi Alpha Eta.

Canceling Undersubscribed Courses

Courses with an enrollment of five or fewer students may be cancelled.

Class Level

A student’s official classification as freshman, sophomore, junior, or senior is determined by the number of semester hours earned.

Freshman	under 30 semester hours
Sophomore	30 semester hours

Junior	60 semester hours
Senior	90 semester hours

Course Numbering

Students should experience increasingly challenging courses during their college careers, developing academic skills and building upon knowledge gained. Principia College's course numbering system seeks to:

1. Identify courses by level of difficulty of content and skills;
2. Help place students in courses appropriate to their ability, thus preventing too wide a range of student skills within courses;
3. Identify, using lower numbers, courses which encourage mastery of basic academic skills early in college careers; and
4. Identify, using higher numbers, advanced level courses which encourage students to challenge themselves at increasingly higher levels of difficulty.

Introductory Level

Courses numbered 100-199 are beginning level courses. Their content and academic skills level are most appropriate for freshmen; sophomores may also enroll. Upperclassmen need the consent of the instructor to enroll in these courses, with the exception of a few courses which welcome students from all class levels.

Intermediate Level

Courses numbered 200-299 are intermediate level courses which build on basic academic skills and present the variety of content available in each discipline. They are most appropriate for sophomores and juniors, but freshmen and seniors may enroll.

Advanced Level

Courses numbered 300-399 are advanced level courses which go into more depth in content and assume mastery of basic academic skills. They are most appropriate for upperclassmen. However, students of any class level who have appropriate skills or content prerequisites may enroll; underclassmen need the consent of the instructor.

Courses numbered 400-499 are advanced research, reading, or independent study courses, senior seminars, or capstone internships. Usually they are most appropriate for majors and need the consent of the instructor.

Non-Credit Courses

Courses numbered 099 and below receive no academic credit.

Athletic Competitions

The opportunity to participate in intercollegiate athletics is an important aspect of the whole man concept at Principia. For the participating student it is an opportunity which is encouraged and supported by the faculty and administration. Since running an intercollegiate athletic program necessarily requires some missed class time and the athletic trip is not by definition a field trip, the following policies will be recognized:

1. As a general rule, classes missed for athletic contests during the regular season and post-season play (i.e., SLIAC conference tournament, NCAA regional or national tournament) are excused absences.
2. Students are required to consult with their instructors before they miss a class because of a scheduled contest. Students are responsible for completing all assignments and making up any class work they have missed.
3. The NCAA requires student-athletes to make normal progress toward graduation and to be in good academic standing in order to participate (practice or compete) in intercollegiate athletics.
4. Principia requires student-athletes to be in good academic standing in order to register for varsity athletics, or any athletic program that includes intercollegiate competition. Students must be enrolled in the appropriate class in order to participate, practice, or compete with the team.
5. Faculty are encouraged to communicate with students and coaches on an ongoing basis concerning any student-athlete who they feel is not meeting his or her academic responsibilities.

Other Rules

Majors and Minors

Approval of or removal of all majors, minors, concentrations, and their requirements rests with the College Curriculum Committee and Faculty Senate, with final approval by the administration.

Graduating seniors cannot add additional majors and/or minors to their academic record after the end of drop/add of their final term.

A major or minor not completed by graduation will be removed from the student's record unless a post grad plan is in place for the student.

Arrival on Campus

All students must be on campus for the first day of classes. *New* students must be on campus to attend their first scheduled orientation activity. Students needing to arrive late for classes for legitimate reasons must make arrangements with the professors of classes they will miss *prior* to missing any classes. All students arriving late risk being dropped from classes.

Attendance Policy

Each professor sets her/his own attendance policy which is explained in the syllabus for each course. Students are responsible for knowing the policy for each of their courses and abiding by the guidelines and requirements provided.

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, disruption of class, plagiarism, or cheating. When excluding the student from class, the instructor must 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. See Exclusion from Class Form (<http://www.principiacollege.edu/current-students/registrar/faculty/staff-services/faculty-forms>). A final grade of "F", and not a withdrawal grade, will be given for the course once a student is excluded.

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.

- Attendance cannot be required at conflict field trips, work conflict field trips, or work which conflicts with field trips.¹ It is assumed that every faculty member has the right to schedule activities for a student during the regular class meeting time.

¹ 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.

End of Semester Assignments and Final Examination Scheduling

End of Semester Assignments

In order to assure that students have adequate time to prepare for final examinations, faculty should carefully consider the demands they place upon students. The week prior to final exams shall be free of major assignments (e.g., tests, papers or projects) unless they have been announced at least two weeks in advance of the due date. It is expected that during this period all assignments and final activities, including any combination of in-class and outside class work and preparation for final exams, will adhere to the normal rule of three hours per semester hour per week. See Academic and Non-Academic Credit Rules (p. 232). Required activities must not interfere with students' ability to prepare for final examinations.

Final Examination Scheduling

- In-class written examinations must be taken during their scheduled final examination periods.
- Take-home examinations must be distributed to students no later than the last officially scheduled, regular class meeting of the semester and are due within the scheduled time of the final examination for that course.
- Notification of final exam meeting time 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.
- Students who, for legitimate reasons, wish to reschedule their final examination must petition the Scholastic Committee by the deadline specified in the academic calendar. However, if a student has a conflicting examination schedule due to evening or unscheduled classes, the instructor of one class may arrange to give the student the examination at another time without petitioning Scholastic Committee. A student who has three final exams scheduled on the same day may petition the Scholastic Committee to have one of the exams rescheduled. Transportation arrangements for leaving campus at the end of a term must accommodate the student's exam schedule and are not considered reason for rescheduling an exam.
- Faculty who, for legitimate reasons, wish an exception to this policy must petition the Scholastic Committee for permission.

Exceptions to Academic Rules

Students who have questions about exceptions to academic rules should inquire with the Registrar.

Purpose and Policies of The Principia

Purpose

THE PRIMARY PURPOSE OF THE PRINCIPIA IS TO SERVE THE CAUSE OF CHRISTIAN SCIENCE.

Policies

1. The Principia shall seek to serve the Cause of Christian Science through appropriate channels open to it as an educational institution.

It shall be made clear that The Principia is a private philanthropy and not an official activity of the Christian Science Church.

2. In its dealings with individuals or organizations, in the formulation of policies and regulations, in the establishment of methods, and in all that it does, The Principia shall strive to conform its ideals and its practices to the teachings of Christian Science.
3. The Principia shall recognize that man as the child of God reflects the intelligence and strength of his Maker, and that all men have equal opportunity and equal ability in the sight of God.

The Principia refuses to accept as final any belief of limitation which grants greater capacity to one individual than to another. "Man is spiritual and perfect; and because he is spiritual and perfect, he must be so understood in Christian Science. Man is idea, the image, of Love; he is not physique. He is the compound idea of God, including all right ideas; the generic term for all that reflects God's image and likeness; the conscious identity of being as found in Science, in which man is the reflection of God, or Mind, and therefore is eternal; that which has no separate mind from God; that which has not a single quality underived from Deity; that which possesses no life, intelligence, nor creative power of his own, but reflects spiritually all that belongs to his Maker." (Science and Health with Key to the Scriptures, by Mary Baker Eddy, p. 475:11-22)

4. All members of the faculty and staff shall be active Christian Scientists. As a rule, members of the student body shall be accepted only from homes in which at least one of the parents or the guardian can give evidence of being a sincere Christian Scientist and of being ready to depend upon Christian Science for help in time of need. However, if an applicant is an earnest student of Christian Science and is sufficiently mature, conditions may warrant an exception to this general rule. Members of the faculty, staff, and student body will be expected to rely on Christian Science for healing.
5. The Principia clearly recognizes that Christian Science shall not be taught except in the Sunday School classes provided for in the *Manual of The Mother Church, The First Church of Christ, Scientist, in Boston, Massachusetts*, by Mary Baker Eddy.

In obedience to the *Church Manual*, Christian Science shall not be taught in the classrooms or elsewhere. Each member of the faculty and staff shall strive to demonstrate "the beauty of the music he teaches in order to show the learner

the way by practice as well as precept” (*Science and Health*, p. 26:19–21). It shall be the purpose of The Principia so to conduct its activities as to turn the members of its student body, faculty, and staff to Christian Science at all times, so that all may gain practical experience in utilizing the teachings of Christian Science in daily living.

6. The Principia shall dedicate its service to the task of training its students to think — and to think clearly, vigorously, fearlessly, tolerantly, unselfishly.

The ability to gather and weigh evidence and to form conclusions that are free from personal influence or selfish considerations is essential to the formulation of sound judgment and to the exercise of constructive citizenship in a democracy. The Principia shall encourage its faculty, staff, and student body to learn by practice and experience to test their thinking by reference to divine law as given in the Bible and as interpreted in the writings of Mary Baker Eddy.

7. In all of its activities, The Principia shall place emphasis upon Principle rather than upon person.

It shall be made clear that responsibility rests in the office, not in the officer. A vigorous effort shall be made to eliminate guidance and influence through either personality or hero worship. Wherever there is evidence of such personal influence, it shall be the responsibility of the institution and its workers to eliminate the cause as far as possible.

8. The Principia shall seek divine inspiration in the conduct of its work and shall therefore willingly depart from common practices whenever the fact becomes clear that there is a better way of doing things.

The Principia must not be guided alone by that which is accepted as good practice in other schools or colleges, but must seek independently and courageously to organize its work as the result of Christianly scientific demonstration, accepting from common practice only those methods and customs which best contribute to the fundamental purpose of the institution.

9. In all departments of its work, both curricular and extracurricular, The Principia shall place emphasis upon devotion to the democratic way of life and upon dedication of the individual to its service. Emphasis shall be laid upon the priceless privileges of the democratic way of life expressed in

freedom of thought,
freedom of speech,
freedom of religious worship,
freedom of press.

10. Teaching at Principia shall emphasize the point of view that education carries with it the obligation to use technical skills and intellectual attainments for the betterment of humanity.
11. The Principia shall seek continuously to improve its educational facilities and business practices in order to keep abreast of educational progress and in key with changing world conditions.

In its educational methods and business practices, The Principia shall make constant efforts to lift its standards to the highest point that the wisdom and experience of the administration, faculty, and staff, and the financial resources of the institution will permit.

12. The Principia takes the position that education in its fullest sense cannot be confined to academic subjects but includes the building of character.

In the words of Mary Kimball Morgan, the Founder of The Principia, “Developing the power to think accurately, wisely, and with intelligent discrimination; cultivating the ability to dissect thought and to discard that which is not constructive in daily living; strengthening the capacity to form high ideals and the courage necessary for standing by those ideals until they are outlined in Christian character — that is the work The Principia regards as true education.”

13. The Principia shall place emphasis upon that which is direct, simple, natural, and honest in all of its activities.

The institution shall help each individual to express himself — his own best or demonstrated self — rather than to be guided by vanity, the desire for popularity, blind acceptance of fads, or susceptibility to personal influence. Every effort shall be made to eliminate superficiality. Unnecessary formality shall be avoided. However, correct and dignified procedures which are unrelated to pride or personal position, but are consistent with the purpose of The Principia’s work, shall be observed at appropriate times.

14. The Principia shall be a coeducational institution in the fullest meaning of the term.

Men and women of the Board of Trustees, administration, faculty, and staff, as well as the members of the student body, shall be eligible for responsibility regardless of sex, and shall enjoy equally all the opportunities which The Principia is able to provide. “Union of the masculine and feminine qualities constitutes completeness” (*Science and Health*, p. 57:4–5).

15. The Principia shall always be conducted as one institution, regardless of the number or location of the units into which it may be divided for administrative or other reasons.

This policy presupposes and requires the thorough integration of all major departments. No department of the institution stands alone. Each can operate effectively only as it correlates its procedures with those of other departments, especially units most closely related to it.

Departmental policies affecting (a) the unfoldment of The Principia educational program, and (b) the organization of personnel work and guidance, from the first year in the elementary school to the end of the senior year in college, shall be part of a comprehensive plan for the institution as a whole. No department shall be free to act independently of the methods used by other departments. “For as we have many members in one body, and all members have not the same office: So we, being many, are one body in Christ, and every one members one of another” (Romans 12:4–5).

16. The government of The Principia shall be as democratic as possible within the organization established by the Board of Trustees of The Principia Corporation and described in the following statement:

The Bylaws of The Principia Corporation provide that the Board of Trustees shall appoint the chief executive officer of The Principia annually, and may appoint such other officers as in the Board's judgment are desirable. All other members of the faculty and staff not specifically appointed by the Board of Trustees shall be appointed by the chief executive officer.

The fundamental policies of the institution, established by the Board of Trustees, shall be interpreted for The Principia by the chief executive officer and reinterpreted in terms of departmental requirements by the head of each department. Each department head shall be directly responsible to his or her superior officer for the conduct of the work under his or her supervision.

Leadership at The Principia shall be expressed in obedience to Principle rather than by the exercise of authority or influence on the basis of human will or opinion. Members of the administration, faculty, and staff shall assume their individual responsibilities in this manner.

Departmental action shall be taken in the most democratic manner possible. A successful department will be one in which there is the widest participation by departmental members in the conduct of that department.

17. In order to facilitate the steady growth of The Principia and effective work in all its departments, every post shall be filled with the most effective individual available.

Since all members of the Board of Trustees, administration, faculty, and staff are loyal Christian Scientists, and since The Principia is established for the prime purpose of service to our Cause, it shall be assumed that an individual will be continued in office as long as the responsibilities of his office are discharged in ways that contribute to the growth of the institution. The Principia shall proceed upon the basis that the success of the work it is doing is more important to all concerned than security in tenure for members of its personnel. This policy shall be administered with wisdom and sympathetic understanding, but it shall be the duty of each department head to continue in service as members of his department only those persons who are prepared to secure better results than any others readily available for the particular posts.

The Principia expects the members of its faculty and staff to be willing to cooperate in spirit and in letter with the administration. Such cooperation is not to be confused with subservience, and it is not essential that any member shall be in full agreement with all points of view expressed by the administration. Yet it is important that The Principia shall have in its service those who are in harmony with the fundamental policies and established administrative practices of the institution. Such members will undertake their work with that proprietary interest which is so essential to the success of the institution, and to which Mrs. Mary Kimball Morgan has referred on so many occasions.

18. The Principia shall extend its opportunities only to those students who are prepared to take sufficient advantage of the experience to make it clear that The Principia is their rightful place.

With appropriate differences, students must measure up to the same demands that are made on members of the faculty and staff. They shall continue as members of the student body only as they earn the right to do so through successful accomplishment to a degree which indicates their desire and readiness to be Principians.

19. The student shall be placed upon his own responsibility insofar as this is practicable in terms of his obligations as a member of this community.

It shall be understood that during the student's experience at The Principia, from pre-school through the last day in the senior year in college, he shall be subject to constructive criticism and guidance in directions which will improve his effective participation in the activities of this institution. This shall be particularly true in matters relating to his growth as a Christian Scientist in a community dedicated to service to the Cause of Christian Science. The deans dealing with student personnel shall seek every possible opportunity to provide training in unselfishness, in consideration for others, in true democracy, in good sportsmanship, in correct social customs, in appropriate dress, manner, speech, and conduct, and in any other items which will enable the student to be a good citizen and an effective Christian Scientist. Training in such directions represents a most important part of The Principia's contribution to the education of the student.

20. 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.

21. Any organized activity associated with The Principia and carried on in the interests of The Principia shall exist only as it is authorized by The Principia Corporation.
22. All activities taking place on the campus or within the school or college community, whether they occur as part of the organized work or as extracurricular phases of school or college life, shall be permitted to exist only to the extent that they are consistent with the purpose and policies of The Principia.

Since smoking, the use of intoxicating liquor, and loose social conduct are inconsistent with the teachings of Christian Science, they must be eliminated from the experience of members of the Principia community.

23. At The Principia, Sunday shall be a day of quiet, and the recreations and activities permitted on the school and college campus shall be of a type that

does not conflict with the spirit of the Sabbath as a day set aside for rest and spiritual refreshment.

Trustees and Administration

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Travis Brantingham
Head, Principia School

College Administration

Jonathan W. Palmer
President

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Provost and Dean of Academics

Libby E. Scheiern
Associate Dean of Academics

Debra Jones
Dean of Students

Joshua Sprague
Assistant Dean of Students

Tamara Gavaletz
Admissions & Financial Aid Director

Alice Stanley Dervin
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Pete Paciorek
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Provost and Dean of Academics

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*Creative Arts and
Communication Division Head*

Christopher B. Young
Humanities Division Head

Christine A. McAllister
*Mathematics and
Natural Sciences Division Head*

Winifred A. Needham
Social Sciences Division Head

James H. Hegarty
Academic Special Programs Director

Joy Trout
Academic Staff Liaison

Faculty

Distinguished Faculty & Endowed Faculty Chairs

Roy W. Johnson Distinguished Professor

Hélène Diaz Brown

Cornelius Ayer and Muriel Prindle Wood Professor of Humanities

Duncan Charters

Charles Stewart Harding Mott Distinguished Professor

Jeffrey B. Cornelius

William Martin and Mina Merrill Prindle Professor of Fine Arts

Margaret M. D'Evelyn

Harry J. and Margaret L. Heimer Professor of Mathematics and Computer Science

Thomas H. Fuller Jr

Kent Smith Professor of Math, Computer, and Natural Sciences

Stephen G. Hinthorne

Edith and Lewis White Distinguished Professor

Joseph M. Ritter

Distinguished Professor of the History of the Christian Science Movement

William B. Stock

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Crystal R. Allen-Gunasekera (2012)

Assistant Professor of Philosophy

BA, Principia College;

MA, PhD, University of Missouri

Sarah C. Andrews (2017)

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BA (Hons.), MA, University of Cambridge, UK;
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MA, Bridgewater State College;
PhD, Southern Illinois University, Carbondale

Ellen F. Sprague (1996)

Assistant Professor in the Center for Teaching and Learning
BA, Principia College;
MA, Middlebury College;
MFA, Vermont College of Fine Arts

Mary Ann Sprague (1997)

Instructor of Physical Education
BA, Principia College;
MBA, University of Missouri

Clinton A. Staley (1986)

Professor of Computer Science
 BA, Principia College;
 MS, PhD, University of California, Santa
 Barbara

Gretchen Starr-LeBeau (2015)

Associate Professor of Religion
 BA, University of Virginia;
 MA, PhD, University of Michigan

Christine Calkins Steele (2006)

Associate Professor of Theatre
 BA, University of Iowa;
 MA, Shakespeare Institute, University of
 Birmingham, UK;
 MFA, Goddard College

Jeff C. Steele (1999)

*Associate Professor in multiple
 disciplines*
 BA, MA, Northwestern University;
 PhD, Shakespeare Institute, University
 of Birmingham, UK

Sally A. Steindorf (2005)

Associate Professor of Global Studies
 BA, Principia College;
 MA, PhD, Syracuse University

William B. Stock (1980)

Professor of Religion
 BA, Principia College;
 MALD, PhD, Tufts University

Anne E. Sussman (2015)

*Assistant Professor in the Center for
 Teaching and Learning*
 BA, Smith College;
 MA, University of Virginia

Chelsea E. Sutton (2009)

Librarian with rank of Assistant Professor
 BA, Principia College;
 MS, University of Illinois, Urbana-
 Champaign

Robert L. Terrell (2008)

Instructor of Physical Education
 BA, Principia College;
 MS, California University of
 Pennsylvania

Peter C. P. van Lidth de Jeude (2015)

Assistant Professor of History
 BA, Principia College;
 MA, University of North Carolina,
 Greensboro;
 PhD, Pennsylvania State University

Joseph D. Van Riper (2010)

Associate Professor of Music
 BA, Principia College;
 MM, Illinois State University;
 DMA, George Mason University

Colleen P. Vucinovich (2015)

*Assistant Professor of Business
 Administration*
 MBA, MS, Edinburgh Business School,
 Heriot-Watt University

Joan T. Wesman (2011)

*Assistant Professor of Mass
 Communication*
 BA, Hamilton College;
 MAT, Brown University

Paul R. Wesman (2010)

*Assistant Professor of Mass
 Communication*
 BA, Principia College;
 MA, Emerson College

Rose J. Whitmore (2013)

Assistant Professor of Music
 BA, BM, MM, University of Oregon;
 MAT, Lewis and Clark College;
 MM, Northwestern University;
 DMA, University of Washington

Sara J. Wienecke (2012)

Assistant Professor of English
 BA, Principia College;
 MFA, Queens University

John W. Williams (1983)

Professor of Political Science
 BA, Principia College;
 JD, George Washington University

Christopher B. Young (2005)

Assistant Professor of Philosophy
 BA, Fort Lewis College;
 MA, University of New Mexico

Emeriti Faculty

David K. Andrews

President Emeritus, 1981

George Andrews

*Professor Emeritus of History and
Philosophy, 1958*

Joan R. Andrews

*Professor Emerita of World Literature
and Religion, 1997*

Louise Andrews

Assistant Professor Emerita of Art, 1958

Robert Andrews

*Professor Emeritus of Business
Administration, 1981*

Nancy W. Baker

Librarian Emerita, 1960

Samuel N. Baker

Professor Emeritus of Spanish, 1960

Brook B. Ballard Jr

Professor Emeritus of History, 1995

James Belote

Professor Emeritus of History, 1983

Frank P. Biggs

Professor Emeritus of Economics, 2008

Donald T. Bliss

Professor Emeritus of Sociology, 1977

Linda A. Bohaker

*Professor Emerita of Business
Administration, 2016*

Edward D. Bradley

Professor Emeritus of French, 1985

Paula R. Bradley

Professor Emerita of French, 1994

Colin C. Campbell

Professor Emeritus of English, 2000

Archibald Carey Jr

Professor Emeritus of Philosophy, 1988

George A. Chandler

*Professor Emeritus of Sociology and
Philosophy, 1963*

J. Bryan Collester

*Professor Emeritus of Political Science,
2002*

J. Colette Collester

Professor Emerita of Art History, 2002

David A. Cornell

Professor Emeritus of Physics, 2002

Joyce C. Cundiff

Professor Emerita of Mathematics, 1993

E. Olive Davis

Dean of Women Emerita, 1960

Edward A. DeWindt

*Associate Professor Emeritus of
Chemistry, 1997*

Glenn Felch

Professor Emeritus of Studio Art, 2007

Judith McCreary Felch

Professor Emerita of Studio Art, 2007

Mary Lu Fennell

Professor Emerita of English, 1999

Thomas R. Fennell

Professor Emeritus of History, 2000

Elaine R. Follis

*Professor Emerita of Religious Studies,
2006*

Clayton D. Ford

*Professor Emeritus of Political Science,
1970*

Beatrice Gamble

Librarian Emerita, 1958

Laura Lee Smith Gerber

Professor Emerita of Mathematics, 1993

Alfred Gertsch

*Professor Emeritus of Modern
Languages, 1997*

David A. Gibbs

*Professor Emeritus of Mathematics,
2009*

James L. Green

Professor Emeritus of Fine Arts, 1976

George B. Happ

Professor Emeritus of Biology, 1960

Gretchen M. Happ

Registrar Emerita, 1963

Albert G. Hinman

Professor Emeritus of Economics, 1997

Thomas M. Holzberlein

Professor Emeritus of Physics, 1993

Dorothy Scott Hooper

Professor Emerita of Mathematics, 1964

William J. Hooper

Professor Emeritus of Physics, 1964

Charles B. Hosmer Jr

Professor Emeritus of History, 1993

Theodore Houpt

*Distinguished Professor Emeritus of
English, 1984*

Garner E. Hubbell

Dean of Men Emeritus, 1960

Winnifred Hubbell

Instructor Emerita of Chorus, 1958

Iolani Ingalls

Professor Emerita of Bible, 1977

Anne Elizabeth Jenkins

Professor Emerita of English, 1960

Marie Jureit-Beamish

Professor Emerita of Music, 2014

Patricia W. Langton

Registrar Emerita, 2012

Robert C. LeClair

Professor Emeritus of English, 1997

Edwin S. Leonard

Dean of the College Emeritus, 1963

Donald J. Mainwaring

*Professor Emeritus of Drama and
Communication, 1988*

Frederick C. Marshall

*Professor Emeritus of Earth Science,
2000*

Abbie H. Martin

Professor Emerita of German, 2007

G. Curtis Martin

*Professor Emeritus of German Studies,
2006*

Chester H. Matravers

Professor Emeritus of Education, 1960

Elizabeth F. McIntire

Professor Emerita of Art History, 1993

Floyd A. McNeil

Professor Emeritus of History, 1960

Frederic Evan Morgan

President Emeritus, 1959

John R. Near

Professor Emeritus of Music, 2013

James A. Nietmann

*Professor Emeritus of Political Science,
1983*

Frank Parker

*Professor Emeritus of Fine Arts and
Drama, 1966*

David E. Pfeifer

Professor Emeritus of Philosophy, 2005

Forbes S. Robertson

*Professor Emeritus of Earth Sciences,
1978*

Percival Robertson

Professor Emeritus of Geology, 1960

Robert J. Rockabrand

Professor Emeritus of Music, 1997

Reinhart Ross

Professor Emeritus of Music, 1985

James K. Schmidt

Professor Emeritus of Fine Arts, 1985

Jack K. Snyder

Professor Emeritus of Economics, 1990

Lenore A. Suarez

*Professor Emerita of Physical Education,
2008*

Douglas B. Swett

*Professor Emeritus of Spanish and
World Literature, 1977*

John F. Wanamaker

Professor Emeritus of Biology, 1977

Paul O. Williams

Professor Emeritus of English, 1986

Affiliated Faculty

William Babcock

*Professor, Southern Illinois University
Carbondale, 2014*

Diane Haigh

*Director of Studies, Trinity Hall,
University of Cambridge, 2014*

Edwin Harper

*Lecturer, University of Miami Osher
Institute, 2014*

Annette Kruetziger-Herr

*Professor, University of Music and
Dance, Cologne, Germany, 2014*

Robyn Metcalfe

*Lecturer, Research Scholar, and
Director, University of Texas at Austin,
2014*

Ronald Musselman

*Professor Emeritus, Franklin and
Marshall College, 2016*

Michael Rechlin

*Dean, Future Generations Graduate
School, 2014*

Scott Schneberger

Retired Provost, Principia College, 2014

Staff

The year in parentheses, listed after individuals' names, indicates their first year of employment with The Principia.

It does not necessarily indicate continuous employment.

Academic Services

Academic and Career Advising Director

Miriam (Midge) M. Browning (1983)
BS, Principia College
BS, California State University

Academic Special Programs Director

James H. Hegarty (2004)
BA, Principia College;
MM, American Conservatory of Music;
MM, Northern Illinois University

Academic Technology Director

open

Library Director

Elizabeth W. Roberts (1998)
BA, Principia College
MLIS, University of Texas, Austin

Principia Abroad Director

Greg Sandford (1998)
BA, Denison University;
MA, PhD, University of Wisconsin,
Madison

Registrar

Alice Dervin (2004)
BA, Principia College
MA, Goddard College

Center for Sustainability Director

Karen L. Eckert (2012)
BS, Principia College
PhD, University of Georgia

Center for Teaching and Learning Director

Libby E. Scheiern (1999)
BA, Principia College
MA, Pepperdine University
PhD, University of Illinois, Chicago

Administrative Services

Admissions and Financial Aid Director

Tamara Gavaletz (2003)

Administrative Systems Group Director

Holly Webster (1990)

Campus Security Director

Matthew Brill (2013)

Compensation and Benefits Director

Deborah Thompson (2013)

Dining Services Director

Lance Thornton (2001)

Facilities Director

Ed Goewert (2004)

Human Resources & Organizational Development Senior Director

SharonAnn Smith (2011)

Information Technology

Chris Hufford (2009), Information
Technology Director
Jim Huddleston (2015), Telecom
Director
Bill Whitney (2006), College Technology
Director

Mail and Copy Services Manager

Ward Patterson (1992)

Media Services Director

John Lyon (1991)

Nursing Director

Tiffany Green (2004)

Workplace Safety Director

David Pate (2003)

Advancement

Senior Director of Development and Annual Giving

Donna Gibbs (1998)

Advancement Services Director

Cindy Fox (1993)

Alumni and Field Relations Associate

Director

Kelly Peticolas (1998)

Director of Capital Giving

Sue Ellen Coughtry (2004)

Planned Giving Director

Ned McCarty (2011)

Business

Budget Office Manager

John Bruce Trevor-Roberts (2011)

Chief Investment Officer

Howard E. Berner Jr. (1996)

College Store Manager

Katie Boyce (2013)

Contracts Officer

Bruce Alioto (1992)

Controller

Donald D. Miller (2014)

Purchasing Agent

Susan Curry (2011)

Student Loans and Billing Services

Milly Mensing (2005)

Billing Services Lead

Cheryl Carbonell (2005)

General Staff

Academic and Career Advising

Shannon Briggs (2016)

John Lane (2010)

Academic Technology

Kevin Henry (2013)

Admissions and Financial Aid

Cassidy Alford (2017)

Laura Ball (2009)

Patti Fox (2013)

Carly Hendrikson (2016)

Cecilia Macklin (2003)

Amber McCartt (1999)

Jordan Poznick (2015)

Katie Schiele (2006)

Kendall Shoemake (2015)

Nathan Smith (2017)

Leslie Thompson (1978)

Alumni and Field Relations

Annabelle Bloom (2012)

Lisa Myles (2015)

Archives

Melody Hauf-Belden (2005)

Athletics

Heather Fairbanks (2011)

Lora McMullin (1988)

Business Manager

Kim Howland (1999)

Campus Security

Lee Garges (2014)

Paul Grant (2012)

Dianne Hite (2011)

Eric Phillips (2007)

Jeff Wingert (1996)

Center for Teaching and Learning

Cherie Hufford (2014)

Chemistry Lab Coordinator

open

College Store

Pam Fox (2000)

Community Service/Sociology/

Anthropology

Robert Pennamon (1997)

Dean of Academics Office

Nikki O'Hagan (2013)

Dining Services

Trey McCartt (1999)
 Alison Rea (2005)
 Catherine Wallace (2010)

Facilities

Marlys Anstead (2017)
 Linda Clifford (2006)
 Paul Lehr (2012)
 Arno List (1994)
 Jeannie Siegling (2004)
 Matt Thompson (1992)
 Mary Pat Ward (2009)

Finance and Accounting

John Barthelmess (2011)
 Liz Campbell (2004)
 Cheryl Carbonell (2005)
 Scott Gerber (2004)
 Cindy Graser (2011)
 Scott Greenman (2011)
 Debbie Humphrey (1985)
 Tammy Payton (2012)
 Jon Sherwood (2014)

Human Resources

Katie Jensen (2016)
 Julie Hammar (2015)
 Beth Trevino (2000)

Information Technology Services

Robin Burns (2007)
 Thomas Cowart (2007)
 Glenn Ford (2002)
 Christian Saucedo (2008)

Land Stewardship Assistant

Andrew Jesper (2016)

Library

Catherine Barlow (2006)
 Jayne Stanley (2000)
 Diane Wingert (1996)
 Deborah Wold (2005)

Mail and Copy Services

Michael Harrison (2012)
 Michael Jensen (2009)
 Lucia Wallace (2016)

Marketing

Heather Shotwell (2009)

Media Services

Stephen Bailey (2012)
 Larry Charlston (1981)
 Eric Lines (2011)
 Darin Pierce (2012)
 Stephanie Young (2006)

Music/Theatre

Jessica Wingert (2016)

Nursing

Shari Charlston (1996)
 Mari Carmen Feijoo (2006)
 Danielle Puduski (2015)
 Tamara Wampole (2004)

Organist

Rose Whitmore (2013)

President's Office

Sue Thoma (2011)

Principia Abroad

Karen Daugherty (2005)
 Stephanie Lovseth (2009)

Principia Guest House

Margaret Sotos (2013)

Provost's Office

Nikki O'Hagan (2013)

Registrar's Office

Lauren Cornthwaite (2014)
 Carolyn Frank (2012)
 Bev Mayhall (2015)
 Joy Trout (2004)
 Helen Wills (1983)

Science Center Operations Manager

Steve Ward (2008)

Theatre

Megan Lovegren (2016)

Web Services

Andrew Blass (2006)
 Jonathan Hosmer (1997), Web Director

Institutes**Euphrates Institute**

James H. Hegarty (2004)

**Institute for the Metaphysics of
Physics**

Laurence Doyle (1989)

Leadership Institute

David Wold (2005)

Office of Student Life

Dean of Students

Debra Jones (2013)

Assistant Dean of Students

Josh Sprague (1996)

Home Life Manager

Mark Hagenlocher (2016)

**International Student Program
Manager**

Kathryn Thompson (1990)

Residential/Community Educators:

Kemi Awosile (2017)

Gustavo Batista (2017)

Doug Brown (2012)

Dana Byquist (2011)

Noel Carlson (2017)

Rich Eisenauer (1988)

Ginger Emden (2012)

Kristen Harrison (2012)

Geoff Hinchman (2010)

Paul Needham (2014)

Student Affairs Manager

BK Thornton (2017)

Student Events Manager

Brett Grimmer (2014)

Student Life Programming Manager

Kristen Halsey (2011)

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